GRE

Jan 11, 2022

PROJECT ID: 4208-05-71

WITH: N/A

COUNTY: SHEBOYGAN

ORDER OF SHEETS

TOTAL SHEETS = 48

N

DESIGN DESIGNATION

A.A.D.T.	(2022)	=	95
A.A.D.T.	(2042)	=	140
D.H.V.	(2042)	=	12.6
D.D.		=	60/40
T.		=	10% (ASSUMED)
DESIGN SPEED		=	55 M.P.H.
ESALS		=	42,925

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'E8")
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4208-05-71	WISC 2022122	1

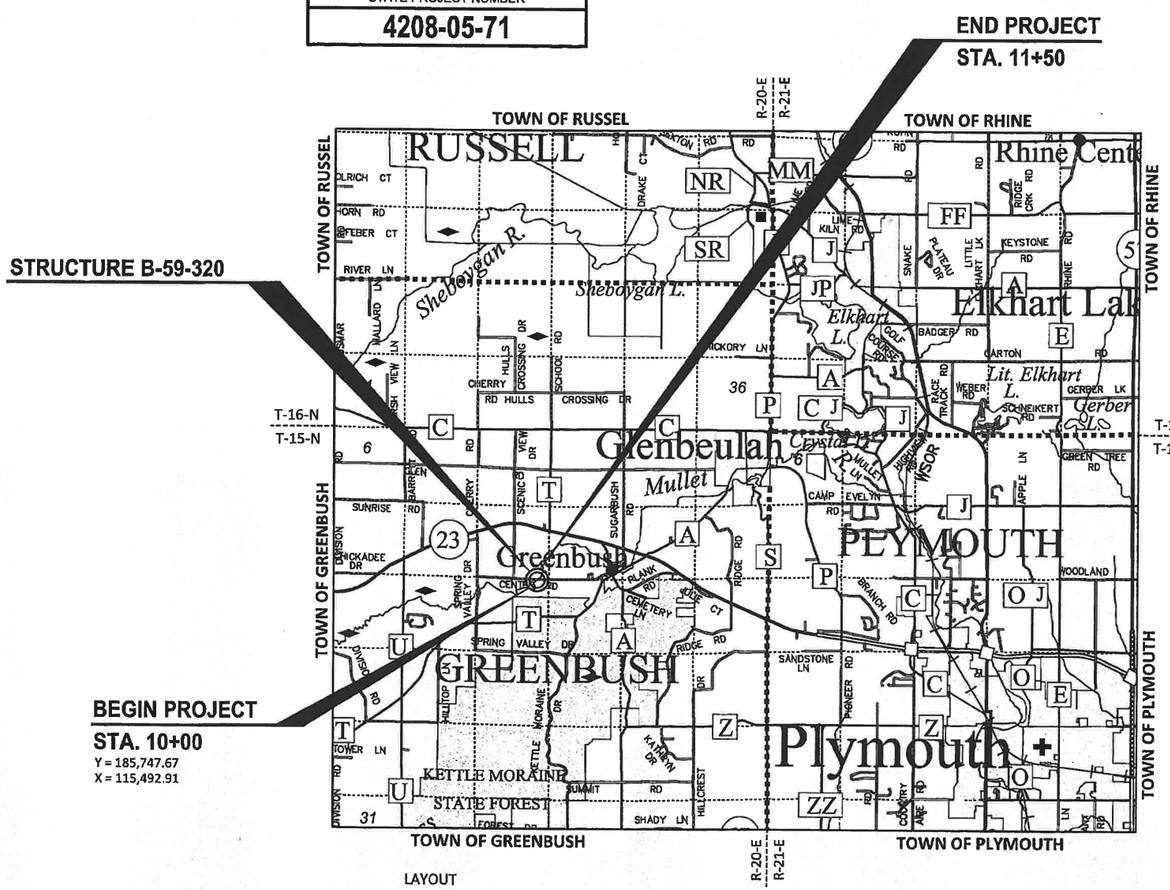
T GREENBUSH, CENTER ROAD

MULLET RIVER BRIDGE

LOC STR

SHEBOYGAN COUNTY

STATE PROJECT NUMBER
4208-05-71



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.028 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, SHEBOYGAN COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCE MAY BE USED AS GROUND DISTANCES.

ELEVATION SHOWN ON THIS PLAN ARE REFERENCE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD (2012).

ACCEPTED FOR

COUNTY of SHEBOYGAN

7/8/2021 (Date) (Transportation Director)

ORIGINAL PLANS PREPARED BY

JEWELL associates engineers, inc
Engineers - Architects - Surveyors

WISCONSIN ELLERY A. SCHAFFER E-41742-6 SPRING GREEN, WI PROFESSIONAL ENGINEER

7/9/2021

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JEWELL ASSOCIATES ENGINEERS, INC.
Designer	JEWELL ASSOCIATES ENGINEERS, INC.
Project Manager	TIMOTHY VERHAGEN, P.E.
Regional Examiner	NE REGION
Regional Supervisor	BRIAN EDWARDS, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 7/15/2021 (Signature)

E

FILE NAME : S:\PROJECTS\W11607 WISDOT - CENTER ROAD, SHEBOYGAN CO\SHEETSPLAN\420805 71_TITLE.DWG

PLOT DATE : 7/9/2021 1:54:42 PM PLOT BY : COLTON PEPER PLOT SCALE : 1" = 1'

LAYOUT : TITLE SHEET 1 IN EQ 2 MI

GENERAL NOTES

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

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE, AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. EXACT LOCATIONS OF EBS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

UNLESS SHOWN OTHERWISE, DISTURBED AREAS SHOWN WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE FERTILIZED (TYPE B), SEEDED (USE SEED MIX NO. 20), AND EROSION MATTED AS DIRECTED BY THE ENGINEER. ALL POST CONSTRUCTION WET AREAS SHALL BE SEEDED WITH SEEDING MIXTURE NO. 60. DO NOT FERTILIZE WETLAND AREAS

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

SILT FENCE AND TURBIDITY BARRIER SHALL BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD. SILT FENCE AND TURBIDITY BARRIER SHALL BE PLACED PRIOR TO CONSTRUCTION AND SHALL BE IN PLACE PRIOR TO STRUCTURE REMOVAL.

EROSION MAT ALL MAINLINE SLOPES AS DIRECTED BY THE ENGINEER IN THE FIELD.

FILL EXPANSION IS VARIABLE AND IS ESTIMATED AT 25%.

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A SAWCUT MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

THE LOCATION OF ALL PERMANENT SIGNING SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD PRIOR TO PLACEMENT.

4-INCHES OF ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 2 ¼-INCH LOWER LAYER AND A 1 ¾-INCH UPPER LAYER.

ADJUST DITCH/ STREAMBED GRADING AS NECESSARY TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER IN THE FIELD.

ASPHALTIC SURFACE QUANTITIES WERE CALCULATED USING 115 LB/SY/IN.

CURVE DATA IS BASED ON THE ARC DEFINITIONS.

WETLANDS ARE PRESENT IN THE PROJECT LIMITS AT STA. 10+06 - STA. 10+61, RT.; STA. 10+14 - STA.11+32, LT.; STA. 10+41 - STA. 11+33, RT.; AND STA. 10+80 - STA. 11+44, LT. THE CONTRACTOR SHALL NOT OPERATE OR STOCKPILE EQUIPMENT BEYOND THE EXISTING TOE OF SLOPE, OR FINISHED SLOPE INTERCEPT.

CONTACTS

SHEBOYGAN COUNTY HIGHWAY DEPARTMENT:

GREG SCHNELL, TRANSPORTATION DIRECTOR
W5741 CTH J
PLYMOUTH, WI 53073
PHONE: (920) 459-3822
EMAIL: greg.schnell@sheboygancounty.com

DESIGN CONSULTANT:

JEWELL ASSOCIATES ENGINEERS, INC.
560 SUNRISE DRIVE
SPRING GREEN, WI 53588
ATTN: ELLERY SCHAFFER, P.E.
PHONE: (608) 459-6027
CELL: (608) 341-8159
EMAIL: ellery.schaffer@jewellassoc.com

TOWN OF GREENBUSH:

MIKE LIMBERG, CHAIRMAN
N6644 SUGARBUSH ROAD
GLENBEULAH, WI 53023
PHONE: (920) 526-3536
CELL: (920) 946-4332
EMAIL: townofgreenbush@frontier.com

DNR LIAISON:

STATE OF WISCONSIN DNR NORTHEAST REGIONAL HQ
2984 SHAWANO AVE
GREEN BAY, WI 54313
ATTN: JAY SCHIEFELBEIN
PHONE: (920) 360-3784
EMAIL: jeremiah.schiefelbein@wisconsin.gov

UTILITIES

TELEPHONE

FRONTIER COMMUNICATIONS
ATTN: RUSSELL RYAN
118 DIVISION ST
PLYMOUTH, WI 53073
OFFICE: (920) 583-3275
CELL: (920) 737-9662
EMAIL: russell.w.ryan@ftr.com

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

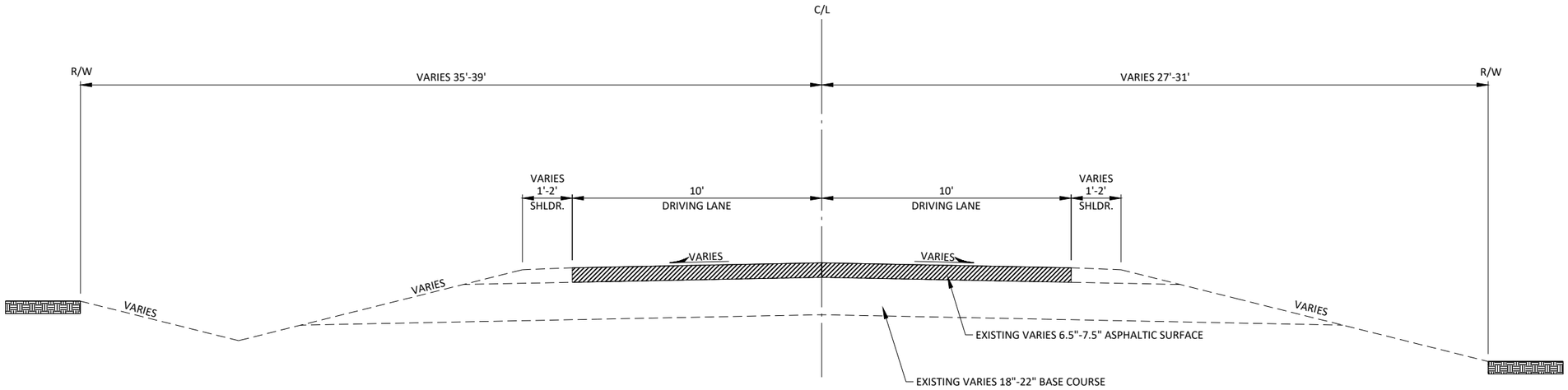
LIST OF STANDARD ABBREVIATIONS

ABUT	Abutment	INV	Invert	SALV	Salvaged
AC	Acre	IP	Iron Pipe or Pin	SAN S	Sanitary Sewer
AGG	Aggregate	IRS	Iron Rod Set	SEC	Section
AH	Ahead	JT	Joint	SHLDR	Shoulder
<	Angle	JCT	Junction	SHR	Shrinkage
ASPH	Asphaltic	LHF	Left-Hand Forward	SW	Sidewalk
AVG	Average	L	Length of Curve	S	South
ADT	Average Daily Traffic	LIN FT or LF	Linear Foot	SQ	Square
BAD	Base Aggregate Dense	LC	Long Chord of Curve	SF or SQ FT	Square Feet
BK	Back	MH	Manhole	SY or SQ YD	Square Yard
BF	Back Face	MB	Mailbox	STD	Standard
BM	Bench Mark	ML or M/L	Match Line	SDD	Standard Detail Drawings
BR	Bridge	N	North	STH	State Trunk Highways
C or C/L	Center Line	Y	North Grid Coordinate	STA	Station
CC	Center to Center	O.A.L.	Overall Length	SS	Storm Sewer
CTH	County Trunk Highway	OD	Outside Diameter	SG	Subgrade
CR	Creek	PLE	Permanent Limited Easement	SE	Superelevation
CR	Crushed		Point	SL or S/L	Survey Line
CY or CU YD	Cubic Yard	PT	Point of Curvature	SV	Septic Vent
CP	Culvert Pipe	PC	Point of Intersection	T	Tangent
C & G	Curb and Gutter	PI	Point of Reverse Curvature	TEL	Telephone
D	Degree of Curve	PRC	Point of Tangency	TEMP	Temporary
DHV	Design Hour Volume	PT	Point On Curve	TI	Temporary Interest
DIA	Diameter	POC	Point on Tangent	TLE	Temporary Limited Easement
E	East	POT	Polyvinyl Chloride	t	Ton
X	East Grid Coordinate	PVC	Portland Cement Concrete	T or TN	Town
ELEC	Electric (al)	PCC	Pound	TRANS	Transition
EL or ELEV	Elevation	LB	Pounds Per Square Inch	TL or T/L	Transit Line
ESALS	Equivalent Single Axle Loads	PSI	Private Entrance	T	Trucks (percent of)
EBS	Excavation Below Subgrade	PE	Radius	TYP	Typical
ESTR	Existing Sign to Remain	R	Railroad	UNCL	Unclassified
FF	Face to Face	RR	Range	UG	Underground Cable
FE	Field Entrance	R	Reference Line	USH	United States Highway
F	Fill	RL or R/L	Reference Point	VAR	Variable
FG	Finished Grade	RP	Reinforced Concrete Culvert	V	Velocity or Design Speed
FL or F/L	Flow Line	RCCP	Pipe	VERT	Vertical
FT	Foot	REQ'D	Required	VC	Vertical Curve
FTG	Footing	RES	Residence or Residential	VOL	Volume
GN	Grid North	RW	Retaining Wall	WM	Water Main
HT	Height	RT	Right	WV	Water Valve
CWT	Hundredweight	RHF	Right-Hand Forward	W	West
HYD	Hydrant	R/W	Right-of-Way	WB	Westbound
INL	Inlet	R	River	YD	Yard
ID	Inside Diameter	RD	Road		
		RDWY	Roadway		

	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= 0.37 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.20 ACRES

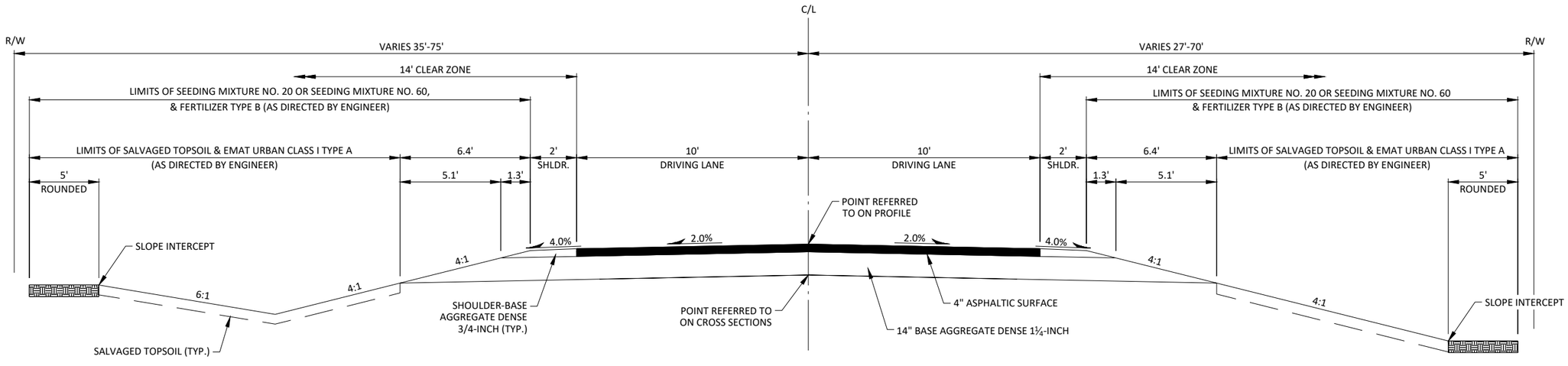
2



CUT **FILL**

TYPICAL EXISTING SECTION

CENTER ROAD

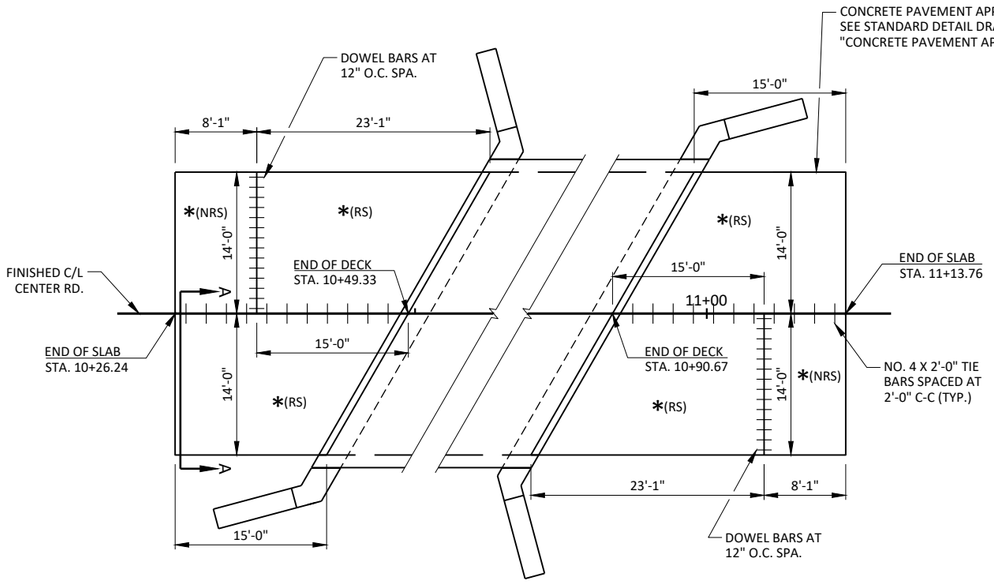


CUT **FILL**

TYPICAL FINISHED SECTION

CENTER ROAD

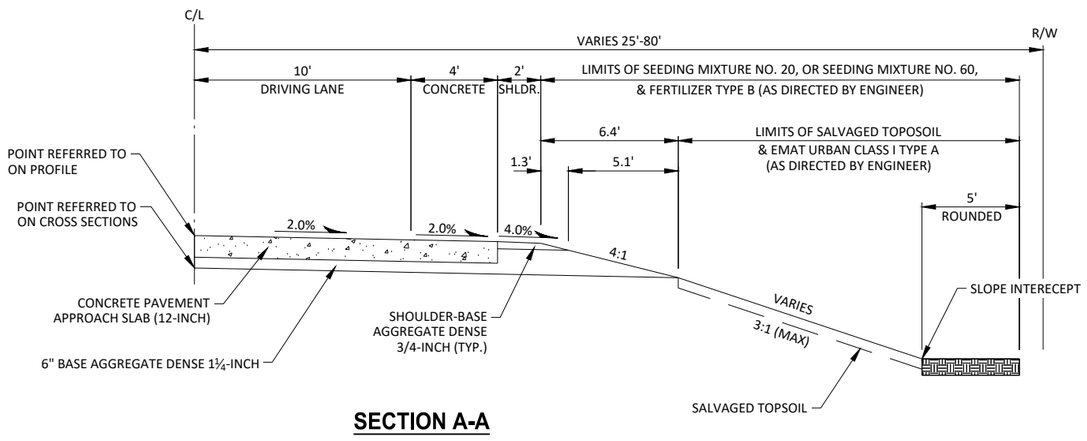
PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	TYPICAL EXISTING SECTION & TYPICAL FINISHED SECTION	SHEET 3	E



STRUCTURE APPROACH DETAILS

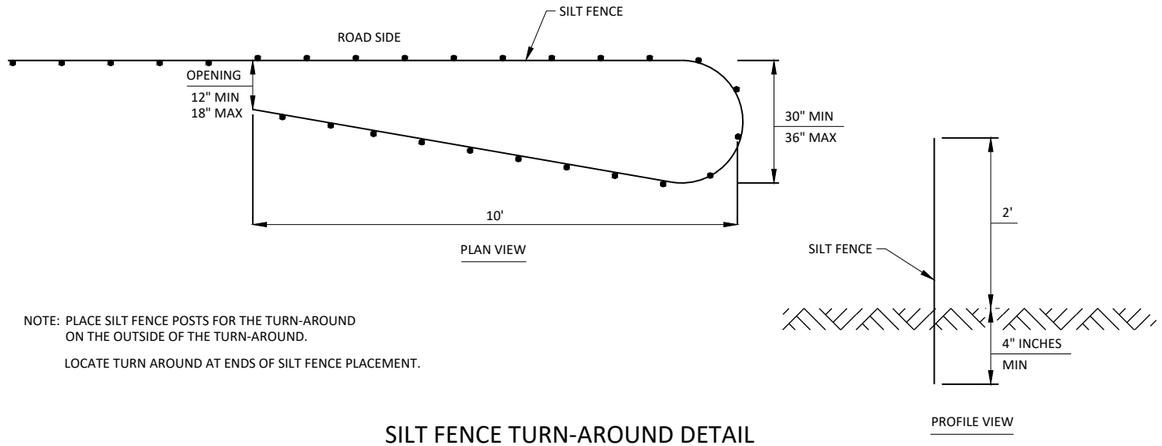
LEGEND

* (RS) = REINFORCED CONCRETE SLAB
* (NRS) = NON-REINFORCED CONCRETE SLAB



SECTION A-A

FILL



NOTE: PLACE SILT FENCE POSTS FOR THE TURN-AROUND ON THE OUTSIDE OF THE TURN-AROUND.

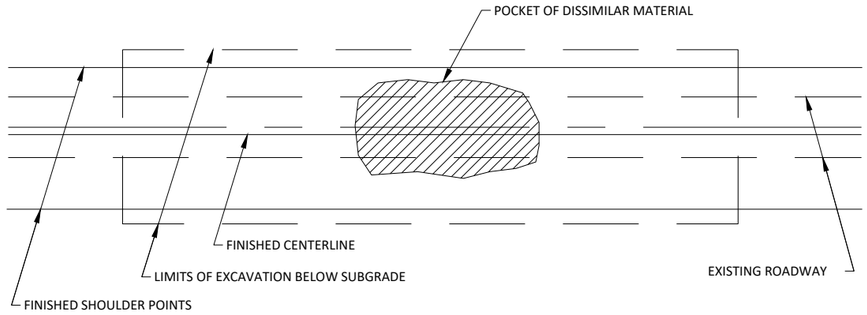
LOCATE TURN AROUND AT ENDS OF SILT FENCE PLACEMENT.

SILT FENCE TURN-AROUND DETAIL

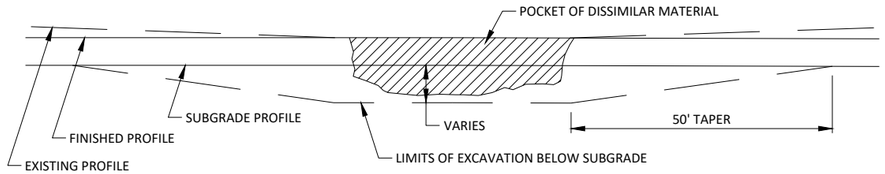
2

PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	CONSTRUCTION DETAILS	SHEET 4	E

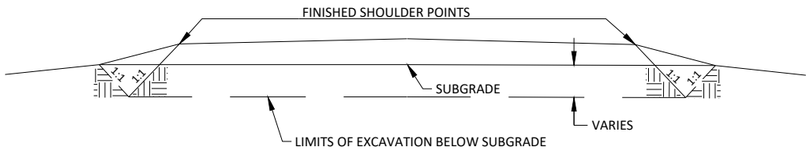
FILE NAME : S:\PROJECTS\W11607 WISDOT – CENTER ROAD, SHEBOYGAN
LAYOUT : C0\SHEETSPLAN\DETAILS\42080571_APPROACH SLAB & EBS.DWG
PLOT DATE : 7/29/2021
PLOT TIME : 4:01:40 PM
PLOT BY : CODY KINTZ
PLOT SCALE : 1" = 1'



PLAN VIEW



PROFILE VIEW



CROSS SECTION VIEW

1. EXACT LOCATION OF E.B.S. (EXCAVATION BELOW SUBGRADE) SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER. BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.
3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED. LATERAL LIMITS OF EXCAVATION SHALL BE THE SUBGRADE SHOULDER POINTS.

EXCAVATION BELOW SUBGRADE (E.B.S.) DETAIL

2

PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	CONSTRUCTION DETAILS	SHEET 5	E

FILE NAME : S:\PROJECTS\W11607 WISDOT – CENTER ROAD, SHEBOYGAN
LAYOUT : C0\SHEETSPLAN\DETAILS\42080571_APPROACH SLAB & EBS.DWG

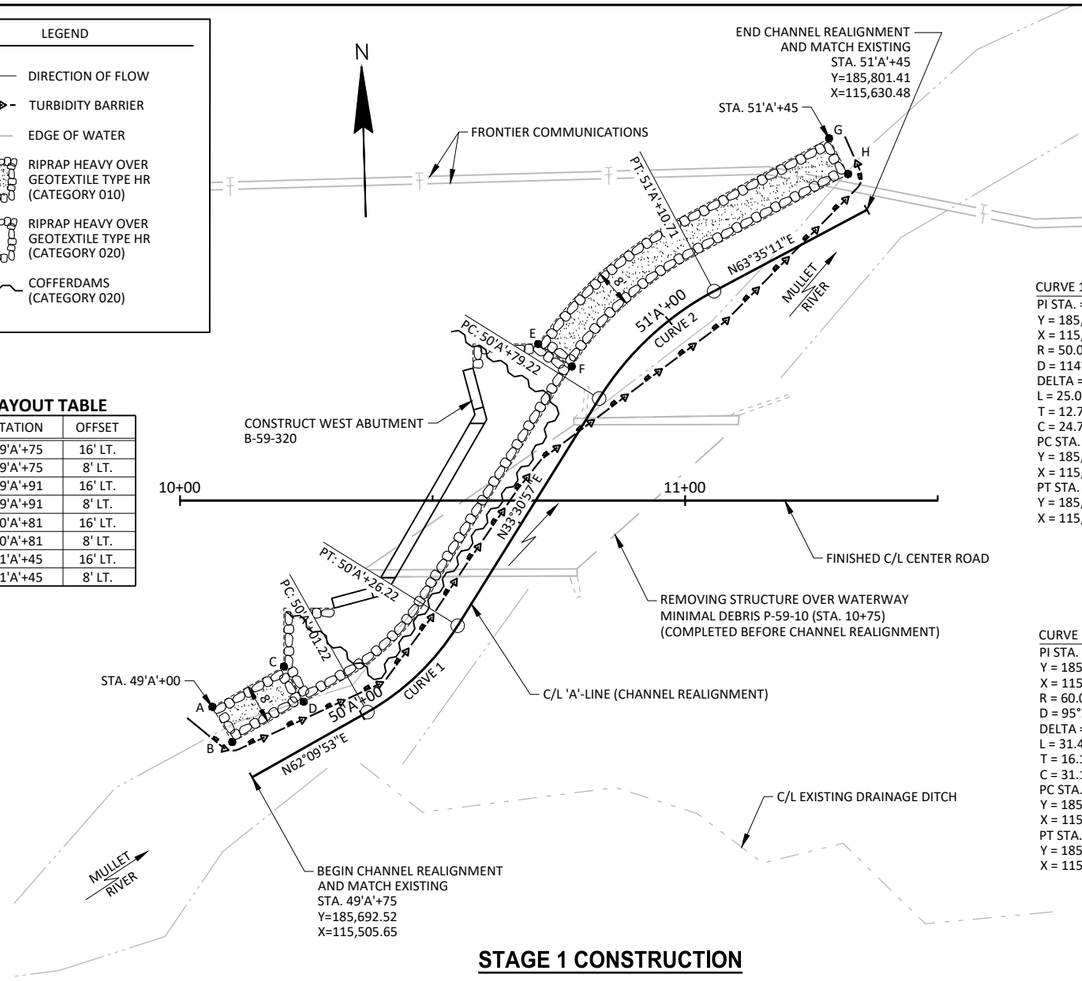
PLOT DATE : 7/29/2021
PLOT TIME : 3:45:12 PM
PLOT BY : CODY KINTZ
PLOT SCALE : 1" = 1'

LEGEND

- DIRECTION OF FLOW
- TURBIDITY BARRIER
- EDGE OF WATER
- RIPRAP HEAVY OVER GEOTEXTILE TYPE HR (CATEGORY 010)
- RIPRAP HEAVY OVER GEOTEXTILE TYPE HR (CATEGORY 020)
- COFFERDAMS (CATEGORY 020)

RIPRAP LAYOUT TABLE

POINT	STATION	OFFSET
A	49'A'+75	16' LT.
B	49'A'+75	8' LT.
C	49'A'+91	16' LT.
D	49'A'+91	8' LT.
E	50'A'+81	16' LT.
F	50'A'+81	8' LT.
G	51'A'+45	16' LT.
H	51'A'+45	8' LT.



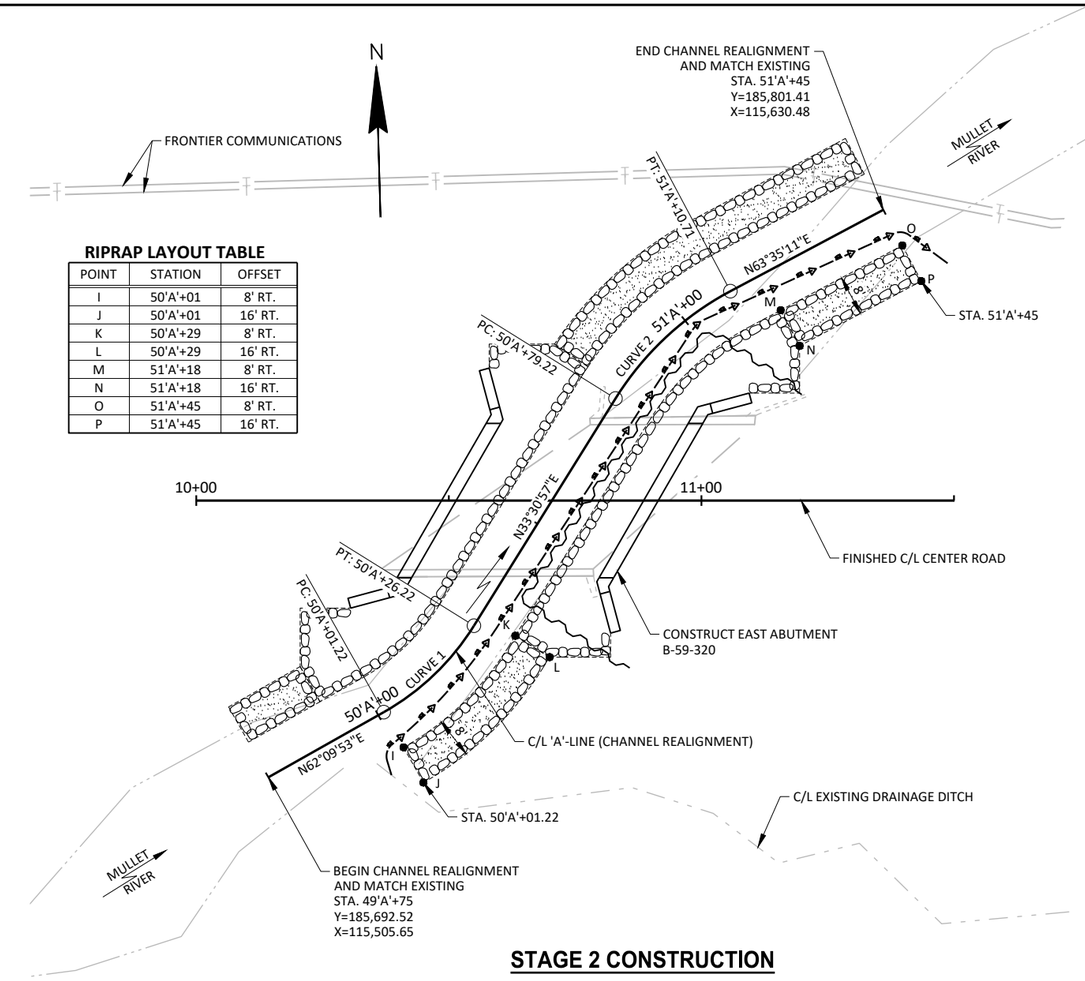
STAGE 1 CONSTRUCTION

CURVE 1
PI STA. = 50+13.99
Y = 185,710.72
X = 115,540.12
R = 50.00
D = 114°35'34"
DELTA = 28°38'55"
L = 25.00
T = 12.77
C = 24.74
PC STA. = 50+01.22
Y = 185,704.76
X = 115,528.83
PT STA. = 50+26.22
Y = 185,721.37
X = 115,547.17

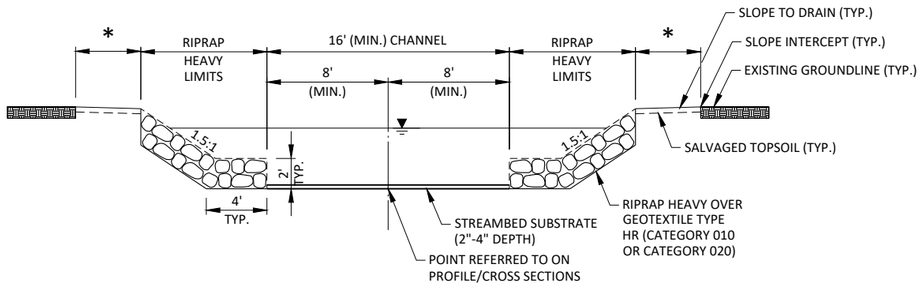
CURVE 2
PI STA. = 50+95.33
Y = 185,778.99
X = 115,585.33
R = 60.00
D = 95°29'35"
DELTA = 30°04'14"
L = 31.49
T = 16.12
C = 31.13
PC STA. = 50+79.22
Y = 185,765.55
X = 115,576.44
PT STA. = 51+10.71
Y = 185,786.16
X = 115,599.77

RIPRAP LAYOUT TABLE

POINT	STATION	OFFSET
I	50'A'+01	8' RT.
J	50'A'+01	16' RT.
K	50'A'+29	8' RT.
L	50'A'+29	16' RT.
M	51'A'+18	8' RT.
N	51'A'+18	16' RT.
O	51'A'+45	8' RT.
P	51'A'+45	16' RT.



STAGE 2 CONSTRUCTION

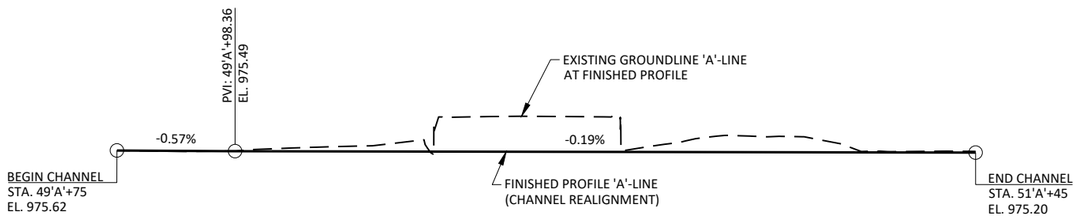


* LIMITS OF SEEDING MIXTURE NO. 60, SALVAGED TOPSOIL, FERTILIZER TYPE B AND EMAT URBAN CLASS I TYPE A (INCLUDED IN CATEGORY 010 MAINLINE QUANTITIES)

TYPICAL CHANNEL REALIGNMENT SECTION

CHANNEL REALIGNMENT DETAILS

EARTHWORK AT CHANNEL REALIGNMENT TO BE INCLUDED IN CATEGORY 010 MAINLINE QUANTITIES



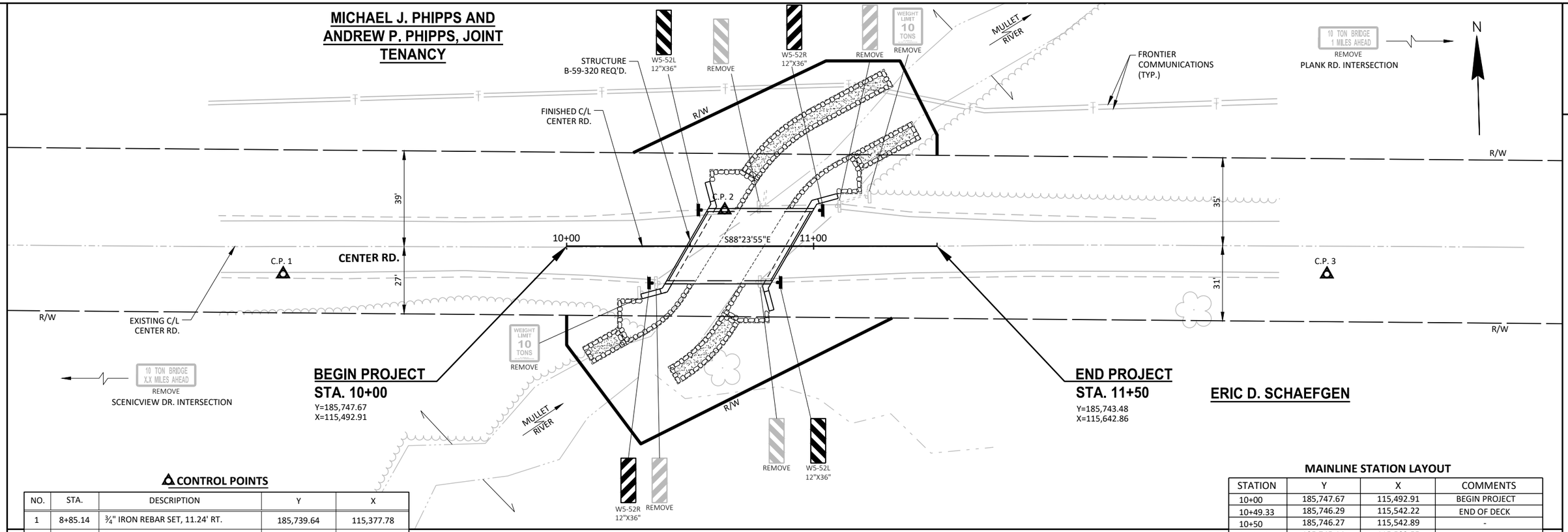
CHANNEL REALIGNMENT - PROFILE GRADE LINE

PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	CONSTRUCTION DETAILS	SHEET 6	E

FILE NAME : S:\PROJECTS\W11607 WSDOT - CENTER ROAD, SHEBOYGAN CO\SHEETSPLAN\DETAILS\42080571_STREAM REALIGNMENT.DWG
LAYOUT : LAYOUT1
PLOT DATE : 7/30/2021
PLOT TIME : 12:41:40 PM
PLOT BY : CODY KINTZ
PLOT SCALE : 1" = 1'

2

MICHAEL J. PHIPPS AND ANDREW P. PHIPPS, JOINT TENANCY

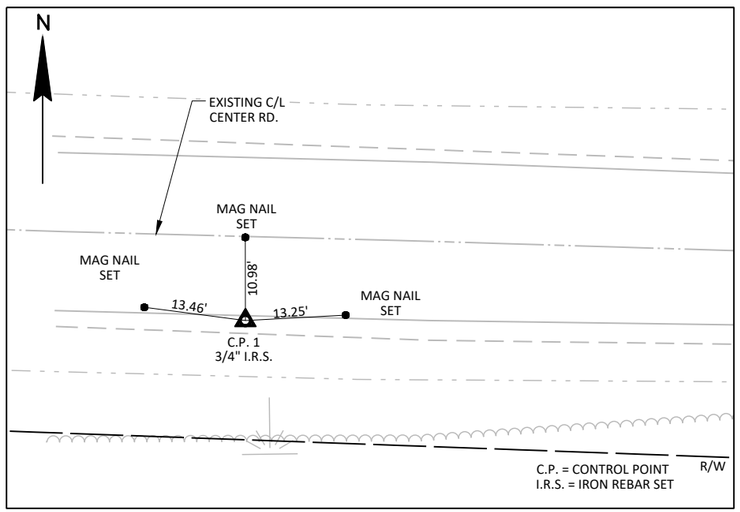


CONTROL POINTS

NO.	STA.	DESCRIPTION	Y	X
1	8+85.14	¾" IRON REBAR SET, 11.24' RT.	185,739.64	115,377.78
2	10+63.98	¾" IRON REBAR SET, 14.64' LT.	185,760.52	115,557.28
3	13+07.93	¾" IRON REBAR SET, 11.33' RT.	185,727.74	115,800.41

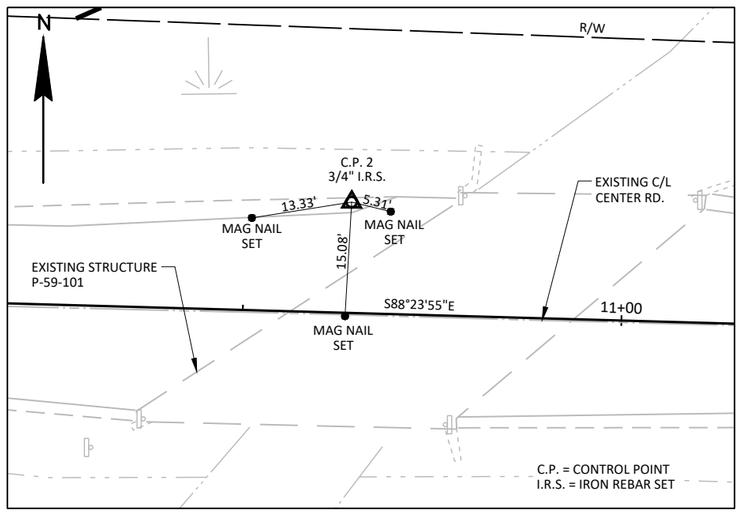
MAINLINE STATION LAYOUT

STATION	Y	X	COMMENTS
10+00	185,747.67	115,492.91	BEGIN PROJECT
10+49.33	185,746.29	115,542.22	END OF DECK
10+50	185,746.27	115,542.89	-
10+90.67	185,745.14	115,583.55	END OF DECK
11+00	185,744.88	115,592.87	-
11+50	185,743.48	115,642.86	END PROJECT



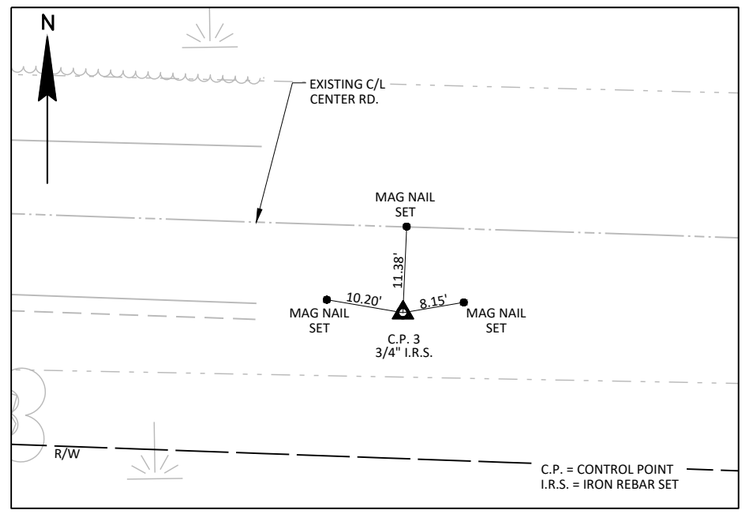
TIES TO C.P.#1

STA. 8+85.14; 11.24' RT.
Y = 185,739.64
X = 115,377.78



TIES TO C.P.#2

STA. 10+63.98; 14.64' LT.
Y = 185,760.52
X = 115,557.28



TIES TO C.P.#3

STA. 13+07.93; 11.33' RT.
Y = 185,727.74
X = 115,800.41

PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	ALIGNMENT AND TIES & PERMANENT SIGNING	SHEET 7	E

4208-05-71

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	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. P-59-101	EACH	1.000	1.000
0008	205.0100	Excavation Common	CY	400.000	400.000
0010	206.1000	Excavation for Structures Bridges (structure) 01. B-59-320	LS	1.000	1.000
0012	206.5000	Cofferdams (structure) 01. B-59-320	LS	1.000	1.000
0014	210.1500	Backfill Structure Type A	TON	320.000	320.000
0016	213.0100	Finishing Roadway (project) 01. 4208-05-71	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	15.000	15.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	340.000	340.000
0022	415.0410	Concrete Pavement Approach Slab	SY	144.000	144.000
0024	455.0605	Tack Coat	GAL	10.000	10.000
0026	465.0105	Asphaltic Surface	TON	45.000	45.000
0028	502.0100	Concrete Masonry Bridges	CY	153.000	153.000
0030	502.3200	Protective Surface Treatment	SY	205.000	205.000
0032	505.0400	Bar Steel Reinforcement HS Structures	LB	4,920.000	4,920.000
0034	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	19,070.000	19,070.000
0036	513.4061	Railing Tubular Type M	LF	86.000	86.000
0038	516.0500	Rubberized Membrane Waterproofing	SY	14.000	14.000
0040	550.0500	Pile Points	EACH	16.000	16.000
0042	550.2104	Piling CIP Concrete 10 3/4 X 0.25-Inch	LF	960.000	960.000
0044	606.0300	Riprap Heavy	CY	220.000	220.000
0046	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	160.000	160.000
0048	618.0100	Maintenance And Repair of Haul Roads (project) 01. 4208-05-71	EACH	1.000	1.000
0050	619.1000	Mobilization	EACH	1.000	1.000
0052	624.0100	Water	MGAL	6.000	6.000
0054	625.0500	Salvaged Topsoil	SY	170.000	170.000
0056	628.1504	Silt Fence	LF	470.000	470.000
0058	628.1520	Silt Fence Maintenance	LF	940.000	940.000
0060	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0062	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0064	628.2006	Erosion Mat Urban Class I Type A	SY	250.000	250.000
0066	628.6005	Turbidity Barriers	SY	490.000	490.000
0068	629.0210	Fertilizer Type B	CWT	0.300	0.300
0070	630.0120	Seeding Mixture No. 20	LB	5.000	5.000
0072	630.0160	Seeding Mixture No. 60	LB	4.000	4.000
0074	630.0200	Seeding Temporary	LB	11.000	11.000
0076	630.0500	Seed Water	MGAL	10.000	10.000
0078	633.5100	Markers ROW	EACH	10.000	10.000
0080	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0082	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0084	638.2602	Removing Signs Type II	EACH	8.000	8.000
0086	638.3000	Removing Small Sign Supports	EACH	8.000	8.000
0088	642.5001	Field Office Type B	EACH	1.000	1.000
0090	643.0420	Traffic Control Barricades Type III	DAY	1,370.000	1,370.000
0092	643.0705	Traffic Control Warning Lights Type A	DAY	1,830.000	1,830.000
0094	643.0900	Traffic Control Signs	DAY	1,070.000	1,070.000
0096	643.5000	Traffic Control	EACH	1.000	1.000
0098	645.0111	Geotextile Type DF Schedule A	SY	100.000	100.000

4208-05-71

Line	Item	Item Description	Unit	Total	Qty
0100	645.0120	Geotextile Type HR	SY	460.000	460.000
0102	650.4500	Construction Staking Subgrade	LF	280.000	280.000
0104	650.5000	Construction Staking Base	LF	110.000	110.000
0106	650.6500	Construction Staking Structure Layout (structure) 01. B-59-320	LS	1.000	1.000
0108	650.9910	Construction Staking Supplemental Control (project) 01. 4208-05-71	LS	1.000	1.000
0110	650.9920	Construction Staking Slope Stakes	LF	280.000	280.000
0112	690.0150	Sawing Asphalt	LF	44.000	44.000
0114	715.0502	Incentive Strength Concrete Structures	DOL	912.000	912.000
0116	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0118	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 10+70	EACH	1.000	1.000
0120	SPV.0035	Special 01. Streambed Substrate	CY	40.000	40.000
0122	SPV.0090	Special 01. Flashing Stainless Steel	LF	75.000	75.000

ALL ITEMS 010 UNLESS OTHERWISE NOTED

CLEARING & GRUBBING

STATION	LOCATION	201.0105 CLEARING (STA)	201.0205 GRUBBING (STA)
10+00 - 12+00	MAINLINE	2	2
	TOTALS =	2	2

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)
10+00 - 11+50	MAINLINE	15	340
	TOTALS =	15	340

ASPHALTIC SURFACE

STATION - STATION	LOCATION	455.0605 TACK COAT (GAL)	465.0105 ASPHALTIC SURFACE (TON)
10+00 - 11+50	MAINLINE	10	45
	TOTALS =	10	45

EARTHWORK SUMMARY

FROM/TO STA	LOCATION	205.0100 EXCAVATION COMMON CUT (CY)	AVAILABLE MATERIAL (CY) (1)	UNEXPANDED FILL (CY)	EXPANDED FILL (CY) FACTOR 1.25 (2)	MASS ORDINATE +/- (CY) (3)	WASTE (CY)
STA. 10+00 - STA. 11+50	MAINLINE	210	210	20	25	185	185
STA. 49'A'+75 - STA. 51'A'+45	CHANNEL REALIGNMENT	190	0	20	25	165	165
	TOTALS =	400	210	40	50	350	350

NOTES:
1.) AVAILABLE MATERIAL = CUT
2.) EXPANDED FILL FACTOR 1.25: EXPANDED FILL = (UNEXPANDED FILL)*1.25
3.) THE MASS ORDINATE+ OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE CATEGORY. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE CATEGORY.

* NOTE: WASTE EXCESS CHANNEL REALIGNMENT MATERIAL. DO NOT USE EXCESS EXCAVATED MATERIAL FROM CHANNEL REALIGNMENT (A-LINE) ACTIVITIES IN ROADWAY RECONSTRUCTION APPROACH CONSTRUCTION.

CONCRETE PAVEMENT APPROACH SLAB

STATION - STATION	LOCATION	415.0410 (SY)
10+26 - 10+57	MAINLINE	72
10+83 - 11+14	MAINLINE	72
	TOTALS =	144

WATER

STATION-STATION	LOCATION	624.0100 (MGAL)
10+00 - 11+50	MAINLINE	6
	TOTALS =	6

RIPRAP HEAVY

STATION - STATION	LOCATION	*606.0300 RIPRAP HEAVY (CY)	*645.0120 GEOTEXTILE TYPE HR (SY)
49'A'+75 - 49'A'+91	MAINLINE, LT.	10	26
50'A'+01 - 50'A'+27	MAINLINE, RT.	20	46
50'A'+81 - 51'A'+45	MAINLINE, LT.	43	96
51'A'+18 - 51'A'+45	MAINLINE, RT.	17	42
	TOTALS =	90	210

* MORE LISTED ELSEWHERE

FINISHING ITEMS

STATION - STATION	LOCATION	625.0500 SALVAGED TOPSOIL (SY)	628.2006 EROSION MAT URBAN CLASS I TYPE A (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0120 SEEDING MIXTURE NO. 20 (LB)	*630.0160 SEEDING MIXTURE NO. 60 (LB)	630.0200 SEEDING TEMPORARY (LB)	630.0500 SEED WATER (MGAL)
10+00 - 11+50	MAINLINE	134	200	0.2	4	3	10	8
UNDISTRIBUTED	-	36	50	0.1	1	1	1	2
	TOTALS =	170	250	0.3	5	4	11	10

* ADJACENT TO WETLAND AREAS (STA 10+06 - STA 10+61, RT; STA 10+14 - STA 11+32, LT; STA 10+41 - STA 11+33, RT; STA 10+80 - STA 11+44, LT)

NOTE: -'A'-LINE CHANNEL REALIGNMENT FINISHING ITEM QUANTITIES ARE INCLUDED IN MAINLINE FINISHING ITEM QUANTITIES.

SILT FENCE

STATION - STATION	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)
10+00 - 10+14	MAINLINE, RT	45	90
10+00 - 11+32	MAINLINE, LT	167	334
10+53 - 11+50	MAINLINE, RT	120	240
11+28 - 11+50	MAINLINE, LT	43	86
UNDISTRIBUTED	-	95	190
TOTALS =		470	940

TURBIDITY BARRIERS

STATION-STATION	LOCATION	628.6005 (SY)
49'A'+75 - 51'A'+45	CHANNEL REALIGNMENT	440
-	UNDISTRIBUTED	50
	TOTALS =	490

MOBILIZATION EROSION CONTROL

PROJECT	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
4208-05-71	5	3
TOTALS =	5	3

PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	MISCELLANEOUS QUANTITIES	SHEET 10	E

FILE NAME : S:\PROJECTS\W11607 WISDOT - CENTER ROAD, SHEBOYGAN CO\SHEETSPLAN\DETAILS\42080571_MISCLLANEOUS QUANTITIES.DWG
LAYOUT : QUANTITIES
PLOT DATE : 7/30/2021
PLOT TIME : 12:38:16 PM
PLOT BY : CODY KINTZ
PLOT SCALE : 1" = 1'

ALL ITEMS 010 UNLESS OTHERWISE NOTED

3

MARKERS ROW

PT. NO.	STATION	OFFSET FROM FINISHED C/L	633.5100 (EACH)
1	11+50.00	29.93' RT.	1
2	11+25.00	29.01' RT.	1
3	10+50.00	70.00' RT.	1
4	10+25.00	70.00' RT.	1
5	9+90.00	27.87' RT	1
6	9+90.00	38.14' RT.	1
7	10+25.00	37.84' LT.	1
8	11+05.00	75.00' LT.	1
9	11+35.00	75.00' LT.	1
10	11+50.00	36.78' LT.	1
		TOTALS =	10

PERMANENT SIGNING

APPROX. STATION	LOCATION	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIGN SIZE	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)
10+25	MAINLINE, RT.	R12-1	BRIDGE WEIGHT LIMIT	10 TONS	24X30	---	---	1	1
10+30	MAINLINE, RT	W5-52R	BRIDGE HASH MARKS		12X36	---	---	1	1
10+30	MAINLINE, RT	W5-	BRIDGE HASH MARKS		12X36	1	3.00	---	---
10+50	MAINLINE, LT.	W5-52L	BRIDGE HASH MARKS		12X36	1	3.00	---	---
10+75	MAINLINE, LT	W5-52L	BRIDGE HASH MARKS		12X36	---	---	1	1
10+75	MAINLINE, RT.	W5-52L	BRIDGE HASH MARKS		12X36	---	---	1	1
10+80	MAINLINE, RT.	W5-52L	BRIDGE HASH MARKS		12X36	1	3.00	---	---
11+00	MAINLINE, LT.	W5-52R	BRIDGE HASH MARKS		12X36	1	3.00	---	---
11+20	MAINLINE, LT.	W5-52R	BRIDGE HASH MARKS		12X36	---	---	1	1
11+25	MAINLINE, LT.	R12-1	BRIDGE WEIGHT LIMIT	10 TONS	24X30	---	---	1	1
SCENIC DRIVE INTERSECTION		R12-55	XX TON BRIDGE XX MILES AHEAD	10 TON BRIDGE	48X18	---	---	1	1
VASHIGNTON ST. INTERSECTIOI		R12-55	XX TON BRIDGE XX MILES AHEAD	10 TON BRIDGE	48X18	---	---	1	1
					TOTALS =	4	12.00	8	8

3

TRAFFIC CONTROL

LOCATION	TRAFFIC CONTROL 643.0420 BARRICADES TYPE III (DAY)	643.0705 WARNING LIGHTS TYPE A (DAY)	643.0900 SIGNS (DAY)	643.5000 TRAFFIC CONTROL (EACH)
PROJECT	1370	1830	1070	1
TOTALS =	1370	1830	1070	1

CONSTRUCTION STAKING

STATION -STATION	LOCATION	650.4500 SUBGRADE (LF)	650.5000 BASE (LF)	∗650.6500 STRUCTURE LAYOUT (B-59-320) (LS)	650.9910 SUPPLEMENTAL CONTROL (01. 4208-05-71) (LS)	650.9920 SLOPES STAKES (LF)
10+00 - 11+50	MAINLINE	110	110	-	-	110
49+75 - 51+45	CHANNEL REALIGNMENT	170	-	-	-	170
-	PROJECT	-	-	1	1	-
	TOTAL =	280	110	1	1	280

∗ CATEGORY 020

SAWING ASPHALT

STATION	LOCATION	690.0150 (L.F.)
10+00	MAINLINE	22
11+50	MAINLINE	22
	TOTAL =	44

STREAMBED SUBSTRATE

STATION -STATION	LOCATION	SPV.0035.01 (CY)
49+75 - 51+45	CHANNEL REALIGNMENT	40
	TOTAL =	40

PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	MISCELLANEOUS QUANTITIES	SHEET 11	E

FILE NAME : S:\PROJECTS\W11607 WISDOT – CENTER ROAD, SHEBOYGAN CO\SHEETSPLAN\DETAILS\42080571_MISCLLANEOUS QUANTITIES.DWG
LAYOUT : QUANTITIES
PLOT DATE : 7/29/2021
PLOT TIME : 4:06:42 PM
PLOT BY : CODY KINTZ
PLOT SCALE : 1" = 1'

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
4208-05-00		
FEDERAL PROJECT NUMBER	4.01	2

PLAT OF RIGHT-OF-WAY REQUIRED FOR

TOWN OF GREENBUSH, CENTER ROAD

(MULLET RIVER BRIDGE, B-59-0320)

LOC STR — SHEBOYGAN COUNTY

CONSTRUCTION PROJECT NUMBER
4208-05-71

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	PROPERTY LINE RECORDED AS	PL (100')
ACCESS RIGHTS	AR	REFERENCE LINE	R/L
ACRES	AC.	RELEASE OF RIGHTS	ROR
AND OTHERS	ET.AL.	REMAINING	REM.
BARN	B.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	SHED	S.
CORNER	COR.	STATION	STA.
CONVEYANCE OF RIGHTS	CR	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.		
GARAGE	G.		
HIGHWAY EASEMENT	H.E.		
HOUSE	H.		
HOUSE TRAILER	H.T.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND SURVEY MONUMENT (WITH POINT NUMBER)	o1040	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	○ ● (SET)	PROPERTY LINE	
R/W STANDARD	△ ▲ (SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
		CORPORATE LIMITS	
SECTION CORNER MONUMENT	⊕	NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
SECTION CORNER SYMBOL		NO ACCESS (BY ACQUISTION)	
		NO ACCESS (BY STATUTORY AUTHORITY)	
FEE (HATCH VARIES)		SECTION LINE	
TEMPORARY LIMITED EASEMENT		QUARTER LINE	
		SIXTEENTH LINE	
PERMANENT LIMITED EASEMENT		EXISTING CENTERLINE	
R/W BOUNDARY POINT	RWB20	PROPOSED REFERENCE LINE	
PARCEL NUMBER	(8)	PARALLEL OFFSET	
UTILITY PARCEL NUMBER	(92)	ENCROACHMENT	E-1/TYPE
SIGN NUMBER (OFF PREMISE)	21-1	HIGHWAY EASEMENT	
BUILDING			

CONVENTIONAL UTILITY SYMBOLS

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

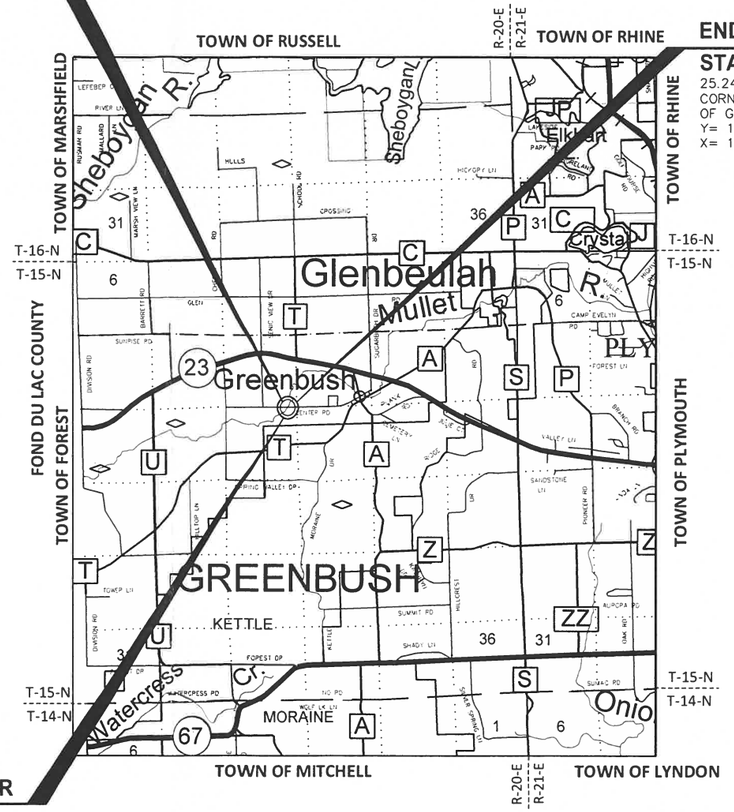
NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), SHEBOYGAN COUNTY, NAD 83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 3/4" X 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

STRUCTURE B-59-0320



END RELOCATION ORDER

STA. 11+50.00

25.24' NORTH AND 795.65' WEST OF THE S.E. CORNER OF SECTION 9, T.15N., R.20E., TOWN OF GREENBUSH, SHEBOYGAN COUNTY, WI
Y= 185743.48
X= 115642.86

BEGIN RELOCATION ORDER

STA. 9+90.00

29.71' NORTH AND 955.59' WEST OF THE S.E. CORNER OF SECTION 9, T.15N., R.20E., TOWN OF GREENBUSH, SHEBOYGAN COUNTY, WI
Y= 185747.95
X= 115482.92

N

LAYOUT

SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.030 MI.

JEWELL
associates engineers, inc.
Engineers - Architects - Surveyors

560 SUNRISE DRIVE
SPRING GREEN, WI 53588
PHONE : 608.588.7484
www.jewellssoc.com

I HEREBY CERTIFY THAT THIS PLAT WAS MADE FOR TOWN OF GREENBUSH, WISCONSIN AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

WISCONSIN
WESLEY L KRAEMER
S-3026
SPRING GREEN WIS.
3/4/2021
LAND SURVEYOR

REVISION DATE

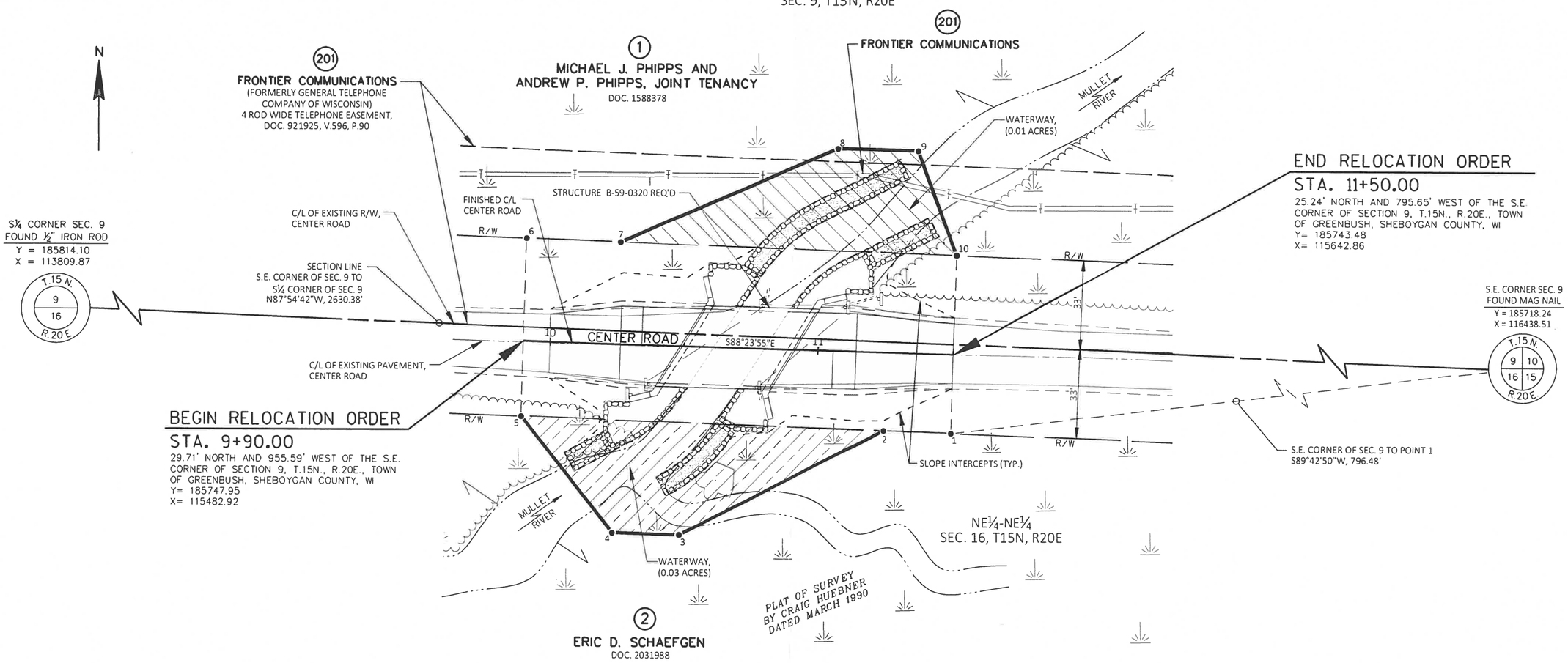
APPROVED FOR TOWN OF GREENBUSH
DATE: 3-8-21 (NAME/TITLE)

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED		
			NEW	EXISTING	TOTAL
1	MICHAEL J. PHIPPS AND ANDREW P. PHIPPS, JOINT TENANCY	FEE	0.07	0.12	0.19
2	ERIC D. SCHAEFGEN	FEE	0.08	0.12	0.20
201	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS			

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

EASEMENT TABLE			
OWNER	RECORDING INFORMATION	LOCATED IN PARCEL NUMBER	REMARKS
FRONTIER COMMUNICATIONS (FORMERLY GENERAL TELEPHONE COMPANY OF WISCONSIN)	DOC. 921925, VOL. 596, PG. 90	1	THE SOUTH 4 RODS LYING NORTH OF THE CENTERLINE OF CENTER ROAD IN THE SE¼-SE¼, SEC. 9, T15N, R20E



COORDINATE TABLE – NEW R/W POINTS				
PT.#	STATION	OFFSET	Y	X
1	11+50.00	29.23' RT.	185714.26	115642.04
2	11+25.00	29.01' RT.	185715.17	115617.05
3	10+50.00	70.00' RT.	185676.30	115540.94
4	10+25.00	70.00' RT.	185677.00	115515.95
5	9+90.00	27.87' RT.	185720.09	115482.14
6	9+90.00	38.14' LT.	185786.07	115483.98
7	10+25.00	37.84' LT.	185784.80	115518.96
8	11+05.00	75.00' LT.	185819.71	115599.97
9	11+35.00	75.00' LT.	185818.87	115629.96
10	11+50.00	36.78' LT.	185780.24	115643.88

RIGHT OF WAY LINE TABLE		
POINT TO POINT	BEARING	DISTANCE
1 TO 2	N87°54'42"W	25.00'
2 TO 3	S62°56'42"W	85.47'
3 TO 4	N88°23'55"W	25.00'
4 TO 5	N38°06'50"W	54.78'
5 TO 6	N01°36'05"E	66.00'
6 TO 7	S87°54'42"E	35.00'
7 TO 8	N66°41'11"E	88.21'
8 TO 9	S88°23'55"E	30.00'
9 TO 10	S19°49'31"E	41.06'
10 TO 1	S01°36'05"W	66.00'

TOWN OF GREENBUSH

NOTE: EXISTING C/L OF CENTER ROAD BASED ON THE LOCATION OF THE SOUTH LINE OF THE SE¼ OF SECTION 9.

EXISTING RIGHT-OF-WAY FOR CENTER ROAD BASED ON THE LOCATION OF THE SOUTH LINE OF THE SE¼ OF SECTION 9, P.O.S. A-18691, BOOK 90 PAGES 34-35, AND WIS. STATUTE 82.31(2).

REVISION DATE	DATE: MARCH 4, 2021	SCALE, FEET 0 20 40	HWY: CENTER ROAD	R/W PROJECT NUMBER: 4208-05-00	PLAT SHEET 4.02	
	GRID FACTOR		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER: 4208-05-71	PS&E SHEET	E

FILE NAME : S:\Projects\W11607 WisDOT – Center Road, Sheboygan Co\RW\W11607 Center Road RW Plat.dwg PLOT DATE : 3/4/2021 3:12 PM PLOT BY : Kraemer, Wes PLOT NAME : PLOT SCALE : 1:1

LEGEND

- DIRECTION OF FLOW
- XXXXXXXXX SAWING ASPHALT
- SILT FENCE
- EDGE OF WATER
- WETLANDS
- RIPRAP HEAVY OVER GEOTEXTILE TYPE HR (CATEGORY 010)
- RIPRAP HEAVY OVER GEOTEXTILE TYPE HR (CATEGORY 020)

SEE CHANNEL REALIGNMENT DETAILS FOR ADDITIONAL EROSION CONTROL

MICHAEL J. PHIPPS & ANDREW P. PHIPPS, JOINT TENANCY

STA. 10+00 - STA.12+00 CLEARING & GRUBBING REQ'D

CHANNEL REALIGNMENT REQ'D. (SEE CONSTRUCTION DETAILS FOR FURTHER INFORMATION)

STRUCTURE B-59-320 REQ'D.

FINISHED C/L CENTER RD.

SILT FENCE TURN-AROUND REQ'D (TYP.)

WETLAND DETERMINATION (TYP.)

MULLET RIVER

FRONTIER COMMUNICATIONS (TYP.)

N

R/W

39'

27'

35'

31'

(ASPHALT)

CENTER RD.

10+00

11+00 S88°23'55"E

BM 1

BM 2

BM 3

EXISTING C/L CENTER RD.

51'A+00

50'A+00

SLOPE INTERCEPTS

CONCRETE PAVEMENT APPROACH SLAB (TYP.)

REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS
P-59-101 (STA. 10+75)
SINGLE-SPAN CONCRETE FLAT SLAB STRUCTURE
28.0' CLEAR ROADWAY WIDTH
33.1' OVERALL LENGTH

C/L EXISTING DRAINAGE DITCH(TO REMAIN)

BEGIN PROJECT
STA. 10+00
Y=185,747.67
X=115,492.91

END PROJECT
STA. 11+50
Y=185,743.48
X=115,642.86

ERIC D. SCHAEFGEN

5

5

FINISHED C/L PROFILE CENTER RD.

EXISTING C/L PROFILE CENTER RD.

-0.11%

OBSERVED WATER
EL. 978.65
(11-01-19)

STA. 10+00.00
EL. 982.25
MATCH EXISTING

STA. 11+50.00
EL. 982.08
MATCH EXISTING

HIGH WATER$_{100}$
EL = 981.11

HIGH WATER$_{2}$
EL = 979.33

STREAMBED
EL. 974.65

EXISTING C/L ELEVATION

FINISHED C/L ELEVATION

STA. 10+70
STRUCTURE B-59-320 REQ'D
SINGLE SPAN REINFORCED CONCRETE FLAT SLAB STRUCTURE
CLEAR ROADWAY WIDTH = 28.0'
O.A.L. = 42.89'
SKEW = 30° L.H.F.

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
1	8+85	3/4" IRON REBAR SET, 11.2' RT.	981.44
2	10+64	3/4" IRON REBAR SET, 14.6' LT.	981.89
3	13+08	3/4" IRON REBAR SET, 11.3' RT.	981.85

EARTHWORK SUMMARY

		MAINLINE	CHANNEL REALIGNMENT	MAINLINE
EXCAVATION COMMON	=	210 C.Y.	190 C.Y.	400 C.Y.
FILL	=	20 C.Y.	20 C.Y.	40 C.Y.
FILL EXPANSION (25%)	=	25 C.Y.	25 C.Y.	50 C.Y.
WASTE	=	185 C.Y.	165 C.Y.	350 C.Y.

984 982 980 978 976 974 972 970 968

981.89 981.88 981.88 981.93 982.04 982.14 982.20 982.25 982.25 982.30 982.23 982.33 982.20 982.37 982.18 982.42 982.16 982.37 982.14 982.25 982.11 982.13 982.09 982.08 982.08 982.03 981.92 981.89 981.91 981.93 981.98 982.04

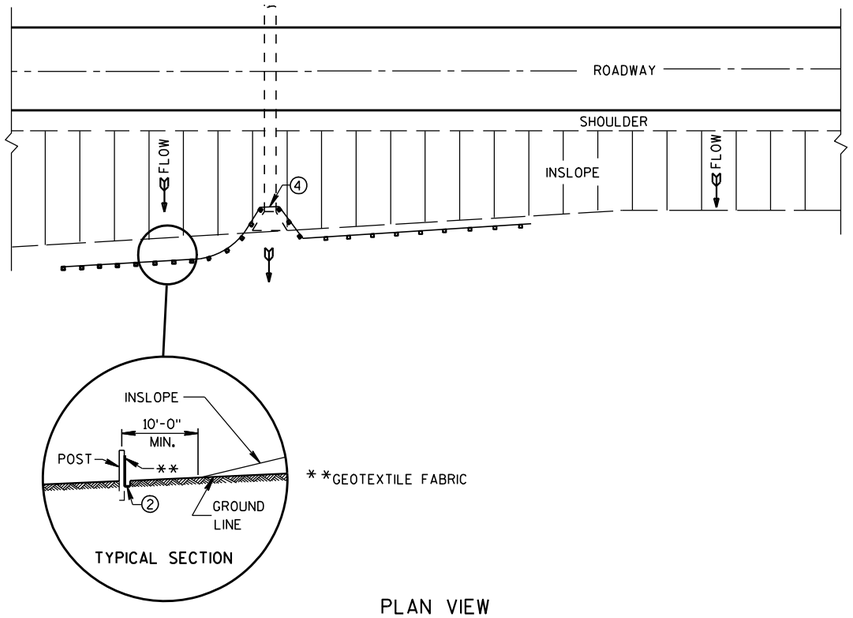
8+00 8+20 8+40 8+60 8+80 9+00 9+20 9+40 9+60 9+80 10+00 10+20 10+40 10+60 10+80 11+00 11+20 11+40 +50 11+60 11+80 12+00 12+20 12+40 12+60 12+80 13+00 13+20 13+40 13+60

PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	PLAN AND PROFILE: MAINLINE	SHEET 14	E

FILE NAME : S:\PROJECTS\W11607 WISDOT - CENTER ROAD, SHEBOYGAN CO\SHEETS\PLAN\PLAN & PROFILE SHEETS\P&P.DWG PLOT DATE : 7/29/2021 3:45:19 PM PLOT BY : CODY KINTZ PLOT SCALE : 1" = 1' LAYOUT : LAYOUT1

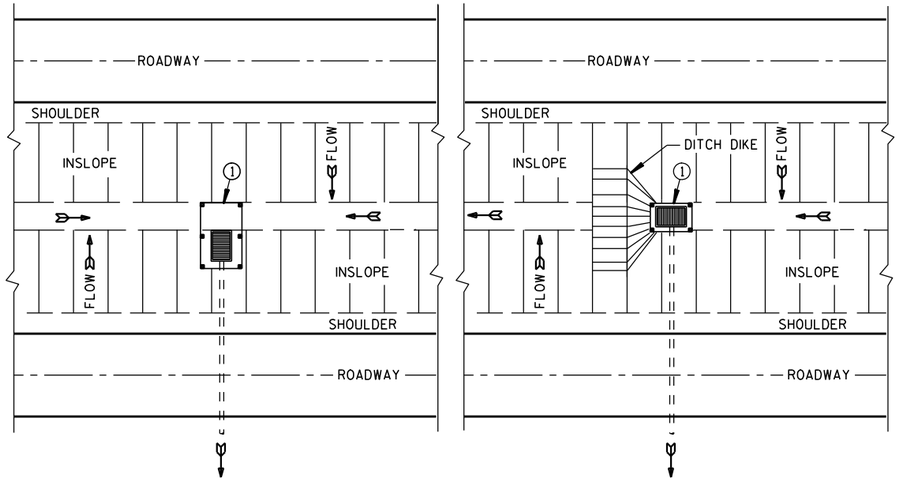
Standard Detail Drawing List

08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



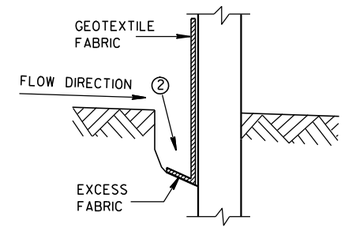
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

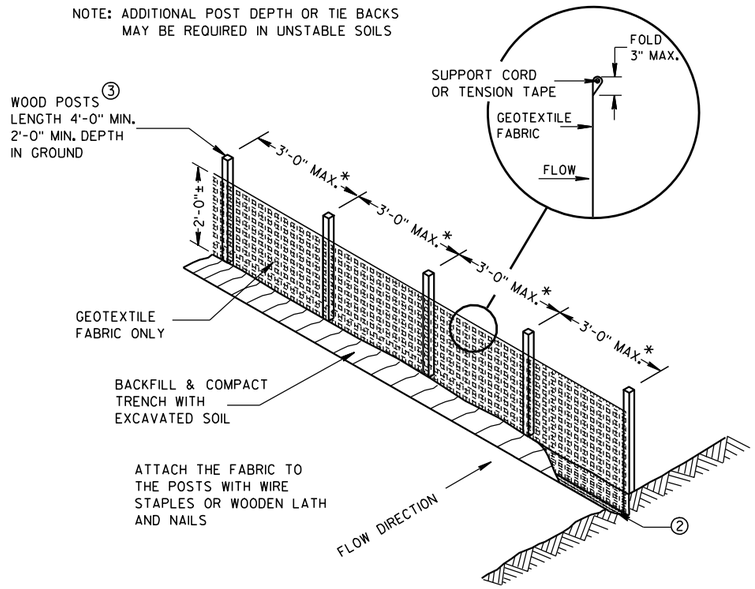
GENERAL NOTES

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

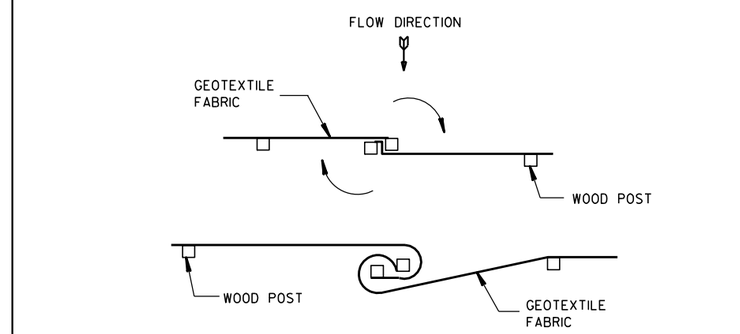
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



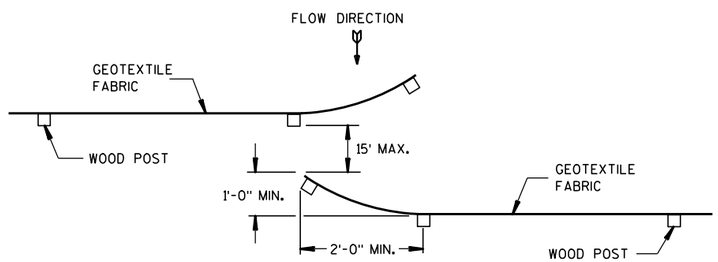
TRENCH DETAIL



SILT FENCE

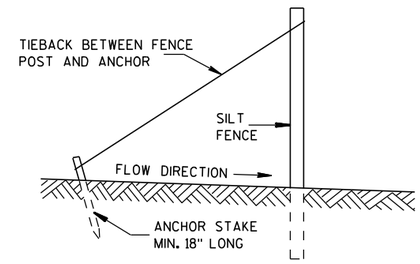


TWIST METHOD



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

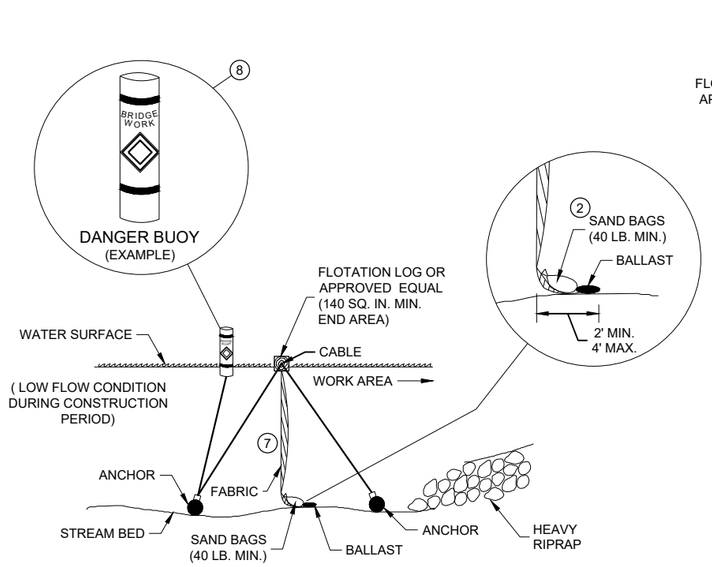
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

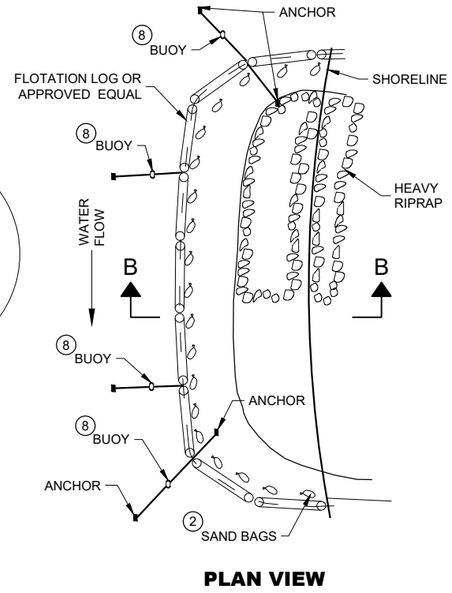
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

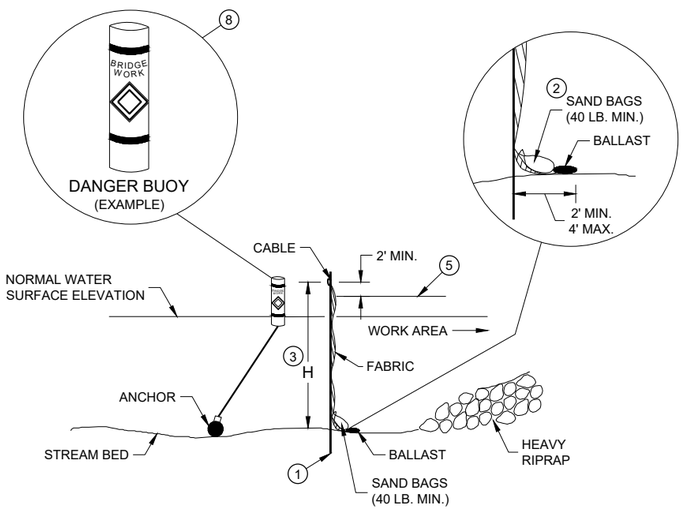


SECTION B - B

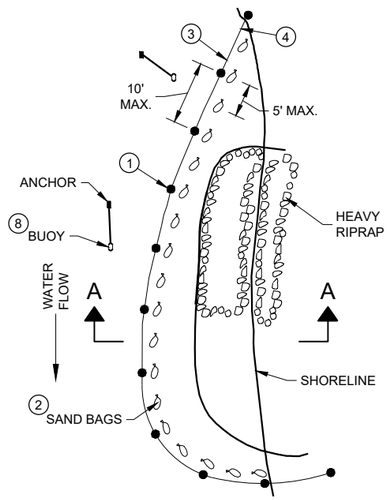


PLAN VIEW

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.

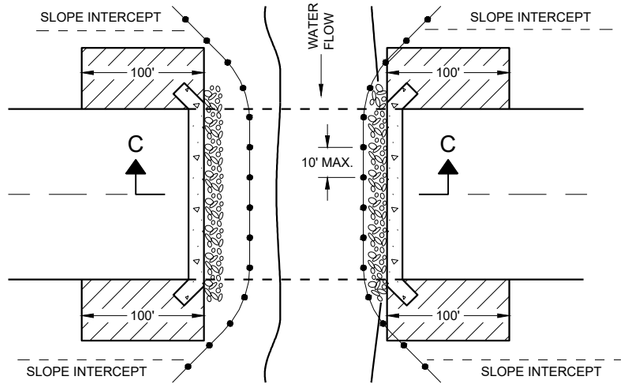
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(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.

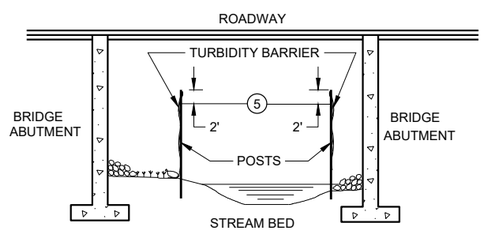
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

(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

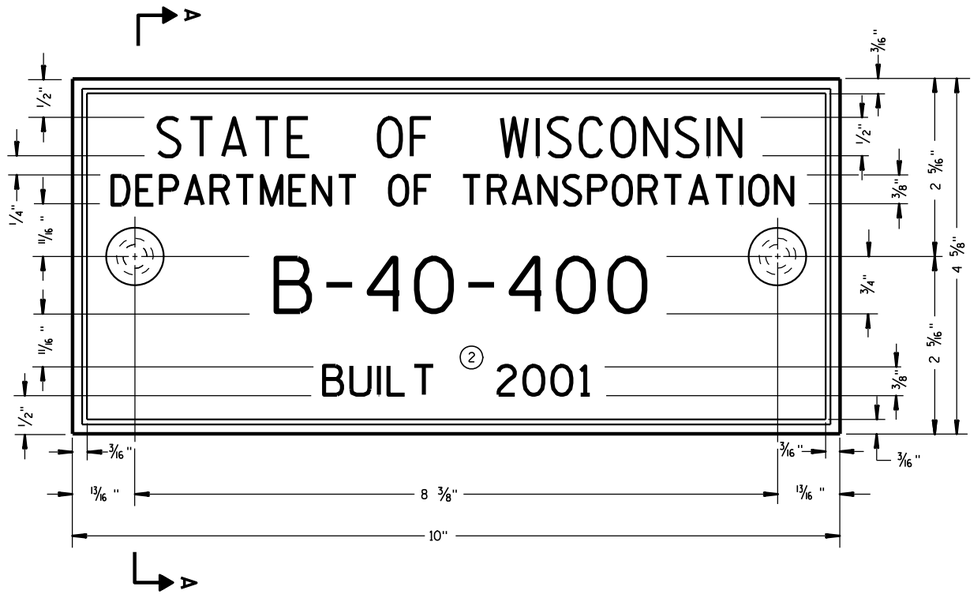
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6
SDD 08E11 - 02



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

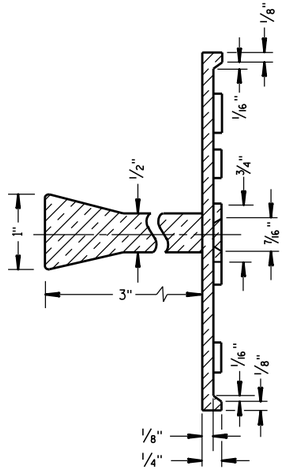
GENERAL NOTES

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

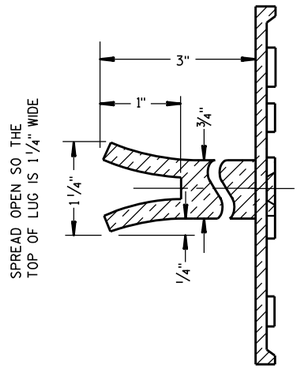
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

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



SECTION A-A



ALTERNATE LUG

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

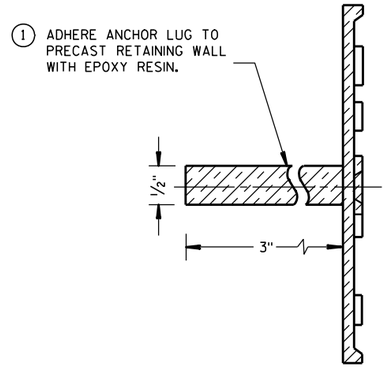
COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION MULTI-UNIT STRUCTURES



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

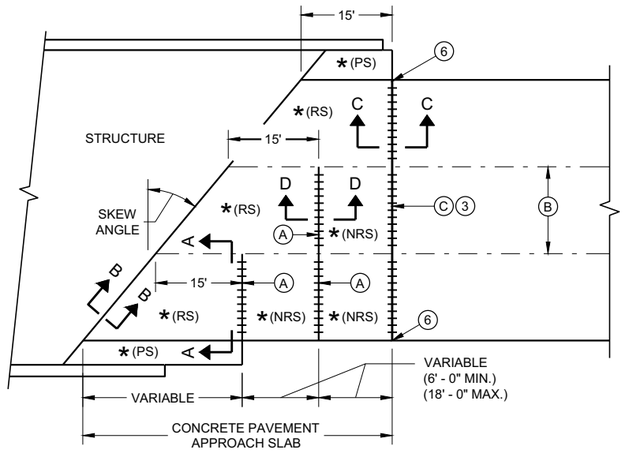
FHWA

6

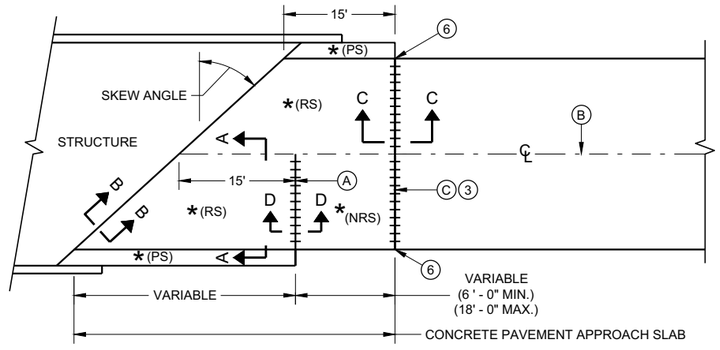
S.D.D. 12 A 3-10

6

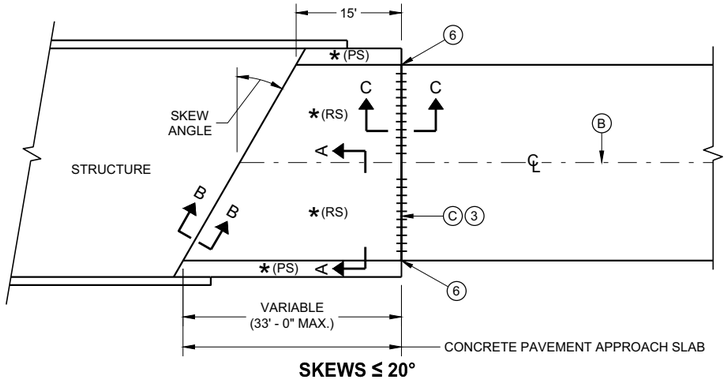
S.D.D. 12 A 3-10



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

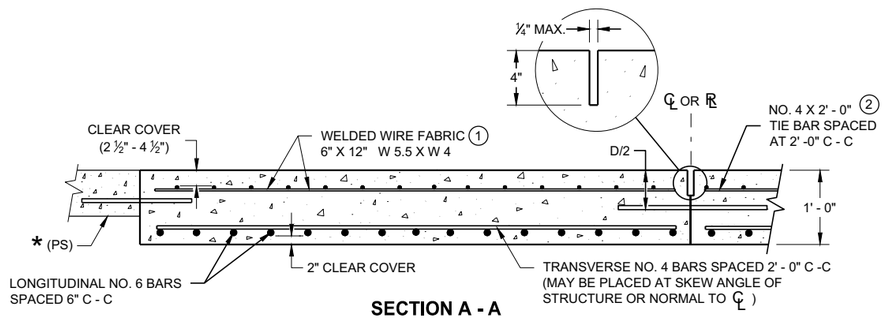
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

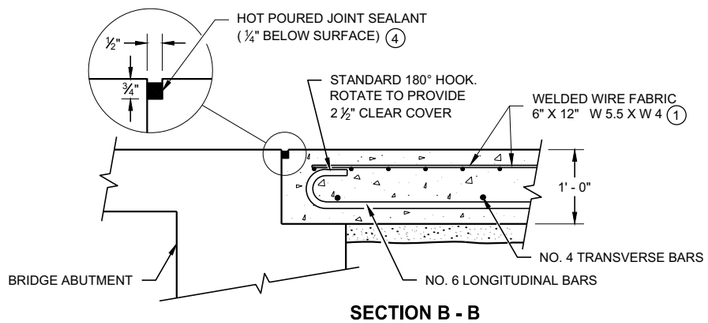
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

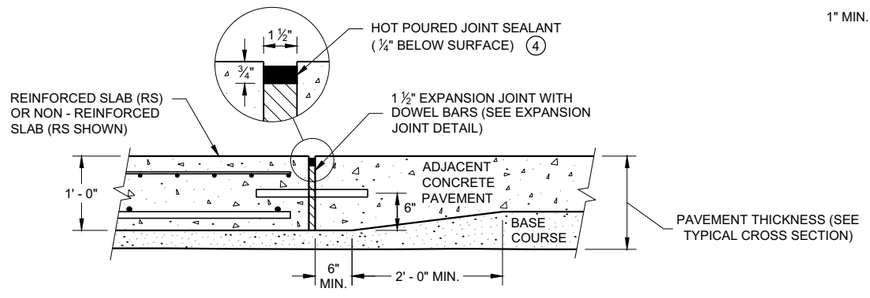
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

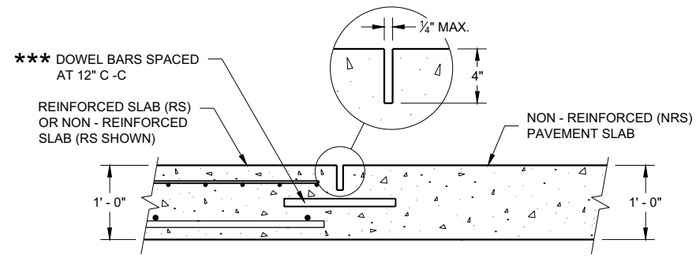
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

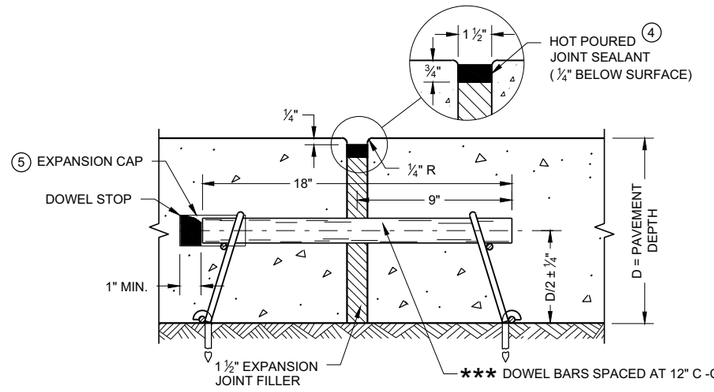
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

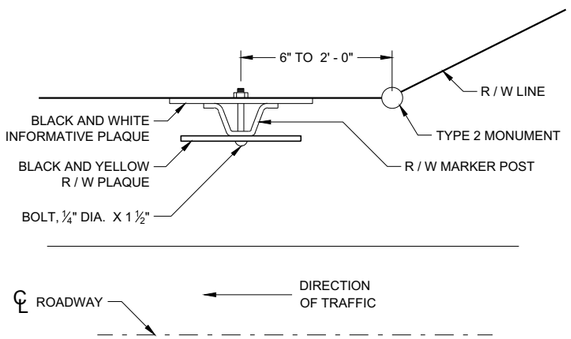
APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

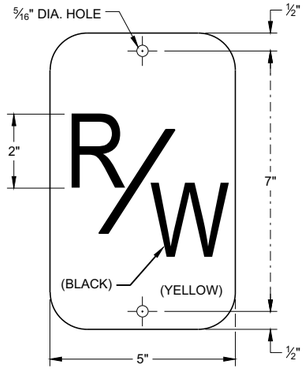
FHWA

6

SDD 13B02 - 09a

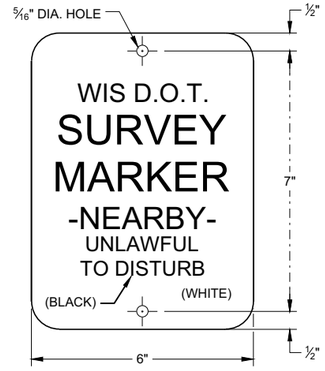


PLAN VIEW
STEEL MARKER POST



R / W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

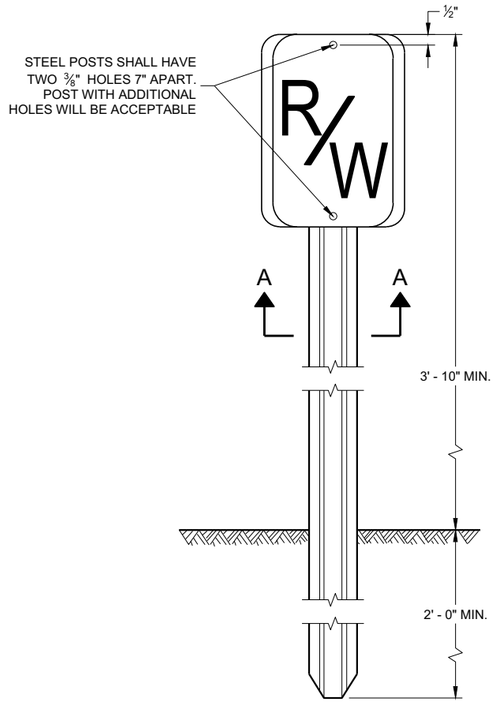
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A STEEL MARKER POST FOR RIGHT -OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

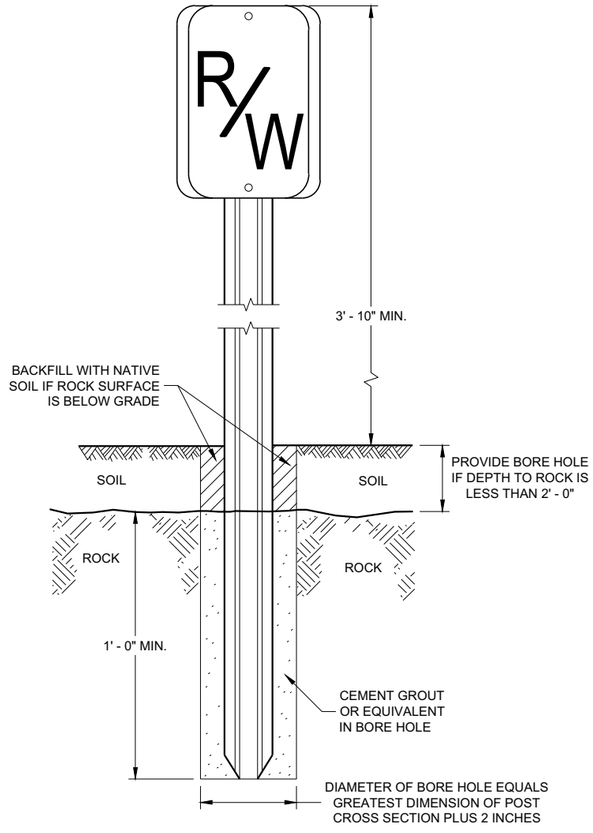
THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFROMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. "R/W" AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

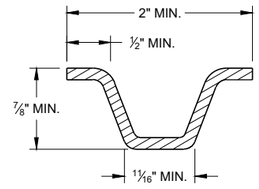
(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' - 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR. FILL THE BORE HOLE WITH CEMENT GROUT OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



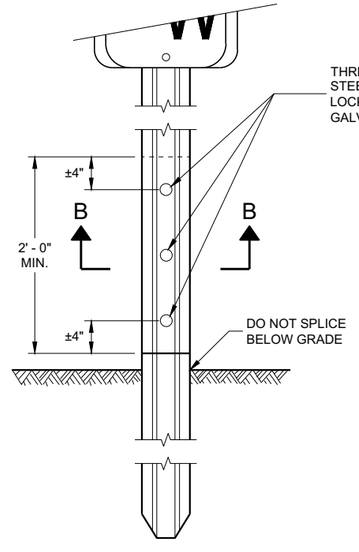
FRONT VIEW
STEEL MARKER POST



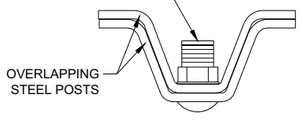
FRONT VIEW
ROCK INSTALLATION (1)



MIN. WEIGHT 1.12 LB./FT.
SECTION A - A



FRONT VIEW
SPLICE DETAIL



SECTION B - B

MARKER POST
FOR RIGHT - OF - WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/18/2016
DATE
/S/ Ray Kumapayi
CHIEF SURVEYING AND MA
ENGINEER

FHWA

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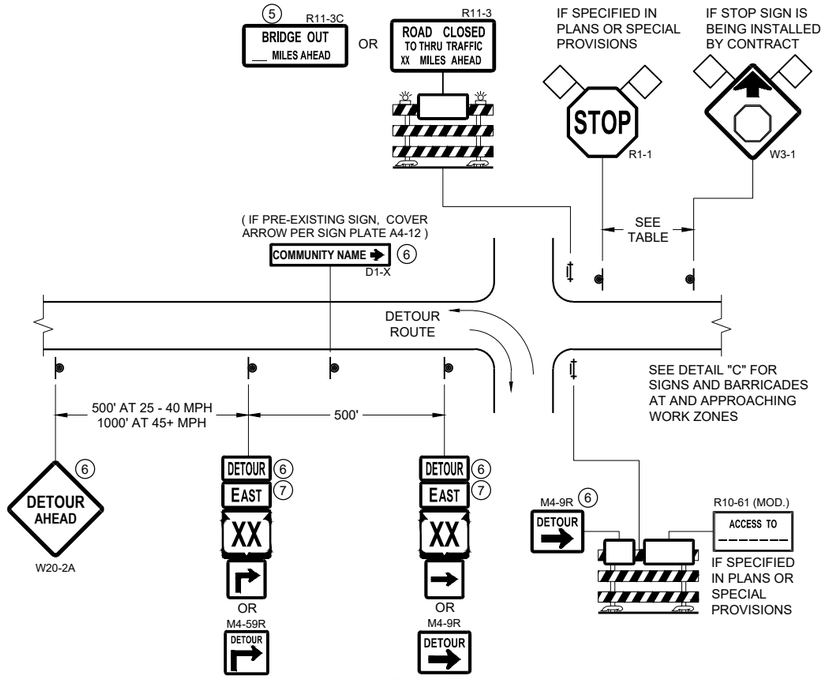
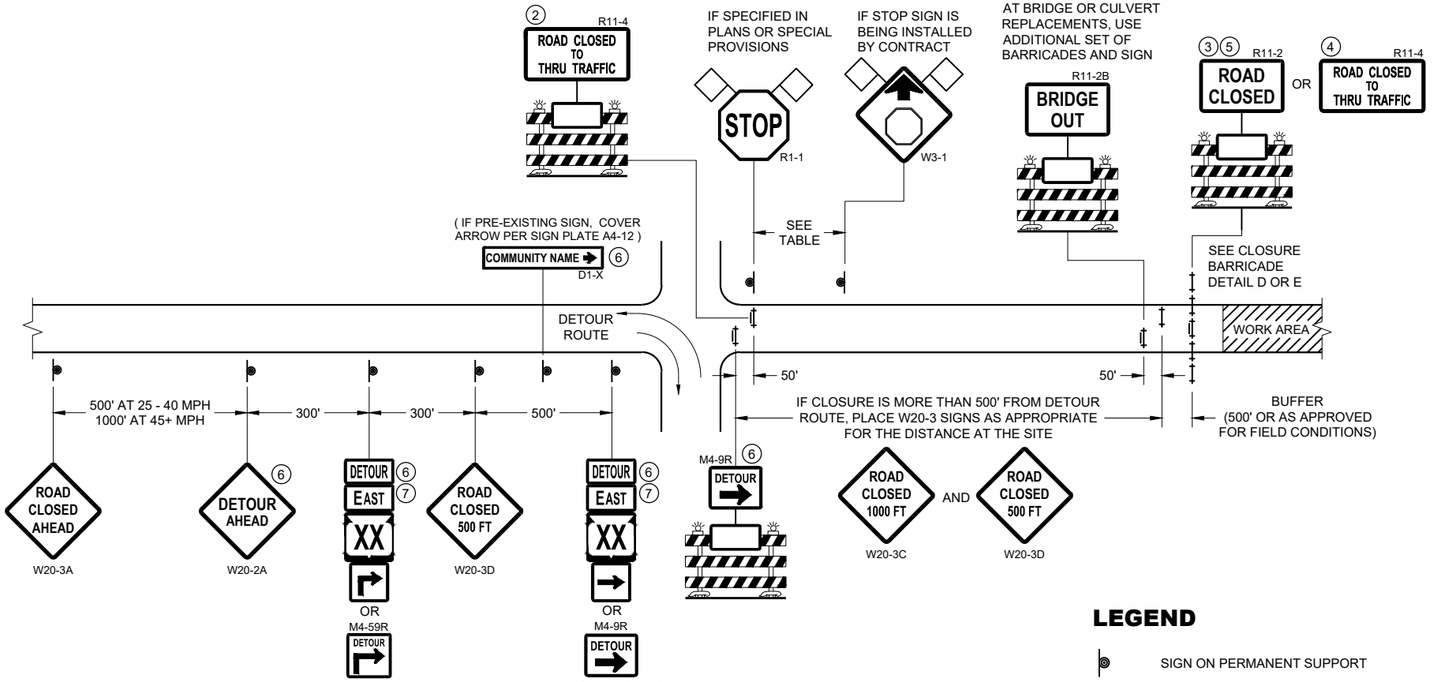
SDD15A01 - 13a





DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

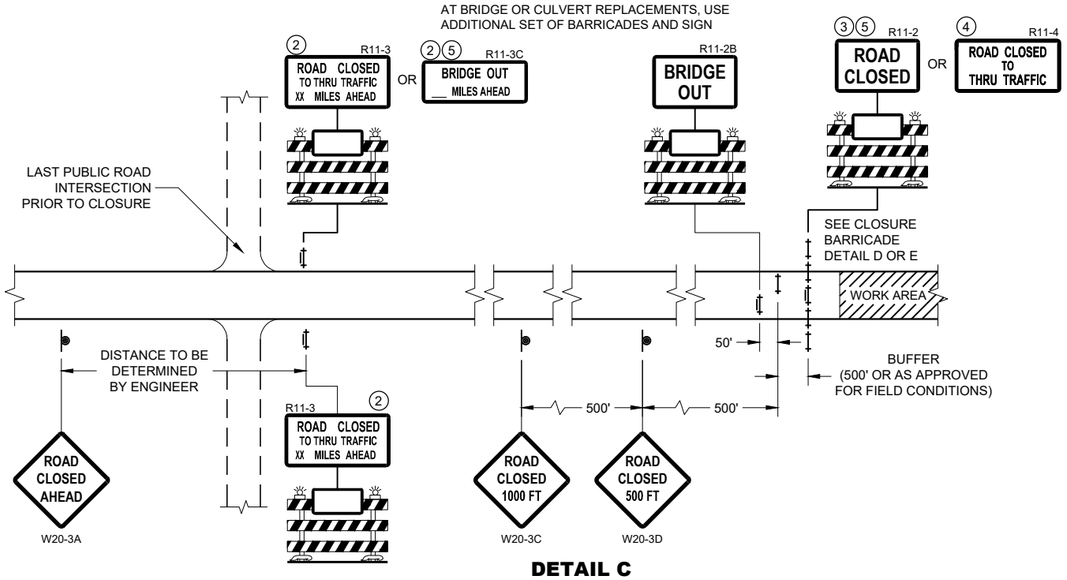
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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

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



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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08a

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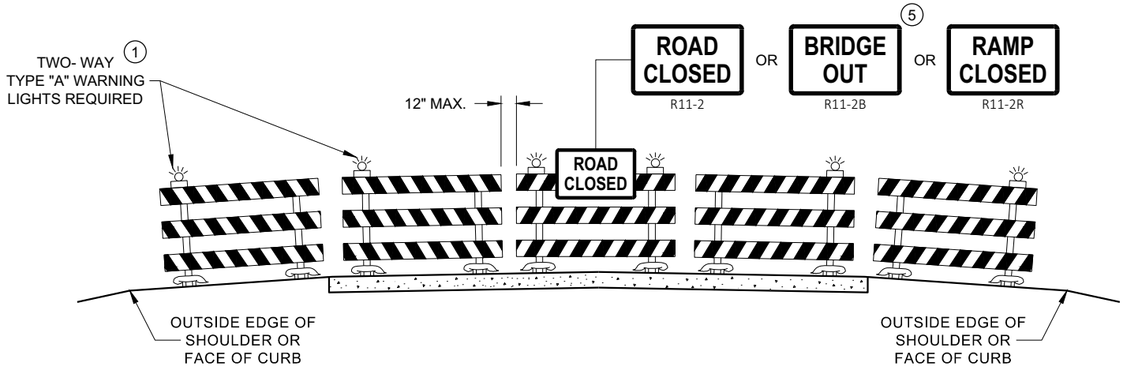
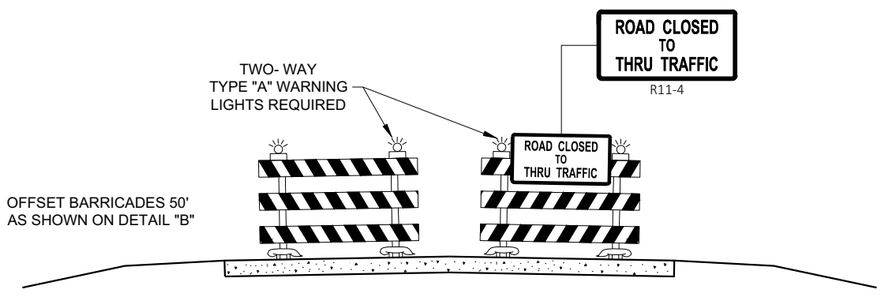
SDD 15C02 - 08a



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
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 08b

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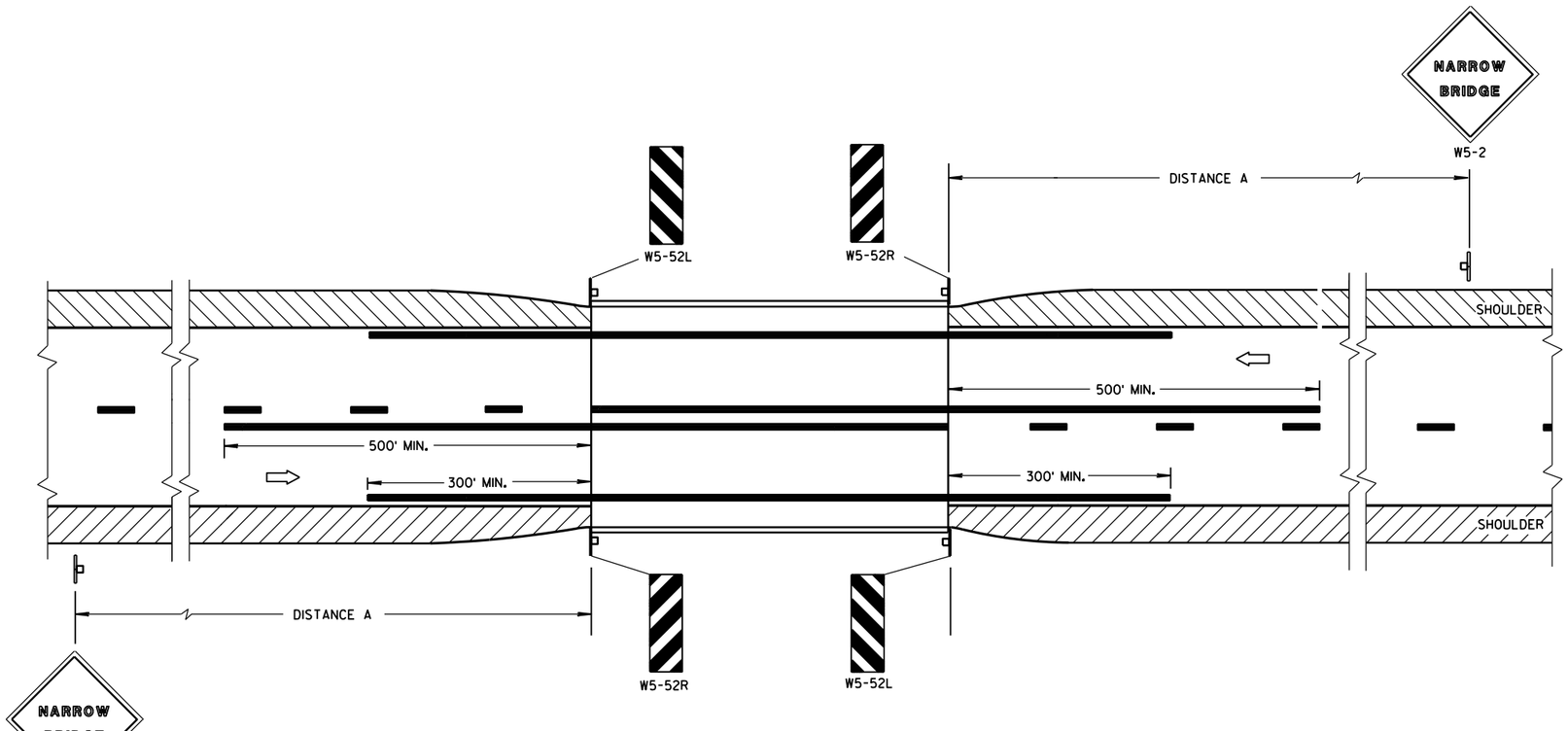
SDD 15C02 - 08b



SITUATION 1

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

DISTANCE TABLE

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

GENERAL NOTES

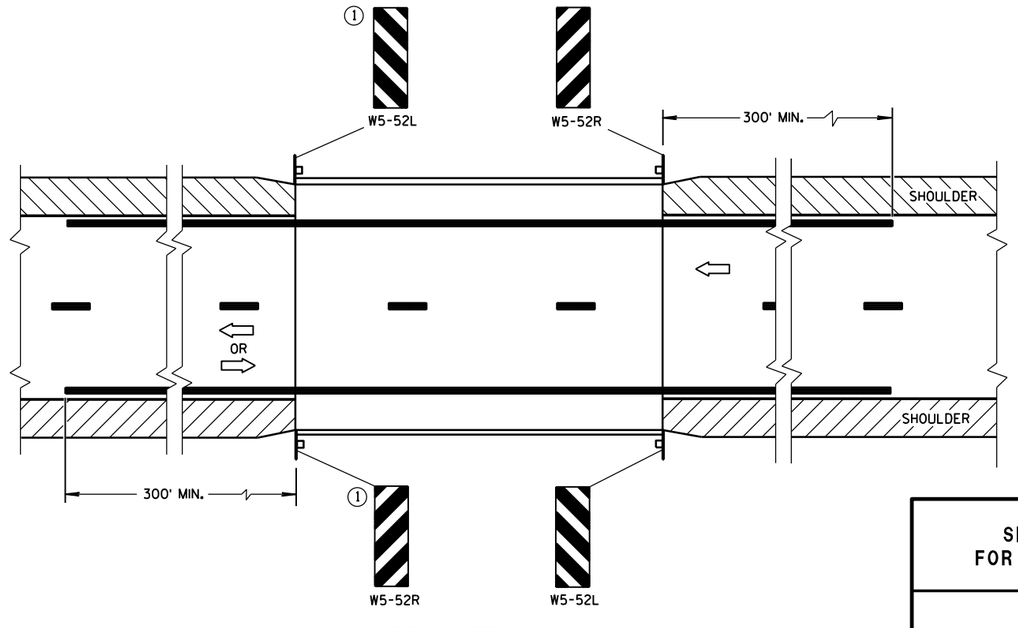
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

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

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

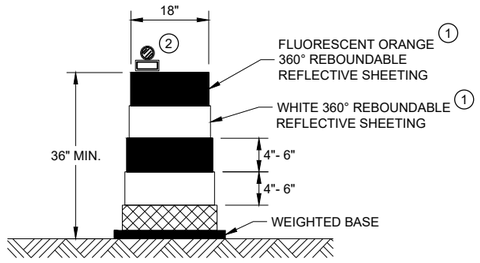
S.D.D. 15 C 6-9

6

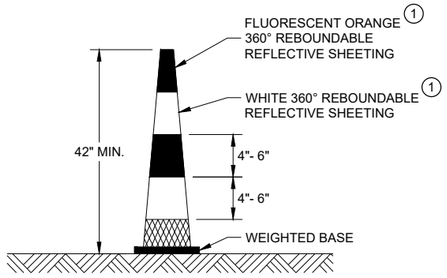
S.D.D. 15 C 6-9

GENERAL NOTES

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

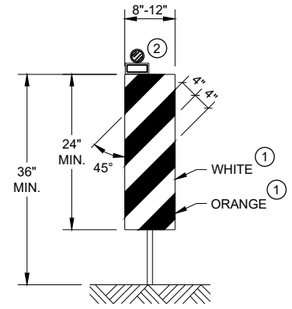


DRUM



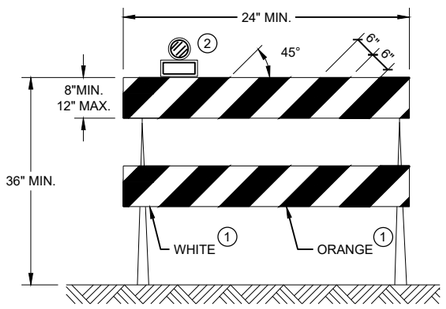
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



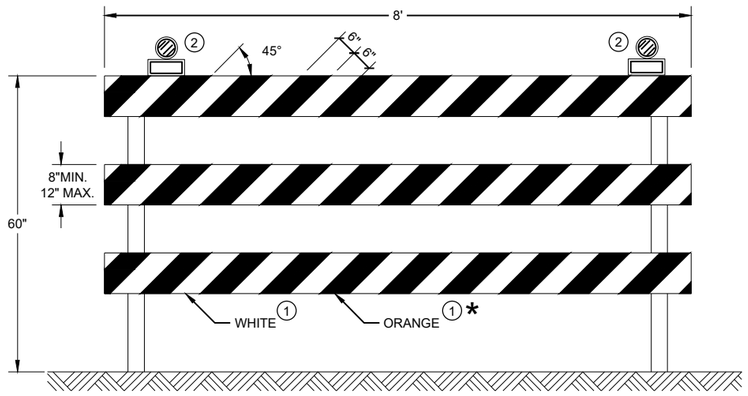
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C11 - 09b

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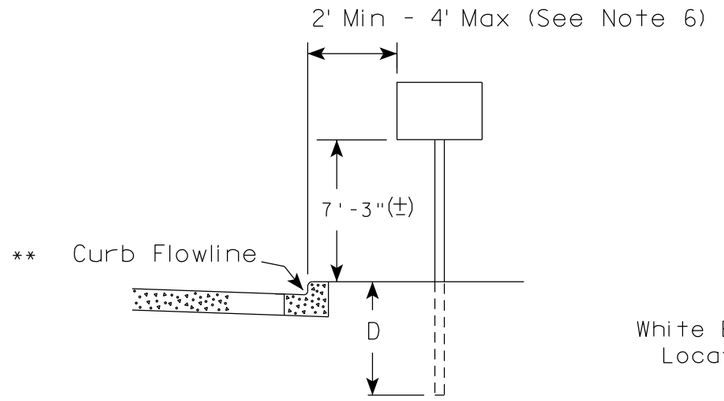
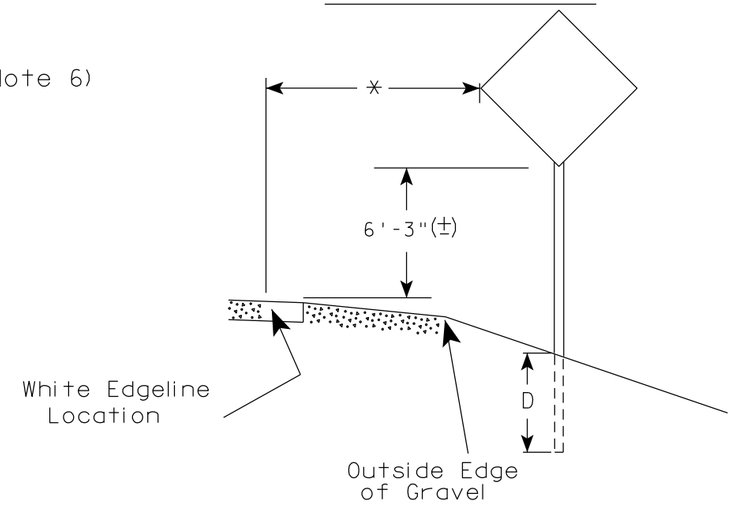
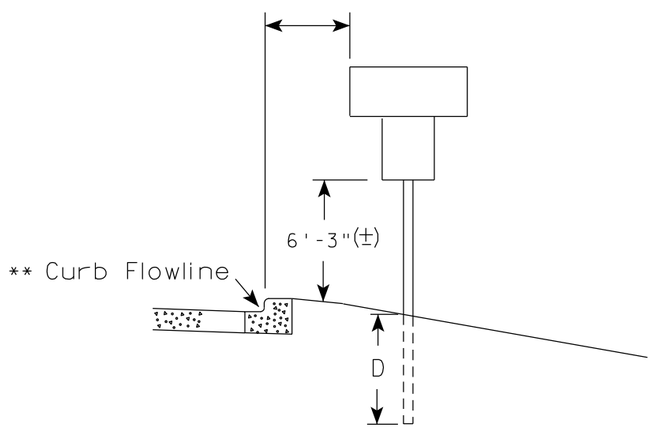
SDD 15C11 - 09b

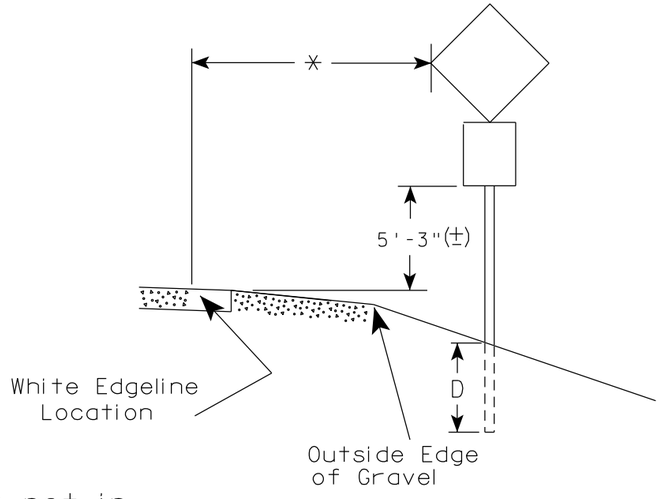
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

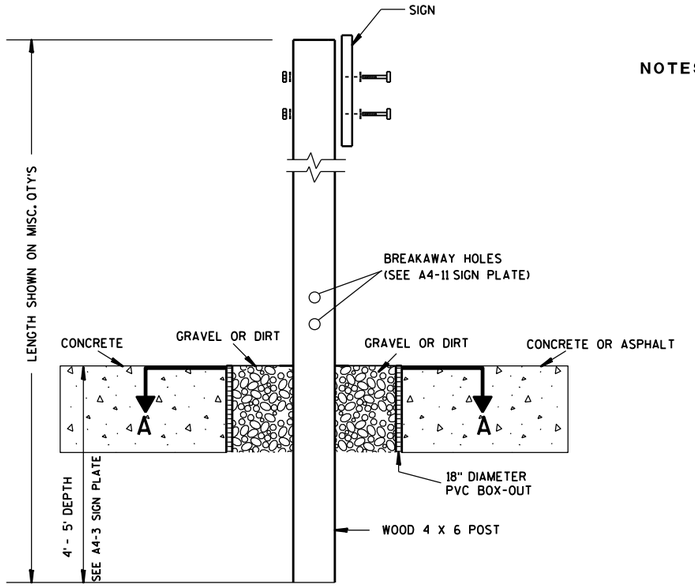
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

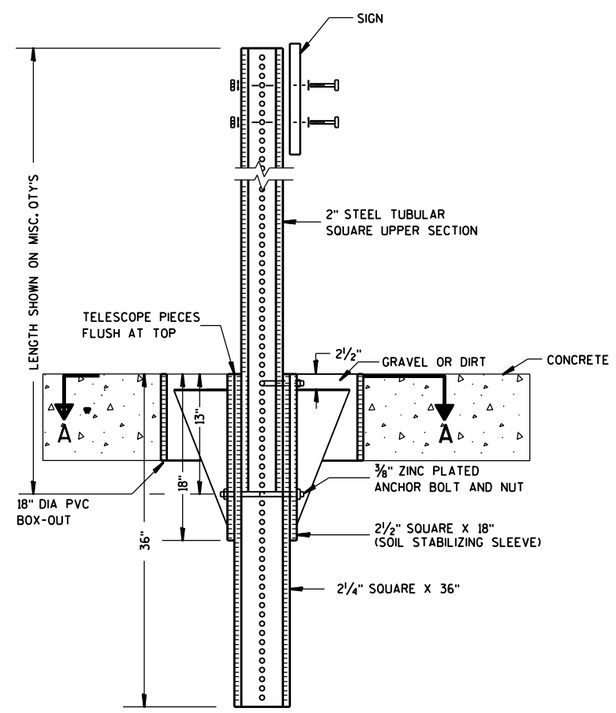
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 25	E



ELEVATION VIEW

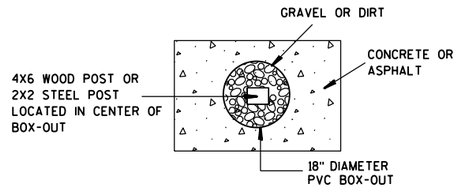
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

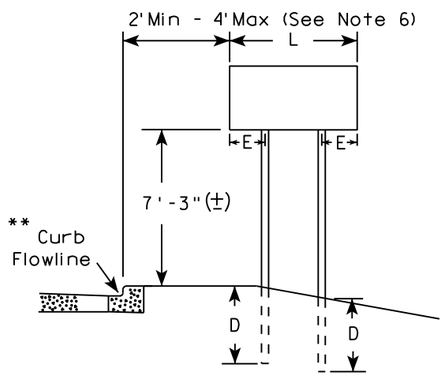
APPROVED Matthew R Rauch
for State Traffic Engineer

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

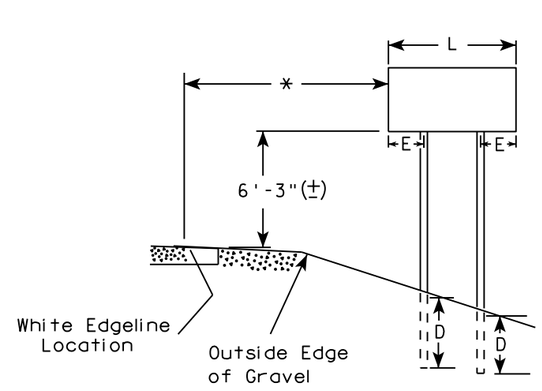
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

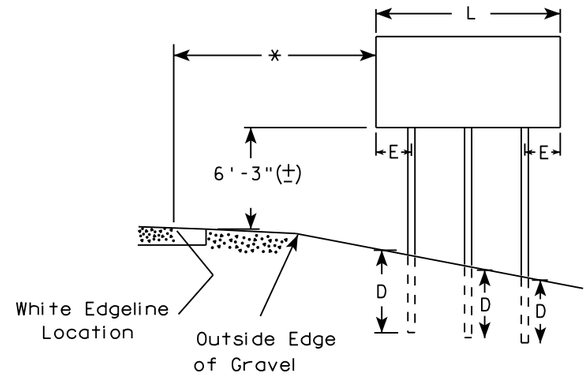
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

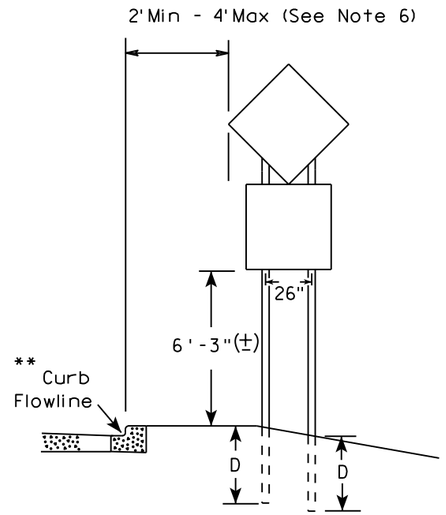
URBAN AREA



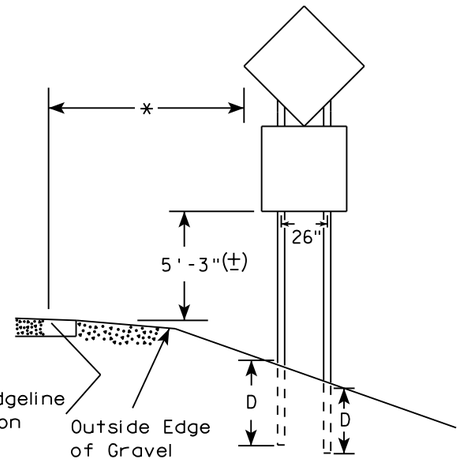
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

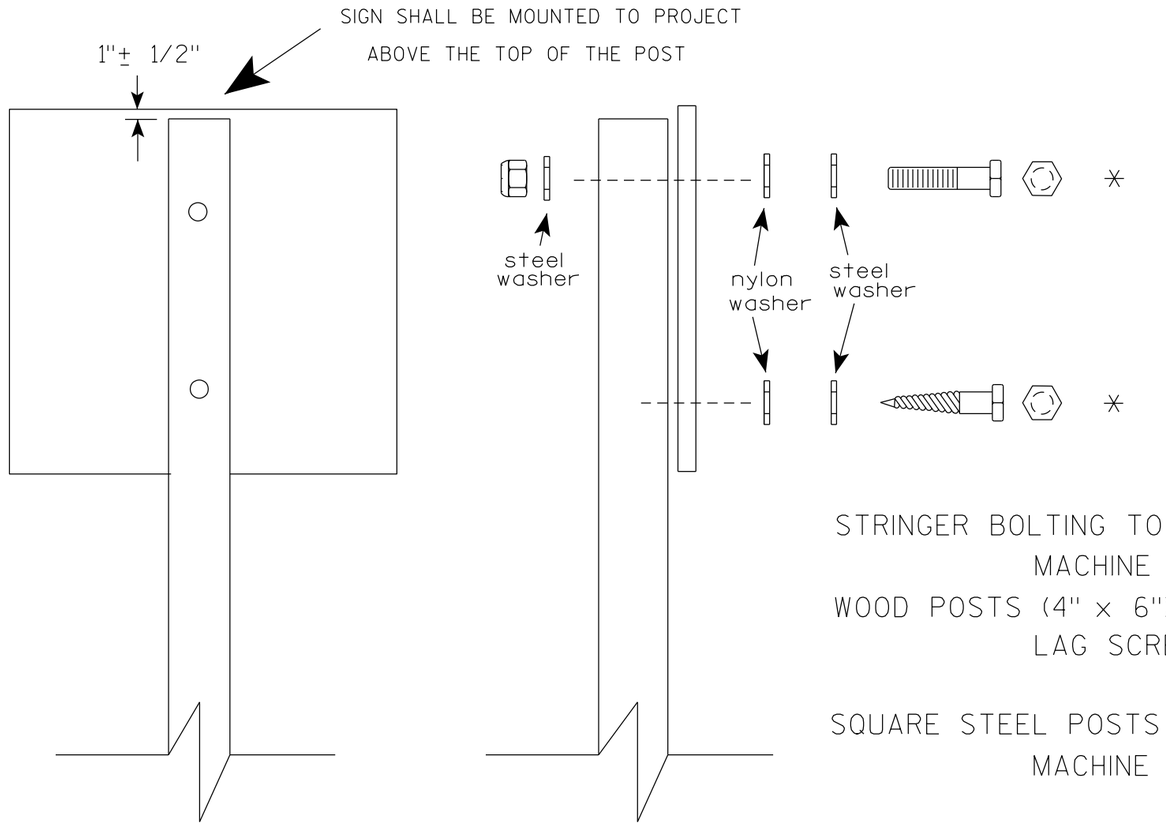
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 27	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

PROJECT NO:

SHEET NO: 28 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 01-APRIL-2020 PLOT BY : dotc4c

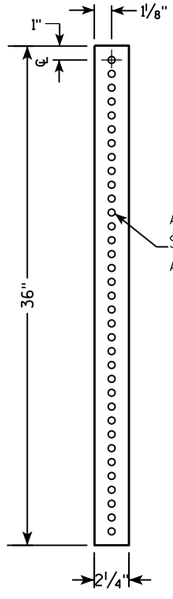
WISDOT/CADDS SHEET 42

7

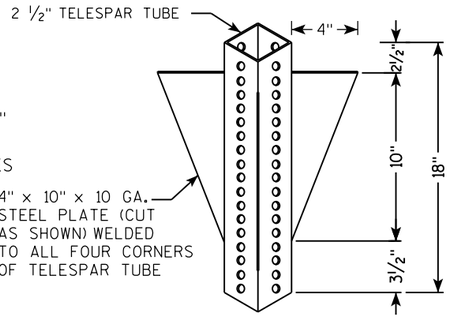
7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

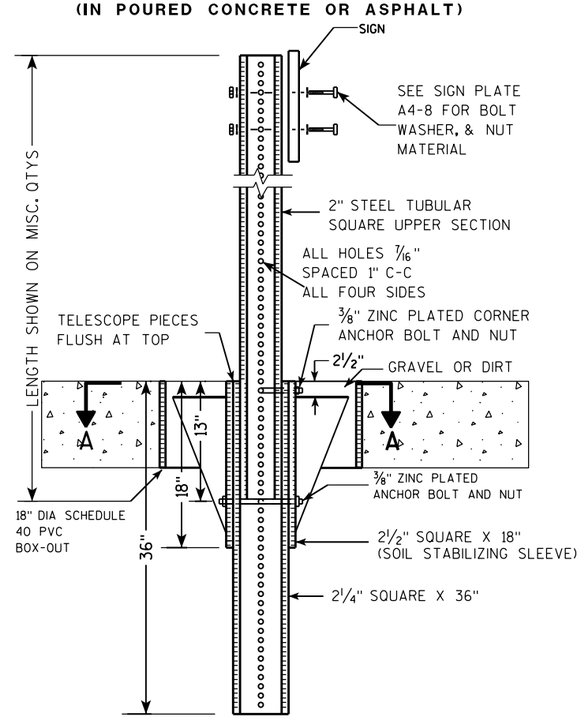
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



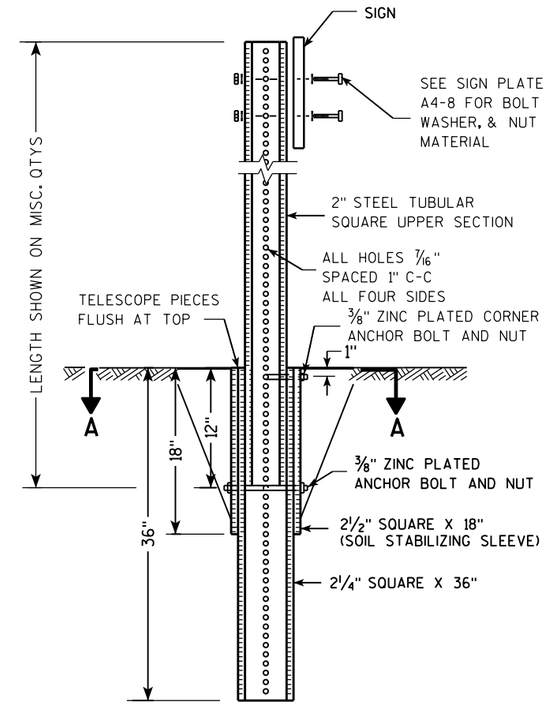
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

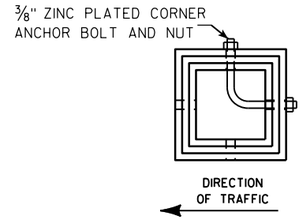


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

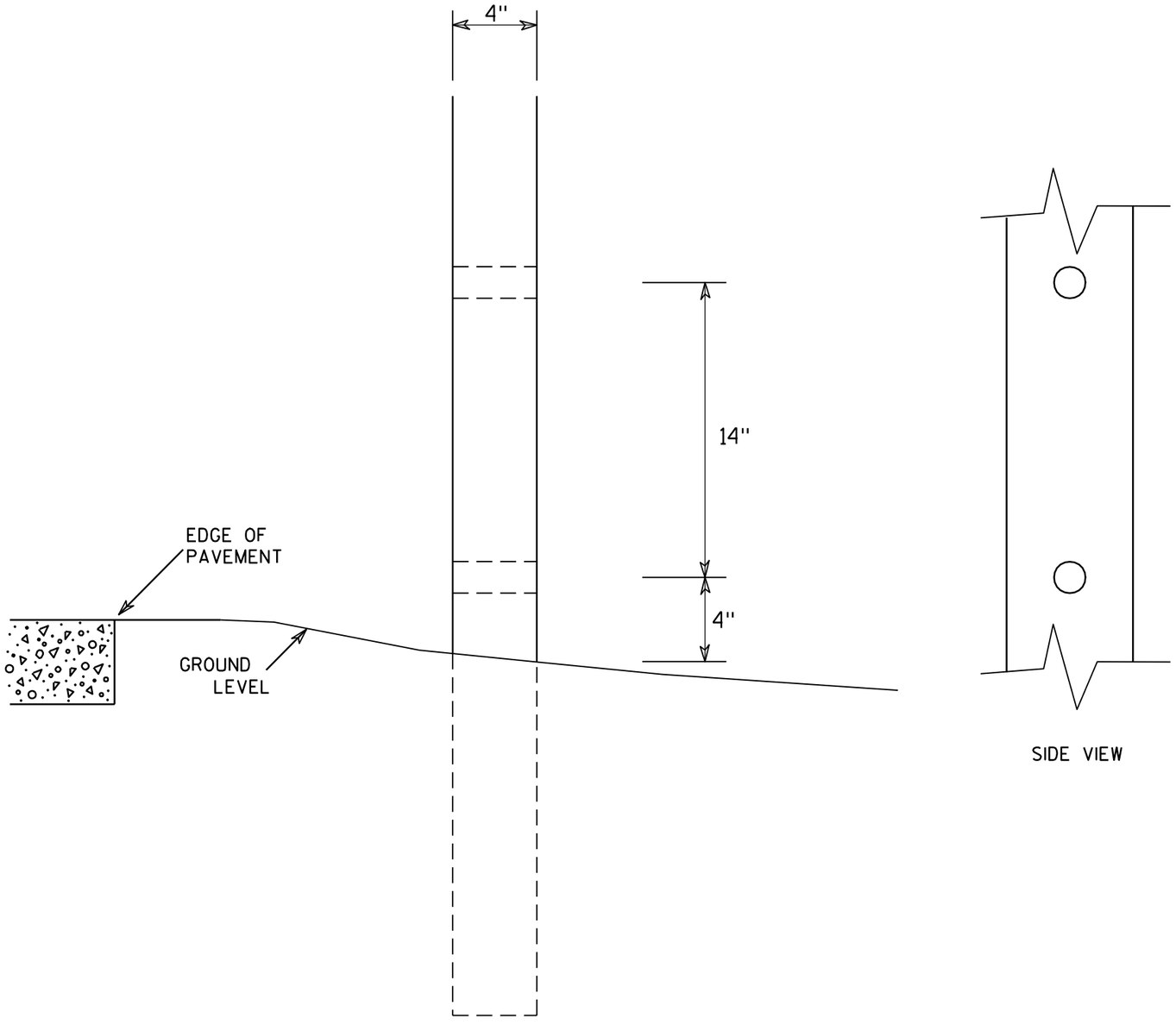
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

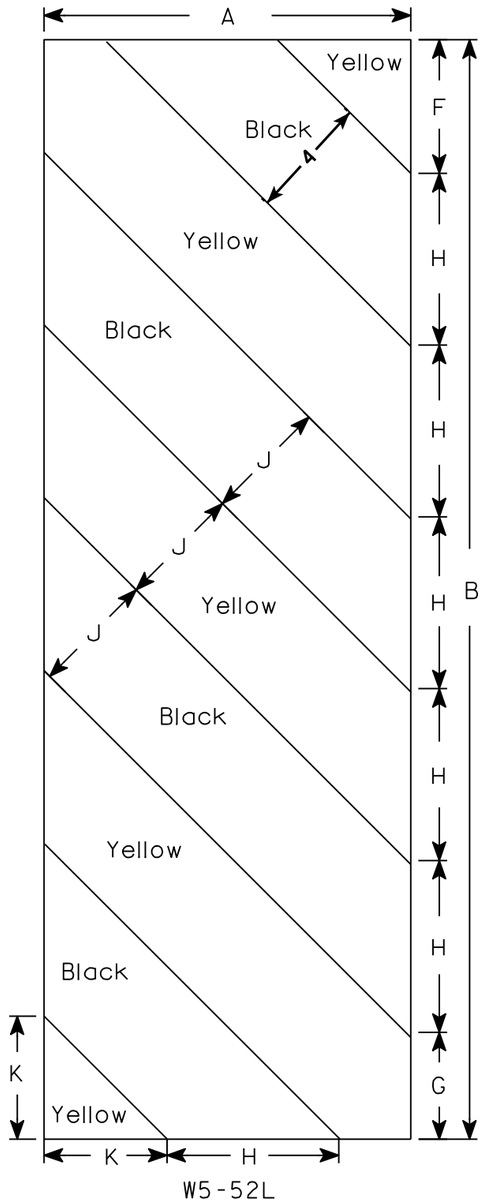
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

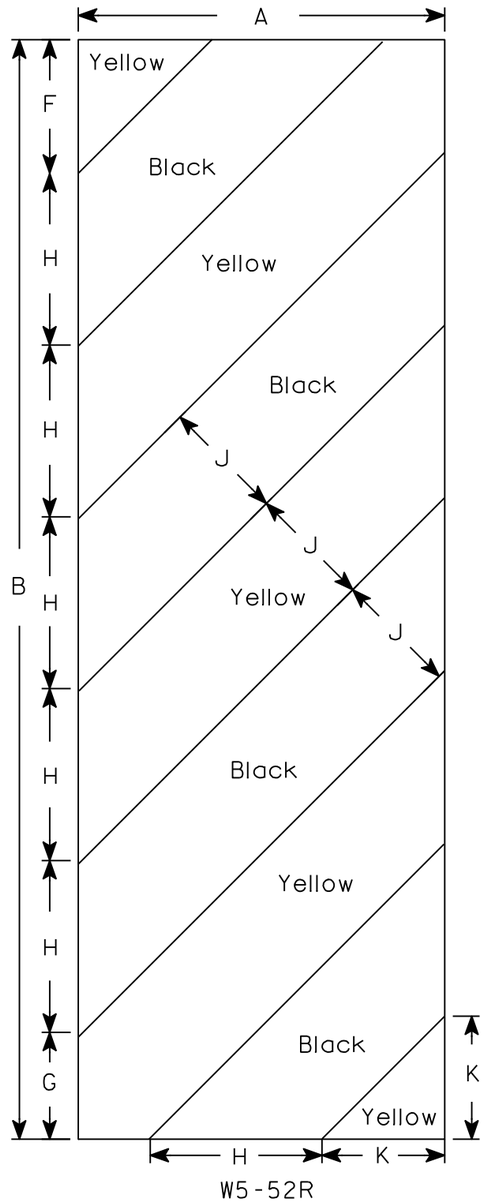
APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 30	E



W5-52L



W5-52R

NOTES

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

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

STANDARD SIGN

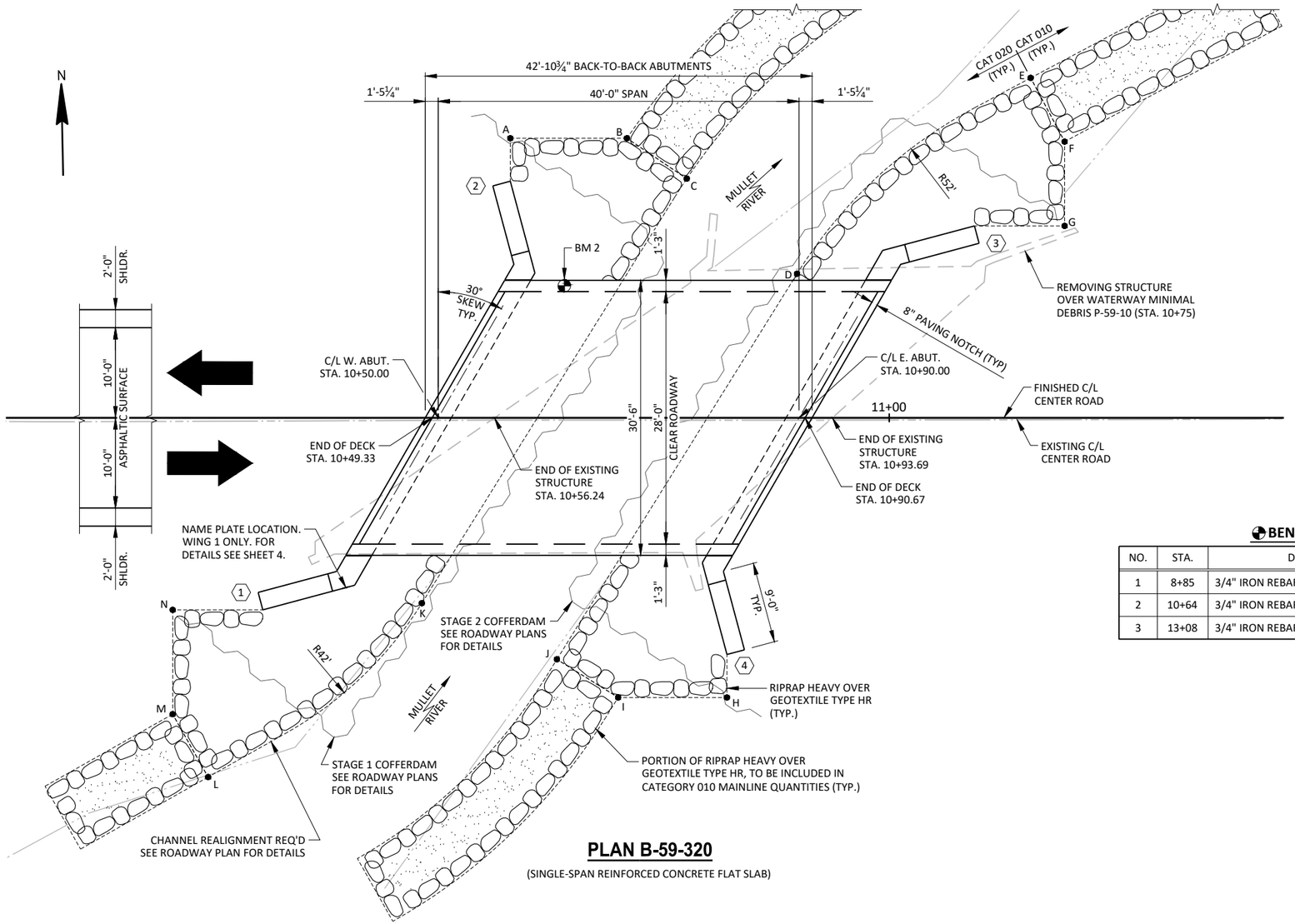
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 31 | E



PLAN B-59-320

(SINGLE-SPAN REINFORCED CONCRETE FLAT SLAB)

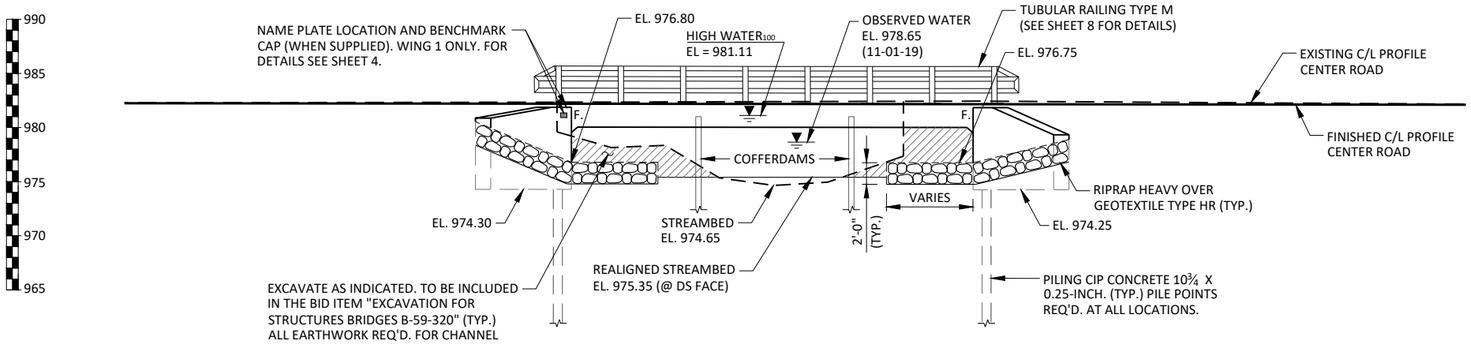
⬡ INDICATES WING NUMBER

RIPRAP HEAVY LAYOUT

POINT	STATION	OFFSET
A	10+58	31' LT.
B	10+71	31' LT.
C	10+78	27' LT.
D	10+90	16' LT.
E	11+16	38' LT.
F	11+19	31' LT.
G	11+19	21' LT.
H	10+82	31' RT.
I	10+70	31' RT.
J	10+63	27' RT.
K	10+48	21' RT.
L	10+24	40' RT.
M	10+21	33' RT.
N	10+21	21' RT.

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
1	8+85	3/4" IRON REBAR SET, 11.2' RT.	981.44
2	10+64	3/4" IRON REBAR SET, 14.6' LT.	981.89
3	13+08	3/4" IRON REBAR SET, 11.3' RT.	981.85



ELEVATION

(NORMAL TO MULLET RIVER)

STATE PROJECT NUMBER

4208-05-71

DESIGN DATA

LIVE LOAD:

DESIGN LOADING — HL-93
INVENTORY RATING FACTOR — RF=1.14
OPERATING RATING FACTOR — RF=1.47
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) — 250 KIPS

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

MATERIAL PROPERTIES:

CONCRETE MASONRY, SUPERSTRUCTURE — f'c = 4,000 P.S.I.
ALL OTHER — f'c = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL
REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON PILING CIP CONCRETE 10¾ X 0.25-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 130 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 60 FT PILE LENGTHS AT BOTH ABUTMENTS. PILE POINTS REQ'D. AT ALL LOCATIONS.

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

TRAFFIC DATA

A.D.T. (2022) — 95
A.D.T. (2042) — 140
DESIGN SPEED — 55 M.P.H.

HYDRAULIC DATA

100 YEAR FREQUENCY
DRAINAGE AREA — 25.10 SQ. MI.
Q_{100} TOTAL — 700 C.F.S.
THROUGH STRUCTURE — 700 C.F.S.
OVERTOPPING ROADWAY — N/A
VELOCITY - THROUGH STRUCTURE — 5.56 F.P.S.
WATERWAY AREA - THROUGH STRUCTURE — 126 SQ. FT.
HIGH WATER$_{100}$ ELEVATION — 981.11
SCOUR CRITICAL CODE — 5

EROSION CONTROL
Q_2 — 205 C.F.S.
VELOCITY$_2$ — 2.06 F.P.S.
HIGH WATER$_2$ ELEVATION — 979.33

LIST OF DRAWINGS

WISCONSIN PROFESSIONAL ENGINEER
PATRICK T. BOLAND
E-36303
HILLPOINT WIS
Patrick Boland 8-31-21

NO.	DATE	REVISION	BY

JEWELL associates engineers, inc.
Engineers - Architects - Surveyors
560 SUNRISE DRIVE
SPRING GREEN, WI 53588
OFFICE: (608) 588-7484
www.jewellassoc.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED — SDR — CHIEF STRUCTURES DESIGN ENGINEER — 09/01/21 DATE

STRUCTURE B-59-320

CENTER ROAD OVER MULLET RIVER

COUNTY	TOWN/~~CITY/VILLAGE~~
SHEBOYGAN	GREENBUSH

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
PMF	PTB	PMF	PTB

GENERAL PLAN

SHEET 1 OF 8
32

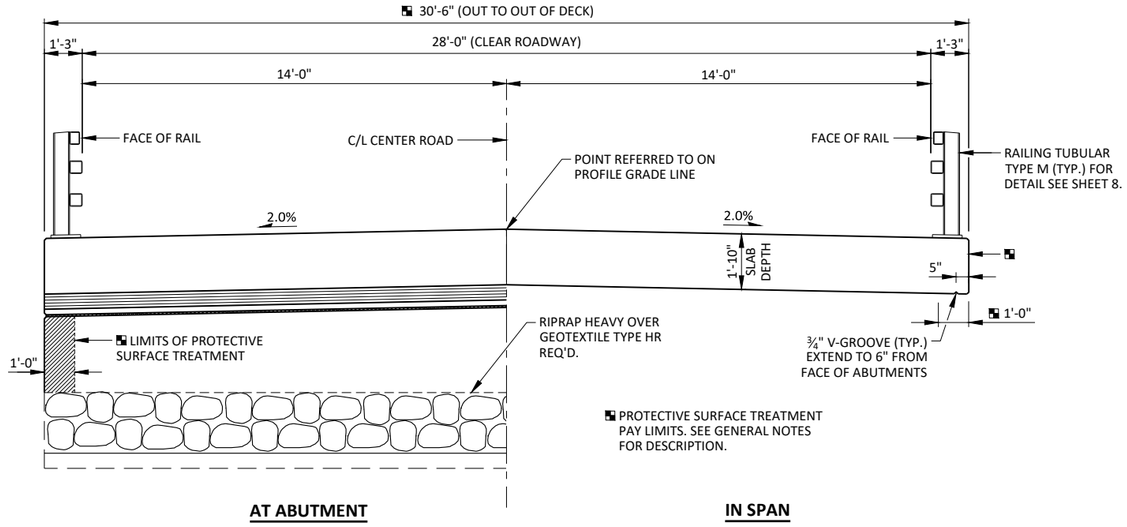
DESIGN CONSULTANT
PATRICK BOLAND, PE
(608) 588-7484

BRIDGE OFFICE CONTACT
AARON BONK, PE
(608) 261-0261

FILE NAME : S:\PROJECTS\W11607 WISDOT - CENTER ROAD, SHEBOYGAN CO\STRUCTURE\CAD FILES\FINALS\01 GENERAL PLAN.DWG
PLOT DATE : 8/31/2021 9:46:13 AM
PLOT BY : BOLAND, PATRICK
PLOT SCALE : 1" = 1'
LAYOUT : LAYOUT1

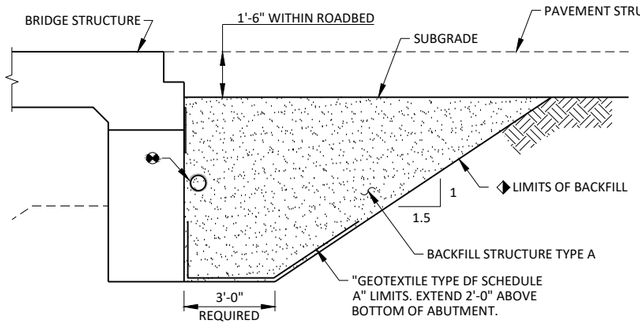
STATE PROJECT NUMBER

4208-05-71



PROPOSED CROSS-SECTION THROUGH ROADWAY

LOOKING EAST

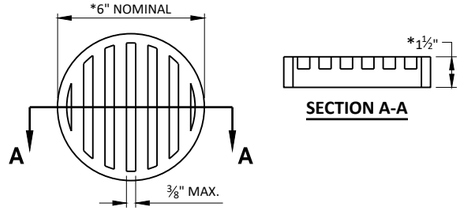


◆ BACKFILL STRUCTURE TYPE A PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO THE BID ITEM "EXCAVATION FOR STRUCTURES B-59-320". LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

◆ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."

BACKFILL STRUCTURE DETAIL

(TYPICAL AT ABUTMENTS. ABUTMENT BODY SHOWN - WING WALLS SIMILAR)



SECTION A-A

RODENT SCREEN

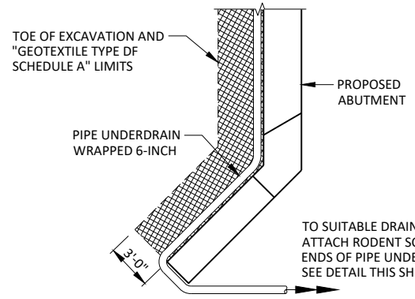
NOTES:

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

ORIENT SHIELD SO SLOTS ARE VERTICAL.

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

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



PIPE UNDERDRAIN DETAIL

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD 88).

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

JOINT FILLER SHALL CONFORM TO A.A.S.H.T.O. DESIGNATION MI53, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M213.

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

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

CHANNEL REALIGNMENT AND ABUTMENT CONSTRUCTION TO TAKE PLACE IN STAGES. SEE ROADWAY PLANS FOR STAGING DETAILS AND COFFERDAM LOCATIONS.

ANY EXCAVATION BELOW THE ABUTMENT AND ASSOCIATED ABUTMENT BEDDING MATERIALS REQUIRE THE APPROVAL OF THE ENGINEER IN THE FIELD.

AT THE DECK, APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF THE DECK (CONCRETE MATERIAL ONLY), THE SIDES OF THE DECK, THE EXTERIOR 12" OF THE UNDERSIDE OF THE DECK, AND THE HORIZONTAL AND VERTICAL FACES OF THE PAVING NOTCH. AT THE ABUTMENTS, APPLY TO THE TOP AND EXTERIOR EXPOSED FACES OF WINGS AND THE FRONT FACE OF ABUTMENTS TO 12" PAST THE EDGE OF SLAB. SEE THIS SHEET FOR DETAIL.

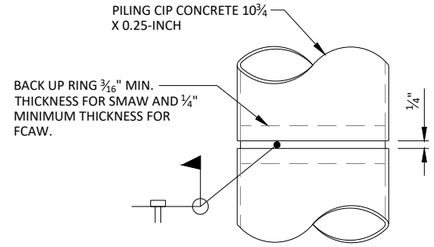
THE EXISTING STRUCTURE (P-59-101) IS A CONCRETE FLAT SLAB STRUCTURE SUPPORTED ON CONCRETE ABUTMENTS. THE STRUCTURE HAS A CLEAR ROADWAY WIDTH OF 28.0 FEET AND IS 33.1' LONG AND SHALL BE REMOVED.

ALL STATIONS AND ELEVATIONS SHOWN ARE IN FEET.

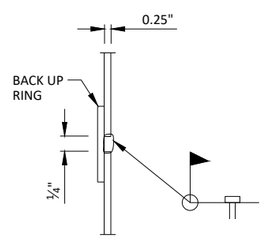
THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

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

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



CAST-IN-PLACE 'PIPE PILE'



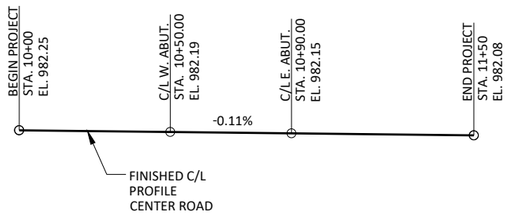
C.I.P. PILE WELD DETAIL

NOTES:

CAST-IN-PLACE PILE SHELL MATERIAL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	W. ABUT.	SUPER	E. ABUT.	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS P-59-101	EACH	--	--	--	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-59-320	LS	--	--	--	1
206.5000	COFFERDAMS B-59-320	LS	--	--	--	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	160	--	160	320
502.0100	CONCRETE MASONRY BRIDGES	CY	30.3	92.5	30.2	153
502.3200	PROTECTIVE SURFACE TREATMENT	SY	15	175	15	205
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,460	--	2,460	4,920
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,425	16,220	1,425	19,070
513.4061	RAILING TUBULAR TYPE M	LF	--	86	--	86
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	7	--	7	14
550.0500	PILE POINTS	EACH	8	--	8	16
550.2104	PILING CIP CONCRETE 10¾ X 0.25-INCH	LF	480	--	480	960
606.0300	RIPRAP HEAVY	CY	70	--	60	130
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	80	--	80	160
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	50	--	50	100
645.0120	GEOTEXTILE TYPE HR	SY	130	--	120	250
SPV.0090.01	FLASHING STAINLESS STEEL	LF	--	75	--	75
	NON-BID ITEMS					
	FILLER	SIZE				½" & ¾"
	NAME PLATE					



PROFILE GRADE LINE

CENTER ROAD

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-59-320

DRAWN BY PMF | PLANS CK'D. PTB

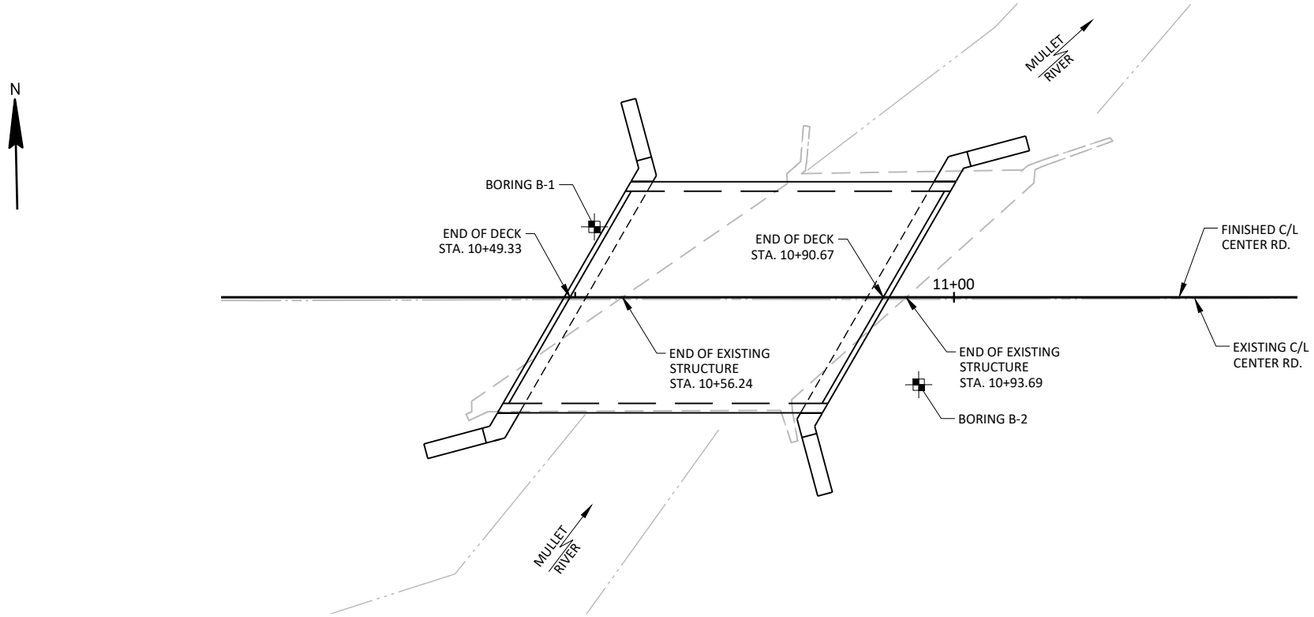
CROSS SECTION AND QUANTITIES

SHEET 2 OF 8

33

8

8



PLAN B-59-320

SOIL BORINGS

BORING NUMBER	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	02/26/20	185,755.5	115,545.7
B-2	02/28/20	185,733.5	115,587.9

BORINGS & REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.
4203 SCHOFIELD AVENUE, SUITE 1
SCHOFIELD, WI 54476

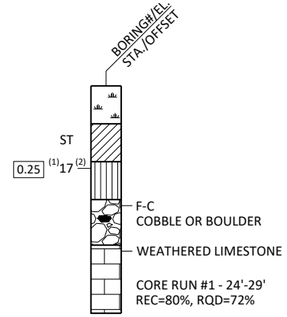
STATE PROJECT NUMBER

4208-05-71

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 ELEVATIONS

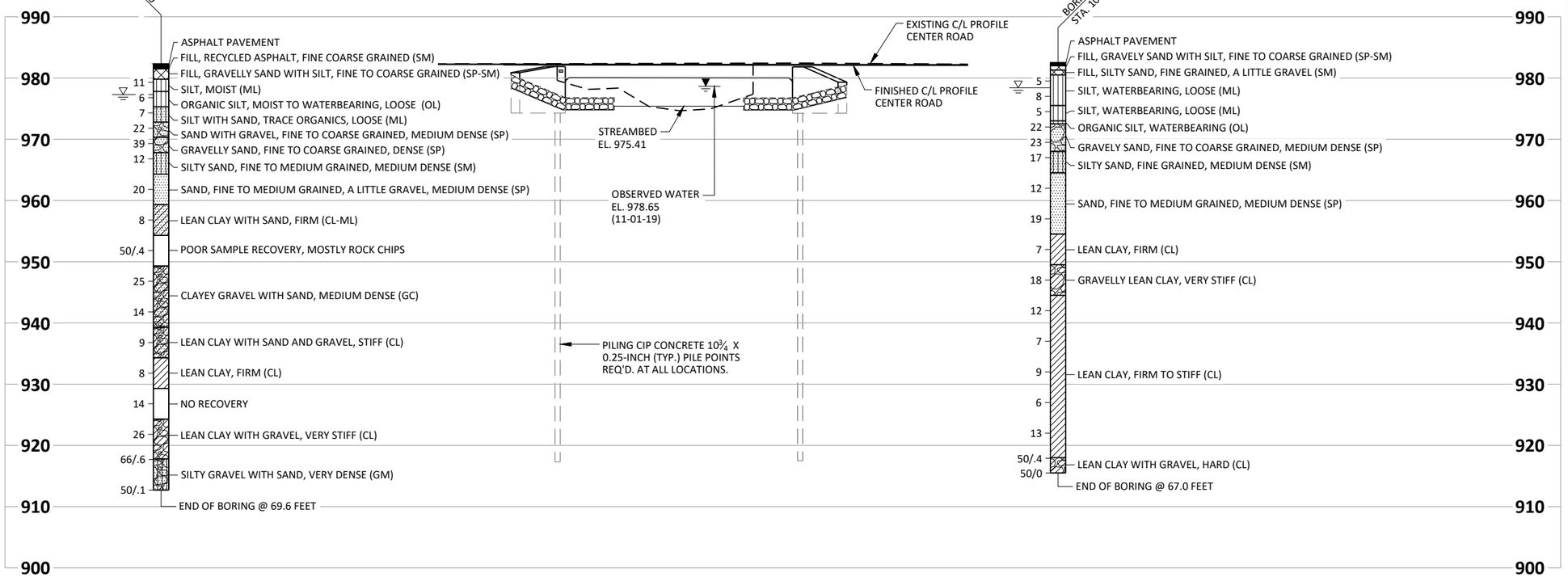
AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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



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STRUCTURE B-59-320

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SUBSURFACE EXPLORATION

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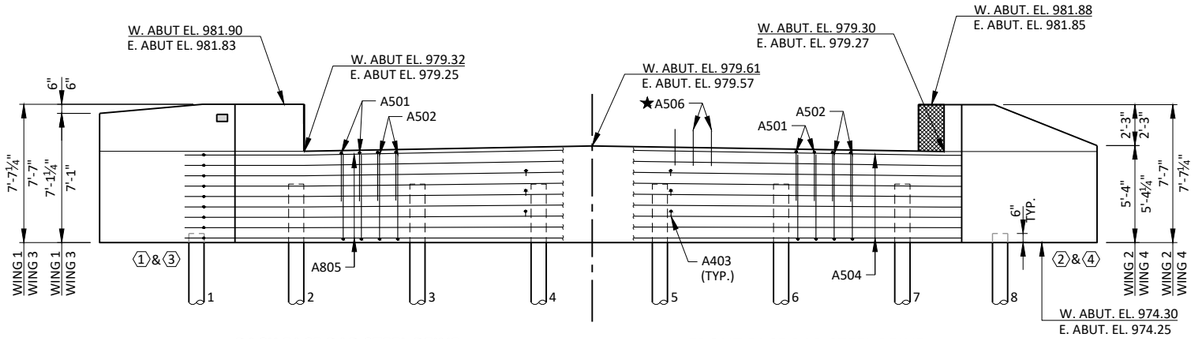
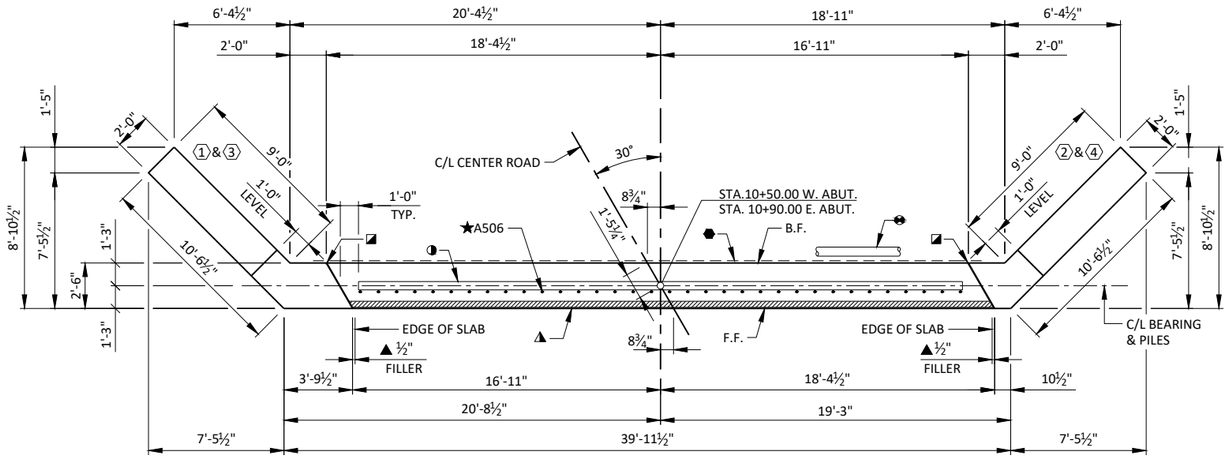
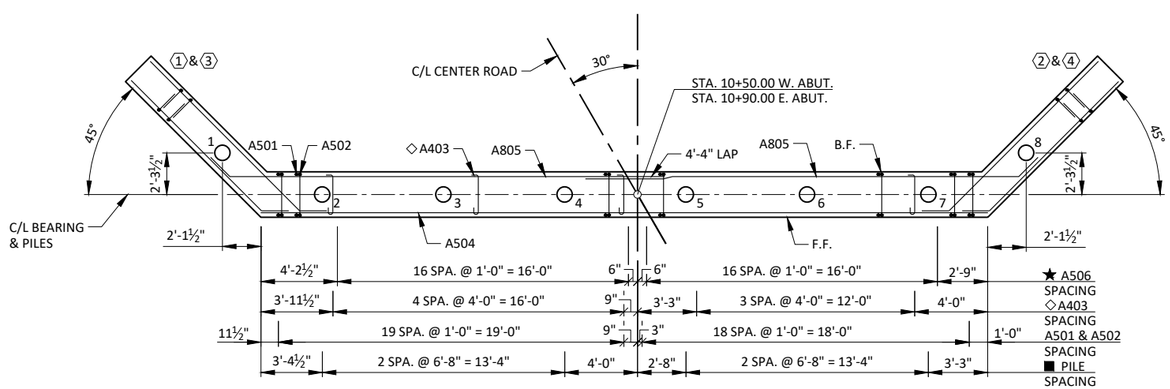


BACK FACE BAR STEEL REINF. **FRONT FACE BAR STEEL REINF.**

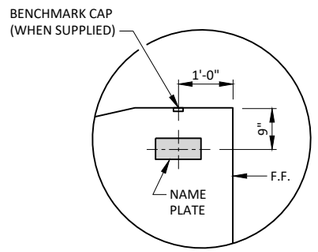
ELEVATION



PLAN

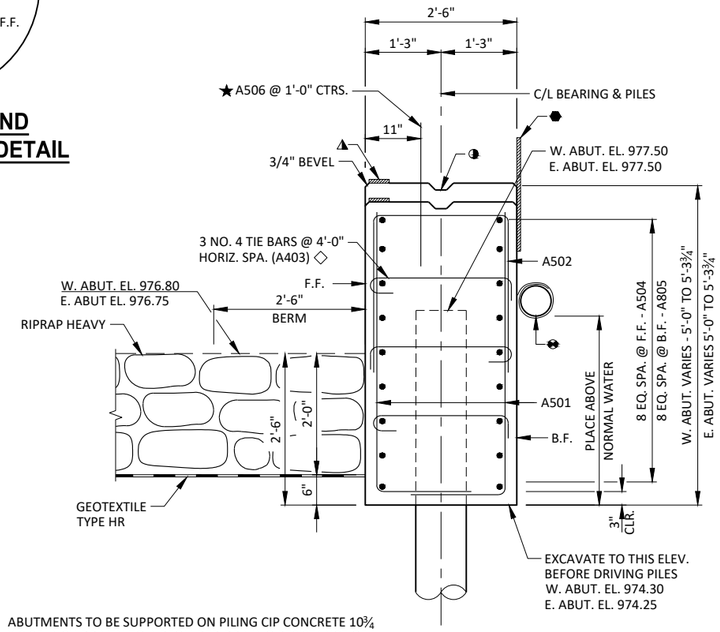


LAYOUT



NAME PLATE AND BENCHMARK CAP DETAIL

(WING 1 ONLY)



ABUTMENTS TO BE SUPPORTED ON PILING CIP CONCRETE 10¾ X 0.25-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 130 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 60 FT PILE LENGTHS AT BOTH ABUTMENTS. PILE POINTS REQ'D. AT ALL LOCATIONS.

TYPICAL SECTION THROUGH ABUTMENT BODY

LEGEND

- KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6.
- VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM 9" BELOW BRIDGE SEAT TO 1" BELOW TOP OF WINGS.
- 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE)
- ¾" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- ★ A506 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE IT HAS TAKEN ITS INITIAL SET. EMBED BAR 1'-0".
- ■ PILE SPACING MEASURED AT BASE OF ABUTMENT BODY.
- PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGN. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."
- ◇ ALTERNATE THE POSITION OF THE 90° AND THE 180° BENDS AT EACH VERTICAL LAYER OF TIES.

NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 5 FOR BILL OF BARS.

SEAT ELEVATIONS SHOWN IN THE ELEVATION VIEW ARE TAKEN AT THE C/L OF BEARING NEGLECTING THE KEYED CONSTRUCTION JOINT.

DO NOT PLACE FILL HIGHER THAN 3 FEET FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SPACE REINFORCEMENT TO MISS PILING

F.F. - FRONT FACE

B.F. - BACK FACE

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ABUTMENTS

SHEET 4 OF 8

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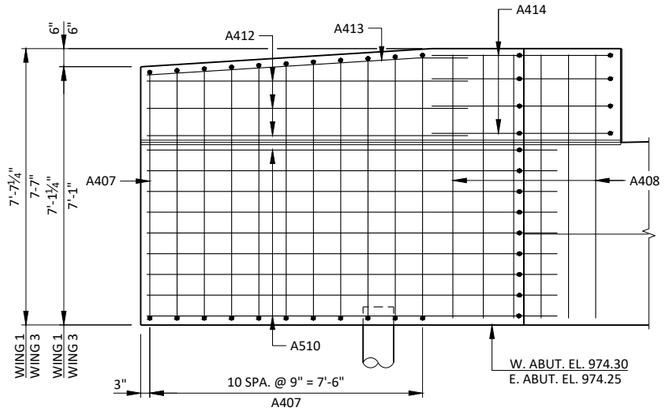
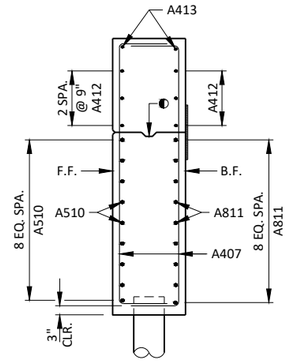
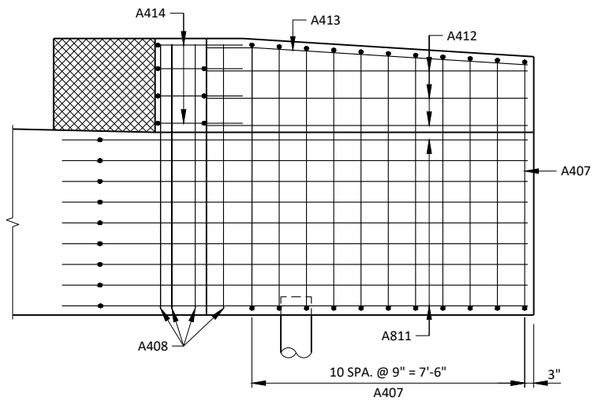


F.F. ELEVATION - WING 1 & 3



SECTION A-A



B.F. ELEVATION - WING 1 & 3

BILL OF BARS
TWO ABUTMENTS SHOWN

2,850 LB (COATED)
4,920 LB (UNCOATED)

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	BAR SERIES	LOCATION
A501	156	6-1	X			BODY - VERT. - F.F & B.F.
A502	78	7-3	X			BODY - VERT. - TOP
A403	54	2-8	X			TIE BARS
A504	18	39-10				BODY - HORIZ. - F.F.
A805	36	26-0	X			BODY - HORIZ. - B.F.
A506	68	2-0		X		BODY - VERT. - DOWELS
A407	44	9-5	X	X	⚹	WING 1 & 3 - VERT. - F.F. & B.F.
A408	20	7-2		X		WING 1 & 3 - VERT.
A409	2	3-0		X		WING 1 & 3 - VERT. - TOP
A510	18	11-9	X	X		WING 1 & 3 - HORIZ. - F.F.
A811	18	13-5	X	X		WING 1 & 3 - HORIZ. - B.F.
A412	12	8-10		X		WING 1 & 3 -HORIZ. - F.F. & B.F.
A413	4	8-10	X	X		WING 1 & 3 - HORIZ. - F.F. & B.F. - TOP
A414	8	11-2	X	X		WING 1 & 3 - HORIZ. - TOP
A415	44	8-6	X	X	⚹	WING 2 & 4 - VERT. - F.F. & B.F.
A416	16	7-2		X		WING 2 & 4 - VERT.
A417	2	3-0		X		WING 2 & 4 - VERT. - TOP
A518	18	11-9	X	X		WING 2 & 4 - HORIZ. - F.F.
A819	18	13-5	X	X		WING 2 & 4 - HORIZ. - B.F.
A420	4	8-10		X		WING 2 & 4 -HORIZ. - F.F. & B.F.
A421	4	6-3		X		WING 2 & 4 -HORIZ. - F.F. & B.F.
A422	4	3-7		X		WING 2 & 4 -HORIZ. - F.F. & B.F.
A423	4	9-2	X	X		WING 2 & 4 - HORIZ. - F.F. & B.F. - TOP
A424	8	8-2	X	X		WING 2 & 4 - HORIZ. - TOP

NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

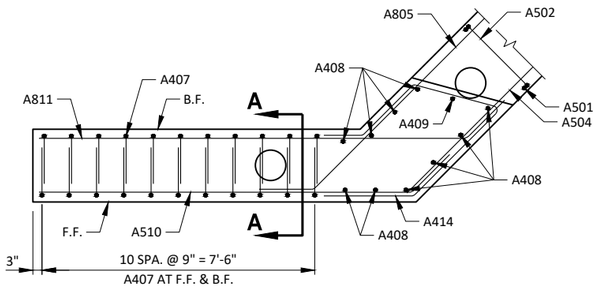
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

⚹ LENGTH SHOWN IS AN AVERAGE LENGTH ONLY. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
A407	4 SERIES OF 11	9-8 TO 9-2
A415	4 SERIES OF 11	9-7 TO 7-5

BUNDLE AND TAG EACH SERIES SEPARATELY.



PLAN VIEW - WING 1 & 3

LEGEND

◐ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6. ¾" "V" GROOVE AT FRONT FACE OF WING WALL AND HORIZONTAL 18" RUBBERIZED MEMBRANE WATERPROOFING AT BACK FACE IF CONSTRUCTION JOINT IS USED. COST IS INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".

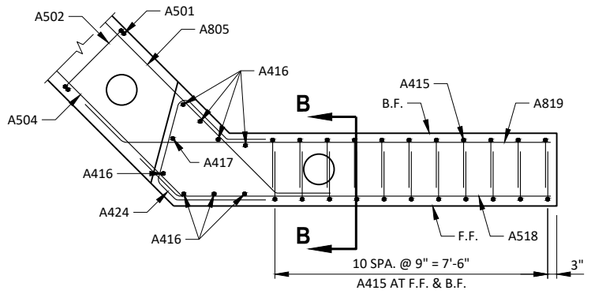
NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE THIS SHEET FOR BILL OF BARS.

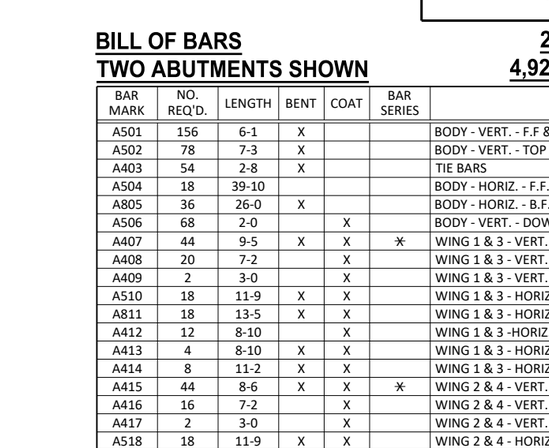
SPACE REINFORCEMENT TO MISS PILING

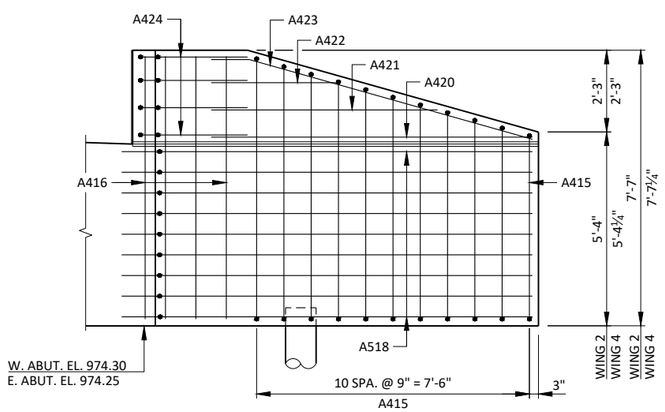
F.F. - FRONT FACE

B.F. - BACK FACE

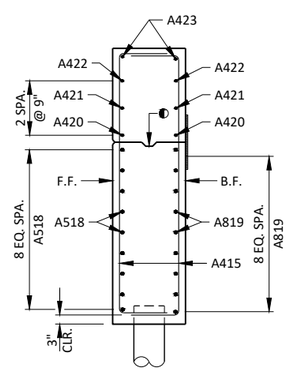


PLAN VIEW - WING 2 & 4

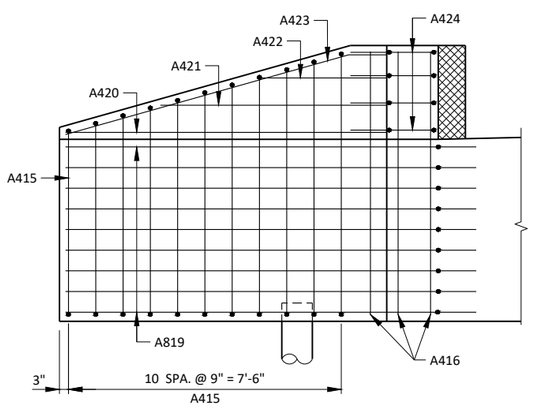




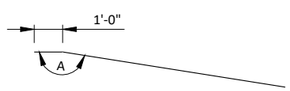
F.F. ELEVATION - WING 2 & 4



SECTION B-B



B.F. ELEVATION - WING 2 & 4



A413 & A423

MARK	'A'
A413	176°25'
A423	164°17'

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ABUTMENT DETAILS

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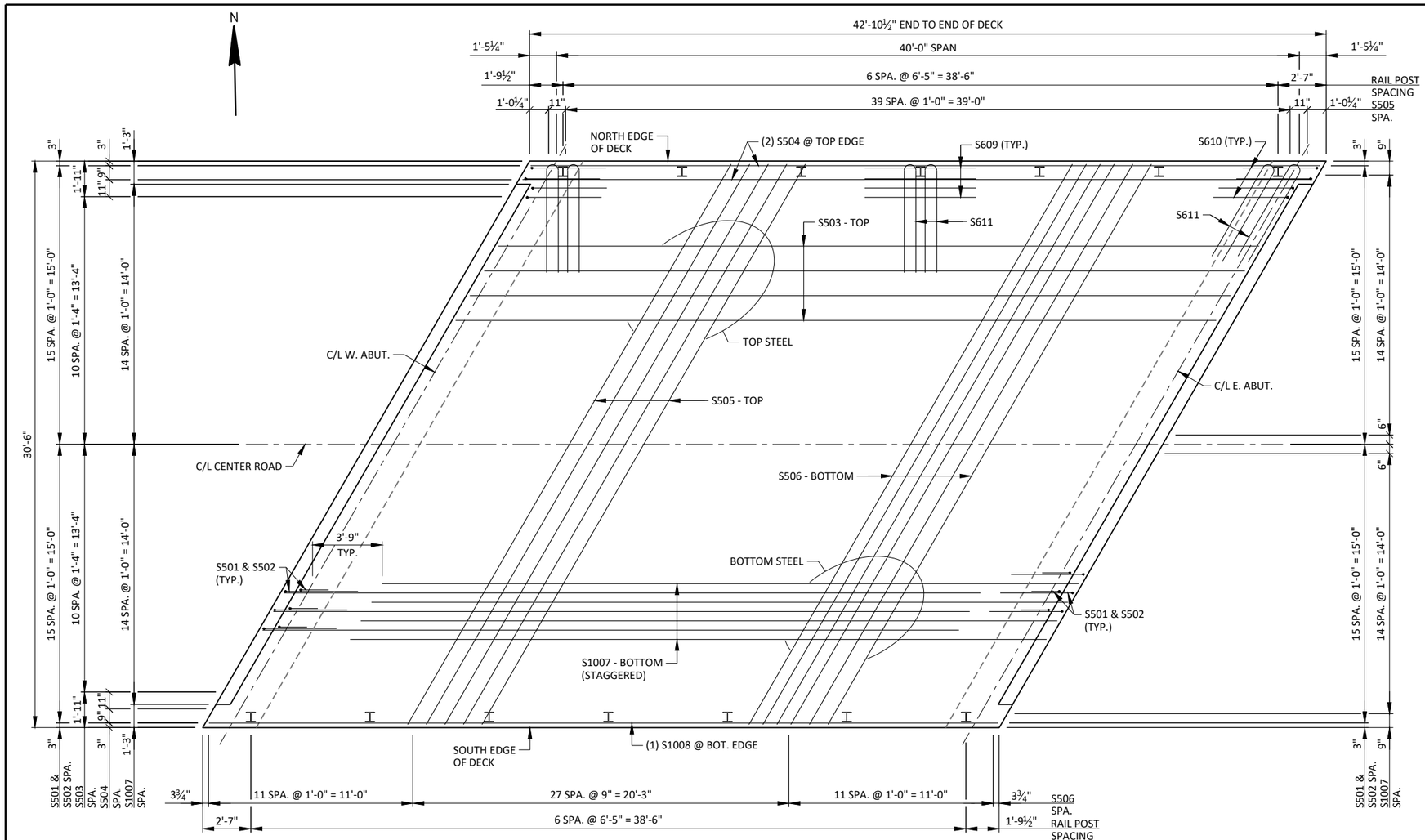
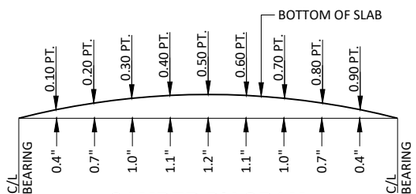


PLAN

TOP OF DECK ELEVATIONS

	C/L W. ABUT.	0.10 PNT.	0.20 PNT.	0.30 PNT.	0.40 PNT.	0.50 PNT.	0.60 PNT.	0.70 PNT.	0.80 PNT.	0.90 PNT.	C/L E. ABUT.
N. EDGE	981.88	981.87	981.87	981.87	981.86	981.86	981.85	981.85	981.84	981.84	981.83
C/L	982.19	982.19	982.18	982.18	982.18	982.17	982.17	982.16	982.16	982.15	982.15
S. EDGE	981.90	981.89	981.89	981.89	981.88	981.88	981.87	981.87	981.86	981.86	981.85



CAMBER DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPAN AS SHOWN TO PROVIDE FOR THEORETICAL DEADLOAD DEFLECTION AND FUTURE PLASTIC FLOW. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB OR CENTER LINE FOLLOW THIS PROCEDURE:

TOP OF SLAB ELEVATION AT FINAL GRADE
-SLAB THICKNESS
+CAMBER
+FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (COMPUTED BY CONTRACTOR)
=TOP OF SLAB FALSEWORK ELEVATION.

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NOTES

SUPPORT ALTERNATE TOP TRANSVERSE BARS IN SLAB BY INDIVIDUAL BAR CHAIRS AT APPROX. 3'-0" CENTERS. SUPPORT BOTTOM LONGITUDINAL BARS BY CONTINUOUS BAR CHAIRS AT APPROX. 4'-0" CENTERS.

PLACE TRANSVERSE BARS PARALLEL TO THE CENTERLINE OF SUBSTRUCTURE UNITS.

THE SLAB THICKNESS DIMENSION IS MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

SURVEY TOP OF DECK ELEVATIONS

	W. ABUT.	0.50 PT.	E. ABUT.
NORTH EDGE OF DECK			
CENTER LINE			
SOUTH EDGE OF DECK			

PRIOR TO RELEASING SLAB FASLEWORK, TAKE TOP OF DECK ELEVATIONS AT THE C/L OF THE ABUTMENTS AND AT 0.50 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG THE EDGE OF DECK AND CENTER LINE. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

NO.	DATE	REVISION	BY

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SUPERSTRUCTURE

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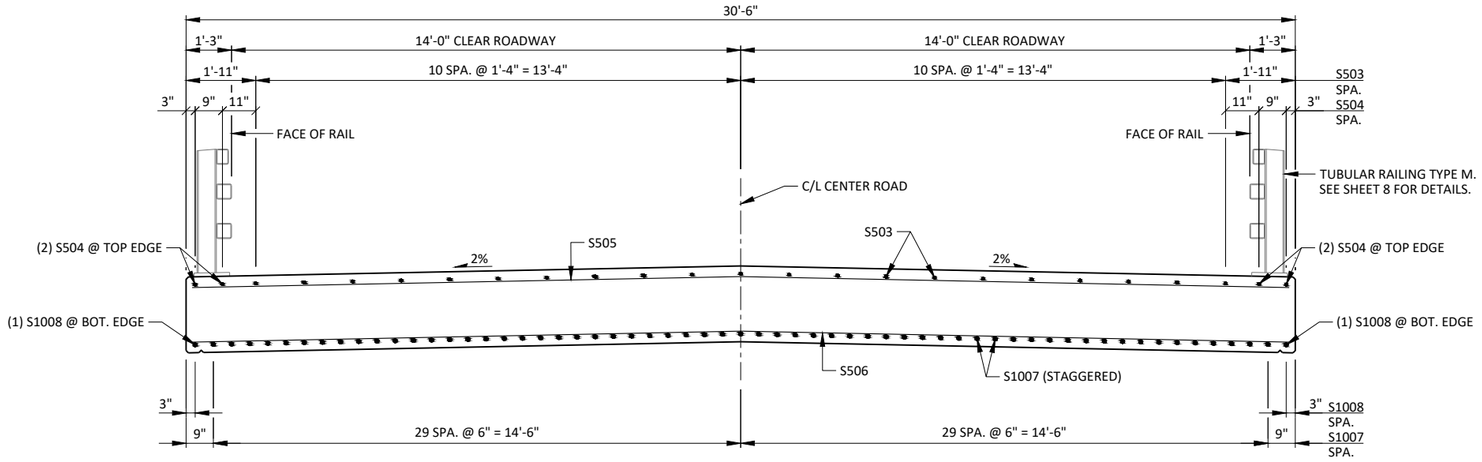
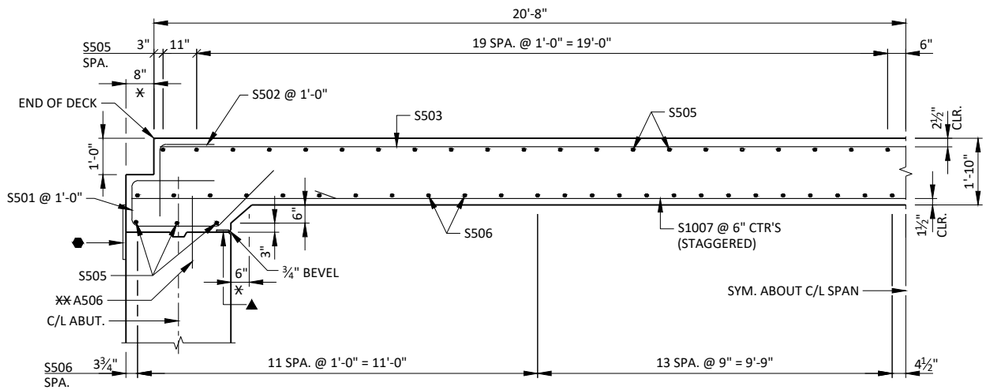


CROSS SECTION THROUGH ROADWAY



PARTIAL LONGITUDINAL SECTION THROUGH ROADWAY

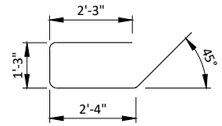
BILL OF BARS
SUPERSTRUCTURE — 16,220 LB (COATED)

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	LOCATION
S501	62	7-10	X	X	ENDS OF DECK
S502	62	3-4	X	X	ENDS OF DECK
S503	21	40-11		X	SLAB - TOP - LONGIT.
S504	4	42-6		X	SLAB - TOP - LONGIT. - EDGES
S505	48	34-10		X	SLAB - TOP - TRANS. & AT ABUTS.
S506	50	34-10		X	SLAB - BOTTOM - TRANS.
S1007	59	37-6		X	SLAB - BOTTOM - LONGIT.
S1008	2	42-6		X	SLAB - BOTTOM - LONGIT. - EDGES
S609	40	6-0		X	RAIL POSTS - INTERIOR
S610	16	4-8	X	X	RAIL POSTS - CORNERS
S611	28	12-0	X	X	RAIL POSTS

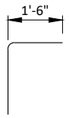
NOTES: THE FIRST DIGIT OF A THREE DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

SOME BARS HAVE BEEN OMITTED FOR CLARITY.



S501



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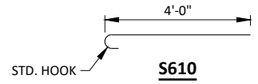
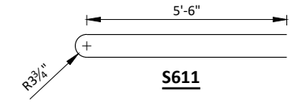
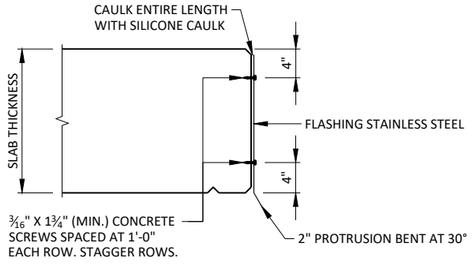


S610



S611



STAINLESS STEEL FLASHING DETAIL

NOTES:

THE BID ITEM "FLASHING STAINLESS STEEL" SHALL INCLUDE PROVIDING AND INSTALLING THE STAINLESS STEEL FLASHING, SILICONE CAULK, 3/16" CONCRETE SCREWS, AND CLEANING THE EDGE OF DECK PRIOR TO ATTACHMENT OF THE FLASHING.

FLASHING TO BE INSTALLED AFTER APPLICATION OF PROTECTIVE SURFACE TREATMENT.

CONCRETE SCREWS SHALL BE 410 STAINLESS STEEL.

EXTEND FLASHING TO F.F. OF ABUTMENT.

TOP OF FLASHING TO BEGIN APPROXIMATELY 1" BELOW TOP OF SLAB SURFACE.

THE FLASHING IS TO BE A CONSTANT HEIGHT BASED ON THE THINNEST SLAB DEPTH OVER THE BRIDGE LENGTH.

LEGEND

- ⬣ 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- ▲ ¾" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- ✕ DIMENSION IS NORMAL TO THE C/L OF SUBSTRUCTURE UNITS.
- XX SEE SHEET 4 FOR PLACEMENT OF A506 BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-59-320

DRAWN BY: PMF | PLANS CK'D.: PTB

SUPERSTRUCTURE DETAILS

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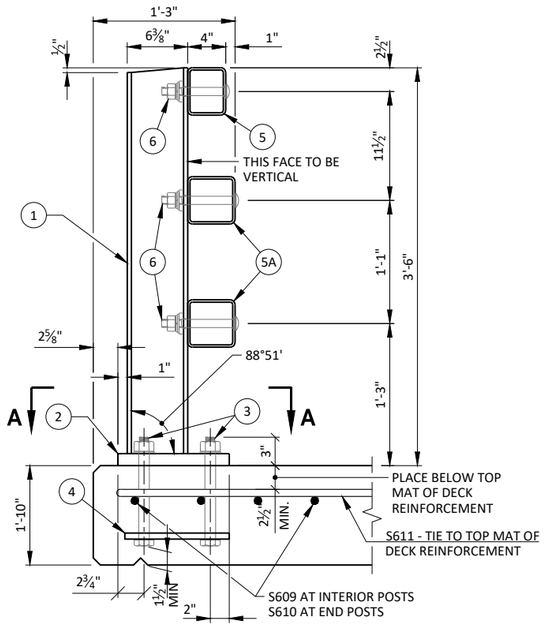
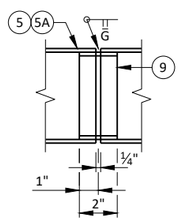
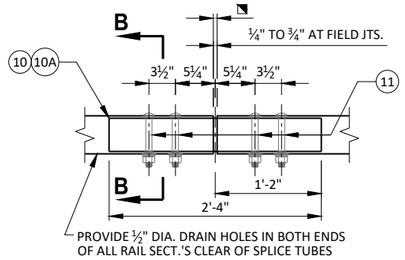


SECTION THROUGH RAILING ON DECK



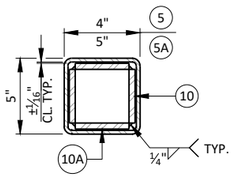
SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



FIELD ERECTION JOINT DETAIL

◥ RDWY. OPENING OR 2½" MIN. FOR STRIP SEAL EXP. JOINT & (¾" TO ¾") OPENING FOR A1 ABUTMENT.



SECTION B-B

LEGEND

① W6x25 WITH 1⅛" x 1½" HORIZONTAL SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.

② PLATE 1½"x11¾"x1'-8" WITH 1 1/16" DIA. OVERSIZED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.

③ ASTM A449 - 1⅛" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG.

④ ⅝"x11"x1'-8" ANCHOR PLATE (GALVANIZED) WITH 1 3/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3.

⑤ TSS 5x4x0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.

⑤A TSS 5x5x0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.

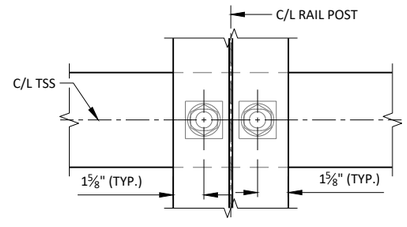
⑥ ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/16"x1⅝"x1⅝" MIN. WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION).

⑨ SPLICE SLEEVE FABRICATED FROM ¼" PLATE. PROVIDE "SLIDING FIT".

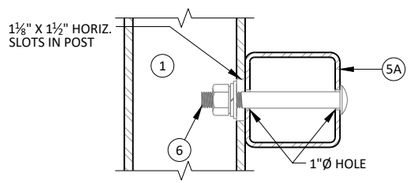
⑩ ⅜"x3⅜"x2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.

⑩A ⅜"x2⅝"x2'-4" PLATE USED IN NO. 5, ⅜"x3⅜"x2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.

⑪ ⅞" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 15/16"x1¼" LONGIT. SLOTTED HOLES IN PLATE NO. 10A. AT FIELD JOINTS AND 15/16"x2¼" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A. PROVIDE 15/16" DIA. ROUND HOLES IN TUBES NO. 5 AND NO. 5A.



SECTION THROUGH POST WEB



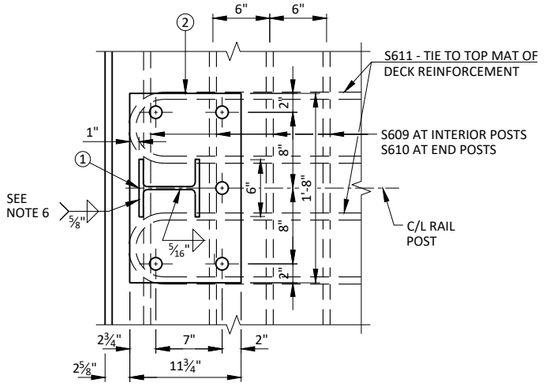
SECTION THROUGH RAIL

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

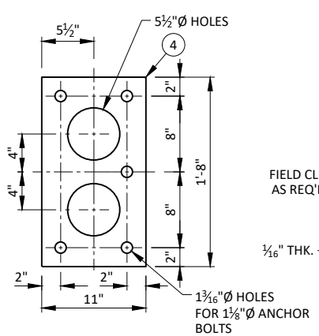
TYPICAL RAIL TO POST CONNECTIONS

GENERAL NOTES

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

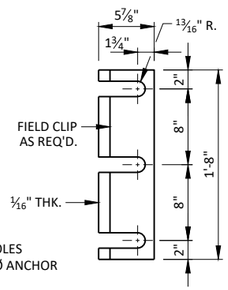


SECTION A-A

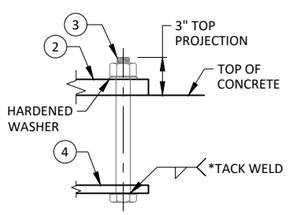


ANCHOR PLATE

AT RAIL TO DECK CONNECTION

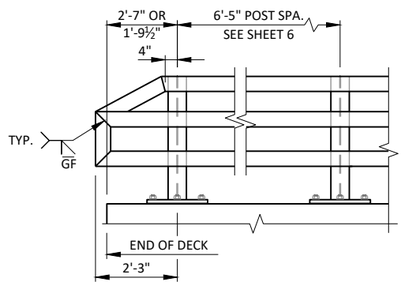


POST SHIM DETAIL



ANCHOR BOLTS

* ANCHOR BOLT ASSEMBLY MAY BE TACK WELDED, EITHER IN THE SHOP, OR IN THE FIELD AFTER THE ANCHOR PLATE IS PLACED.



PART ELEVATION OF RAILING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-59-320

DRAWN BY PMF | PLANS CK'D. PTB

TUBULAR STEEL RAILING TYPE M

SHEET 8 OF 8

39

8

8

EARTHWORK-CENTER ROAD

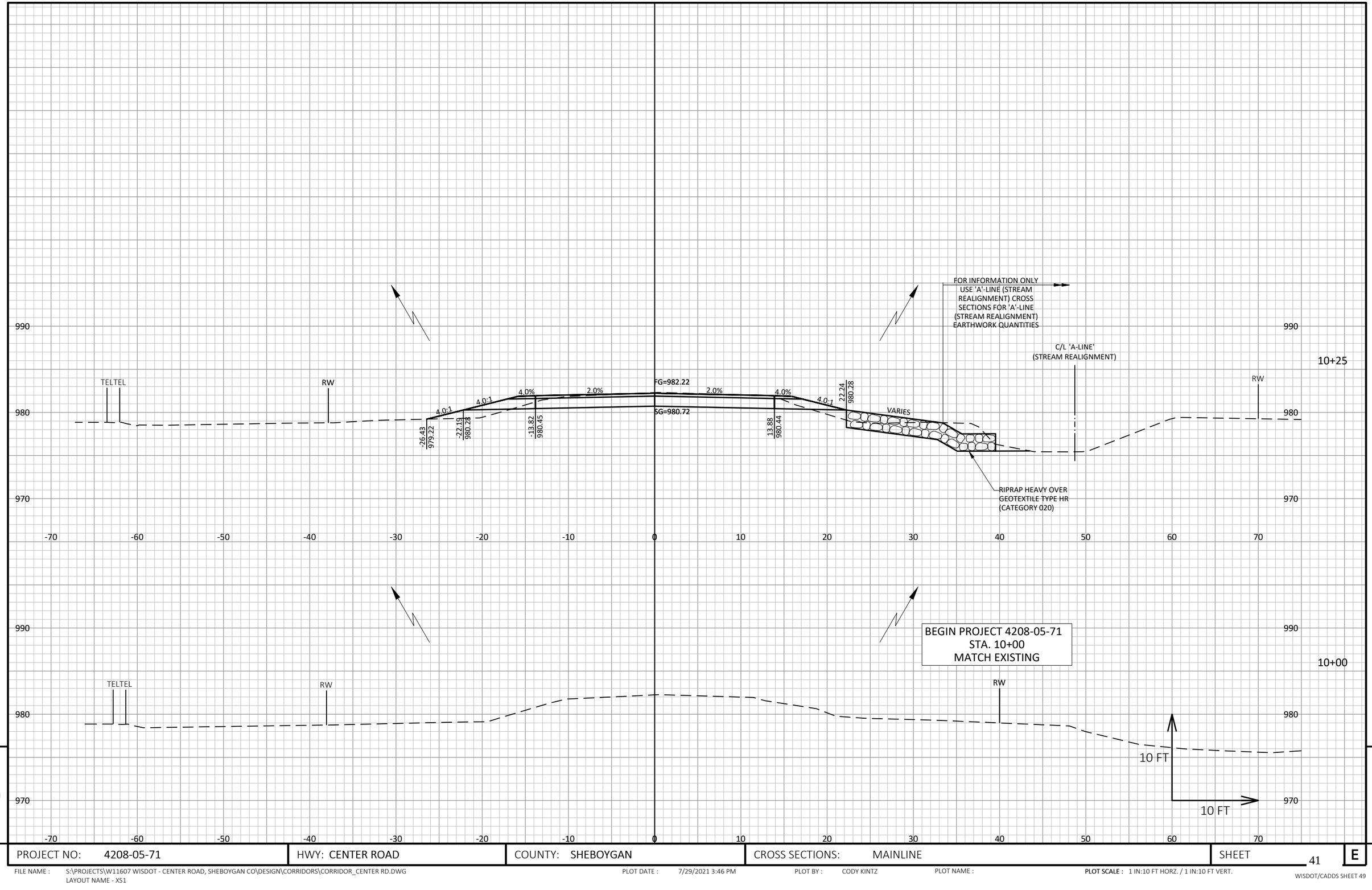
	AREA (SF)			INCREMENTAL VOL (CY)				CUMMULATIVE VOLUME (CY)			
STATION	CUT	SALVAGED/ UNUSABLE PAV'T MATERIAL	FILL	CUT NOTE 1	SALVAGED/ UNUSABLE PAV'T MATERIAL NOTE 2	FILL NOTE 3	FILL (25%)	CUT 1.00 NOTE 1	FILL	FILL (25%) NOTE 4	MASS ORDINATE NOTE 5
10+00	40	0	0	0	0	0	0	0	0	0	0
10+25	59	0	8	46	0	3	5	46	3	5	41
10+50	59	0	8	54	0	7	9	100	10	14	86
10+50	0	0	0	0	0	0	0	100	10	14	86
10+75	0	0	0	0	0	0	0	100	10	14	86
10+91	0	0	0	0	0	0	0	100	10	14	86
10+91	54	0	3	0	0	0	0	100	10	14	86
11+00	54	0	3	18	0	1	1	118	11	15	103
11+25	50	0	8	48	0	5	6	166	16	21	145
11+50	42	0	0	44	0	4	4	210	20	25	185
COLUMN SUBTOTALS =				210	0	20	25				

EARTHWORK 'A'-LINE (CHANNEL REALIGNMENT)

	AREA (SF)			INCREMENTAL VOL (CY)				CUMMULATIVE VOLUME (CY)			
STATION	CUT	SALVAGED/ UNUSABLE PAV'T MATERIAL	FILL	CUT NOTE 1	SALVAGED/ UNUSABLE PAV'T MATERIAL NOTE 2	FILL NOTE 3	FILL (25%)	CUT 1.00 NOTE 1	FILL	FILL (25%) NOTE 4	MASS ORDINATE NOTE 5
49'A'+75	0	0	0	0	0	0	0	0	0	0	0
50'A'+00	17	0	0	8	0	0	0	8	0	0	8
51'A'+00	56	0	7	135	0	14	18	143	14	18	125
51'A'+45	0	0	0	47	0	6	7	190	20	25	165
COLUMN SUBTOTALS =				190	0	20	25				
MAINLINE				210	0	20	25	210	20	25	185
*CHANNEL REALIGNMENT				190	0	20	25	190	20	25	165
TOTAL				400	0	40	50	400	40	50	350

NOTE: WASTE EXCESS CHANNEL REALIGNMENT MATERIAL. DO NOT USE EXCESS EXCAVATED MATERIAL FROM CHANNEL REALIGNMENT ('A'-LINE) ACTIVITIES IN ROADWAY RECONSTRUCTION APPROACH CONSTRUCTION.

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - FILL (25%)	FILL 25%: (UNEXPANDED FILL - (ROCK * ROCK FACTOR))*1.25
5 - MASS ORDINATE	(CUT - FILL (25%))

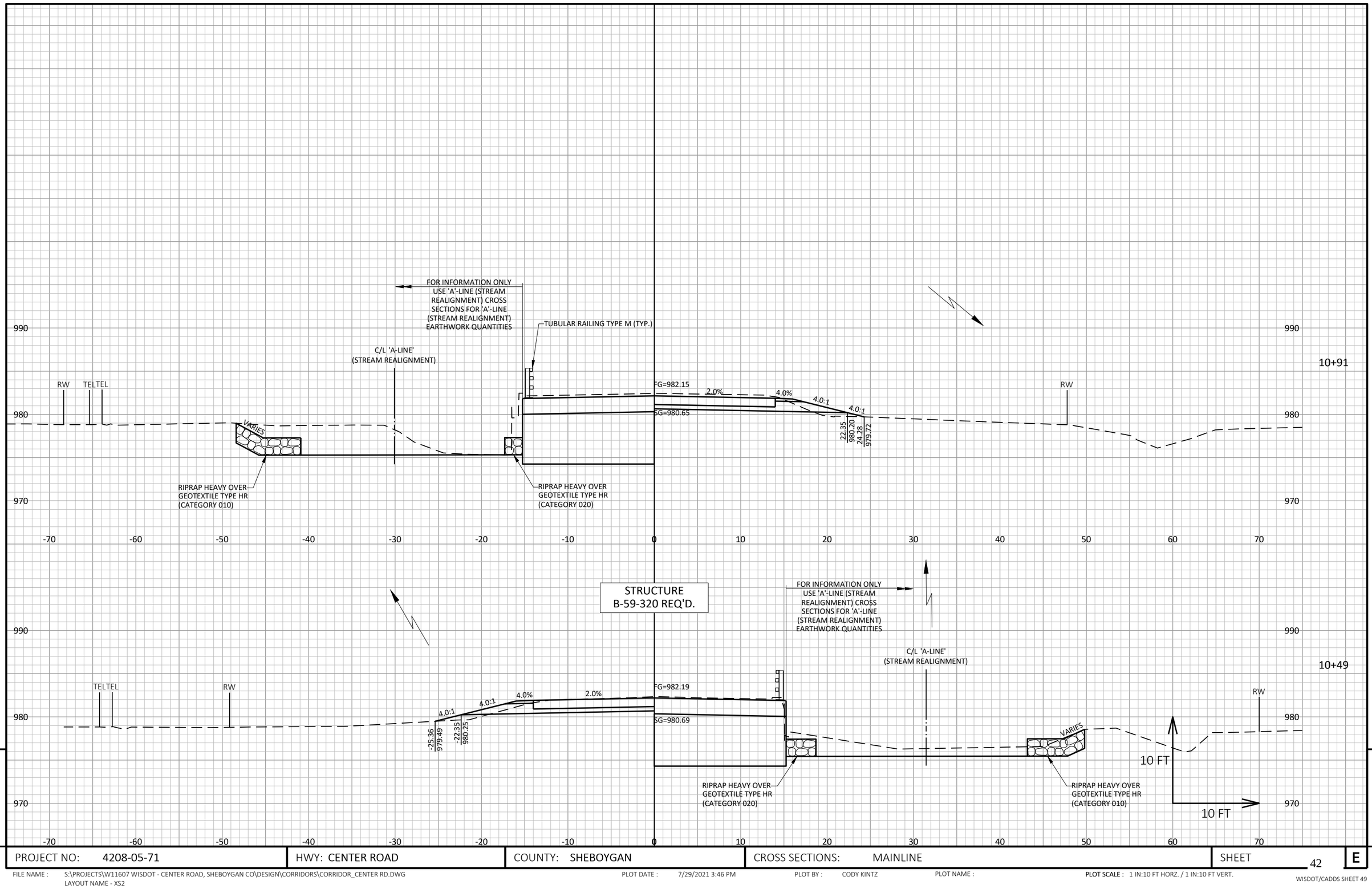


PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	CROSS SECTIONS: MAINLINE	SHEET 41	E

FILE NAME : S:\PROJECTS\W11607 WISDOT - CENTER ROAD, SHEBOYGAN CO\DESIGN\CORRIDORS\CORRIDOR_CENTER RD.DWG
LAYOUT NAME - XS1

PLOT DATE : 7/29/2021 3:46 PM PLOT BY : CODY KINTZ PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

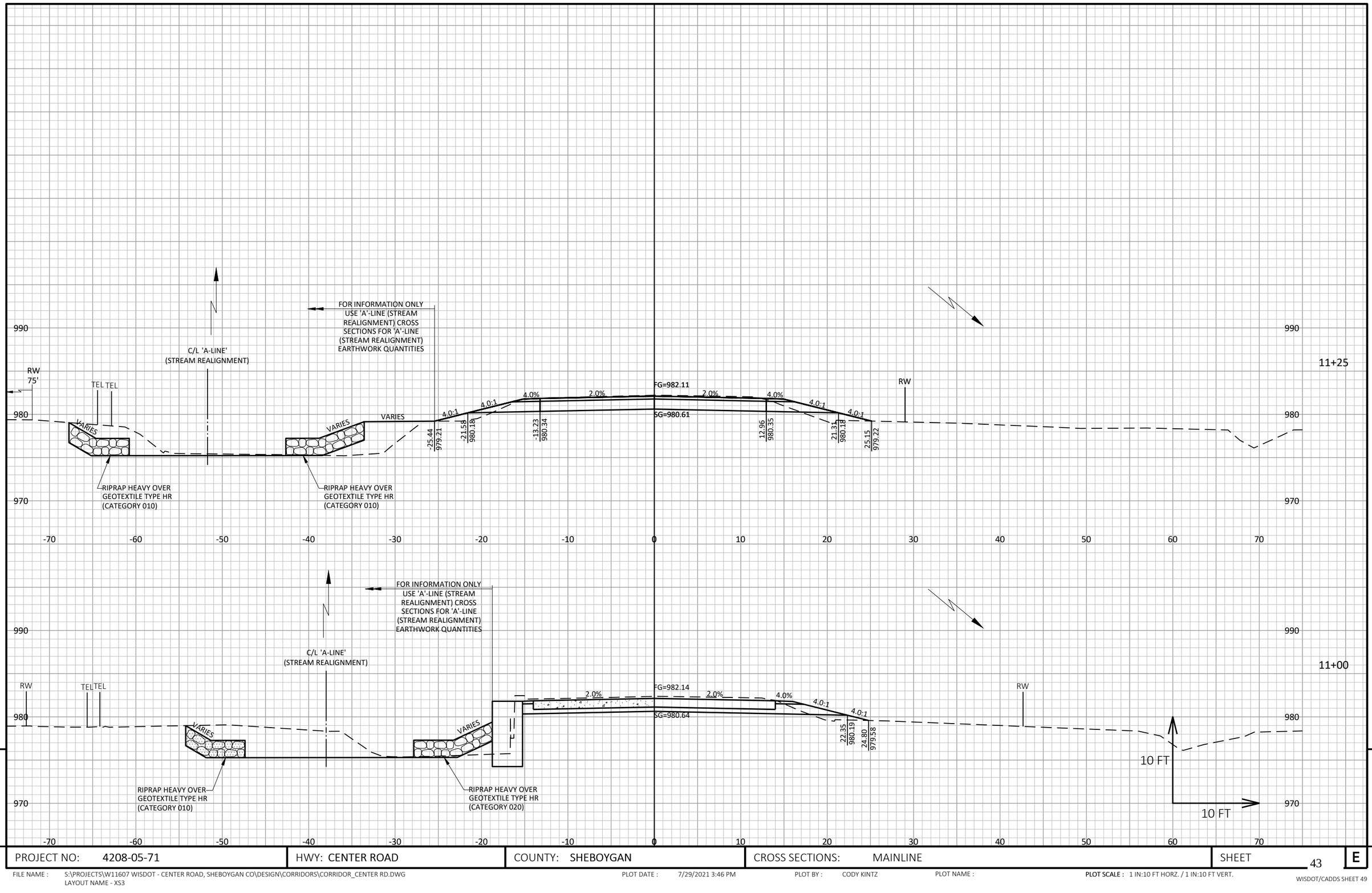


PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	CROSS SECTIONS: MAINLINE	SHEET 42	E

FILE NAME : S:\PROJECTS\W11607 WISDOT - CENTER ROAD, SHEBOYGAN CO\DESIGN\CORRIDORS\CORRIDOR_CENTER RD.DWG
LAYOUT NAME - XS2

PLOT DATE : 7/29/2021 3:46 PM PLOT BY : CODY KINTZ PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	CROSS SECTIONS: MAINLINE	SHEET 43	E

FILE NAME : S:\PROJECTS\W11607 WISDOT - CENTER ROAD, SHEBOYGAN CO\DESIGN\CORRIDORS\CORRIDOR_CENTER RD.DWG
LAYOUT NAME - XS3

PLOT DATE : 7/29/2021 3:46 PM PLOT BY : CODY KINTZ PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

END PROJECT 4208-05-71
STA. 11+50
MATCH EXISTING

990
980
970

RW
RW
TEL TEL

11+50

10 FT
10 FT

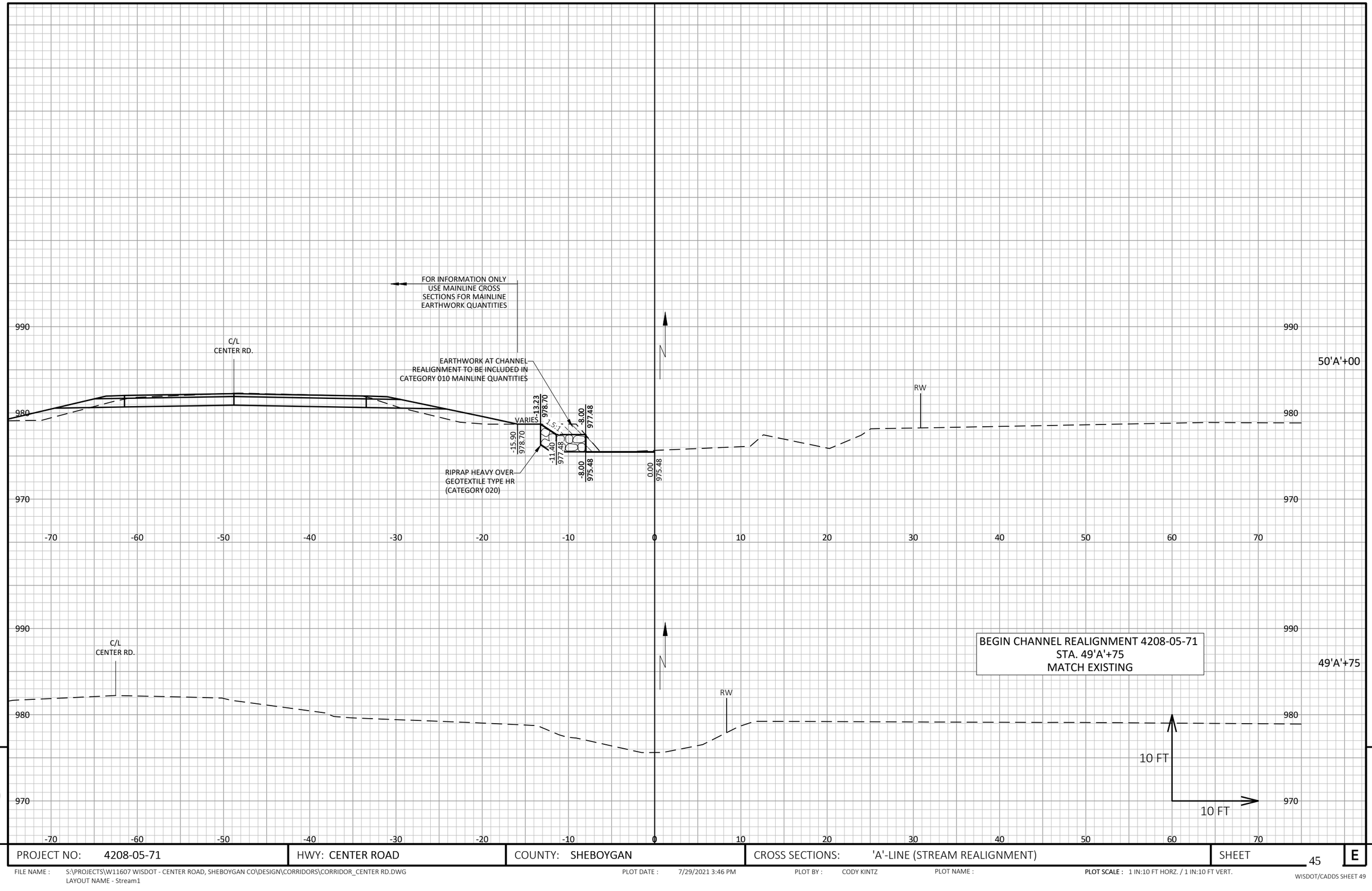
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

9 9

PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	CROSS SECTIONS: MAINLINE	SHEET 44	E

FILE NAME : S:\PROJECTS\W11607 WISDOT - CENTER ROAD, SHEBOYGAN CO\DESIGN\CORRIDORS\CORRIDOR_CENTER RD.DWG
LAYOUT NAME - XS4

PLOT DATE : 7/29/2021 3:46 PM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	CROSS SECTIONS: 'A'-LINE (STREAM REALIGNMENT)	SHEET 45	E

FILE NAME : S:\PROJECTS\W11607 WISDOT - CENTER ROAD, SHEBOYGAN CO\DESIGN\CORRIDORS\CORRIDOR_CENTER RD.DWG
LAYOUT NAME - Stream1

PLOT DATE : 7/29/2021 3:46 PM PLOT BY : CODY KINTZ PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END CHANNEL REALIGNMENT 4208-05-71
STA. 51'A'+45
MATCH EXISTING

51'A'+45

990
980
970
RW
TEL TEL
C/L
CENTER RD.
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

FOR INFORMATION ONLY
USE MAINLINE CROSS
SECTIONS FOR MAINLINE
EARTHWORK QUANTITIES

51'A'+00

TEL TEL RW
-13.73
978.84
1.5:1
-8.00
977.29
-11.40
977.29
-8.00
975.29
8.00
977.29
11.40
977.29
VARIES
8.00
975.29
C/L
CENTER RD.
10 FT
10 FT

RIPRAP HEAVY OVER
GEOTEXTILE TYPE HR
(CATEGORY 010)

EARTHWORK AT CHANNEL
REALIGNMENT TO BE INCLUDED IN
CATEGORY 010 MAINLINE QUANTITIES

RIPRAP HEAVY OVER
GEOTEXTILE TYPE HR
(CATEGORY 020)

9

PROJECT NO: 4208-05-71	HWY: CENTER ROAD	COUNTY: SHEBOYGAN	CROSS SECTIONS: 'A'-LINE (STREAM REALIGNMENT)	SHEET 46	E

FILE NAME : S:\PROJECTS\W11607 WISDOT - CENTER ROAD, SHEBOYGAN CO\DESIGN\CORRIDORS\CORRIDOR_CENTER RD.DWG
LAYOUT NAME - Stream2
PLOT DATE : 7/29/2021 3:46 PM
PLOT BY : CODY KINTZ
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov