EAU

PROJECT ID: 7878-03-70

WITH: N/A

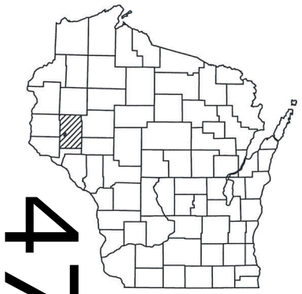
COUNTY: DUNN

JANUARY 2026

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 44



47

N

DESIGN DESIGNATION 7878-03-00

A.A.D.T.	2026	=	350
A.A.D.T.	2046	=	520
D.H.V.		=	52
D.D.		=	50/50
T.		=	10.0%
DESIGN SPEED		=	55 MPH
ESALS		=	150,000

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WCL - MENOMONIE

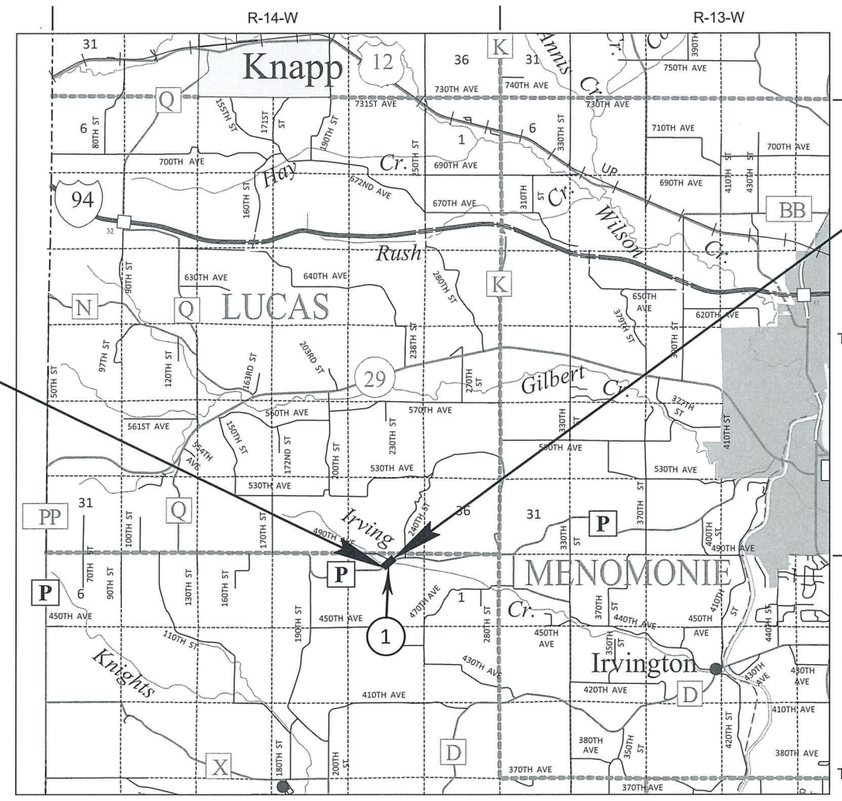
IRVING CREEK BRIDGE B-17-0238

CTH P

DUNN COUNTY

STATE PROJECT NUMBER
7878-03-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7878-03-70		



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.063 MI

CONVENTIONAL SYMBOLS

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

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DUNN COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ACCEPTED FOR

COUNTY of DUNN

07/21/2025 (Date)

HIGHWAY COMMISSIONER (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

SEH
Building a Better World for All of Us™

Short Elliott Hendrickson Inc.
6808 Odana Road, Suite 200
Madison, WI 53719-1137
608.620.6199 main | 888.908.8166 fax
800.732.4362 toll free | www.sehinc.com

WISCONSIN PROFESSIONAL ENGINEER
CHRISTOPHER J. BLUM
E-33157
MADISON
WI

7/23/2025 (Date)

(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SEH
Designer	SEH
Project Manager	MATTHEW BERG, PE
Regional Examiner	NWR
Regional Supervisor	TOU YANG, PE

APPROVED FOR THE DEPARTMENT

DATE: 7/22/2025

(Signature)

E

STANDARD ABBREVIATIONS:

ABUT	ABUTMENT
AC	ACRE
AGG	AGGREGATE
AECPRC	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
AECPCS	APRON ENDWALL FOR CULVERT PIPE CORRUGATED STEEL
ASPH	ASPHALTIC
AVG	AVERAGE
ADT	AVERAGE DAILY TRAFFIC
BF	BACK FACE
BM	BENCH MARK
BR	BRIDGE
CE	COMMERCIAL ENTRANCE
C/L	CENTER LINE
Δ	CENTRAL ANGLE OR DELTA
COB	CENTER OF BARRIER
CONC	CONCRETE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
CR	CREEK
CY	CUBIC YARD
C&G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DISCH	DISCHARGE
DG	DITCH GRADE
DWY	DRIVEWAY
X	EAST GRID COORDINATE
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
EOR	END POINT OF RADIUS
EL	ELEVATION
ENT	ENTRANCE
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FC	FACE OF CURB
FF	FACE TO FACE
FERT	FERTILIZE
FE	FIELD ENTRANCE
FL	FLOW LINE
FO	FIBER OPTIC
CWT	HUNDREDWEIGHT
HYD	HYDRANT
ID	INSIDE DIAMETER
INV	INVERT
IP	IRON PIPE ON PIN
LHF	LEFT-HAND FORWARD
L	LENGTH OF CURVE
LF	LINEAR FOOT
LC	LONG CHORD OF CURVE
LS	LUMP SUM
MH	MANHOLE
MOR	MID POINT OF RADIUS
NC	NORMAL CROWN
NO	NUMBER
OBLIT	OBLITERATE
PAVT	PAVEMENT
PE	PRIVATE ENTRANCE
PVRC	POINT OF VERTICAL REVERSE CURVE
QOR	QUARTER POINT OF RADIUS
R	RADIUS
REQ'D	REQUIRED
RES	RESIDENCE OR RESIDENTIAL
RHF	RIGHT-HAND FORWARD
R/W	RIGHT-OF-WAY
R	RIVER
RDWY	ROADWAY
R/L	REFERENCE LINE
SALV	SALVAGED
SAN	SANITARY SEWER
SF	SQUARE FEET
SY	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
STA	STATION
SS	STORM SEWER
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
SE	SUPERELEVATION RATE
TC	TOP OF CURB
T OR TN	TOWN
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
VAR	VARIABLE
VC	VERTICAL CURVE
Y	NORTH GRID COORDINATE
YD	YARD

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2 `	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			25 32			27 34			28 ` 36 `			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = **0.6** ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = **0.4**ACRES

DNR AREA LIAISON:

DNR WEST CENTRAL REGION HEADQUARTERS
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
TELEPHONE: 715.934.9014
ATTENTION: LEAH NICOL
EMAIL: LEAH.NICOL@WISCONSIN.GOV

WISDOT CONTACT:

WI DEPT OF TRANSPORTATION
718 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
TELEPHONE: 920.492.4147
ATTENTION: MATTHEW BERG
EMAIL: MATTHEW.BERG@DOT.WI.GOV

MUNICIPALITY CONTACT:

DUNN COUNTY HIGHWAY DIVISION
3303 US HIGHWAY 12 EAST
MENOMONIE, WI 54751
TELEPHONE: 715.231.6587
ATTENTION: DUSTIN BINDER
EMAIL: DBINDER@CO.DUNN.WI.US

DESIGN CONTACT:

SHORT ELLIOTT HENDRICKSON INC
6808 ODANA ROAD, SUITE 200
MADISON, WI 53719-1137
TELEPHONE: 608.620.6192
ATTENTION: CHRISTOPHER BLUM
EMAIL: CBLUM@SEHINC.COM

UTILITY CONTACT LIST:

AT&T DISTRIBUTION
304 S DEWEY STREET
4TH FLOOR
EAU CLAIRE, WI 54701
TELEPHONE: 715.410.0656
ATTENTION: RICK PODOLAK
EMAIL: RP4514@ATT.COM

DUNN ENERGY COOPERATIVE
PO BOX 220
MENOMONIE, WI 54751
TELEPHONE: 715.232.6240
ATTENTION: LOREN LUZINSKI
EMAIL: LOREN@DUNNENERGY.COM

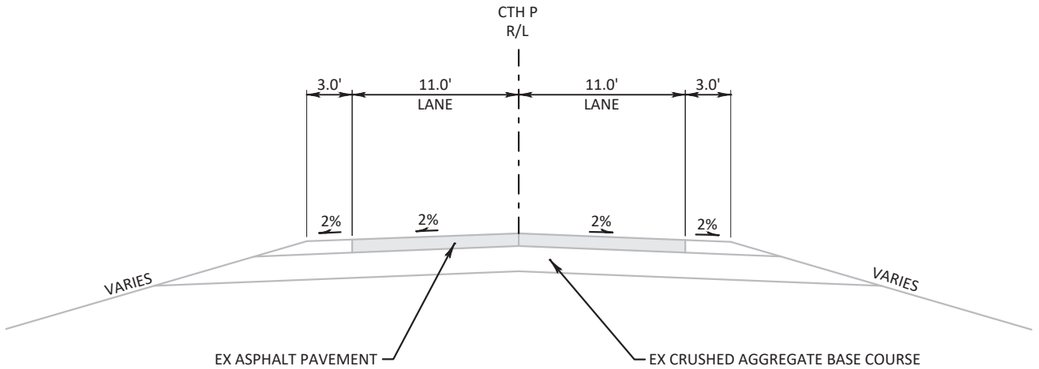
DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

GENERAL NOTES:

1. NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
3. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.
4. PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLANS WITH THE ENGINEER.
5. WETLANDS, WATERWAYS, AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SHALL BE PROTECTED AT ALL TIMES. DO NOT STORE EQUIPMENT OR MATERIALS NEAR THESE SITES UNLESS APPROVED BY THE ENGINEER.
6. INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.
7. CROSS SECTIONS SHOWN INCLUDE THE THICKNESS OF TOPSOIL WHERE REQUIRED. TOPSOIL SHALL BE REPLACED WITH 4-INCH TYPICAL DEPTH.
8. TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
9. REMOVAL OF EROSION CONTROL DEVICES IS INCLUDED IN THE COST OF THEIR RESPECTIVE BID ITEMS.
10. THE EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
11. ASPHALTIC SURFACES SHALL BE SAWCUT AT THE MATCH LINE AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.
12. DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE TOPSOILED, FERTILIZED AND SEEDED.
13. FERTILIZER SHALL NOT BE USED NEAR NAVIGABLE WATERWAYS OR WETLANDS.
14. A CONVERSION FACTOR OF 2.0 TONS/CY IS USED TO ESTIMATE QUANTITIES FOR BASE AGGREGATE DENSE.
15. HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
16. THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISITENT WITH THE PLAN AND TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

2

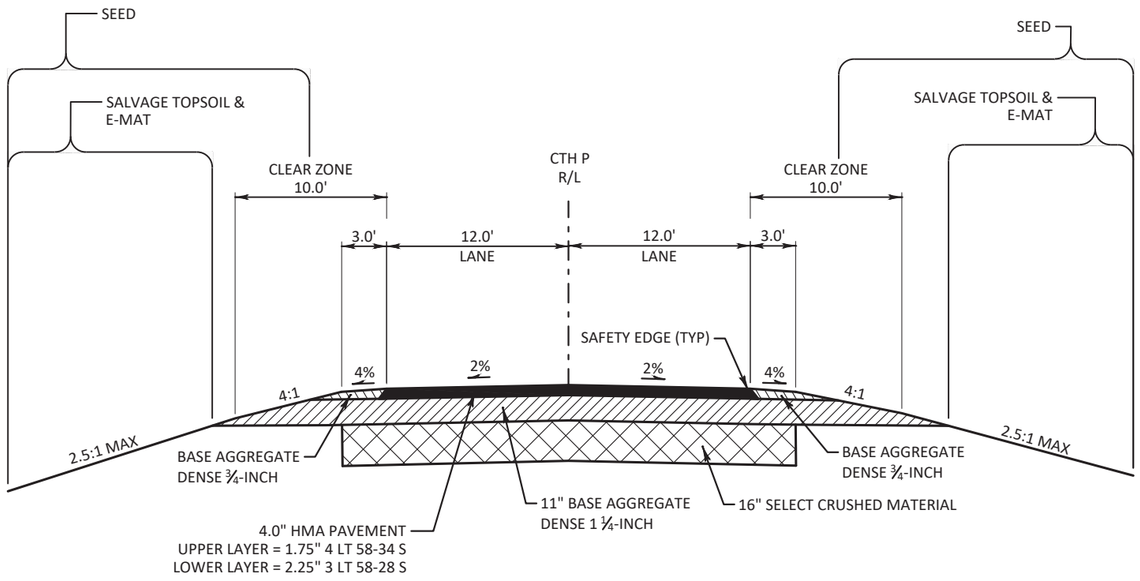
2



TYPICAL EXISTING SECTION

CTH P

STA 8+35.00 TO STA 11+65.00



TYPICAL FINISHED SECTION

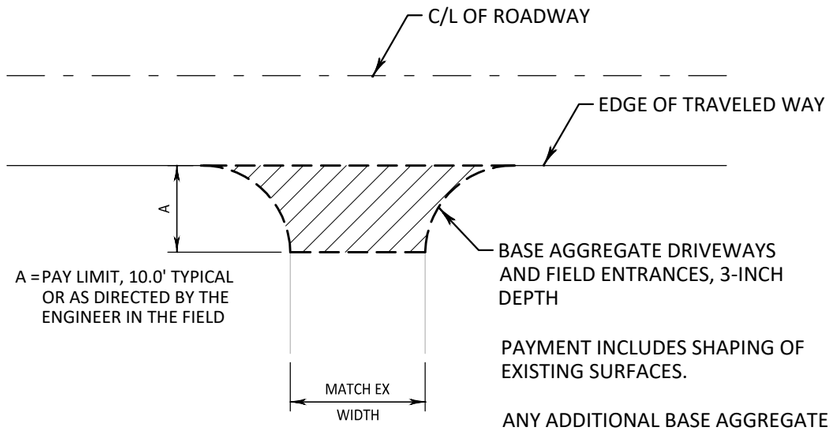
CTH P

STA 8+35.00 TO STA 11+65.00

PROJECT NO: 7878-03-70	HWY: CTH P	COUNTY: DUNN	TYPICAL SECTIONS	SHEET 3	E

FILE NAME : X:\AE\D\DUNHD\174247\5-final-dsgn\51-drawings\40-TransHwy\7878-03-00\sheets\SEC 02 Typ Sec & Details\020300_ts (Typical Sections).dwg PLOT DATE : 5/30/2025 2:56 PM PLOT BY : SEH LAYOUT NAME : 01 PLOT SCALE : 1.0 IN = 10.0 FT

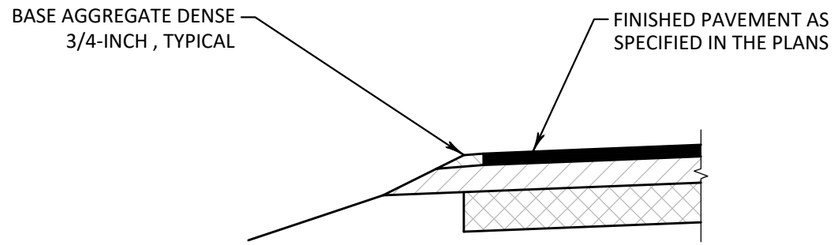
WISDOT/CADDS SHEET 42



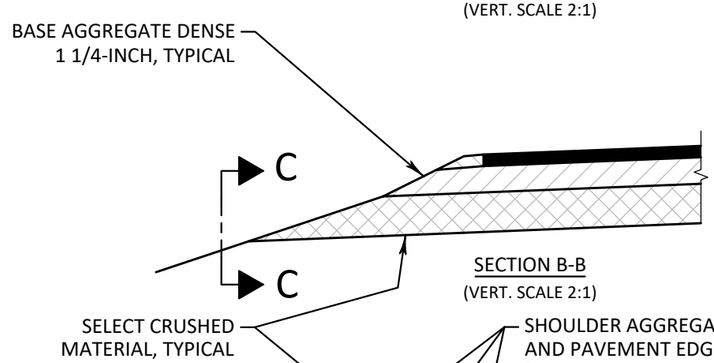
PAYMENT INCLUDES SHAPING OF EXISTING SURFACES.

ANY ADDITIONAL BASE AGGREGATE DENSE REQUIRED SHALL BE PAID UNDER ITEM - "BASE AGGREGATE DENSE 3/4-INCH".

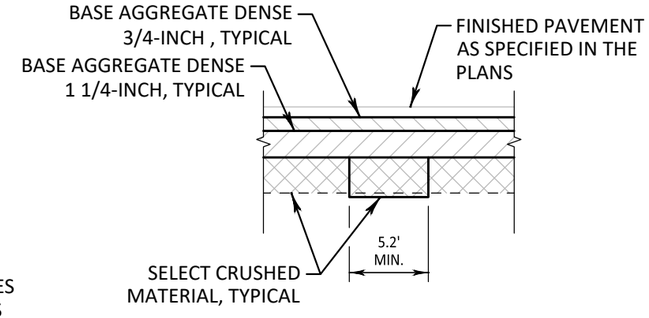
BASE AGGREGATE DRIVEWAYS AND FIELD ENTERANCES
(PE,CE, OR FE)



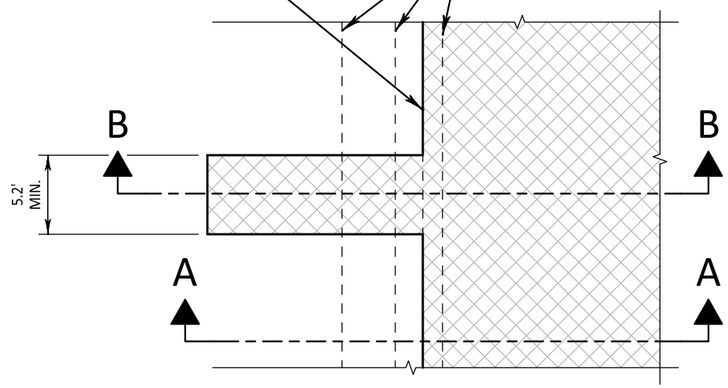
SECTION A-A
(VERT. SCALE 2:1)



SECTION B-B
(VERT. SCALE 2:1)



SECTION C-C
(VERT. SCALE 2:1)



PLAN VIEW
(VIEW PLANE AT TOP OF SELECT CRUSHED MATERIAL)

RELIEF TRENCH

NOTE:

CONSTRUCT RELIEF TRENCHES AT 200'-300' INTERVALS AND AT PROFILE SAG POINTS (LEFT AND RIGHT).

FINAL LOCATIONS TO BE APPROVED OR DETERMINED BY THE ENGINEER IN THE FIELD.

MATERIALS AND LABOR FOR RELIEF TRENCH ARE INCLUDED IN THE SELECT CRUSHED MATERIAL BID ITEM.

Estimate Of Quantities

7878-03-70

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	203.0220	Removing Structure (structure) 01. P-17-0915	EACH	1.000	1.000
0008	205.0100	Excavation Common	CY	896.000	896.000
0010	206.2001	Excavation for Structures Culverts (structure) 01. B-17-0238	EACH	1.000	1.000
0012	210.2500	Backfill Structure Type B	TON	1,050.000	1,050.000
0014	213.0100	Finishing Roadway (project) 01. 7878-03-70	EACH	1.000	1.000
0016	305.0110	Base Aggregate Dense 3/4-Inch	TON	58.000	58.000
0018	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	815.000	815.000
0020	311.0115	Breaker Run	CY	110.000	110.000
0022	312.0110	Select Crushed Material	TON	1,022.000	1,022.000
0024	455.0605	Tack Coat	GAL	45.000	45.000
0026	460.2000	Incentive Density HMA Pavement	DOL	140.000	140.000
0028	460.5223	HMA Pavement 3 LT 58-28 S	TON	111.000	111.000
0030	460.5244	HMA Pavement 4 LT 58-34 S	TON	94.000	94.000
0032	504.0100	Concrete Masonry Culverts	CY	200.000	200.000
0034	505.0400	Bar Steel Reinforcement HS Structures	LB	32,340.000	32,340.000
0036	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	1,980.000	1,980.000
0038	516.0500	Rubberized Membrane Waterproofing	SY	14.000	14.000
0040	606.0300	Riprap Heavy	CY	55.000	55.000
0042	618.0100	Maintenance and Repair of Haul Roads (project) 01. 7878-03-70	EACH	1.000	1.000
0044	619.1000	Mobilization	EACH	1.000	1.000
0046	624.0100	Water	MGAL	10.000	10.000
0048	625.0500	Salvaged Topsoil	SY	710.000	710.000
0050	628.1504	Silt Fence	LF	663.000	663.000
0052	628.1520	Silt Fence Maintenance	LF	663.000	663.000
0054	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0056	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0058	628.2027	Erosion Mat Class II Type C	SY	521.000	521.000
0060	628.6005	Turbidity Barriers	SY	30.000	30.000
0062	630.0120	Seeding Mixture No. 20	LB	14.000	14.000
0064	630.0200	Seeding Temporary	LB	14.000	14.000
0066	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0068	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0070	638.2602	Removing Signs Type II	EACH	4.000	4.000
0072	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0074	642.5001	Field Office Type B	EACH	1.000	1.000
0076	643.0420	Traffic Control Barricades Type III	DAY	1,278.000	1,278.000
0078	643.0705	Traffic Control Warning Lights Type A	DAY	1,988.000	1,988.000
0080	643.0900	Traffic Control Signs	DAY	994.000	994.000
0082	643.5000	Traffic Control	EACH	1.000	1.000
0084	645.0105	Geotextile Type C	SY	329.000	329.000
0086	645.0120	Geotextile Type HR	SY	120.000	120.000
0088	646.2020	Marking Line Epoxy 6-Inch	LF	660.000	660.000
0090	650.4500	Construction Staking Subgrade	LF	330.000	330.000
0092	650.5000	Construction Staking Base	LF	330.000	330.000
0094	650.6501	Construction Staking Structure Layout (structure) 01. B-17-0238	EACH	1.000	1.000
0096	650.9911	Construction Staking Supplemental Control (project) 01. 7878-03-70	EACH	1.000	1.000
0098	650.9920	Construction Staking Slope Stakes	LF	330.000	330.000

Estimate Of Quantities

7878-03-70

Line	Item	Item Description	Unit	Total	Qty
0100	690.0150	Sawing Asphalt	LF	44.000	44.000
0102	715.0502	Incentive Strength Concrete Structures	DOL	1,260.000	1,260.000
0104	SPV.0060	Special 01. Temporary Water Diversions Twin-Cell Box Culvert (P-17-0915)	EACH	1.000	1.000

3

CLEARING & GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
0010						
	9+00	TO	10+00	LT	1	1
	10+00	TO	11+00	LT	1	1
			ITEM TOTALS		2	2

EARTHWORK SUMMARY

CATEGORY	STATION	LOCATION	205.0100 EXCAVATION COMMON (1) CY	AVAILABLE MATERIAL (2) CY	EXPANDED FILL (3) CY	MASS ORDINATE (4) +/-
0010						
	8+35 TO 11+65	LT/RT	896	794	595	199
	PROJECT TOTAL		896	794	595	199

NOTES:
(1) UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN COMMON EXCAVATION.
(2) AVAILABLE MATERIAL DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION.
(3) EXPANSION FACTOR = 1.3
(4) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

BASE AGGREGATE DENSE

CATEGORY	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	624.0100 WATER MGAL	REMARKS
0010							
	8+35 TO 11+65	LT/RT	55	815	929	9	
	9+55	RT	3	-	-	1	RECONSTRUCT GRAVEL FE
	UNDISTRIBUTED		-	-	93	-	
	PROJECT TOTALS		58	815	1,022	10	

HMA PAVEMENT

CATEGORY	STATION	LOCATION	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5244 HMA PAVEMENT 4 LT 58-34 S TON
0010	8+35 TO 11+65	LT/RT	45	111	94
	PROJECT TOTALS		45	111	94

MAINTENANCE AND REPAIR OF HAUL ROADS (7878-03-70)

CATEGORY	STATION	618.0100 EACH
0030		
	PROJECT LENGTH	1
	ITEM TOTAL	1

TOPSOIL, MULCHING AND SEEDING

CATEGORY	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 TEMPORARY SEEDING LB
0010	8+35 TO 11+65	LT	255	4.8	4.8
	8+35 TO 11+65	RT	313	6.3	6.3
	UNDISTRIBUTED		142	2.8	2.8
		ITEM TOTALS	710	14	14

MOBILIZATIONS EROSION CONTROL

CATEGORY	STATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	PROJECT LENGTH	3	2
	ITEM TOTALS	3	2

3

EROSION CONTROL ITEMS

CATEGORY	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2027 EROSION MAT CLASS II TYPE C SY	628.6005 TURBIDITY BARRIERS SY
0010	8+35 TO 11+65	LT	239	239	176	25
	8+35 TO 11+65	RT	284	284	235	-
	UNDISTRIBUTED	-	140	140	110	5
		ITEM TOTALS	663	663	521	30

PAVEMENT MARKING

CATEGORY	STATION	LOCATION	646.2020 MARKING LINE EPOXY 6-INCH LF	REMARKS
0010	8+35 TO 11+65	CL	660	YELLOW DOUBLE CENTERLINE
		ITEM TOTALS	660	

SPECIAL ITEMS

CATEGORY	STATION	LOCATION	SPV.0060 01. TEMPORARY WATER DIVERSIONS TWIN-CELL BOX CULVERT (P-17-0915) EACH
0010	9+88	LT/RT	1
		ITEM TOTALS	1

3

PERMANENT SIGNING

CATEGORY	STATION	LOCATION	SIGN CODE	SIZE (INCH)	SIZE (INCH)	MESSAGE	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
0010	9+70	LT	W5-52-L	12	36	CLEARANCE STRIPER	1	3	1	1
	9+79	RT	W5-52-R	12	36	CLEARANCE STRIPER	1	3	1	1
	9+98	LT	W5-52-R	12	36	CLEARANCE STRIPER	1	3	1	1
	10+05	RT	W5-52-L	12	36	CLEARANCE STRIPER	1	3	1	1
						PROJECT TOTAL	4	12	4	4

SAWING

CATEGORY	STATION	LOCATION	690.0150 SAWING ASPHALT LF
0010	8+35	LT/RT	22
	11+65	LT/RT	22
		ITEM TOTALS	44

TRAFFIC CONTROL ITEMS

CATEGORY	APPROX. SERVICE PERIOD DAYS	QTY.	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	QTY.	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	QTY.	643.0900 TRAFFIC CONTROL SIGNS DAY
0010	71	18	1,278	28	1,988	14	994
	PROJECT TOTALS		1,278		1,988		994

CONSTRUCTION STAKING

CATEGORY	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT (B-17-0238) EACH	650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (7878-03-70) EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	PROJECT LENGTH	LT/RT	330	330	1	1	330
	ITEM TOTALS		330	330	1	1	330

CONVENTIONAL SYMBOLS

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

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

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

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25
UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL UTILITY SYMBOLS

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

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA ABBREVIATIONS

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

NOTES:

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

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

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

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

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

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

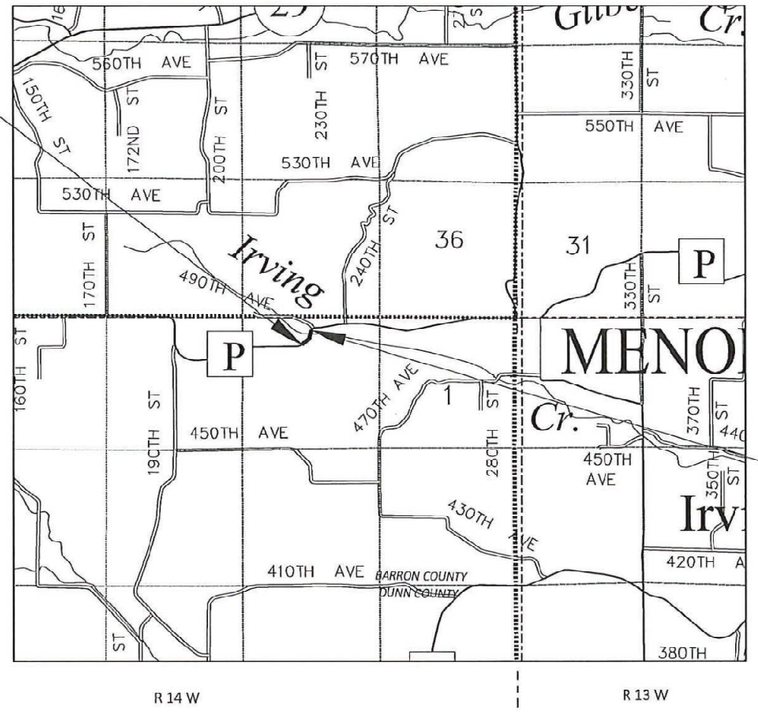
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE DUNN COUNTY HIGHWAY DEPARTMENT.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE DETAIL PAGES.

BEGIN RELOCATION
STA 9+00.00
Y = 163096.208
X = 130895.729
4280.398 FEET NORTH AND 35.118 FEET WEST OF THE SOUTH QUARTER CORNER OF SECTION 2, T27N, R14W



END RELOCATION
STA 10+50.00
Y = 163242.417
X = 130926.221
654.762 FEET SOUTH AND 25.332 FEET WEST OF THE NORTH QUARTER CORNER OF SECTION 2, T27N, R14W

LAYOUT
SCALE 0 1.0 MILES

TOTAL NET LENGTH OF CENTERLINE = 0.028 MILES

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.

R/W PROJECT NUMBER 7878-03-00	SHEET NUMBER	TOTAL SHEETS
FEDERAL PROJECT NUMBER	4.01	2

PLAT OF RIGHT OF WAY REQUIRED FOR

WCL-MENOMONIE IRVING CREEK BRIDGE
IRVING CREEK BRIDGE P-17-0915

CTH P	DUNN COUNTY

CONSTRUCTION PROJECT NUMBER
7878-03-70

RECEIVED
FEB 13 2025
By Dunn County

Original Plat Prepared by

SEH

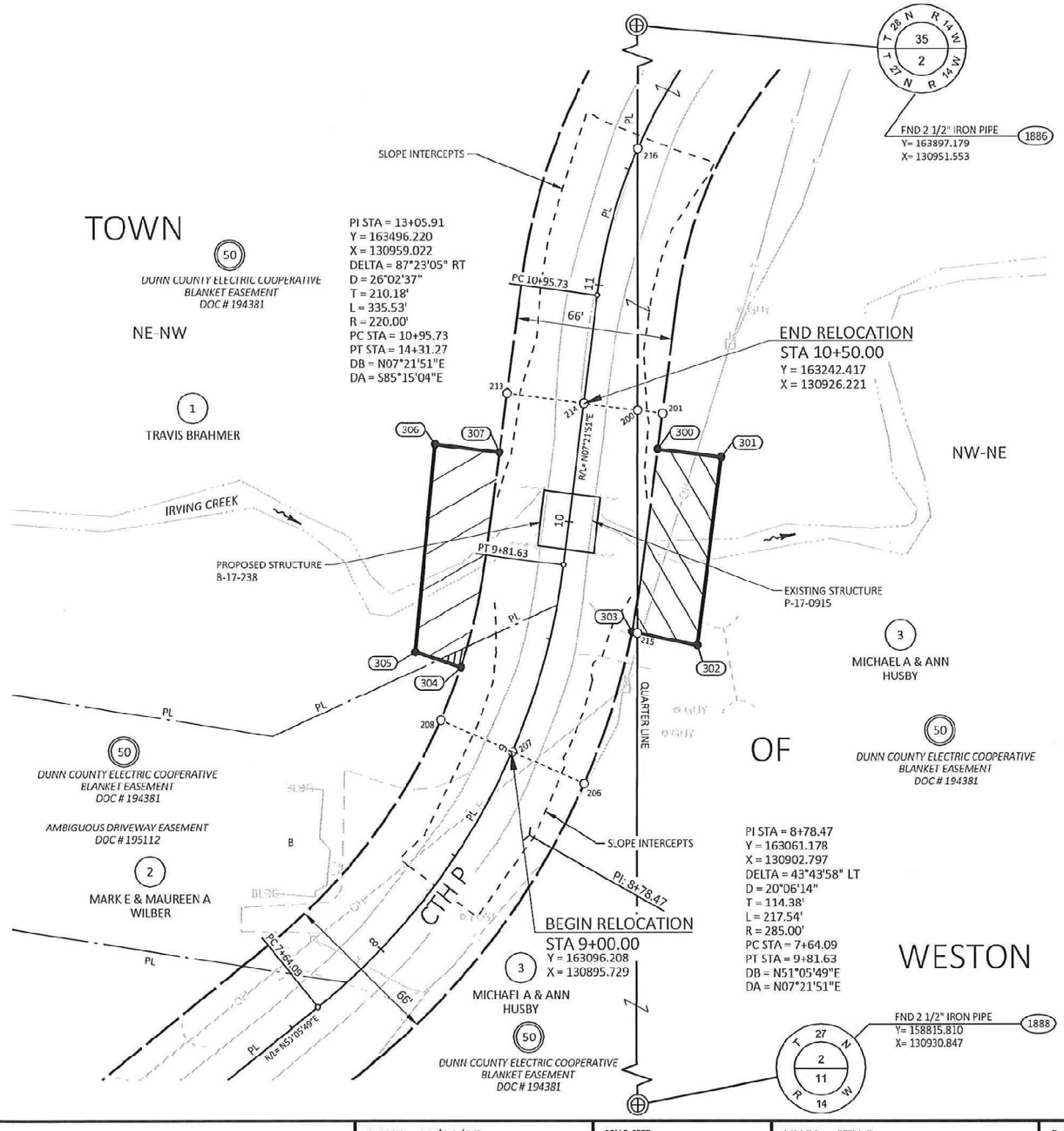
WISCONSIN
JASON L. CANCE
S-2688
CHIPPEWA FALLS WI
LAND SURVEYOR

(Signature) 2-13-2025 (Date)

REVISION DATE

ACCEPTED FOR
COUNTY OF DUNN
DATE: 2/13/2025 (Signature)

FILE NAME : X:\AE\D\DUNHD\174247\S-FINAL-DSGN\51-DRAWINGS\40-TRANSHWY\7878-03-00\RW\DWG\040101-RP.DWG
PLOT DATE : 2/12/2025 4:22 PM
PLOT BY : SEH
PLOT NAME :



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

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED			TLE ACRES
			NEW	EXISTING	TOTAL	
1	TRAVIS BRAHMER	FEE	0.05	0.07	0.12	-
2	MARK E WILBUR & MAUREEN A WILBER	FEE	0.01	0.04	0.05	-
3	MICHAEL A HUSBY & ANN S. HUSBY	FEE	0.05	0.12	0.17	-
50	DUNN COUNTY ELECTRIC COOPERATIVE	RELEASE OF RIGHTS				

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN 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), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE DUNN COUNTY HIGHWAY DEPARTMENT.

CURVE 208 - 304
L= 23.88'
LCH= 23.88'
LCB= N21°02'41"E
R= 249.00'

CURVE 303 - 206
L= 66.97'
LCH= 66.84'
LCB= S17°41'54"W
R= 315.00'

R/W - COURSE TABLE

COURSE	BEARING	DISTANCE
200 - 201	S 82° 38' 09" E	10.56'
201 - 300	S 07° 41' 15" W	15.00'
300 - 301	S 82° 38' 09" E	26.68'
301 - 302	S 07° 21' 40" W	79.60'
302 - 215	N 78° 17' 16" W	25.65'
215 - 303	N 78° 17' 16" W	2.29'
303 - 206	SEE CURVE INFO	
206 - 207	N 66° 13' 32" W	33.11'
207 - 208	N 66° 13' 32" W	32.89'
208 - 304	SEE CURVE INFO	
304 - 305	N 71° 39' 13" W	20.11'
305 - 306	N 05° 33' 53" E	87.61'
306 - 307	S 82° 38' 09" E	27.26'
307 - 213	N 07° 41' 15" E	25.00'
213 - 214	S 82° 38' 09" E	32.60'
214 - 200	S 82° 38' 09" E	22.84'

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
200	10+50.00	22.84' RT
201	10+50.00	33.40' RT
206	9+00.00	33.11' RT
207	9+00.00	0.00'
208	9+00.00	32.89' LT
213	10+50.00	32.60' LT
214	10+50.00	0.00'
216	11+59.69	0.00'
300	10+35.00	33.32' RT
301	10+35.00	60.00' RT
302	9+60.00	61.00' RT
303	9+60.00	33.06' RT
304	9+27.00	32.89' LT
305	9+27.00	53.00' LT
306	10+25.00	60.00' LT
307	10+25.00	32.74' LT

ROAD NAME	BASIS OF EXISTING R/W
CTH P	CONVEYANCE OF LANDS V.122, P.325 DOC # 195355 (1959)
	WI STATUTE 82.31(2)

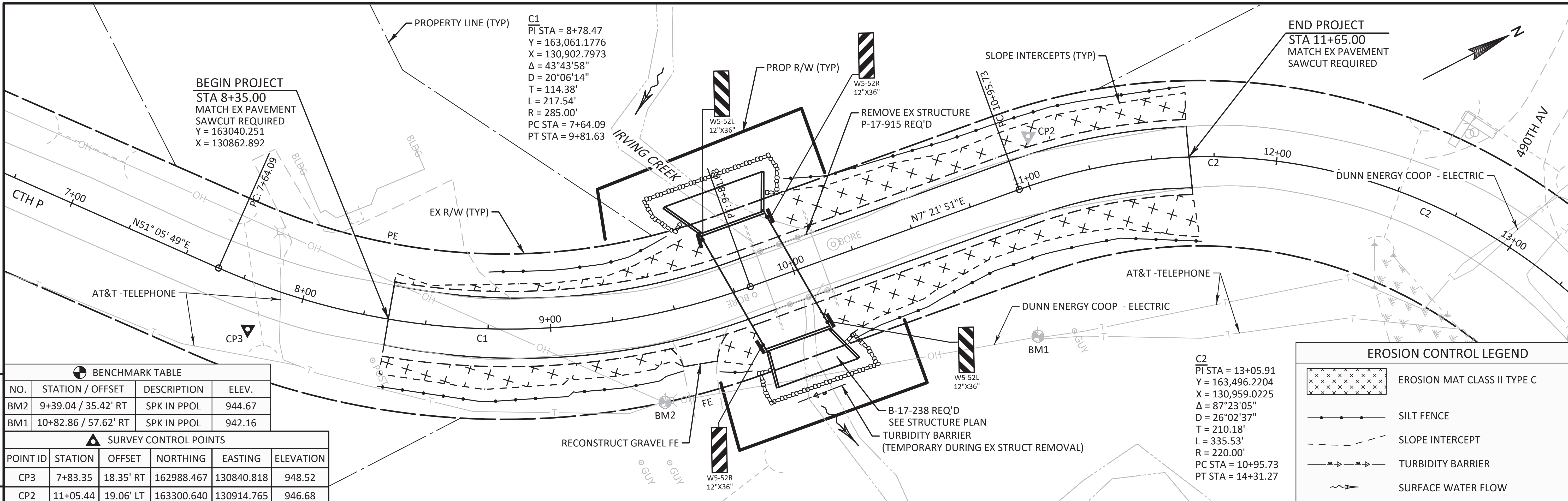
SECTION LINE - COURSE TABLE

COURSE	BEARING	DISTANCE
1886 - 1888	S 00° 14' 01" W	5081.41'
1886 - 216	S 00° 14' 01" W	548.06'
216 - 200	S 00° 14' 01" W	109.64'
200 - 1888	S 00° 14' 01" W	4423.71'

REVISION DATE	DATE 02/11/25	SCALE, FEET 0 25 50	HWY: CTH P	R/W PROJECT NUMBER 7878-03-00	PLAT SHEET 4.02	
	GRID FACTOR N/A		COUNTY: DUNN	CONSTRUCTION PROJECT NUMBER	PS&E SHEET	E

FILE NAME : 040101-RP.DWG PLOT DATE : 2/12/2025 4:22 PM PLOT BY : SEH PLOT NAME : WISDOT/CADDS SHEET 75

RECEIVED FEB 13 2025 By CountyClerk



PROPERTY LINE (TYP)
C1
PI STA = 8+78.47
Y = 163,061.1776
X = 130,902.7973
Δ = 43°43'58"
D = 20°06'14"
T = 114.38'
L = 217.54'
R = 285.00'
PC STA = 7+64.09
PT STA = 9+81.63
BEGIN PROJECT
STA 8+35.00
MATCH EX PAVEMENT
SAWCUT REQUIRED
Y = 163040.251
X = 130862.892
IRVING CREEK
PROP R/W (TYP)
W5-52L 12"X36"
W5-52R 12"X36"
REMOVE EX STRUCTURE
P-17-915 REQ'D
SLOPE INTERCEPTS (TYP)
PC 10+95.73
CP2
END PROJECT
STA 11+65.00
MATCH EX PAVEMENT
SAWCUT REQUIRED
N
490TH AV
C2
12+00
DUNN ENERGY COOP - ELECTRIC
11+00
N7° 21' 51"E
CTH P
7+00
PC: 7+64.09
N51° 05' 49"E
EX R/W (TYP)
PE
BORE
10+00
13+00
AT&T -TELEPHONE
8+00
9+00
C1
CP3
AT&T -TELEPHONE
DUNN ENERGY COOP - ELECTRIC
BM1
BM2
FE
B-17-238 REQ'D
SEE STRUCTURE PLAN
TURBIDITY BARRIER
(TEMPORARY DURING EX STRUCT REMOVAL)
RECONSTRUCT GRAVEL FE
W5-52L 12"X36"
W5-52R 12"X36"
C2
PI STA = 13+05.91
Y = 163,496.2204
X = 130,959.0225
Δ = 87°23'05"
D = 26°02'37"
T = 210.18'
L = 335.53'
R = 220.00'
PC STA = 10+95.73
PT STA = 14+31.27
EROSION CONTROL LEGEND
EROSION MAT CLASS II TYPE C
SILT FENCE
SLOPE INTERCEPT
TURBIDITY BARRIER
SURFACE WATER FLOW

5

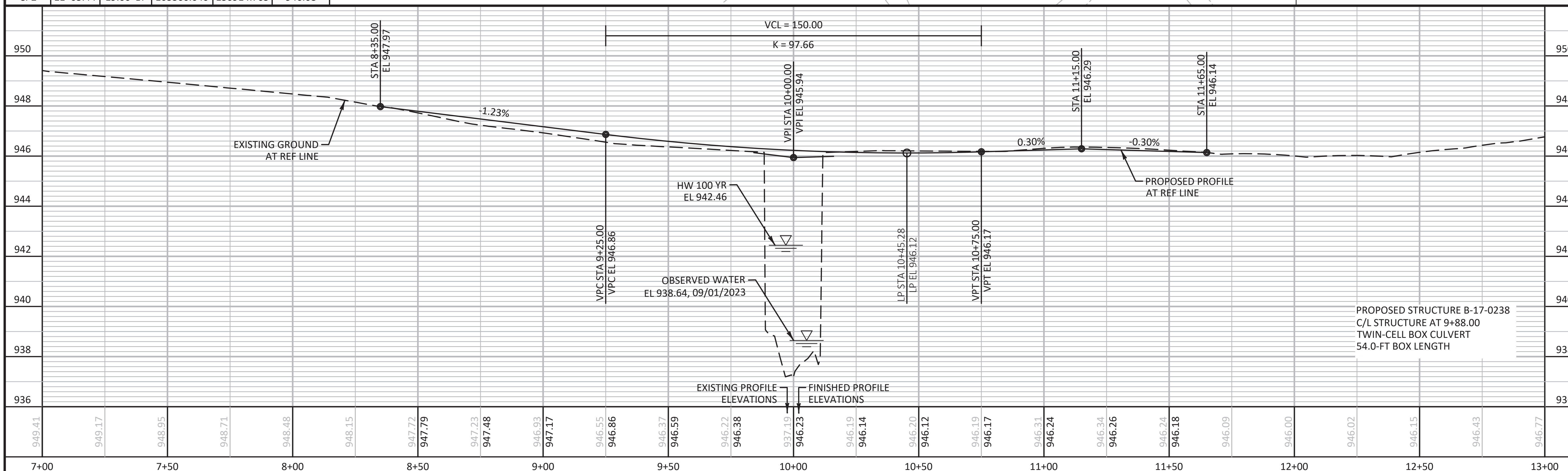
BENCHMARK TABLE

NO.	STATION / OFFSET	DESCRIPTION	ELEV.
BM2	9+39.04 / 35.42' RT	SPK IN PPOL	944.67
BM1	10+82.86 / 57.62' RT	SPK IN PPOL	942.16

SURVEY CONTROL POINTS

POINT ID	STATION	OFFSET	NORTHING	EASTING	ELEVATION
CP3	7+83.35	18.35' RT	162988.467	130840.818	948.52
CP2	11+05.44	19.06' LT	163300.640	130914.765	946.68

5

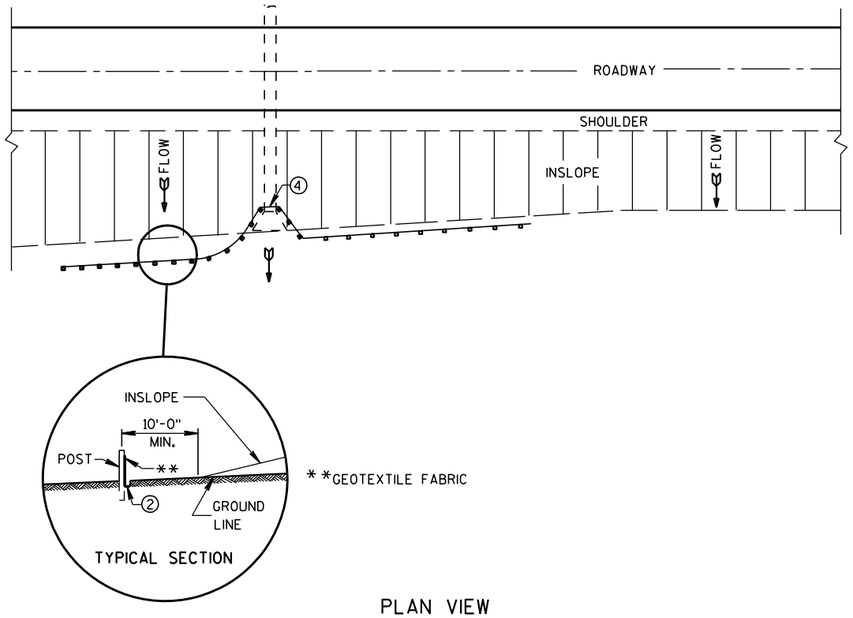


VCL = 150.00
K = 97.66
950
948
946
944
942
940
938
936
STA 8+35.00
EL 947.97
-1.23%
EXISTING GROUND
AT REF LINE
VPI STA 10+00.00
VPI EL 945.94
STA 11+15.00
EL 946.29
STA 11+65.00
EL 946.14
0.30%
-0.30%
PROPOSED PROFILE
AT REF LINE
HW 100 YR
EL 942.46
VPC STA 9+25.00
VPC EL 946.86
LP STA 10+45.28
LP EL 946.12
VPT STA 10+75.00
VPT EL 946.17
OBSERVED WATER
EL 938.64, 09/01/2023
PROPOSED STRUCTURE B-17-0238
C/L STRUCTURE AT 9+88.00
TWIN-CELL BOX CULVERT
54.0-FT BOX LENGTH
EXISTING PROFILE
ELEVATIONS
FINISHED PROFILE
ELEVATIONS
949.41
949.17
948.95
948.71
948.48
948.15
947.72
947.79
947.23
947.48
946.93
947.17
946.55
946.86
946.37
946.59
946.22
946.38
937.19
946.23
946.19
946.14
946.20
946.12
946.19
946.17
946.31
946.24
946.34
946.26
946.24
946.18
946.09
946.00
946.02
946.15
946.43
946.77
7+00
7+50
8+00
8+50
9+00
9+50
10+00
10+50
11+00
11+50
12+00
12+50
13+00

PROJECT NO: 7878-03-70	HWY: CTH P	COUNTY: DUNN	PLAN AND PROFILE: CTH P	SHEET 11	E

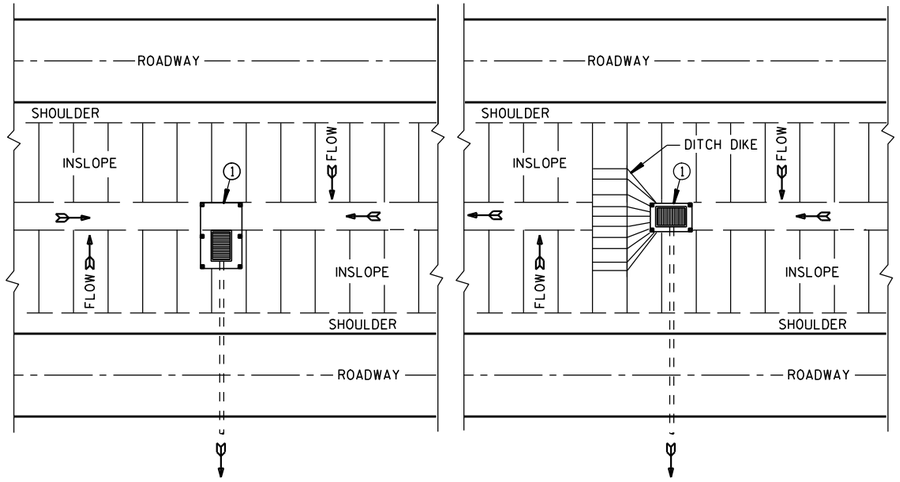
Standard Detail Drawing List

08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

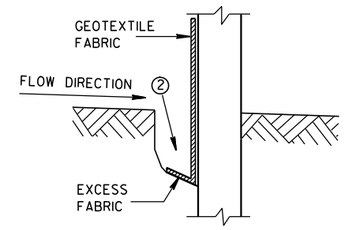
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

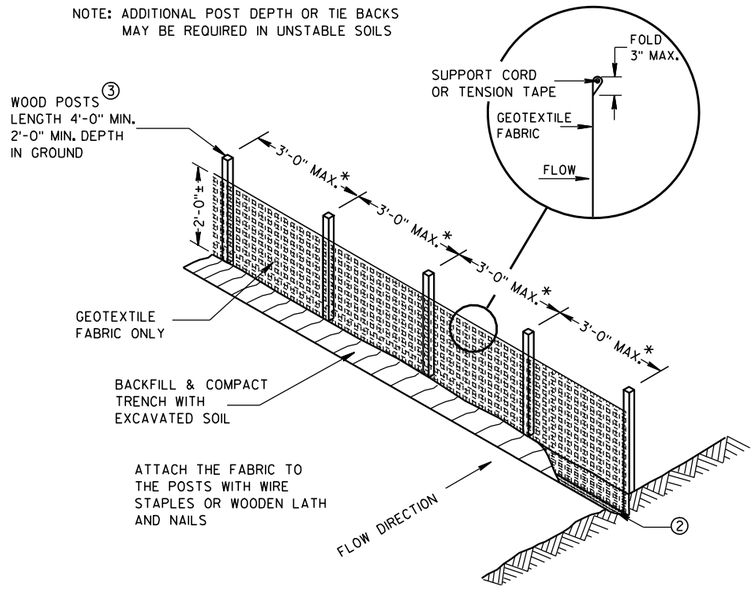
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

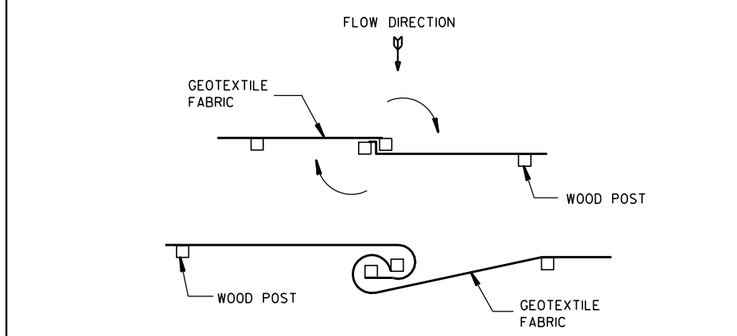
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



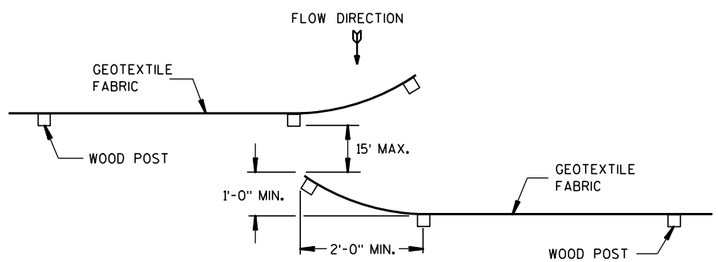
TRENCH DETAIL



SILT FENCE

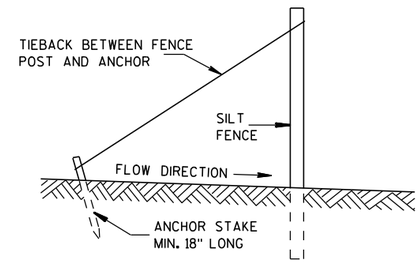


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

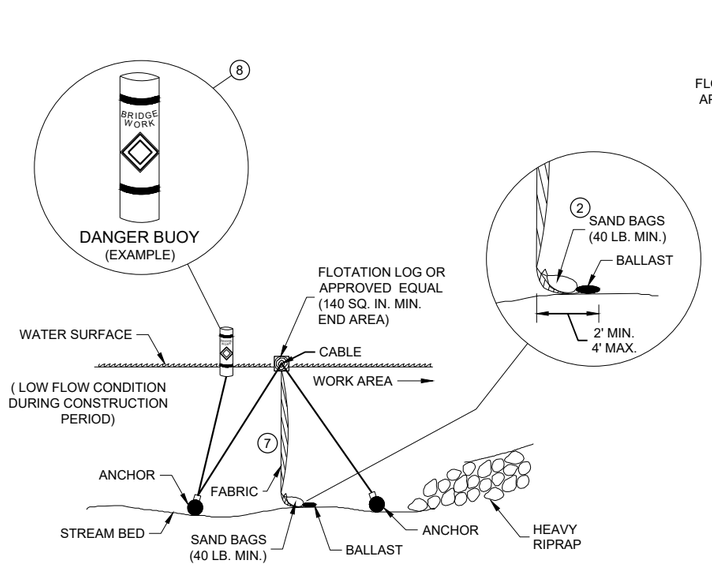
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

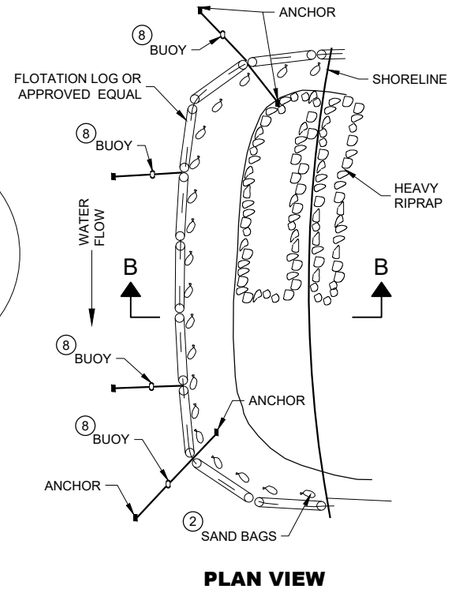
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

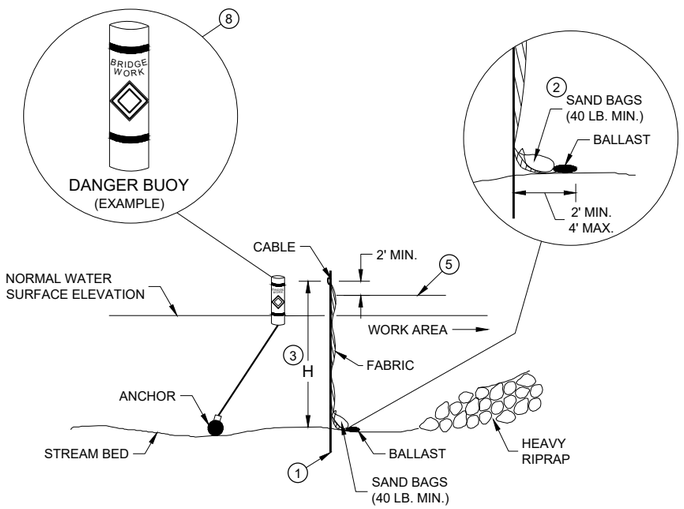


SECTION B - B

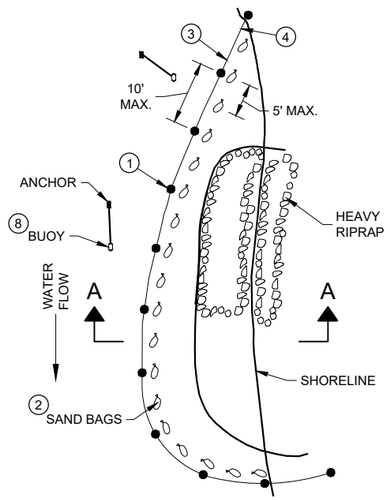


PLAN VIEW

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) SAND BAGS 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 FEET, POST SPACING MAY NEED TO BE DECREASED.

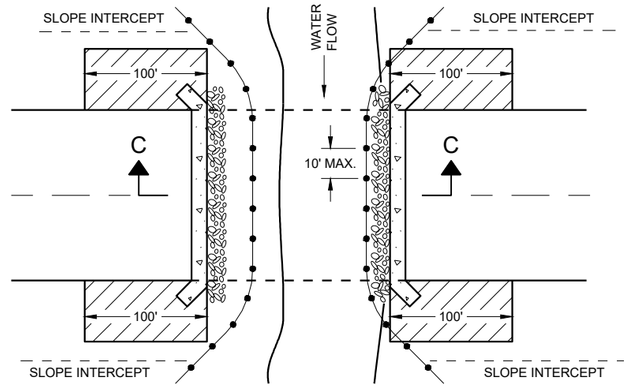
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(5) ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.

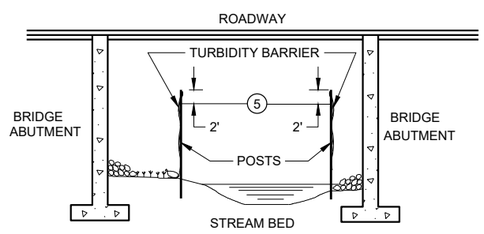
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

(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

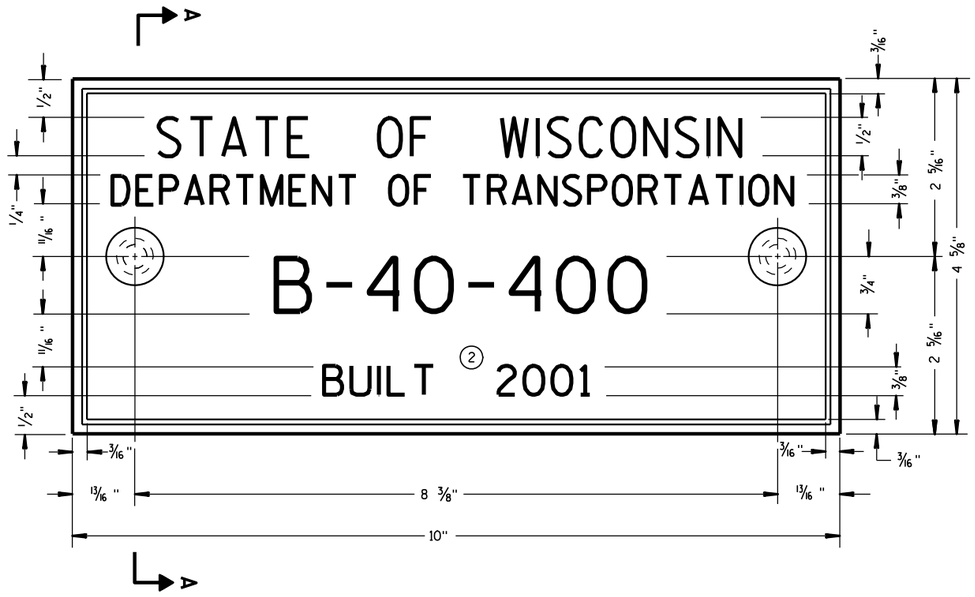
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
SDD 08E11 - 02



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

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

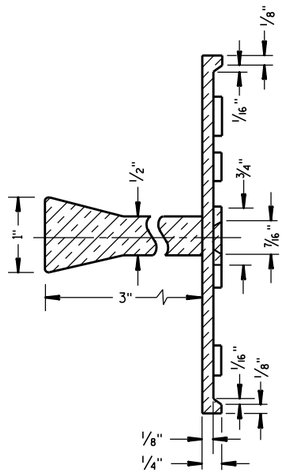
GENERAL NOTES

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

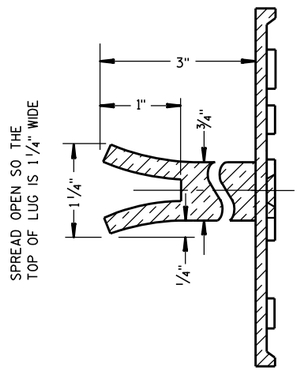
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

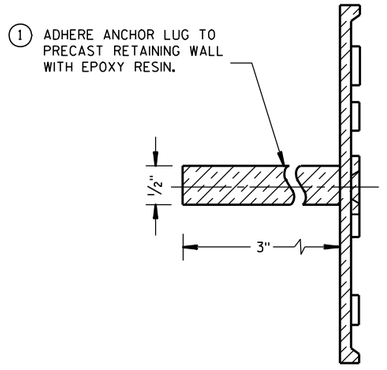
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

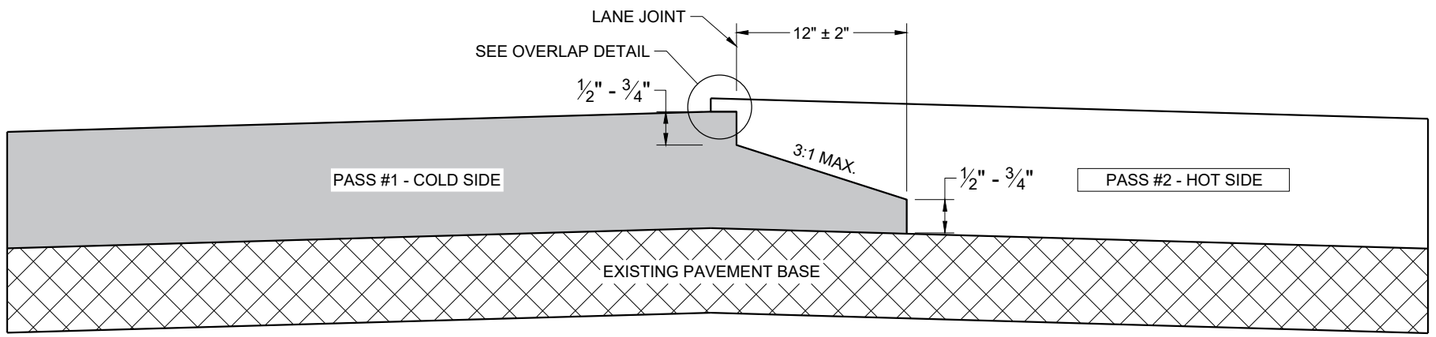
3/26/10 DATE

/S/ Scot Beck CHIEF STRUCTURAL DEVELOPMENT ENGINEER

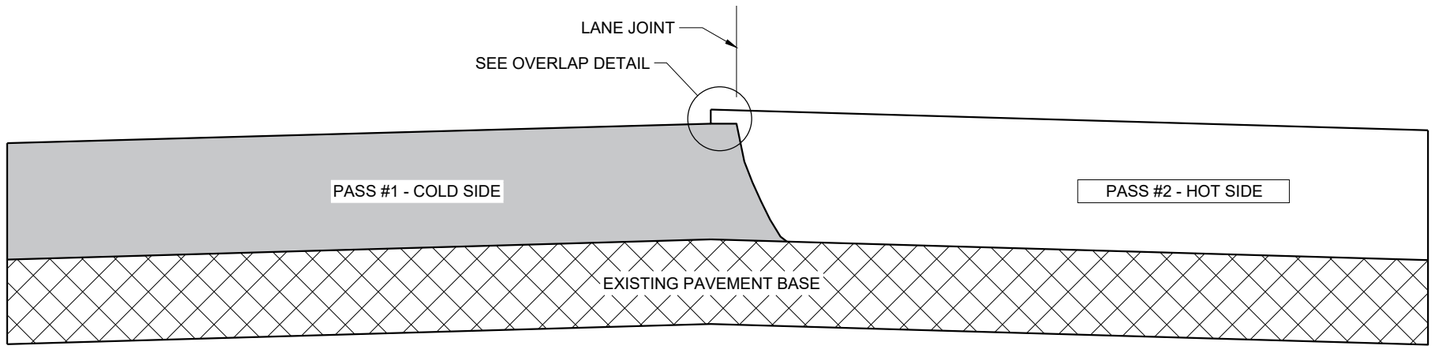
FHWA

6

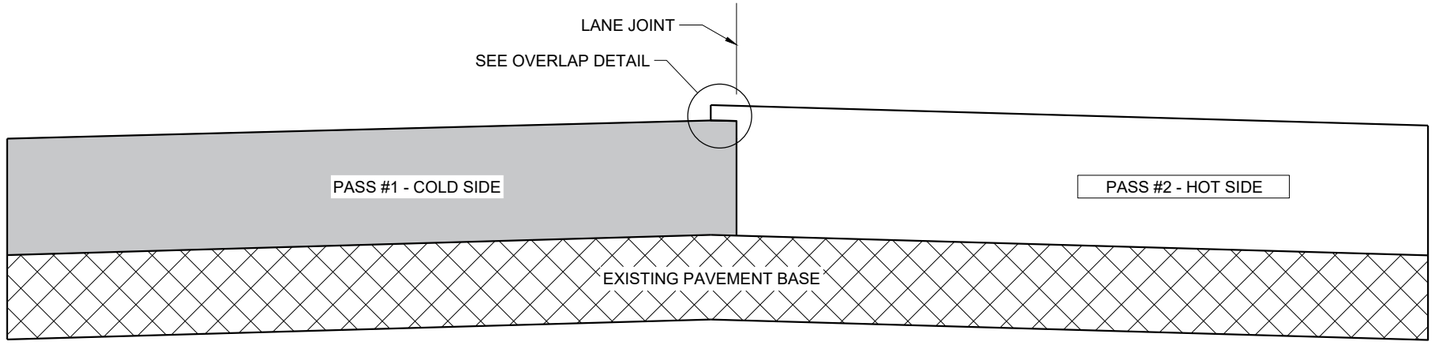
S.D.D. 12 A 3-10



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

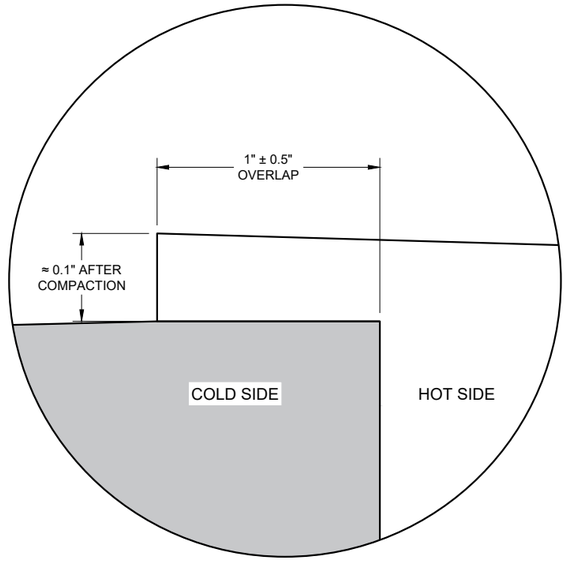
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGIN

FHWA

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SDD 13C19 - 03

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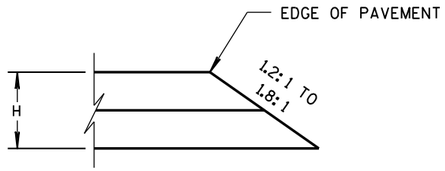
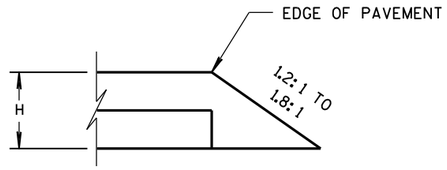
SDD 13C19 - 03



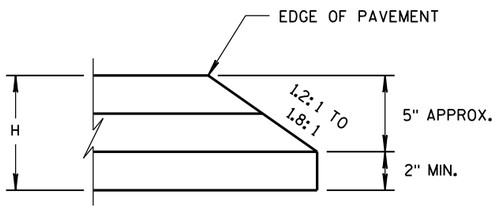
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



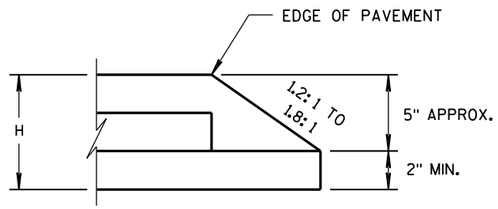
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

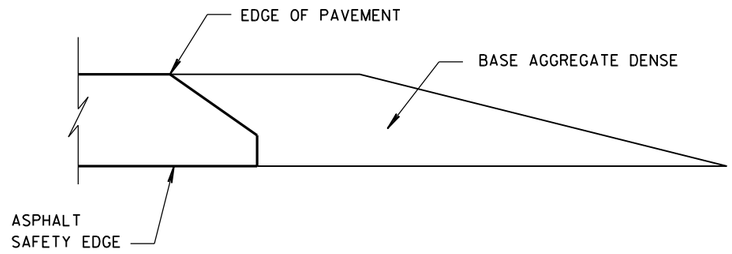
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

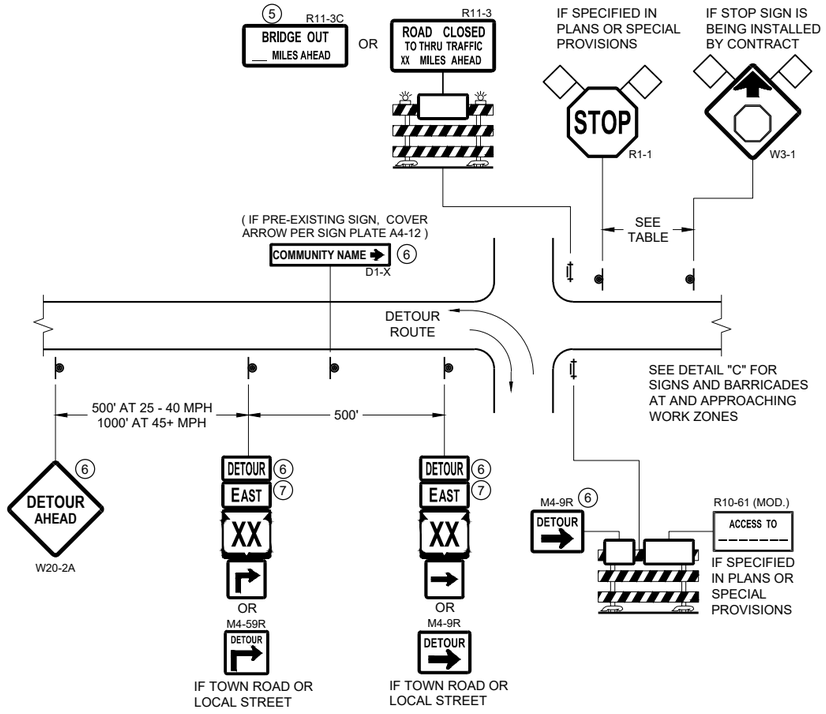
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

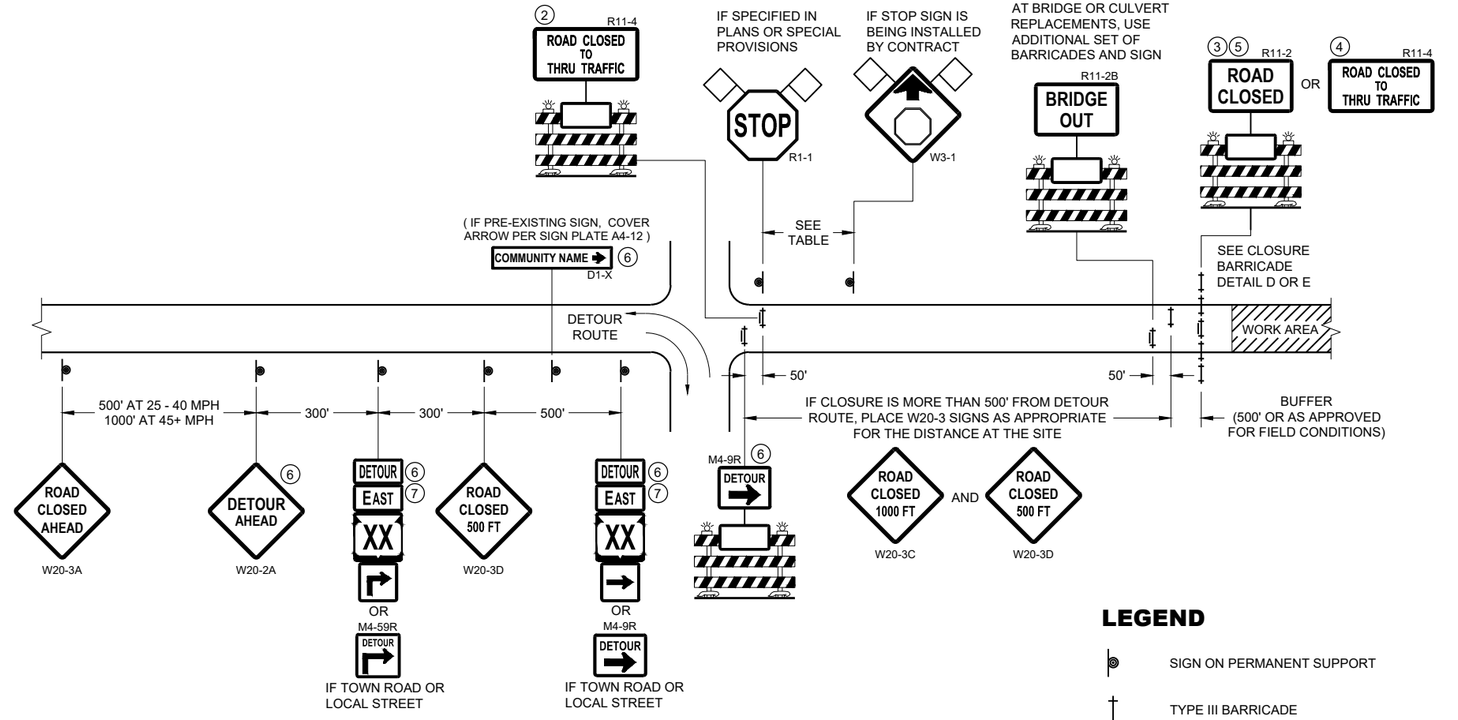
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



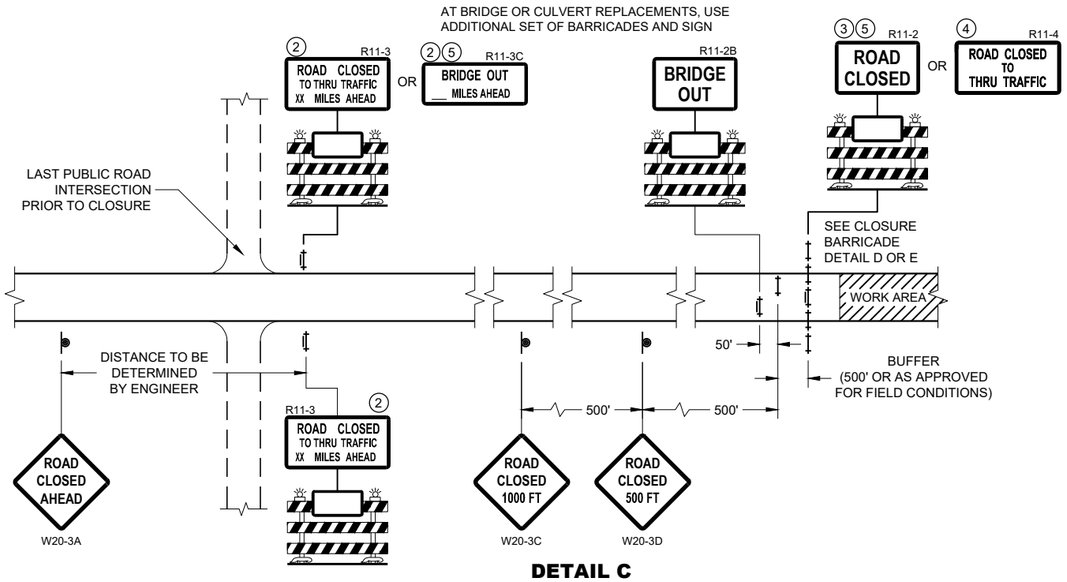
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



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
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

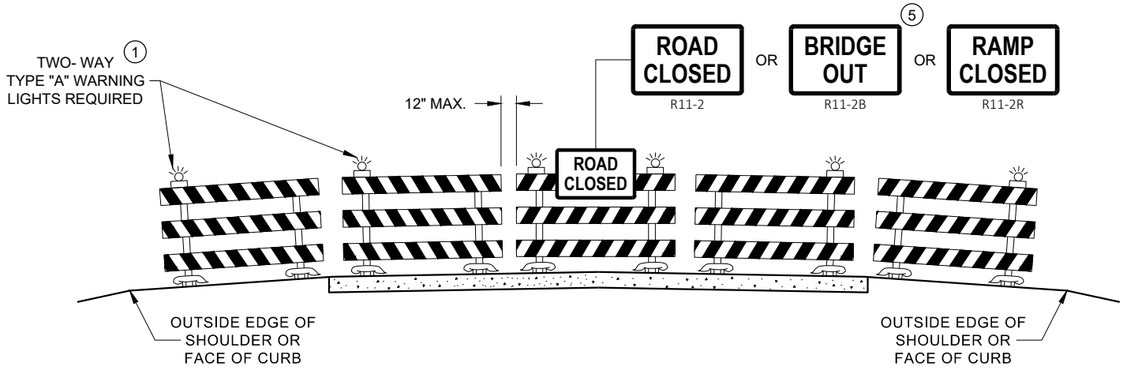
APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

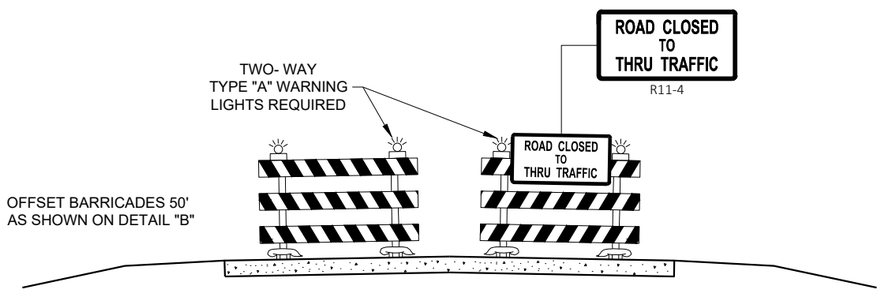
6

SDD 15C02 - 09a

SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

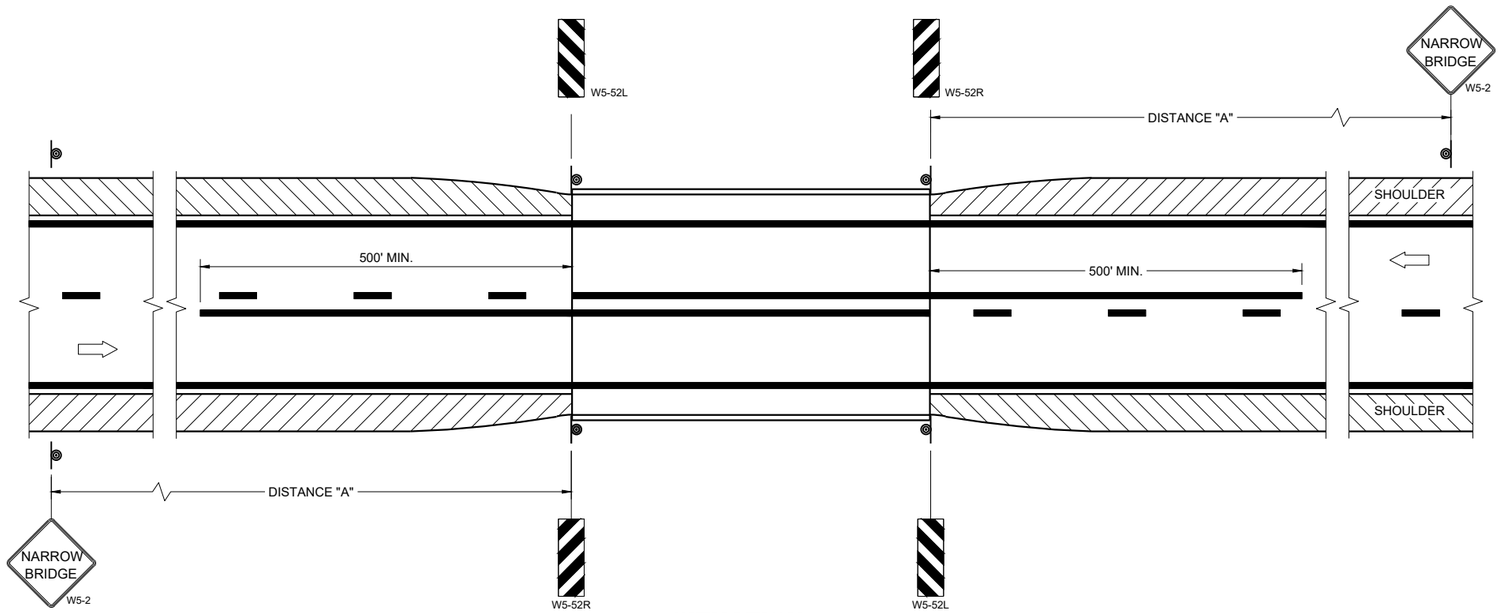
APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 09b

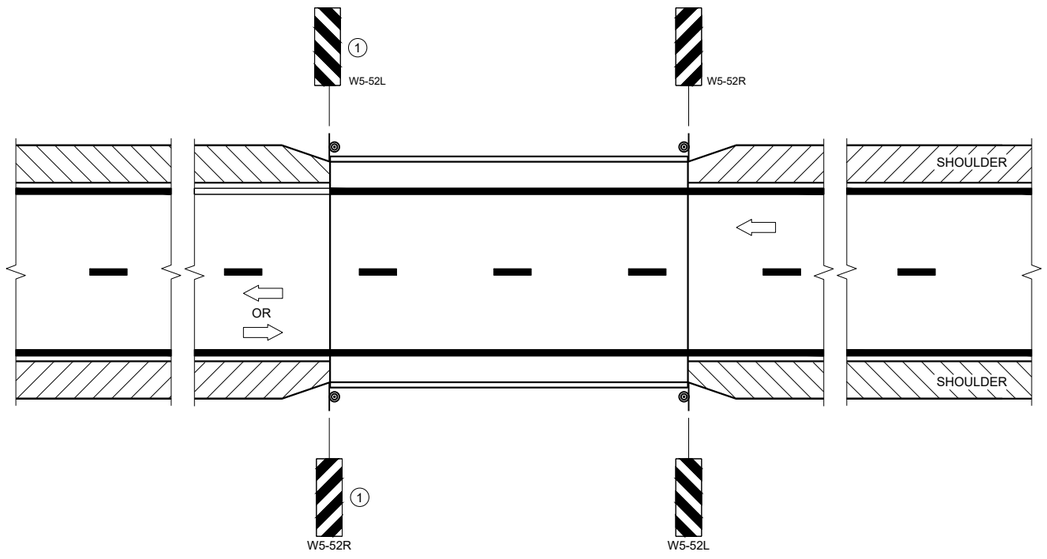
6

SDD 15C02 - 09b



SITUATION 1

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



SITUATION 2

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

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THE 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.

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

(1) OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	700'

SIGNING AND MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer
FHWA

6
SDD 15C06-12

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

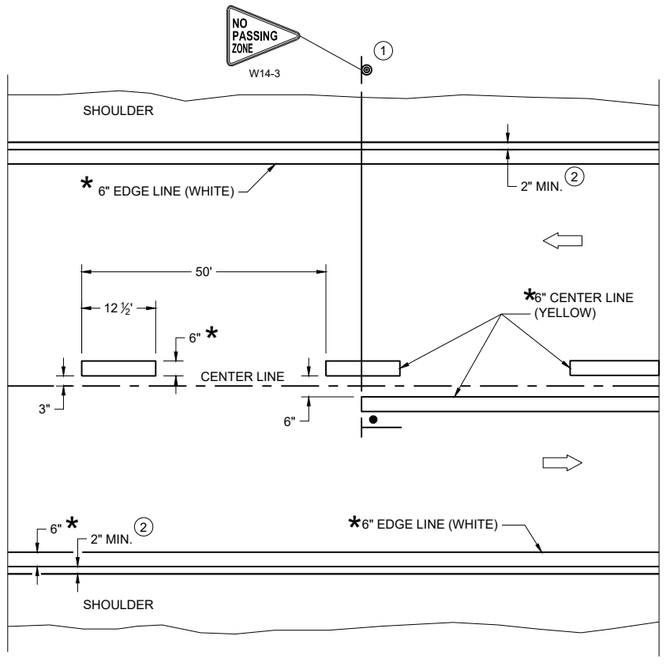
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

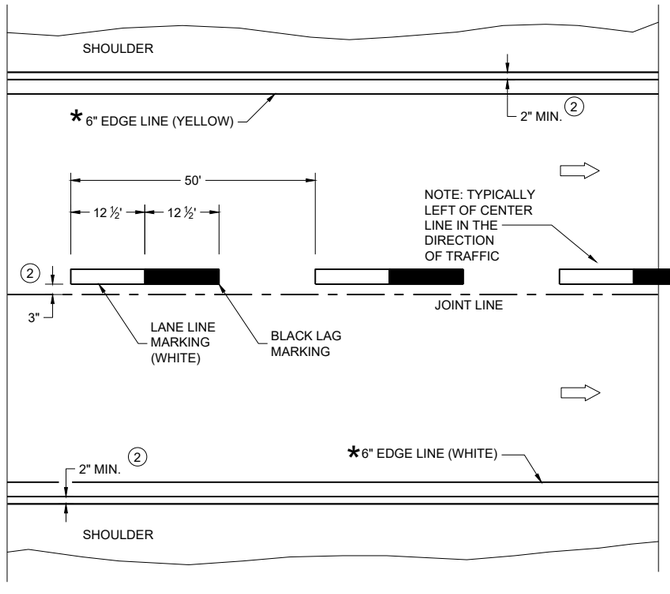
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

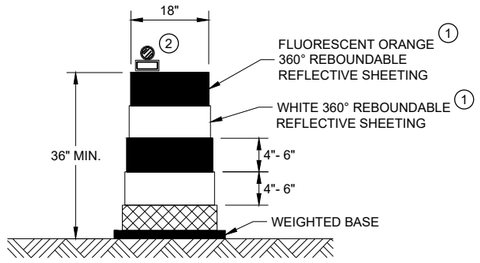
FHWA

SDD 15C08-24a

SDD 15C08-24a

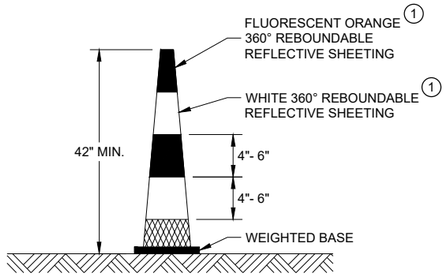
GENERAL NOTES

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



DRUM

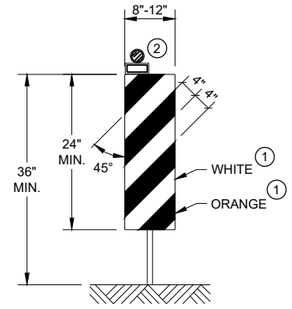
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

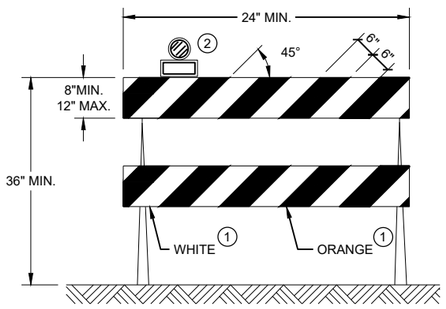
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



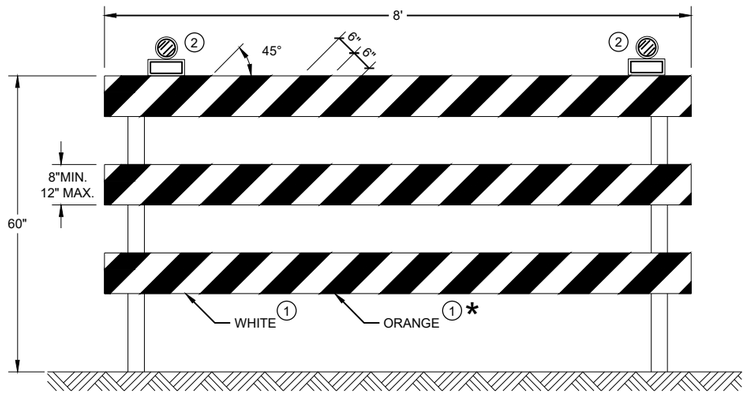
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

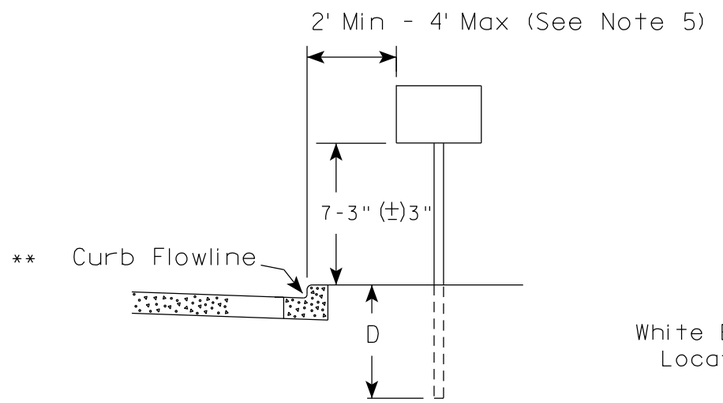
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

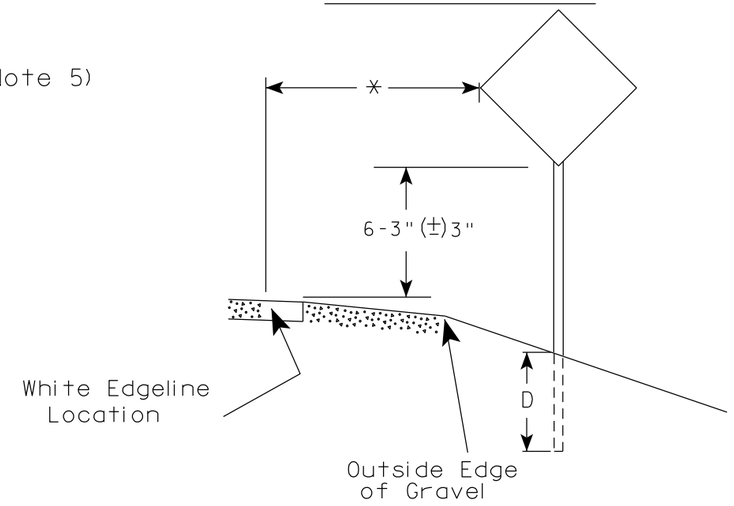
6

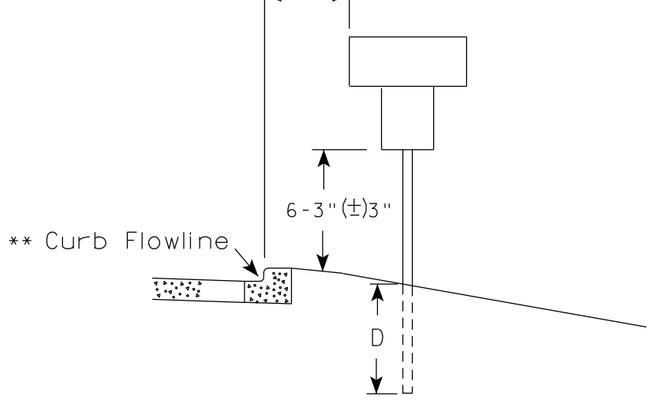
SDD 15C11 - 10b

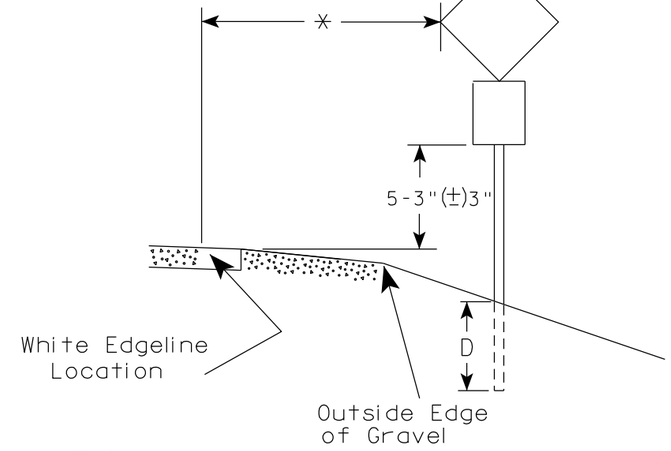
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

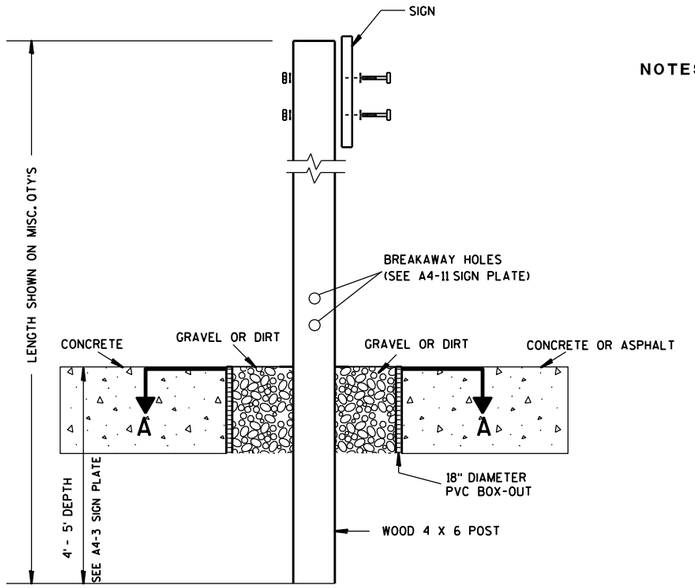
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

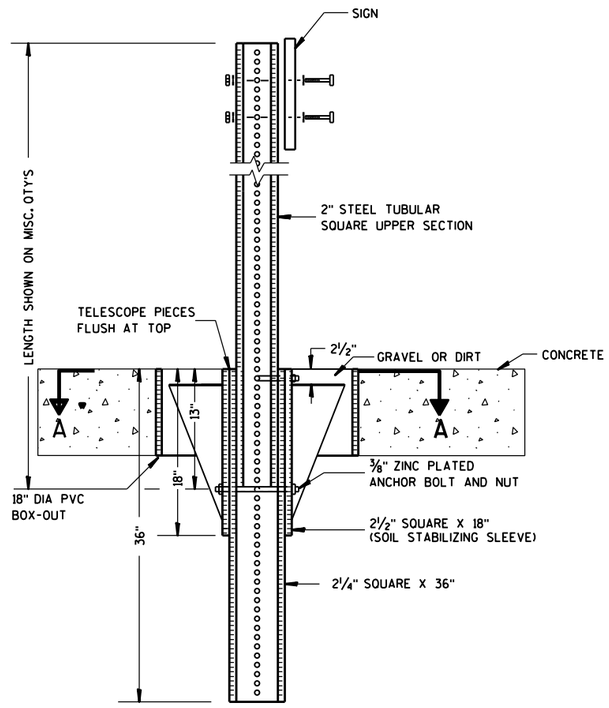
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 23	E



ELEVATION VIEW

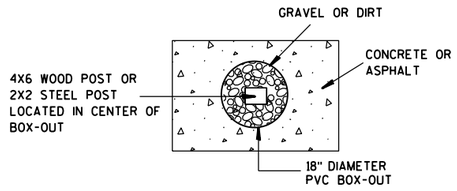
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

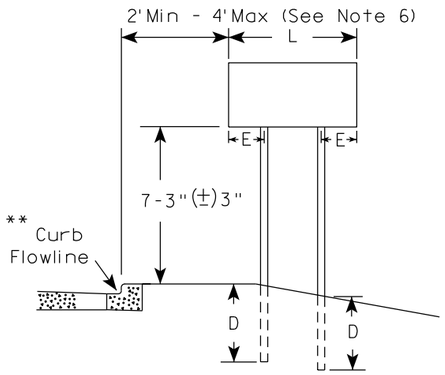
WISCONSIN DEPT OF TRANSPORTATION

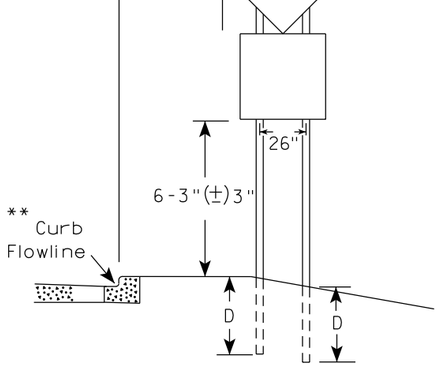
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

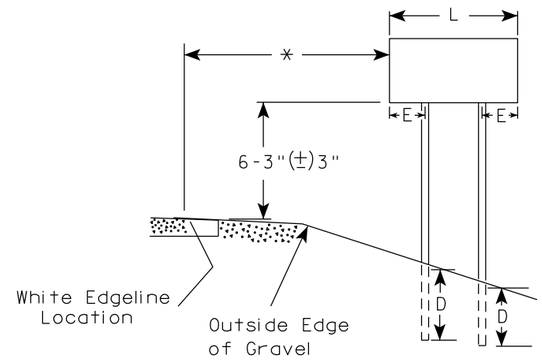
URBAN AREA

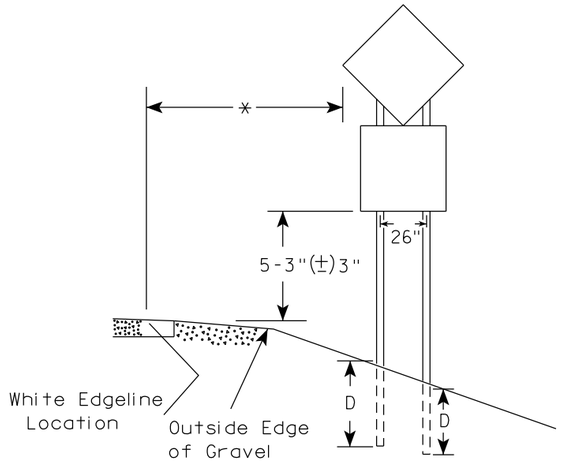




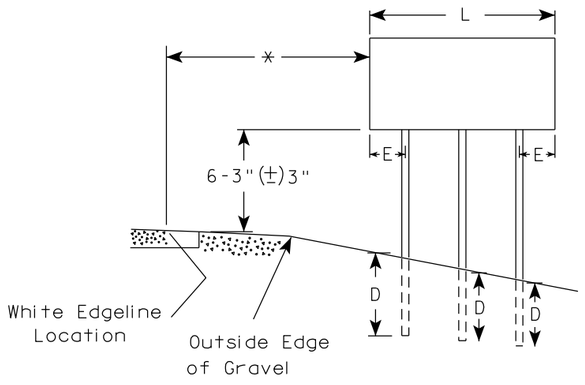
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

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

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

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

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

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

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

POST EMBEDMENT DEPTH

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

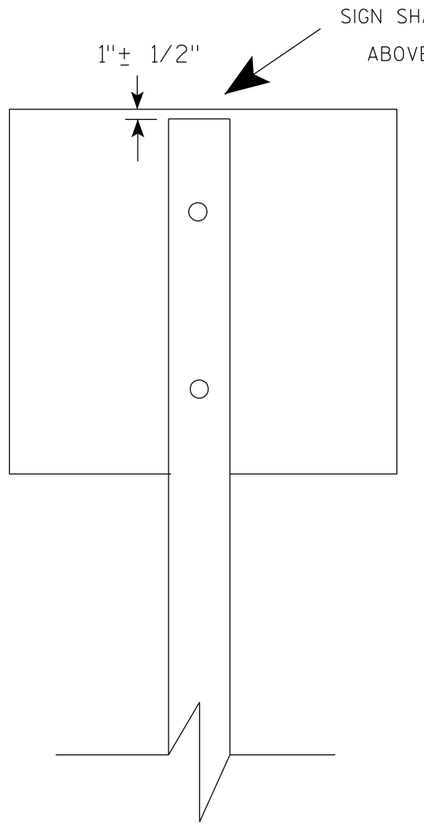
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

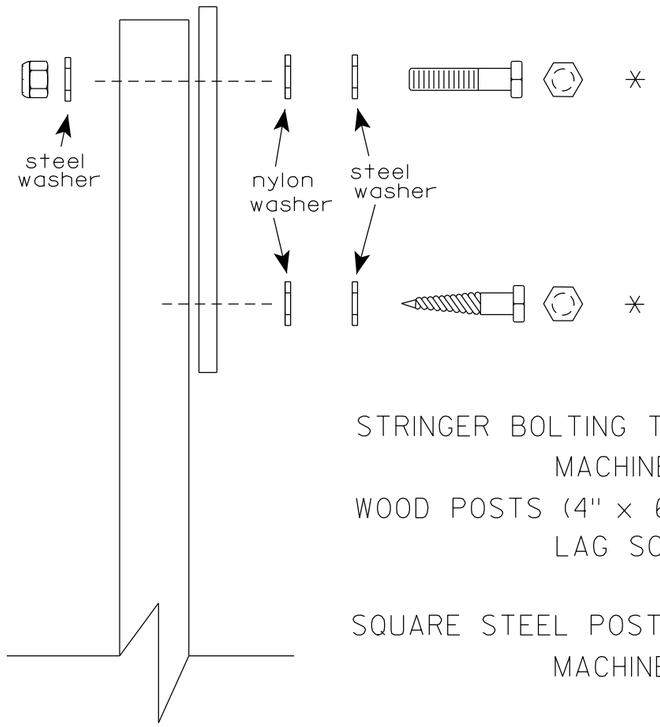
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 25	E





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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

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

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

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

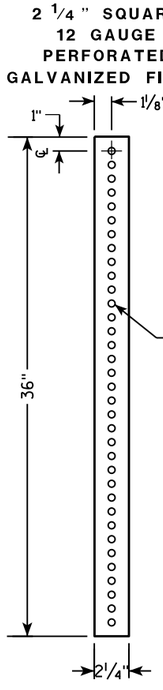
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

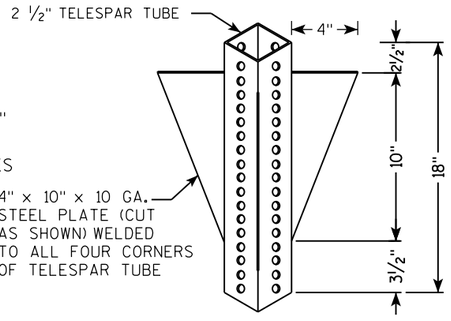
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

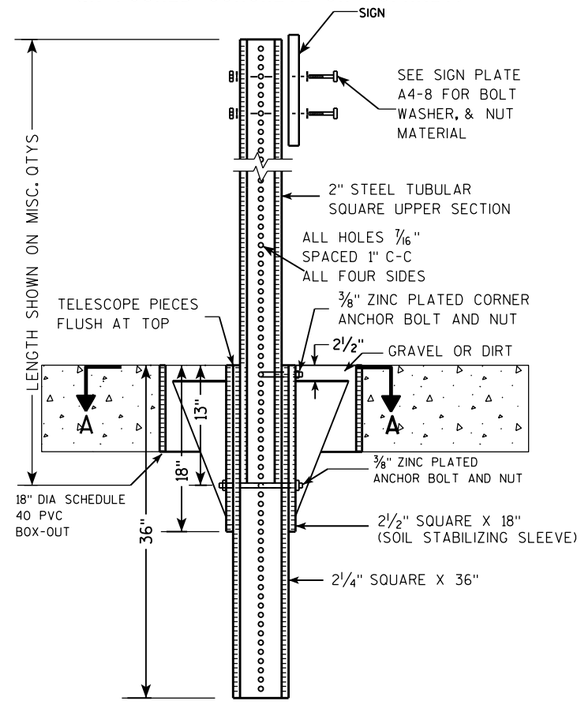
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



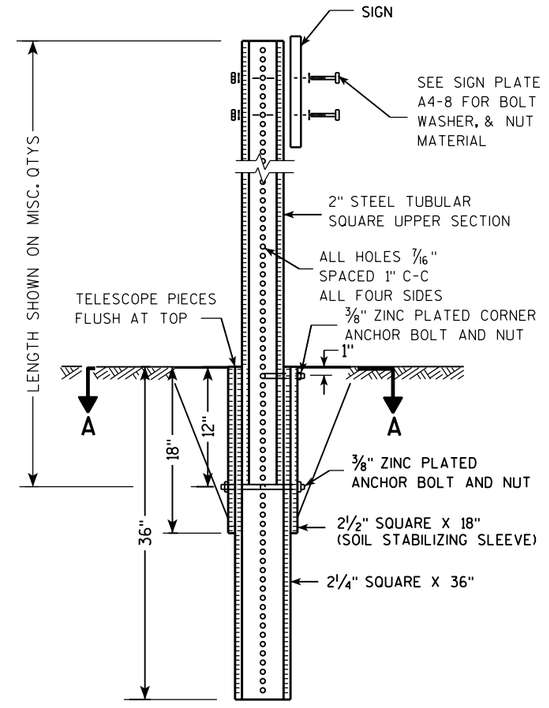
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

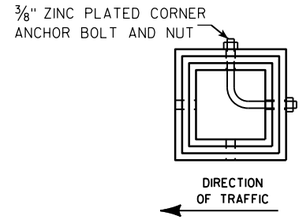


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

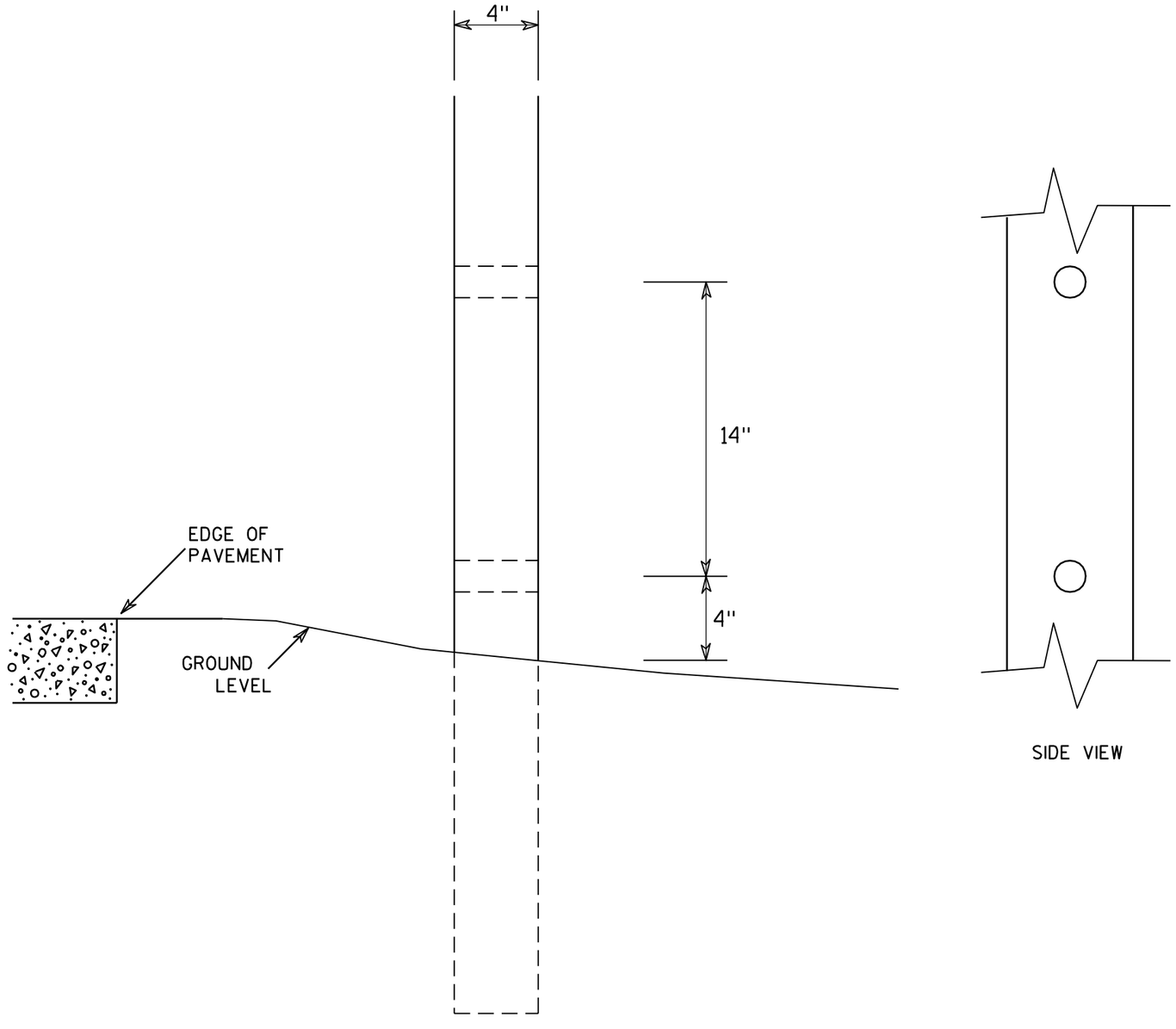
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 27 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

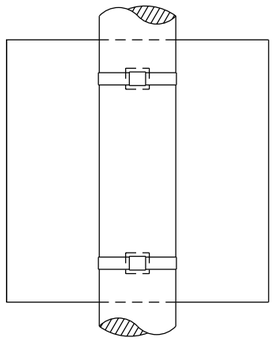
APPROVED Chester J Spang for State Traffic Engineer

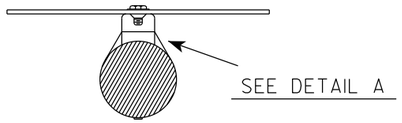
DATE 3/27/97 PLATE NO. A4-11.2

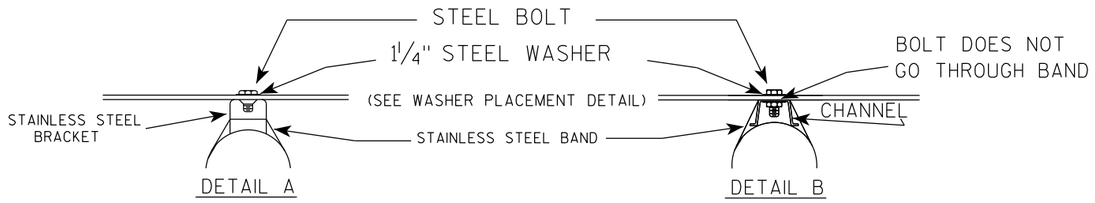
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 28	E

BANDING

SINGLE SIGN



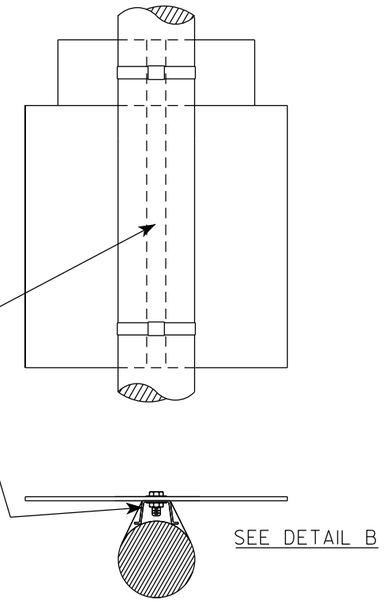




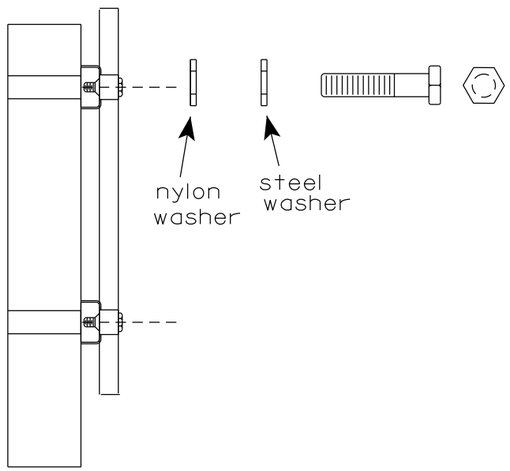
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

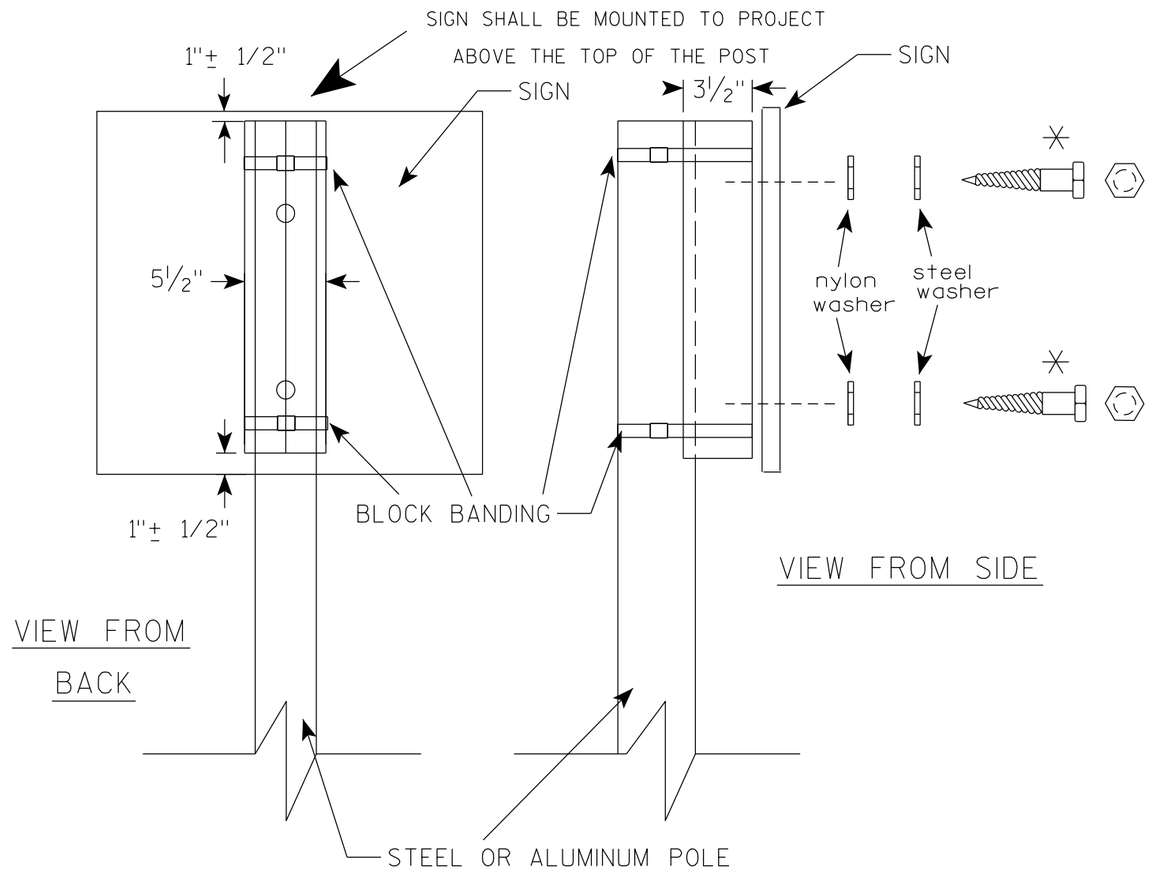
WISCONSIN DEPT OF TRANSPORTATION

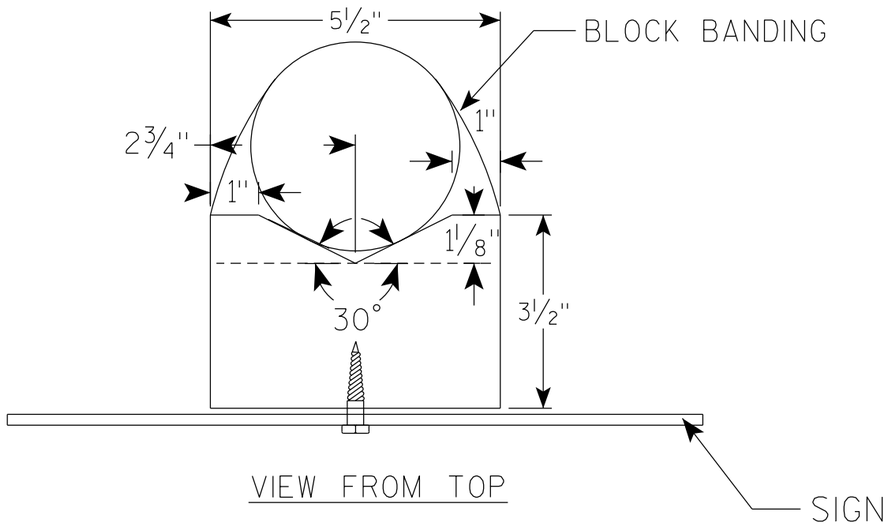
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 29	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

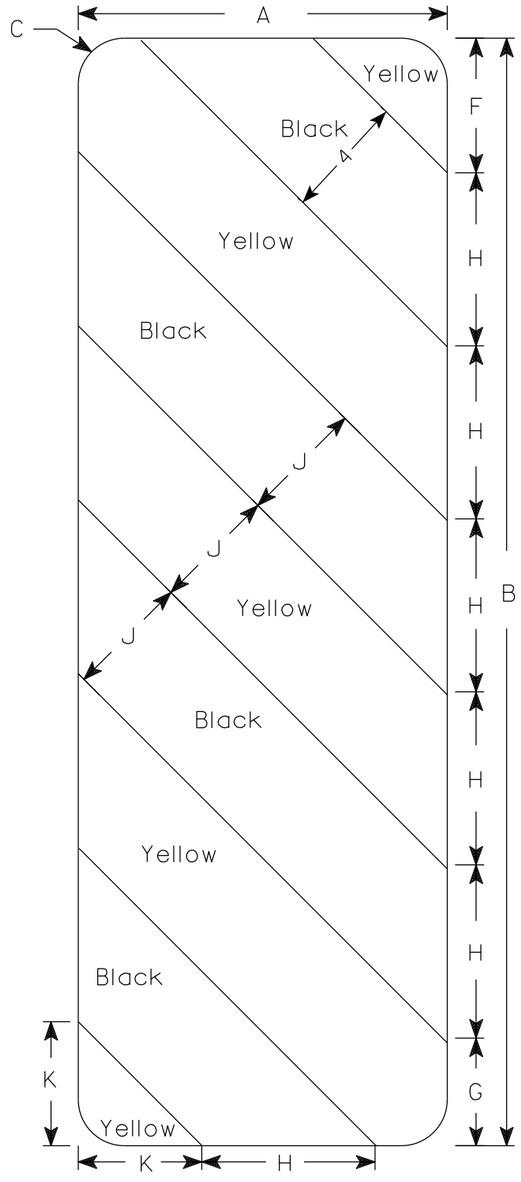
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

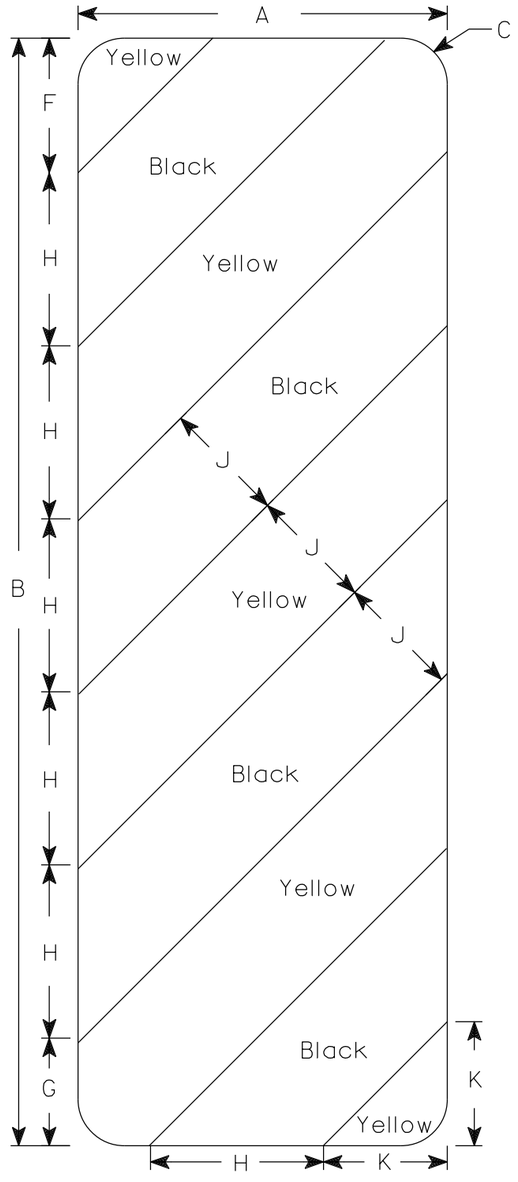
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 30 E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Alternate colors of stripes as shown.

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

STANDARD SIGN

W5-52L & W5-52R

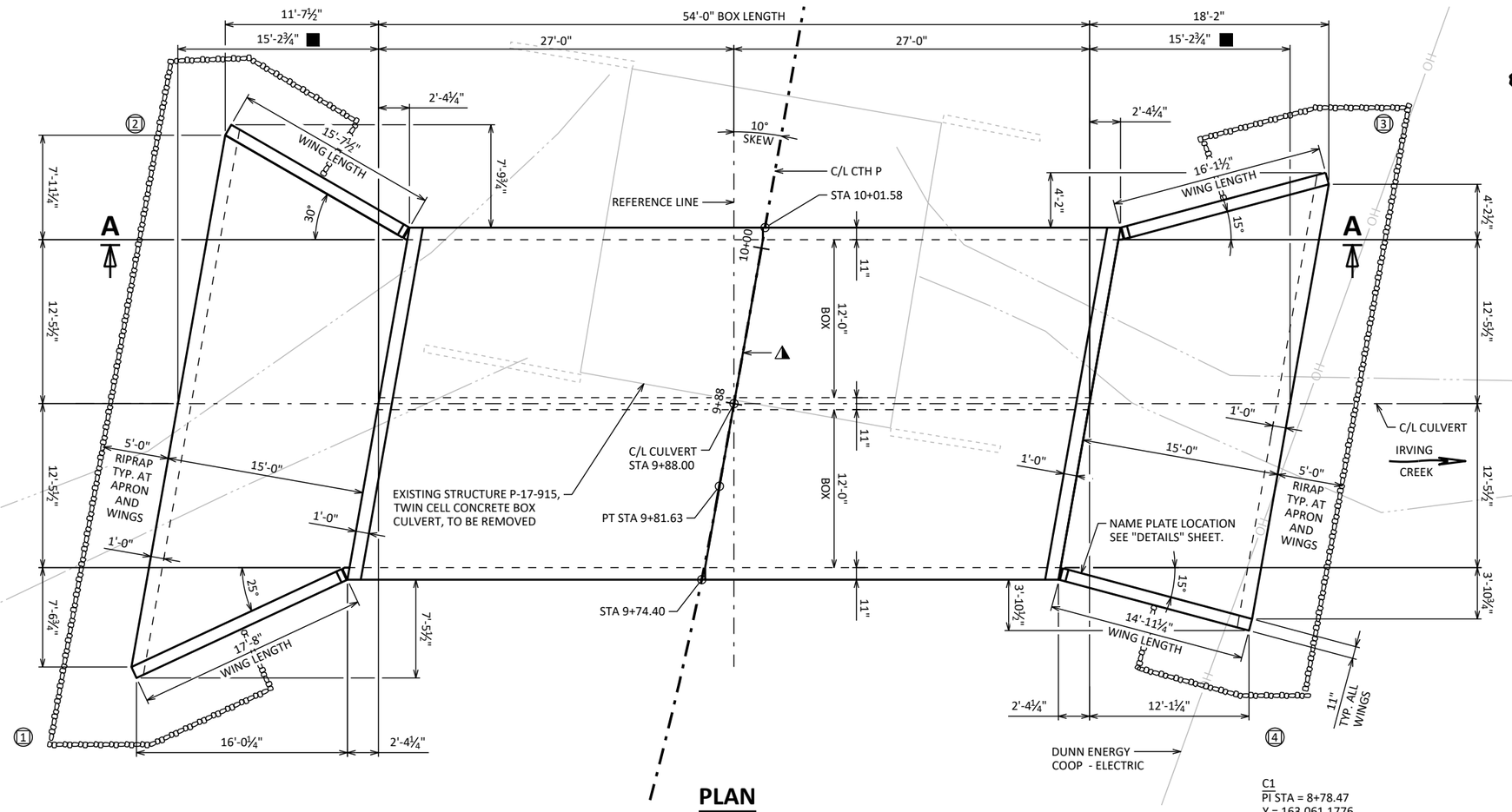
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/4/2024 PLATE NO. W5-52.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate_W552.dgn PLOT DATE : 4-MARCH 2024 11:57 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

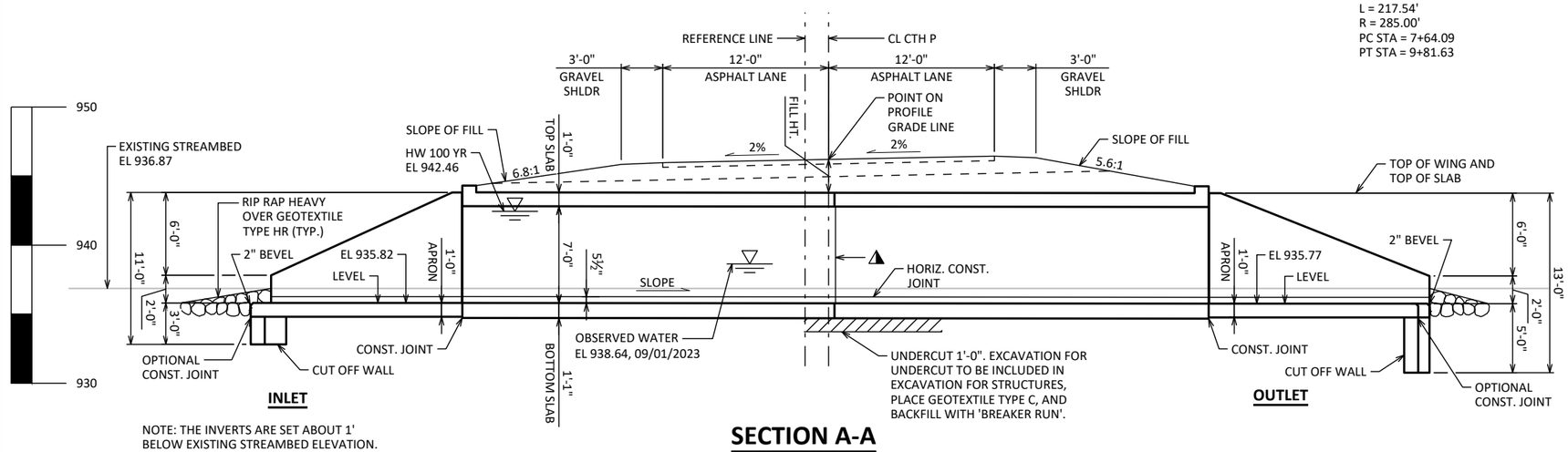


NOTE: STRUCTURE BACKFILL REQUIRED BEHIND ALL WING WALLS.

PLAN

(TWIN CELL CONCRETE BOX CULVERT)
(LOOKING UPSTATION)

C1
PI STA = 8+78.47
Y = 163,061.1776
X = 130,902.7973
Δ = 43°43'58"
D = 20°06'14"
T = 114.38'
L = 217.54'
R = 285.00'
PC STA = 7+64.09
PT STA = 9+81.63



INLET

OUTLET

NOTE: THE INVERTS ARE SET ABOUT 1' BELOW EXISTING STREAMBED ELEVATION.

SECTION A-A

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.22
OPERATING RATING: RF = 1.58
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

EARTH LOAD:

DESIGNED FOR 2 FT TO 3 FT OF FILL.

MATERIAL PROPERTIES:

CONCRETE MASONRY — f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT — f_y = 60,000 PSI

HYDRAULIC DATA

100-YEAR FREQUENCY:

Q_{100} = 570 C.F.S.
V_{100} = 4.64 F.P.S.
HW_{100} = EL. 942.46
WATERWAY AREA = 168 SF
DRAINAGE AREA = 2.1 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

2-YEAR FREQUENCY:

Q_2= 117 C.F.S.
V_2= 1.12 F.P.S.
HW_2= EL. 941.19

TRAFFIC DATA

FEATURE ON: CTH P

ADT = 350 (2026)
ADT = 520 (2046)
R.D.S. = 55 MPH

LEGEND

- INDICATES WING NUMBER
- VERT CONSTRUCTION JOINT: 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING UP WALLS AND ACROSS TOP SLAB
- BUILD APRON AND END OF BOX LEVEL

LIST OF DRAWINGS:

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. BOX DETAILS
5. APRON DETAILS
6. WINGWALL DETAILS
7. BILL OF BARS

STRUCTURE DESIGN CONTACTS:

SEH CONTACT: CHRIS BLUM, 608-620-6192
WISDOT BRIDGE OFFICE CONTACT: AARON BONK, 608-261-0261

STATE PROJECT NUMBER
7878-03-70

NO.	DATE	REVISION	BY

SEH
SHORT ELLIOTT HENDRICKSON INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/18/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

WISCONSIN PROFESSIONAL ENGINEER
CHRISTOPHER J. BLUM
E-33157
MADISON
WI
7/29/2025

STRUCTURE B-17-238

CTH P OVER IRVING CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
DUNN	WESTON

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
NCK	JGM	ALC	JGM

GENERAL PLAN

SHEET 1 OF 7
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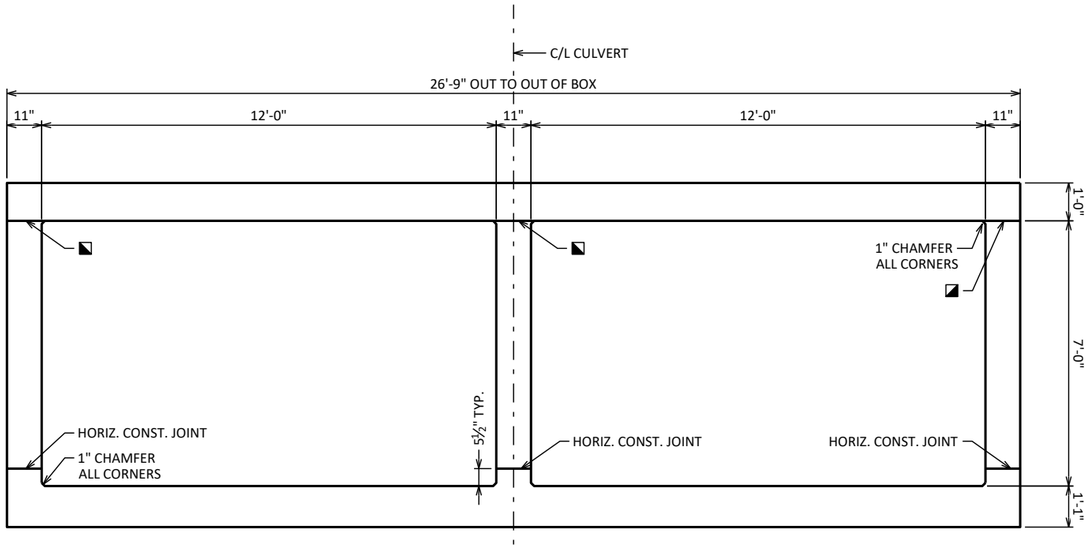
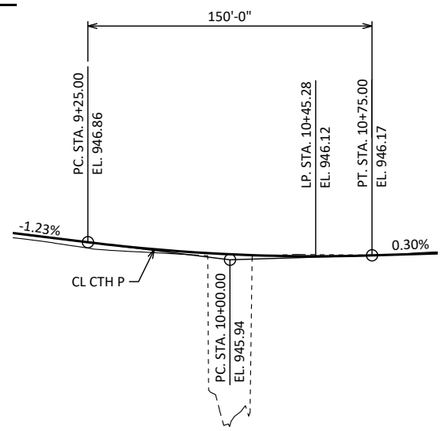
I.D.
DATE:

STATE PROJECT NUMBER

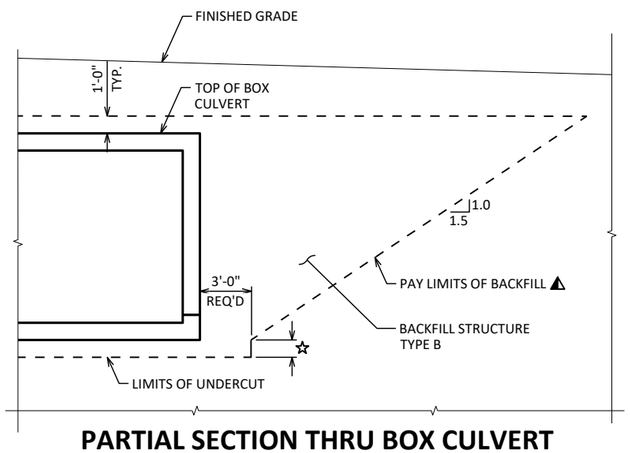
7878-03-70



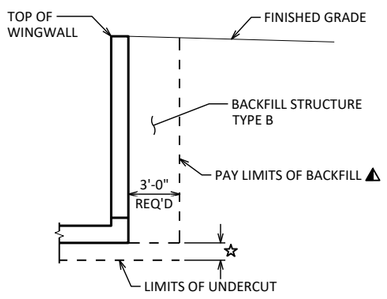
CROSS SECTION THRU BOX



PROFILE GRADE LINE



PARTIAL SECTION THRU BOX CULVERT



TYPICAL SECTION THRU BOX CULVERT WINGWALL

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS B-17-238" SHALL BE THE EXISTING GROUNDLINE.

ALL VOLUME WHICH CANNOT BE PLACED BEFORE CULVERT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL WITHIN THE LENGTH OF THE CULVERT INCLUDING THE APRON WING WALLS.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

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

PLACE 18" (MIN.) WIDE SHEET OF "RUBBERIZED MEMBRANE WATERPROOFING" ON TOP SLAB OVER ALL CONSTRUCTION JOINTS AND EXTEND 6" MIN. BELOW TOP OF BOTTOM SLAB.

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS ON CHAPTER 36 STANDARDS OF THE CURRENT WISC. DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".

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

THE ALTERNATE CUT-OFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONCRETE CUT-OFF WALLS.

TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
	203.0220	REMOVING STRUCTURE P-17-915	EACH	1
	206.2001	EXCAVATION FOR STRUCTURES CULVERTS B-17-238	EACH	1
(1)	210.2500	BACKFILL STRUCTURE TYPE B	TON	1,050
	311.0115	BREAKER RUN	CY	110
	504.0100	CONCRETE MASONRY CULVERTS	CY	200
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	32,340
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,980
(2)	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	14
	606.0300	RIPRAP HEAVY	CY	55
	645.0105	GEOTEXTILE TYPE C	SY	329
	645.0120	GEOTEXTILE TYPE HR	SY	120
		NON-BID ITEMS		
		FILLER	SIZE	¾"
		NAMEPLATE	EACH	1

(1) BEHIND BOX AND WINGWALLS. COORDINATE WITH ROADWAY DRAWINGS.

(2) DOES NOT INCLUDE RUBBERIZED MEMBRANE WATERPROOFING WHERE OPTIONAL CONSTRUCTION JOINT IS USED.

LEGEND

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

☆ UNDERCUT 1'-0". EXCAVATION FOR UNDER CUT IS TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE FABRIC TYPE C" AND BACKFILL WITH "BREAKER RUN".

IN LIEU OF USING BREAKER RUN FOR THE BOX CONSTRUCTION PLATFORM, THE CONTRACTOR MAY ELECT TO SUBSTITUTE #1 OR #2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR THE BASE STABILITY WITH ANY SUBSTITUTED MATERIAL. THE REGION GEOTECHNICAL ENGINEER MAY BE CONTACTED TO DETERMINE IF "OTHER GRANULAR MATERIAL" IS ACCEPTABLE.

◪ OPTIONAL CONSTRUCTION JOINT. OMIT 1" CHAMFER IF OPTIONAL CONST. JOINT IS USED.

BENCH MARK

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
BM 1	10+82.86/57.62' RT	SPIKE IN PPOL	942.16'
BM 2	9+39.04/35.42' RT	SPIKE IN PPOL	944.67'

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-17-238

DRAWN BY ALC | PLANS CK'D JGM

CROSS SECTION AND QUANTITIES

SHEET 2 OF 7

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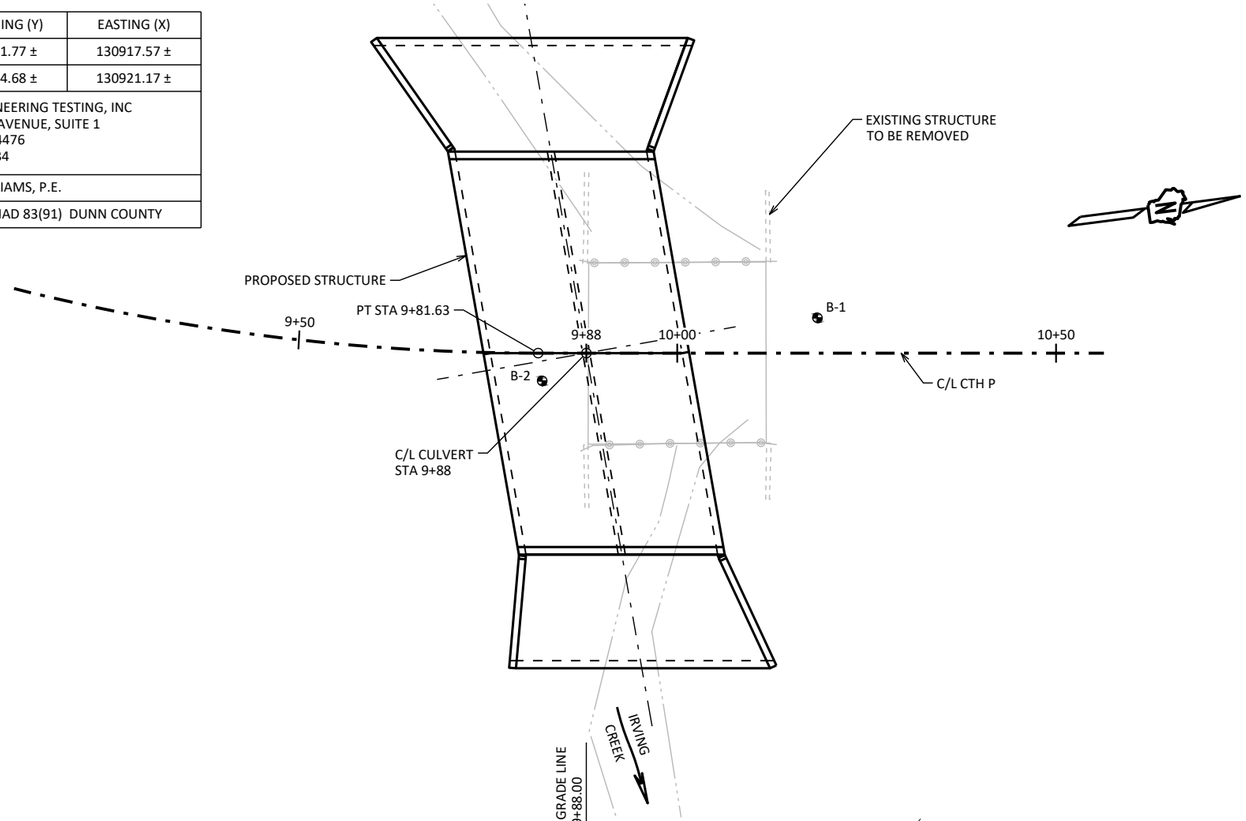
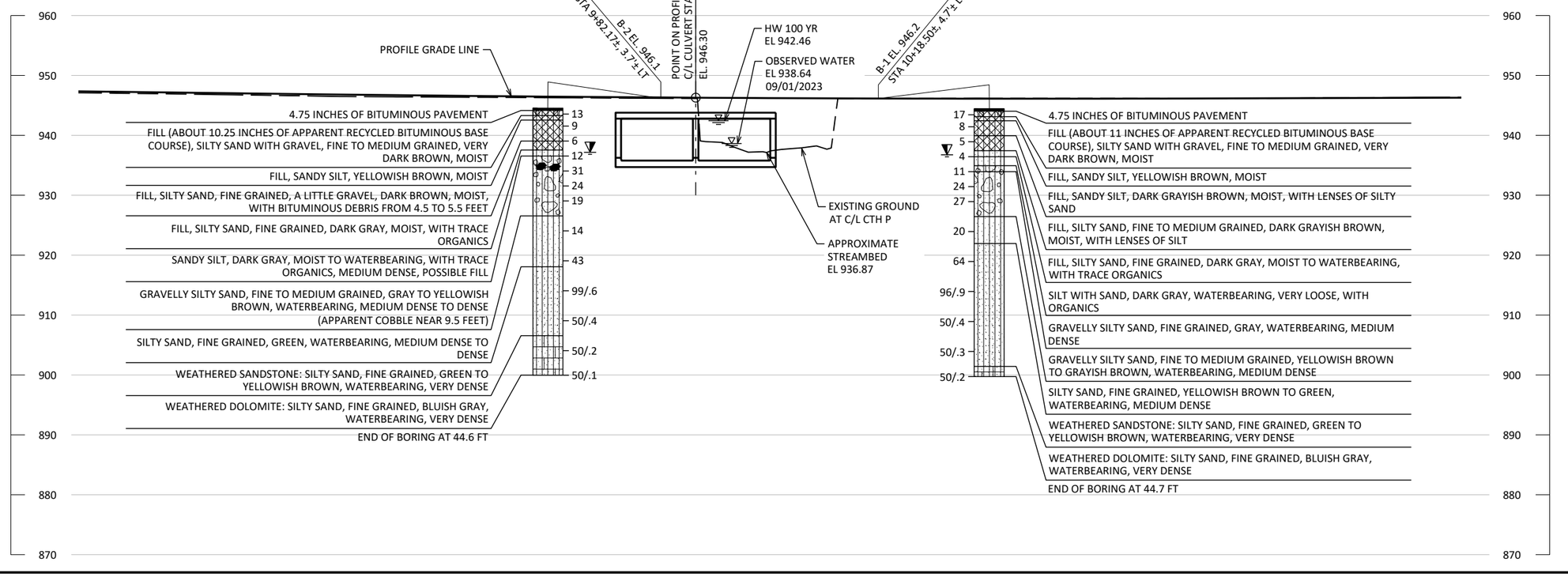
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	8/28/2023	163211.77 ±	130917.57 ±
B-2	8/28/2023	163174.68 ±	130921.17 ±

BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING, INC
4203 SCHOFIELD AVENUE, SUITE 1
SCHOFIELD, WI 54476
PH: (715) 359-3534

REPORT COMPLETED BY: MATTHEW B. WILLIAMS, P.E.

ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DUNN COUNTY





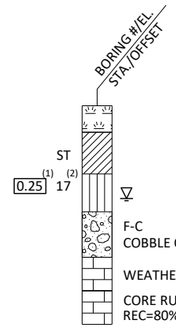
STATE PROJECT NUMBER

7878-03-70

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-17-238

DRAWN BY ALC · PLANS CK'D JGM

SUBSURFACE EXPLORATION

SHEET 3 OF 7
34

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STATE PROJECT NUMBER

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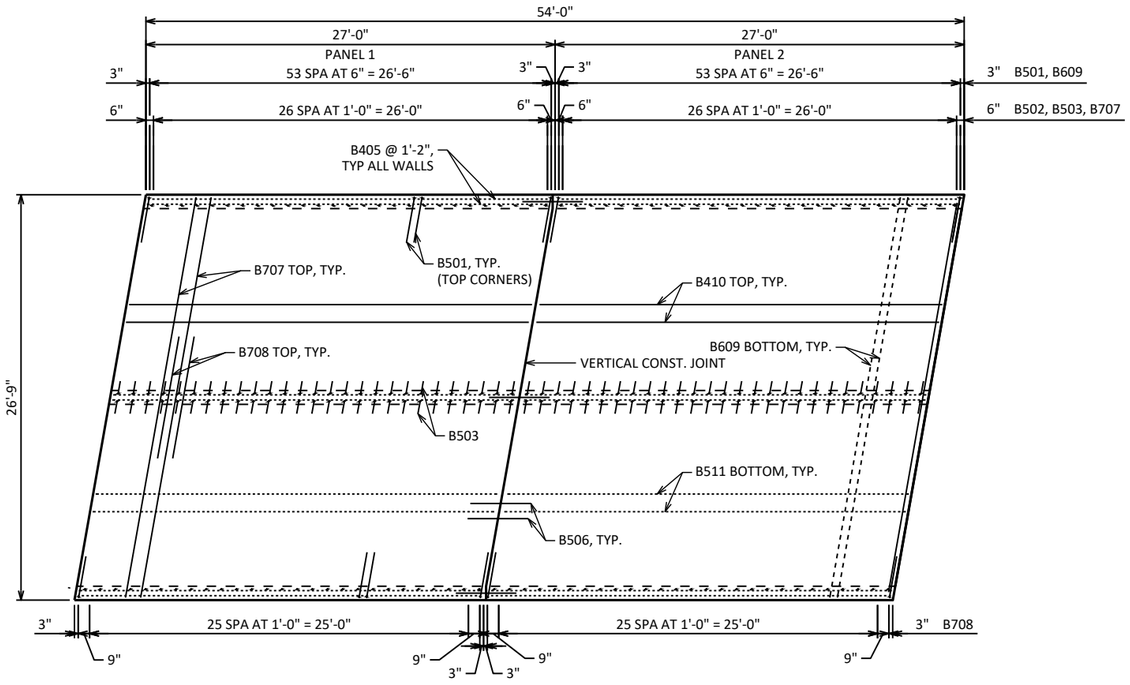
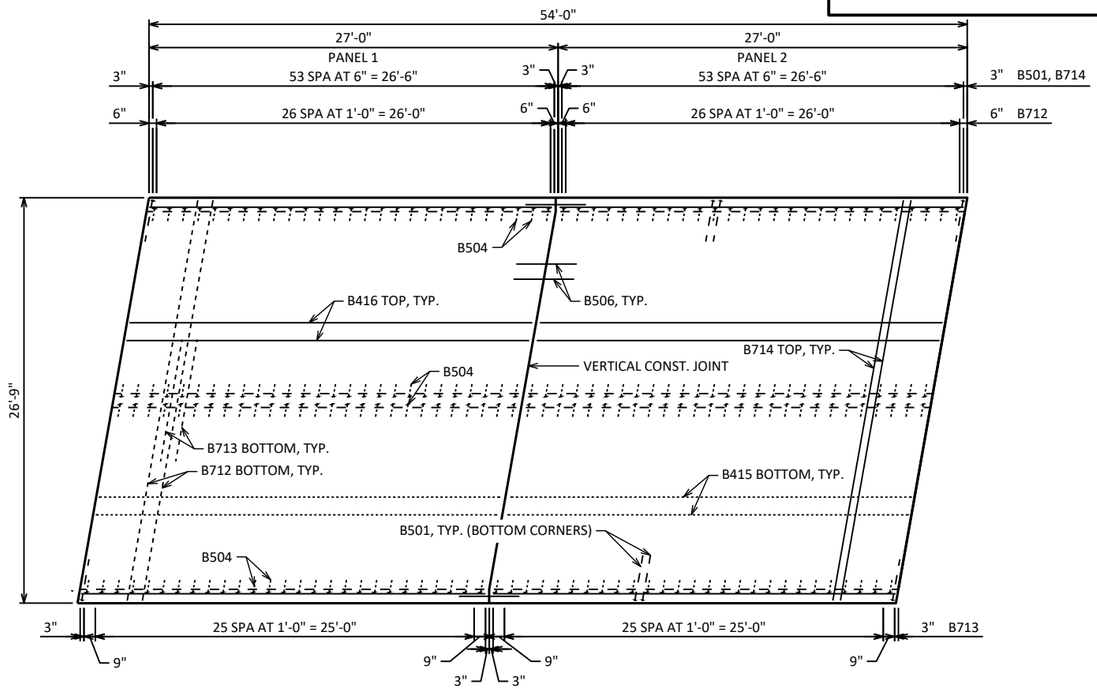


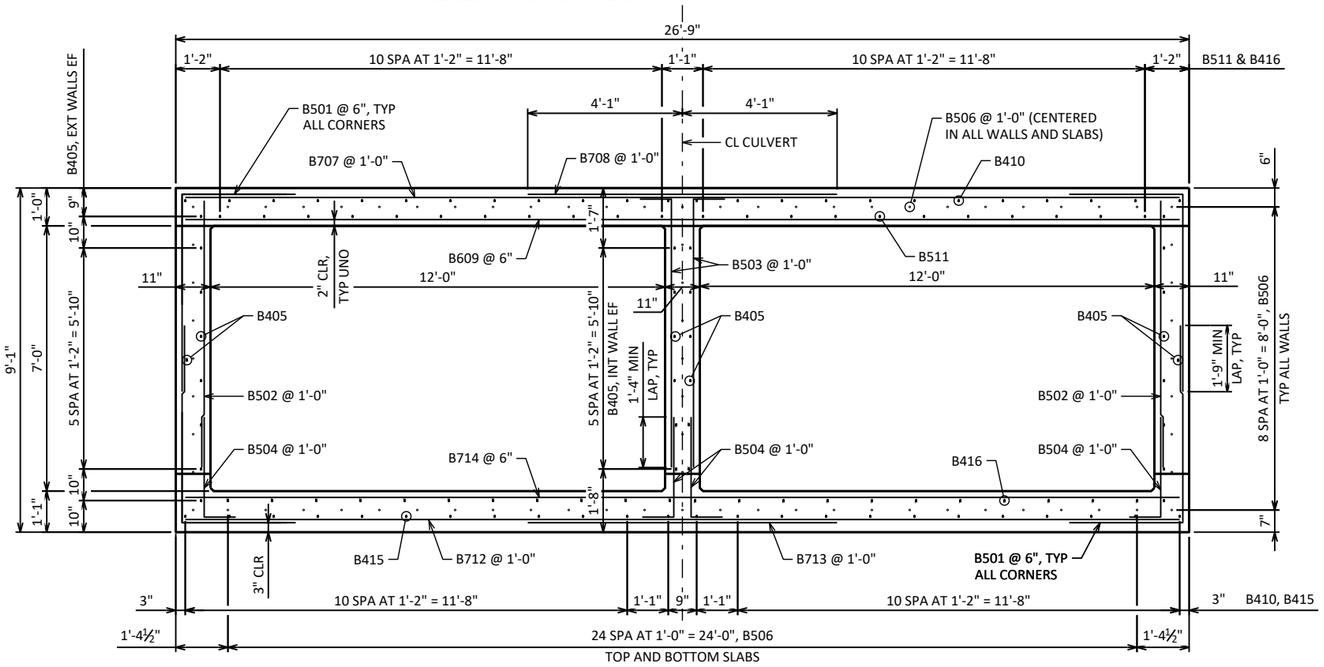
PLAN VIEW - TOP SLAB REINFORCEMENT

HEADERS NOT SHOWN FOR CLARITY

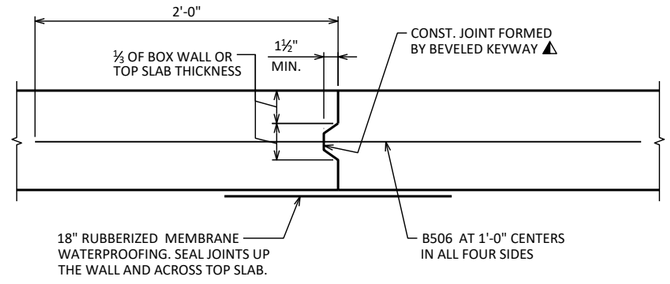


PLAN VIEW - BOTTOM SLAB REINFORCEMENT

HEADERS NOT SHOWN FOR CLARITY

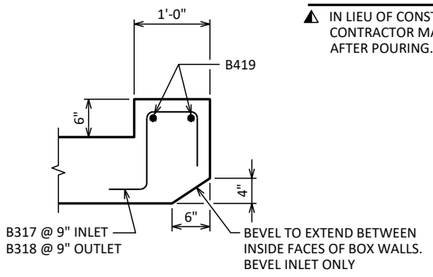


SECTION THRU BOX - REINFORCEMENT



VERTICAL CONSTRUCTION JOINT

⚠ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING. #5 BARS 4'-0" AT 1'-0" CENTERS REQUIRED.



SECTION THRU HEADER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-17-238

DRAWN BY ALC | PLANS CK'D NCK

BOX DETAILS

SHEET 4 OF 7

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STATE PROJECT NUMBER

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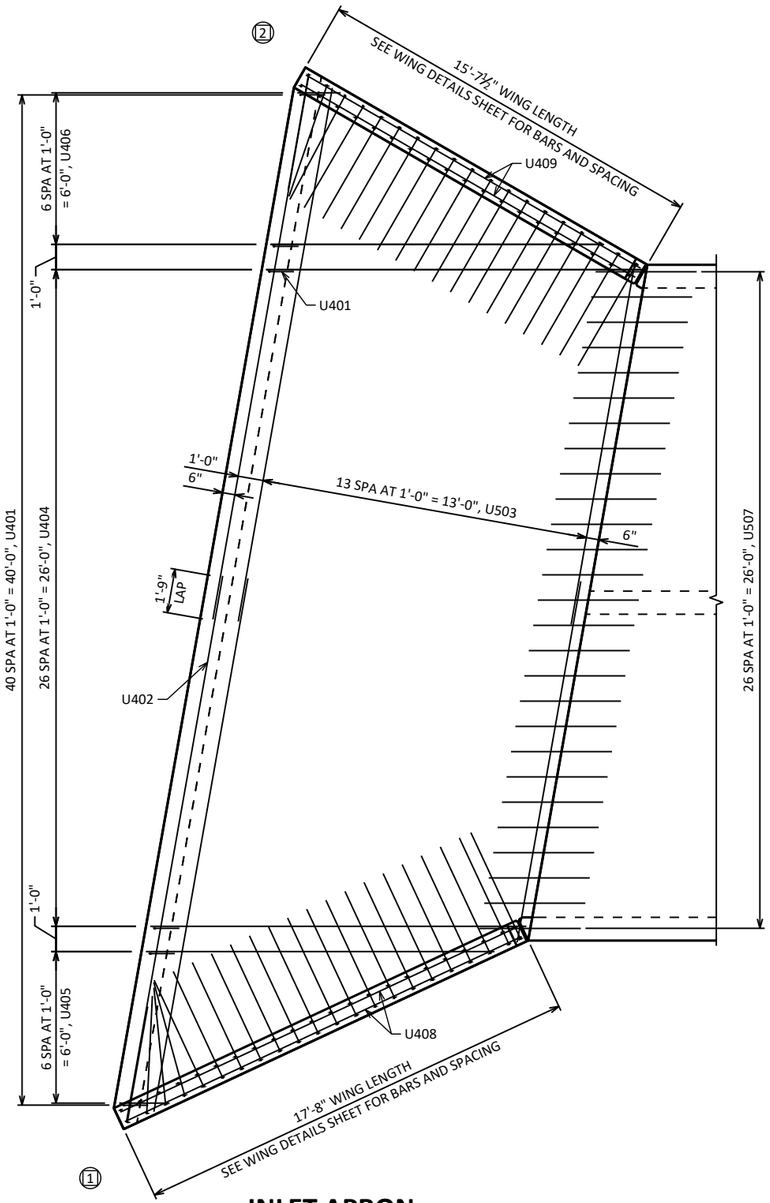
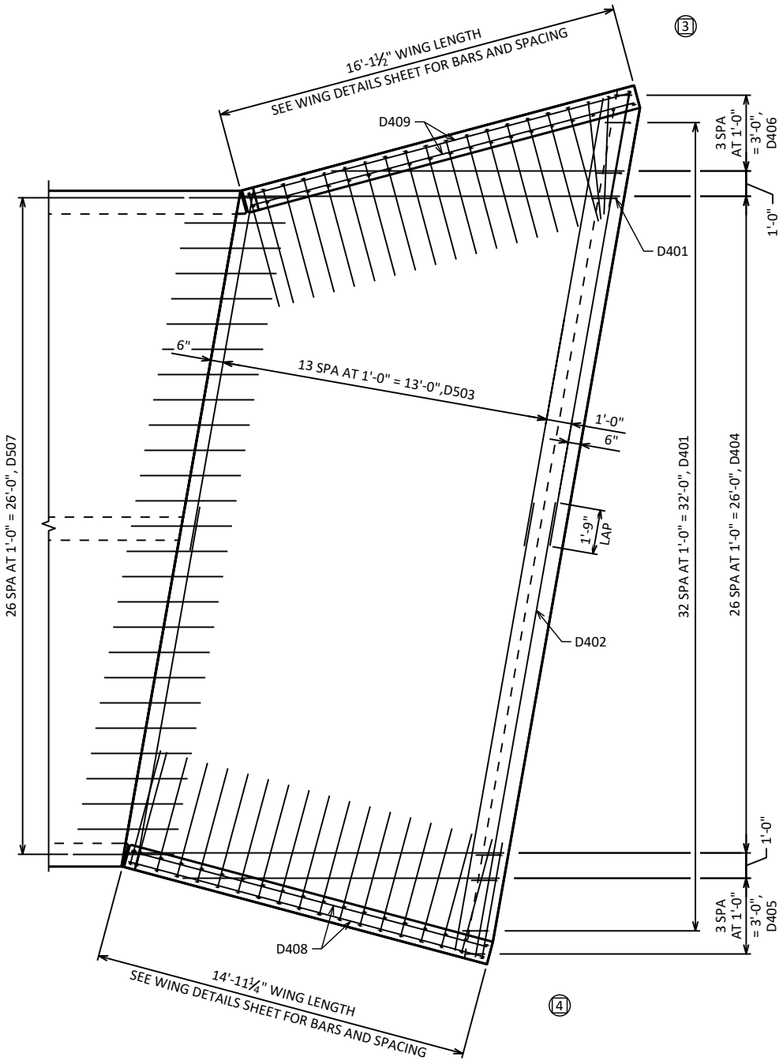
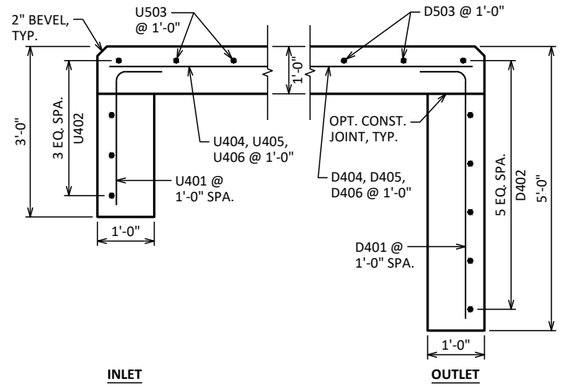


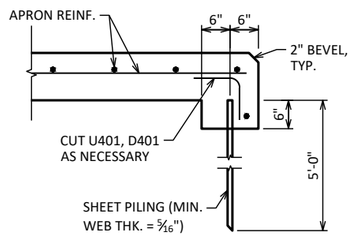
INLET APRON



OUTLET APRON

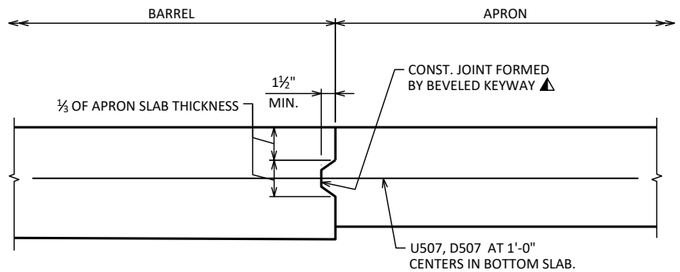


CUT-OFF WALLS



ALTERNATE CUT-OFF WALLS

THE ABOVE ALTERNATIVE MAY BE USED IN LIEU OF CAST-IN-PLACE CONCRETE CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONCRETE CUT-OFF WALLS.



APRON CONNECTION DETAIL

⚠ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING. #5 BARS 4'-0" AT 1'-0" CENTERS REQUIRED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-17-238

DRAWN BY ALC | PLANS CK'D NCK

APRON DETAILS

SHEET 5 OF 7

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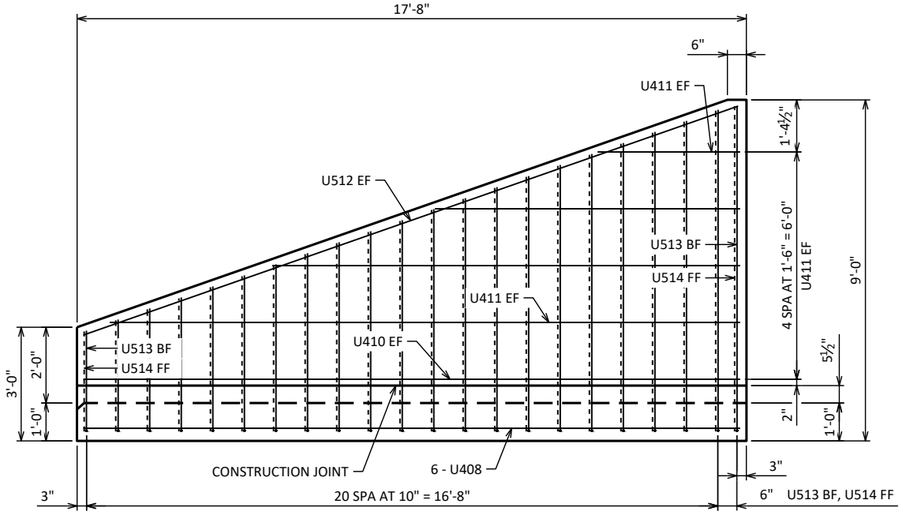
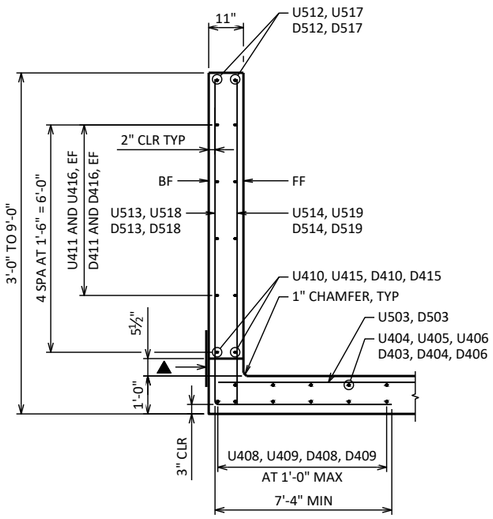
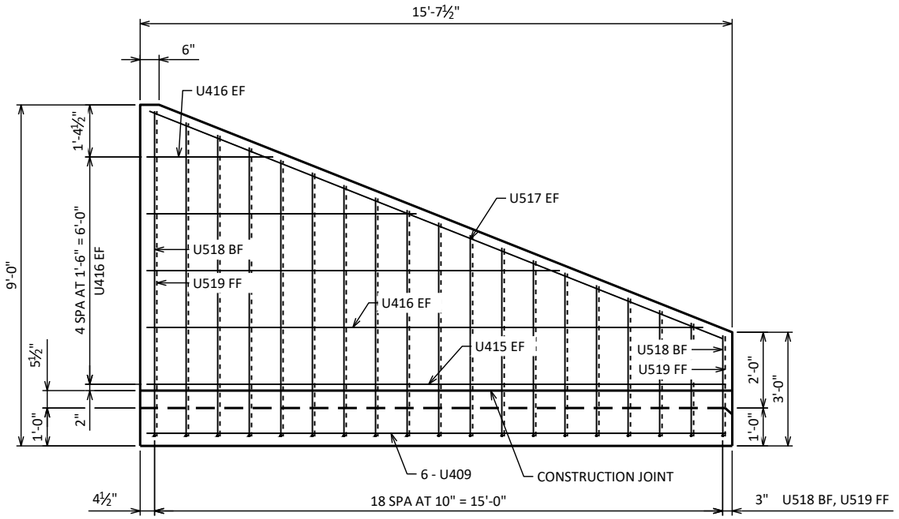


WING 1

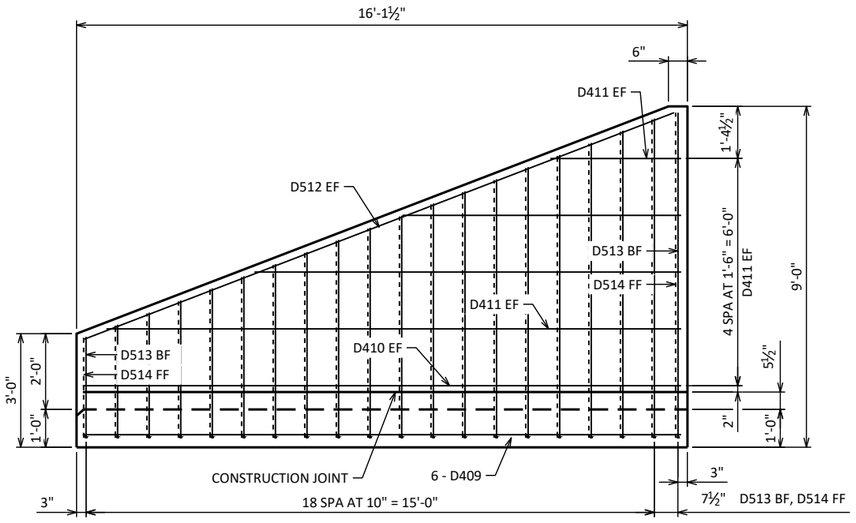
▲ 18" RUBBERIZED MEMBRANE WATERPROOFING, PLACE ALONG HORIZ. CONST. JT. FOR ENTIRE LENGTH OF WING, TYP.



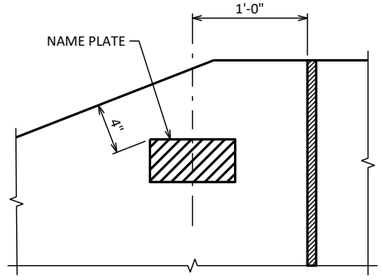
TYPICAL SECTION THRU WINGWALL



WING 2

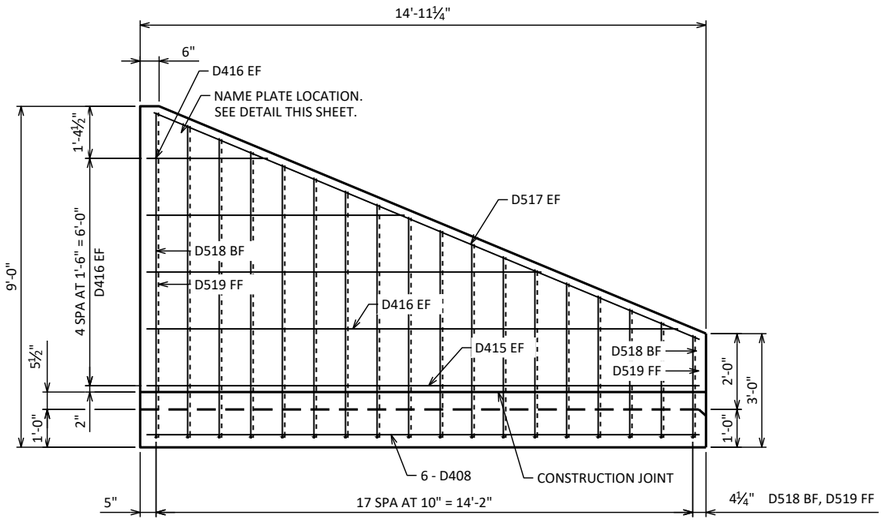


WING 3



NAME PLATE DETAIL

WING 4



WING 4

EF = EACH FACE
FF = FRONT FACE
BF = BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-17-238

DRAWN BY ALC | PLANS CK'D NCK

WINGWALL DETAILS

SHEET 6 OF 7
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STATE PROJECT NUMBER

7878-03-70

BILL OF BARS - BOX

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		432	8 - 1	X		CORNERS - TOP AND BOTTOM - EXTERIOR
B502		108	7 - 0			EXTERIOR WALLS - INTERIOR FACE - VERT
B503		108	8 - 0	X		INTERIOR WALL - EACH FACE - VERT
B504		216	3 - 6	X		WALLS - DOWEL - VERT
B405		72	26 - 8			WALLS - EACH FACE - HORIZ
B506		77	4 - 0			WALLS AND SLABS - CJ DOWEL - HORIZ/TRANS
B707		54	26 - 9			TOP SLAB - EXTERIOR - TRANSVERSE
B708		56	8 - 2			TOP SLAB - EXTERIOR - TRANSVERSE
B609		108	26 - 9			TOP SLAB - INTERIOR - TRANSVERSE
B410		48	26 - 8			TOP SLAB - EXTERIOR - LONGITUDINAL
B511		44	26 - 8			TOP SLAB - INTERIOR - LONGITUDINAL
B712		54	26 - 9			BOTTOM SLAB - EXTERIOR - TRANSVERSE
B713		56	8 - 2			BOTTOM SLAB - EXTERIOR - TRANSVERSE
B714		108	26 - 9			BOTTOM SLAB - INTERIOR - TRANSVERSE
B415		48	26 - 8			BOTTOM SLAB - EXTERIOR - LONGITUDINAL
B416		48	26 - 8			BOTTOM SLAB - INTERIOR - LONGITUDINAL
B317		37	3 - 2	X		HEADER - INLET
B318		37	3 - 6	X		HEADER - OUTLET
B419		4	26 - 9			HEADER - LONGITUDINAL

BILL OF BARS - INLET

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
APRON						
U401		41	3 - 7	X		INLET APRON - CUTOFF WALL - VERT.
U402		8	21 - 11			INLET APRON - CUTOFF WALL - HORIZ.
U503		28	18 - 0		⚠	INLET APRON - TRANSVERSE
U404		27	14 - 8			INLET APRON - LONGITUDINAL
U405		7	7 - 11		⚠	INLET APRON - LONGITUDINAL
U406		7	7 - 5		⚠	INLET APRON - LONGITUDINAL
U507		27	4 - 0			INLET APRON - CJ DOWEL
U408		6	17 - 4			INLET APRON
U409		6	15 - 3			INLET APRON
WINGS						
U410	X	2	17 - 2			WING 1 WALL - EACH FACE - HORIZONTAL
U411	X	8	10 - 2		⚠	WING 1 WALL - EACH FACE - HORIZONTAL
U512	X	2	18 - 3			WING 1 WALL - TOP - HORIZONTAL
U513	X	22	13 -0	X	⚠	WING 1 WALL - BACK FACE - VERTICAL
U514	X	22	5 - 7		⚠	WING 1 WALL - FRONT FACE - VERTICAL
U415	X	2	15 - 3			WING 2 WALL - EACH FACE - HORIZONTAL
U416	X	8	9 - 0		⚠	WING 2 WALL - EACH FACE - HORIZONTAL
U517	X	2	16 - 3			WING 2 WALL - TOP - HORIZONTAL
U518	X	19	13 -0	X	⚠	WING 2 WALL - BACK FACE - VERTICAL
U519	X	19	5 - 7		⚠	WING 2 WALL - FRONT FACE - VERTICAL

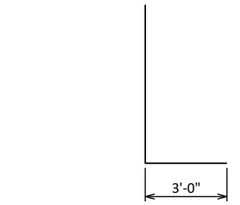
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BILL OF BARS - OUTLET

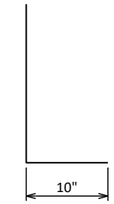
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
APRON						
D401		33	5 - 7	X		OUTLET APRON - CUTOFF WALL - VERT.
D402		12	18 - 4			OUTLET APRON - CUTOFF WALL - HORIZ.
D503		28	16 - 3		⚠	OUTLET APRON - TRANSVERSE
D404		27	14 - 8			OUTLET APRON - LONGITUDINAL
D405		4	6 - 8		⚠	OUTLET APRON - LONGITUDINAL
D406		4	6 - 2		⚠	OUTLET APRON - LONGITUDINAL
D507		27	4 - 0			OUTLET APRON - CJ DOWEL
D408		6	14 - 6			OUTLET APRON
D409		6	15 - 8			OUTLET APRON
WINGS						
D410	X	2	15 - 8			WING 3 WALL - EACH FACE - HORIZONTAL
D411	X	8	9 - 4		⚠	WING 3 WALL - EACH FACE - HORIZONTAL
D512	X	2	16 - 8			WING 3 WALL - TOP - HORIZONTAL
D513	X	20	13 -0	X	⚠	WING 3 WALL - BACK FACE - VERTICAL
D514	X	20	5 - 7		⚠	WING 3 WALL - FRONT FACE - VERTICAL
D415	X	2	14 - 6			WING 4 WALL - EACH FACE - HORIZONTAL
D416	X	8	8 - 7		⚠	WING 4 WALL - EACH FACE - HORIZONTAL
D517	X	2	15 - 6			WING 4 WALL - TOP - HORIZONTAL
D518	X	18	13 -0	X	⚠	WING 4 WALL - BACK FACE - VERTICAL
D519	X	18	5 - 7		⚠	WING 4 WALL - FRONT FACE - VERTICAL

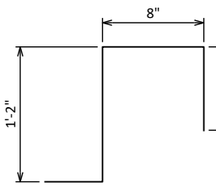
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



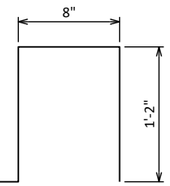
B501



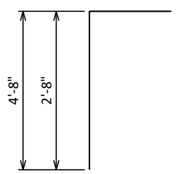
B503, B504



B317



B318



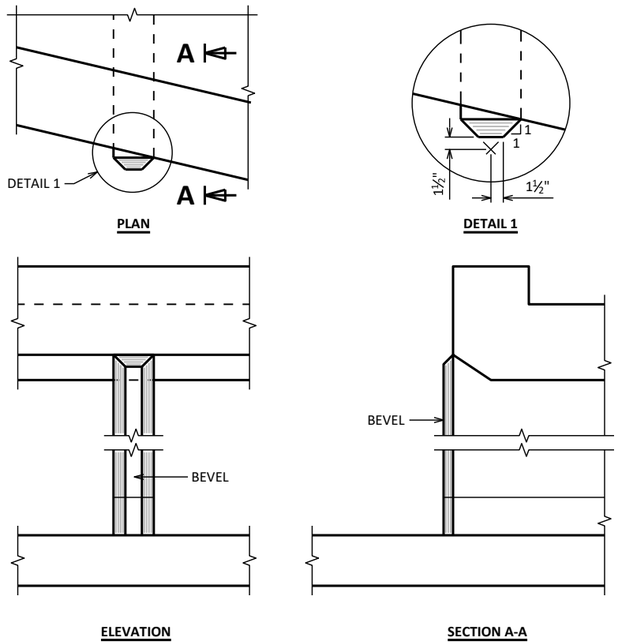
U401, D401

U513, U518
D513, D518

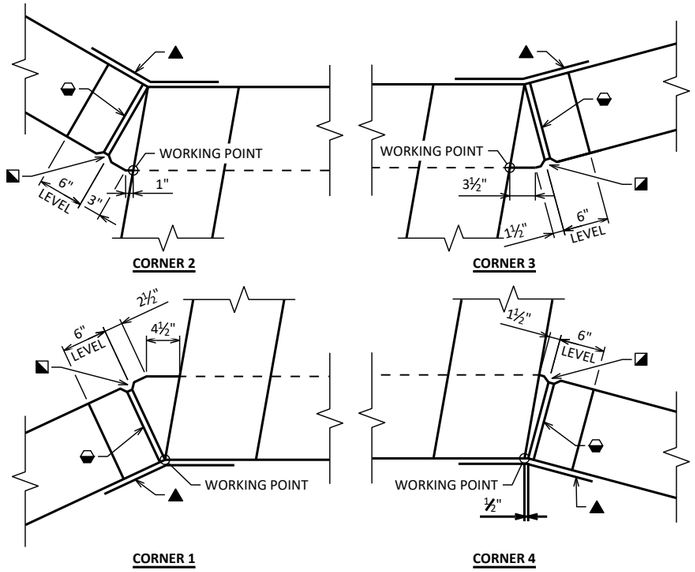
BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
INLET		
U503	2 SERIES OF 14	14 - 7 TO 21 - 6
U405	1 SERIES OF 7	2 - 0 TO 13 - 10
U406	1 SERIES OF 7	1 - 9 TO 13 - 1
U411	2 SERIES OF 4	3 - 9 TO 16 - 7
U513	1 SERIES OF 22	10 - 0 TO 16 - 0
U514	1 SERIES OF 22	2 - 7 TO 8 - 7
U416	2 SERIES OF 4	3 - 4 TO 14 - 8
U518	1 SERIES OF 19	10 - 0 TO 16 - 0
U519	1 SERIES OF 19	2 - 7 TO 8 - 7
OUTLET		
D503	2 SERIES OF 14	14 - 5 TO 18 - 1
D405	1 SERIES OF 4	0 - 9 TO 12 - 7
D406	1 SERIES OF 4	0 - 9 TO 11 - 7
D411	2 SERIES OF 4	3 - 5 TO 15 - 1
D513	1 SERIES OF 20	10 - 0 TO 16 - 0
D514	1 SERIES OF 20	2 - 7 TO 8 - 7
D416	2 SERIES OF 4	3 - 2 TO 14 - 0
D518	1 SERIES OF 18	10 - 0 TO 16 - 0
D519	1 SERIES OF 18	2 - 7 TO 8 - 7



INLET NOSE DETAILS



- 3/4" FILLER, TYP. EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WING.
- 1" BEVEL, TYP.
- 18" RUBBERIZED MEMBRANE WATERPROOFING. EXTEND FROM HORIZ. CONST. JT. TO TOP OF WALL (FLUSH WITH FACE OF CONCRETE).

CORNER DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-17-238

DRAWN BY ALC | PLANS CK'D NCK

BILL OF BARS

SHEET 7 OF 7

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8

8

BRIDGE B-17-0238

EARTHWORK SUMMARY

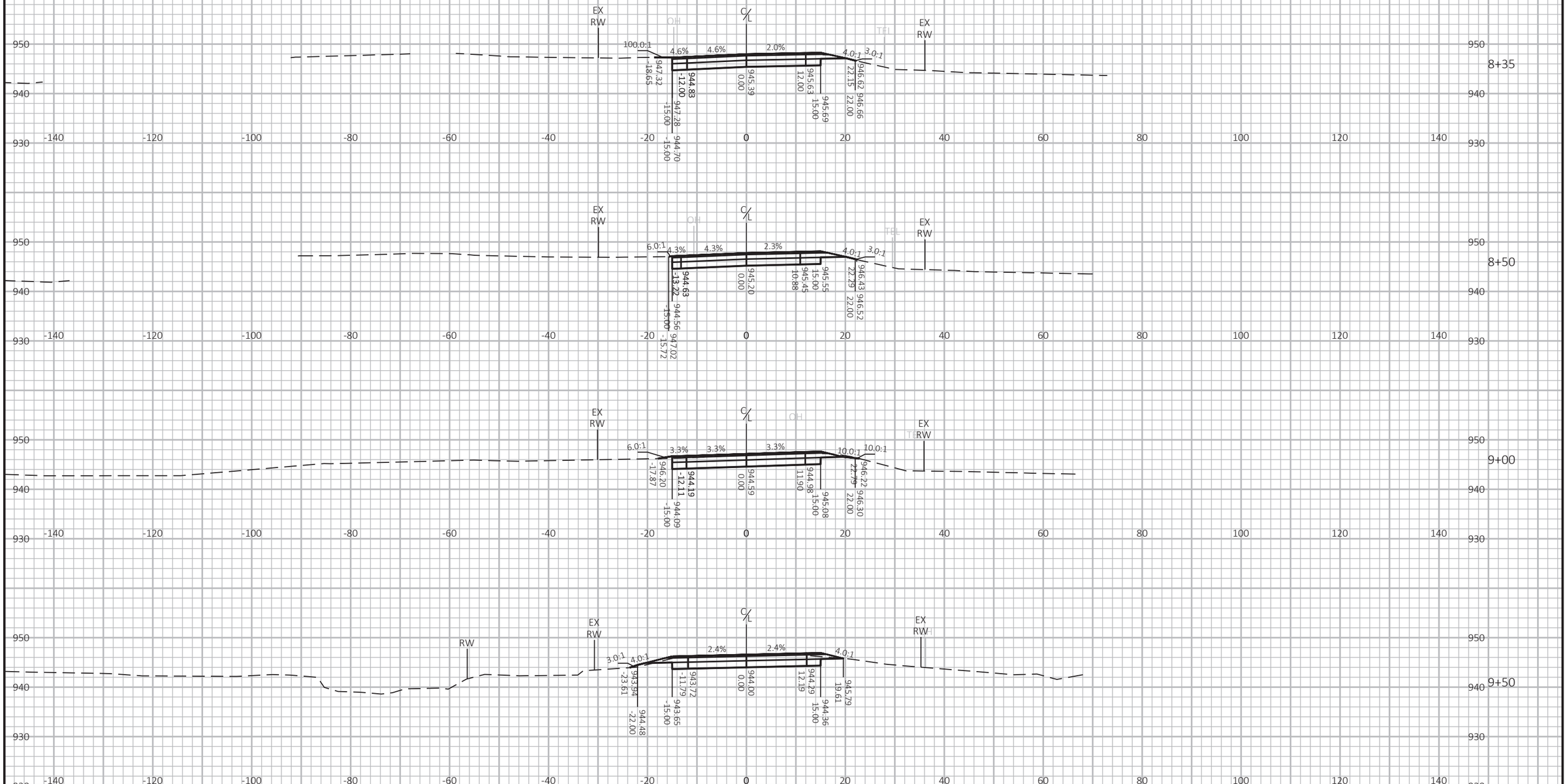
STATION		REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		MASS ORDINATE
				CUT	FILL	CUT (3)	FILL (1)	CUT 1.00	FILL 1.3 (2)	
8+35	AH	835.00	0.00	80.25	0.09	0.00	0.00	0.00	0.00	0.00
8+50		850.00	15.00	77.75	0.18	43.89	0.08	43.89	0.10	43.79
9+00		900.00	50.00	72.12	0.61	138.77	0.73	182.66	1.05	181.61
9+50		950.00	50.00	70.65	1.33	132.19	1.80	314.85	3.38	311.47
9+54.61		954.61	4.61	70.42	2.14	12.04	0.30	326.90	3.77	323.13
9+88		988.00	33.39	56.32	74.83	78.37	47.59	405.26	65.64	339.62
10+00		1000.00	12.00	0.00	336.30	12.52	91.36	417.78	184.41	233.37
10+50		1050.00	50.00	85.35	2.46	79.03	313.67	496.81	592.18	-95.37
11+00		1100.00	50.00	92.56	0.00	164.73	2.28	661.54	595.14	66.40
11+50		1150.00	50.00	99.82	0.00	178.13	0.00	839.67	595.14	244.53
11+65	BK	1165.00	15.00	103.17	0.00	56.39	0.00	896.05	595.14	300.91
							TOTALS	**896**	**595**	

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

(2) - FILL EXPANSION 30%

(3) - EXISTING ASPHALTIC PAVEMENT IS INCLUDED IN COMMON EXCAVATION TOTALS

BEGIN PROJECT
STA 8+35

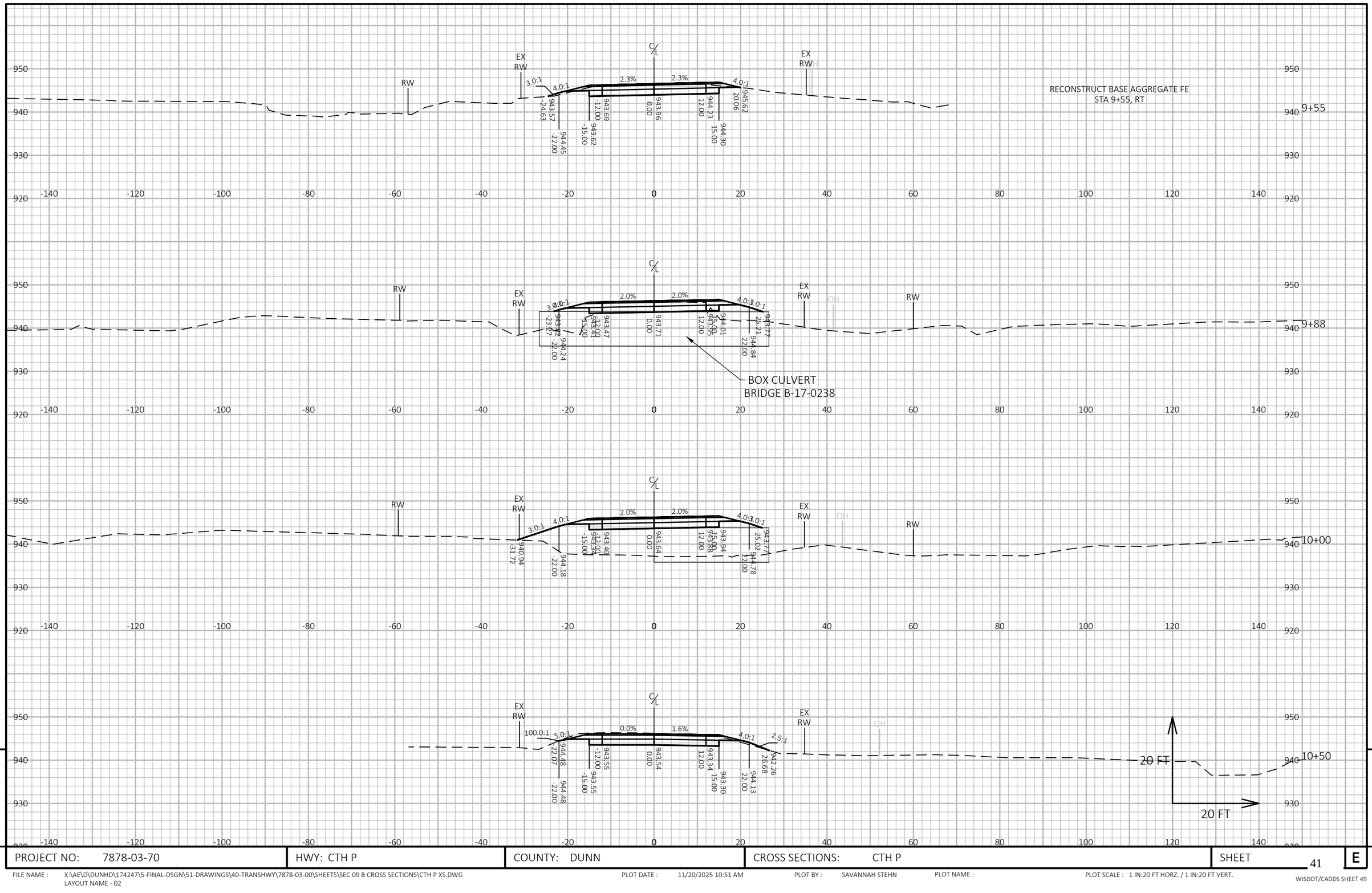


PROJECT NO: 7878-03-70	HWY: CTH P	COUNTY: DUNN	CROSS SECTIONS: CTH P	SHEET 40	E

FILE NAME : X:\AE\D\DUNHD\174247\5-FINAL-DSGN\51-DRAWINGS\40-TRANSHWY\7878-03-00\SHEETS\SEC 09 B CROSS SECTIONS\CTH P XS.DWG
LAYOUT NAME - 01

PLOT DATE : 5/30/2025 2:58 PM PLOT BY : JASMINE MOLDOVAN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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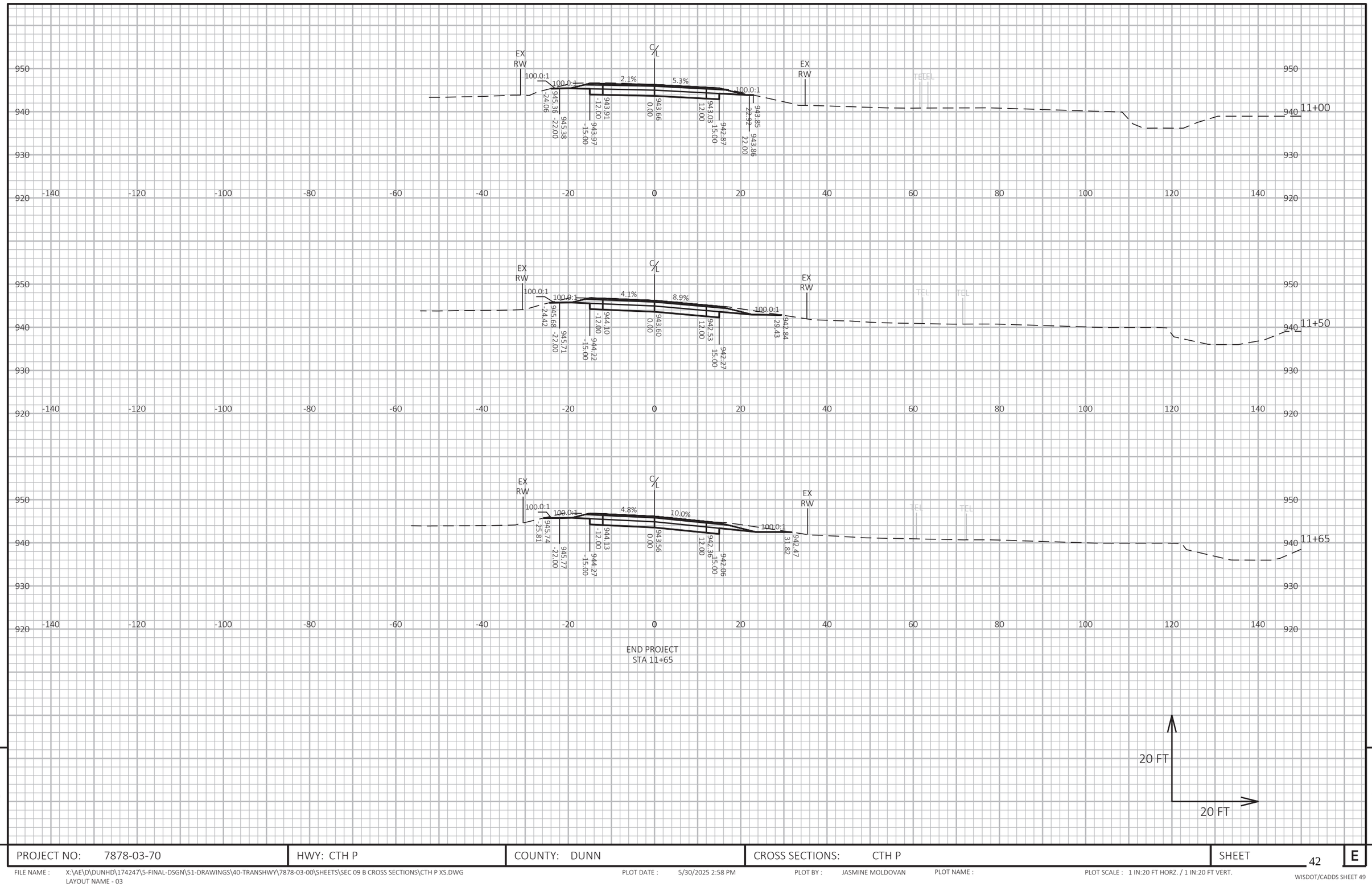
PROJECT NO: 7878-03-70	HWY: CTH P	COUNTY: DUNN	CROSS SECTIONS: CTH P	SHEET 41	E

FILE NAME : X:\AE\D\DUNHD\174247\5-FINAL-DSGN\51-DRAWINGS\40-TRANSHWY\7878-03-00\SHEETS\SEC 09 B CROSS SECTIONS\CTH P XS.DWG
LAYOUT NAME - 02

PLOT DATE : 11/20/2025 10:51 AM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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PROJECT NO: 7878-03-70	HWY: CTH P	COUNTY: DUNN	CROSS SECTIONS: CTH P	SHEET 42	E

FILE NAME : X:\AE\D\DUNHD\174247\5-FINAL-DSGN\51-DRAWINGS\40-TRANSHWY\7878-03-00\SHEETS\SEC 09 B CROSS SECTIONS\CTH P XS.DWG
LAYOUT NAME - 03

PLOT DATE : 5/30/2025 2:58 PM PLOT BY : JASMINE MOLDOVAN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

Notes

Wisconsin Department of Transportation

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through innovation and exceptional service.

http://www.dot.wisconsin.gov

Place Sheet Numbers