LAX

DECEMBER 2018

PROJECT ID: 5295-00-70

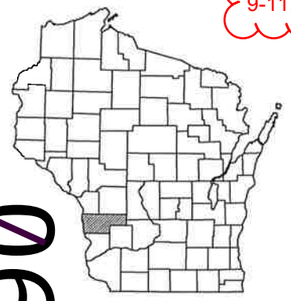
WITH: N/A

COUNTY: VERNON

ORDER OF SHEETS

TOTAL SHEETS = 42

Sheets revised: 1, 9-11, 26, 39



N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5295-00-70		

TOWN OF WEBSTER, SOUTH ELK RUN ROAD

(ELK RUN BRIDGE B-62-254)

LOCAL STREET

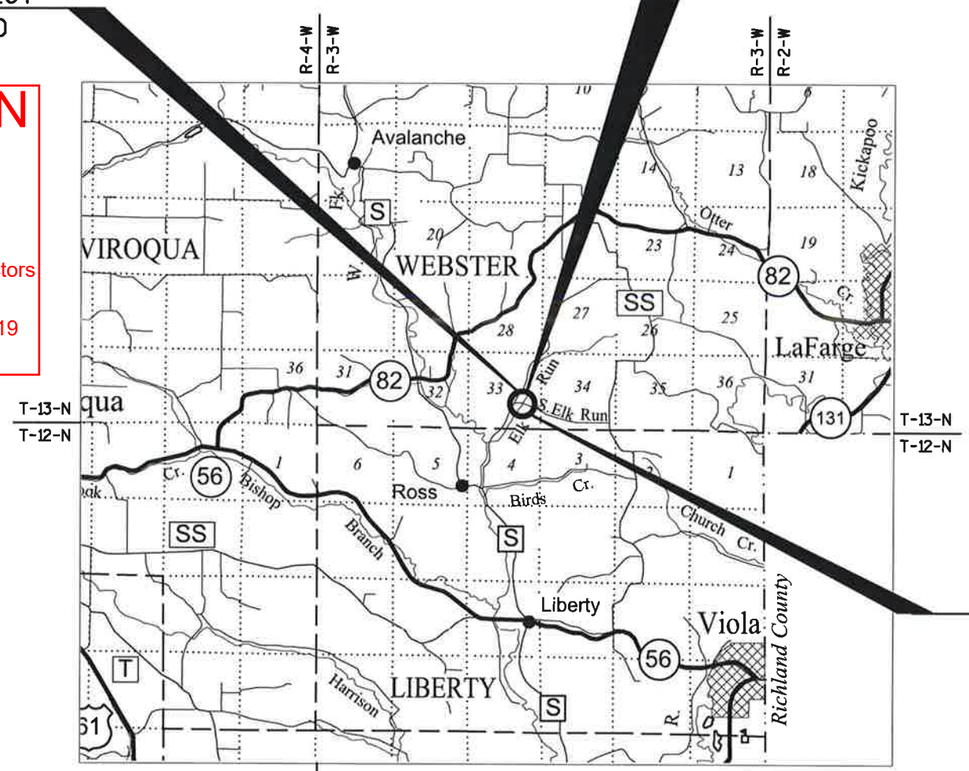
VERNON COUNTY

Subcontractor list:
Hard Rock Sawing & Drilling
Wanless Excavating
Mattison Construction Company
Mathy Construction Company
Safemark LLC
SJK Engineering

STATE PROJECT NUMBER
5295-00-70

END PROJECT
STA. 15+00

STRUCTURE B-62-254



LAYOUT

SCALE 0 2 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.038

BEGIN PROJECT
STA. 13+00
Y=149,664.31
X=742,482.22

"Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Vernon County."

"Elevations shown on the plan are referenced to the North American Vertical Datum of 1988 (NAVD 88)."

AS-BUILT PLAN

SUPERVISOR: Oscar Winger
PROJECT MANAGER: Aleigha Burg
PROJECT LEADER: Jeff Merten, ISG
PRIME CONTRACTOR: Radtke Contractors
CONSTRUCTION STARTED: 4/22/2019
SUBSTANTIALLY COMPLETE: 6/17/2019
CONTRACT ID: 20181211006

DESIGN DESIGNATION

A.A.D.T.	(2019)	= 58
A.A.D.T.	(2039)	= 70
D.H.V.		= 38
D.D.		= 60/40
T.		= 9.7%
DESIGN SPEED		= 30 MPH
ESALS		= 8,000

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE		ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
MARSH AREA		STORM SEWER	SS
WOODED OR SHRUB AREA		TELEPHONE	T
		WATER	W
		UTILITY PEDESTAL	
		POWER POLE	
		TELEPHONE POLE	

ACCEPTED FOR
COUNTY of VERNON
6-28-18 (Date) Phil Hewitt (Highway Commissioner)

ACCEPTED FOR
TOWN of WEBSTER
6-28-18 (Date) (Town Chairman)

ORIGINAL PLANS PREPARED BY

JEWELL associates engineers, inc.
Engineers - Architects - Surveyors

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

6/22/2018 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor JEWELL ASSOCIATES ENGINEERS, INC.
Designer JEWELL ASSOCIATES ENGINEERS, INC.
Management Consultant KL ENGINEERING, INC.

APPROVED FOR THE DEPARTMENT
DATE: 7/25/18
Management Consultant Signature

E

2

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	OD	Outside Diameter	SS	Storm Sewer
CTH	County Trunk Highway	PLE	Permanent Limited Easement	SG	Subgrade
CR	Creek			SE	Superelevation
CR	Crushed	PT	Point	SL or S/L	Survey Line
CY or CU YD	Cubic Yard	PC	Point of Curvature	SV	Septic Vent
CP	Culvert Pipe	PI	Point of Intersection	T	Tangent
C & G	Curb and Gutter	PRC	Point of Reverse Curvature	TEL	Telephone
D	Degree of Curve	PT	Point of Tangency	TEMP	Temporary
DHV	Design Hour Volume	POC	Point On Curve	TI	Temporary Interest
DIA	Diameter	POT	Point on Tangent	TLE	Temporary Limited Easement
E	East	PVC	Polyvinyl Chloride		
X	East Grid Coordinate	PCC	Portland Cement Concrete	t	Ton
ELEC	Electric (al)	LB	Pound	T or TN	Town
EL or ELEV	Elevation	PSI	Pounds Per Square Inch	TRANS	Transition
ESALS	Equivalent Single Axle Loads	PE	Private Entrance	TL or T/L	Transit Line
		R	Radius	T	Trucks (percent of)
EBS	Excavation Below Subgrade	RR	Railroad	TYP	Typical
FF	Face to Face	R	Range	UNCL	Unclassified
FE	Field Entrance	RL or R/L	Reference Line	UG	Underground Cable
F	Fill	RP	Reference Point	USH	United States Highway
FG	Finished Grade	RCCP	Reinforced Concrete Culvert Pipe	VAR	Variable
FL or F/L	Flow Line			V	Velocity or Design Speed
FT	Foot	REQ'D	Required	VERT	Vertical
FTG	Footing	RES	Residence or Residential	VC	Vertical Curve
GN	Grid North	RW	Retaining Wall	VOL	Volume
HT	Height	RT	Right	WM	Water Main
CWT	Hundredweight	RHF	Right–Hand Forward	WV	Water Valve
HYD	Hydrant	R/W	Right–of–Way	W	West
INL	Inlet	R	River	WB	Westbound
ID	Inside Diameter	RD	Road	YD	Yard
		RDWY	Roadway		

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.

UNLESS OTHERWISE SHOWN DISTURBED AREAS SHOWN WITHIN THE RIGHT–OF–WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE FERTILIZED (TYPE B), SEEDED (USE TEMPORARY SEEDING AND SEED MIX NO. 20), AND MULCHED AS DIRECTED BY THE ENGINEER. ALL POST CONSTRUCTION WETLAND AREAS SHALL BE SEEDED WITH SEEDING MIXTURE NO. 60.

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 THE 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 IN PLACE PRIOR TO STRUCTURE REMOVAL.

MULCH ALL MAINLINE SLOPES AS DIRECTED BY THE ENGINEER IN THE FIELD.

FILL EXPANSION IS VARIABLE AND IS ESTIMATED AT 25%.

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

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.

WETLANDS ARE PRESENT IN THE PROJECT LIMITS. THE CONTRACTOR SHALL NOT OPERATE EQUIPMENT BEYOND THE SLOPE INTERCEPTS FROM STA. 13+00 – STA. 14+23, LT. AND STA. 14+40 – STA. 15+00, LT. AND STA. 13+00 – STA. 13+85, RT.

$3\frac{1}{2}$–INCHES OF ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A $1\frac{3}{4}$–INCH UPPER LAYER AND A $1\frac{3}{4}$–INCH LOWER LAYER. THE NOMINAL SIZE AGGREGATE USED FOR THE LOWER LAYER SHALL BE 12.5 MM.

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

CONTACTS

VERNON COUNTY HIGHWAY DEPARTMENT:

PHIL HEWITT, COMMISSIONER
602 NORTH MAIN STREET
VIROQUA, WI 54665
PH: (608) 637–5452
EMAIL: phil.hewitt@vernoncounty.org

TOWN OF WEBSTER:

JOHN YOUNG, CHAIRMAN
S3760 SALEM RIDGE ROAD
LA FARGE, WI 54639
PH: (608) 604–1415
EMAIL: jlyoung@mwt.net

DESIGN CONSULTANT:

JEWELL ASSOCIATES ENGINEERS, INC.
560 SUNRISE DRIVE
SPRING GREEN, WI 53588
ATTN: ELLERY SCHAFFER, P.E.
PH: (608) 588–7484
CELL: (608) 341–8159
EMAIL: ellery.schaffer@jewellassoc.com

DNR LIAISON:

STATE OF WISCONSIN
DNR SERVICE CENTER
3550 MORMON COULEE ROAD
LACROSSE, WI 54601
ATTN: KAREN KALVELAGE
PH: (608) 785–9115
EMAIL: Karen.Kalvelage@wisconsin.gov

UTILITIES

TELEPHONE

VERNON COMMUNICATIONS COOPERATIVE
ATTN: SCOTT FREDERICK
103 NORTH MAIN STREET
P.O. BOX 20
WESTBY, WI 54667
PH: (608) 634–7434
CELL: (608) 632–0607
EMAIL: sfrederick@vernoncom.coop

ELECTRIC

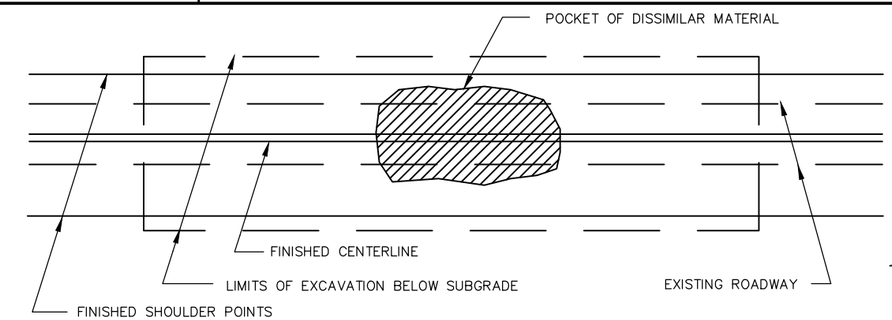
VERNON ELECTRIC COOPERATIVE
ATTN: MARK SEE
110 SAUGSTAD ROAD
WESTBY, WI 54667
PH: (608) 634–3121
EMAIL: msee@vernonelectric.org

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

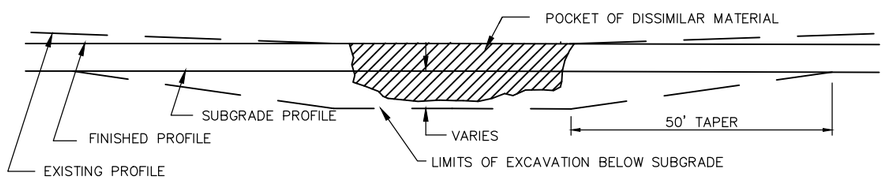
* DENOTES UTILITY IS NOT A MEMBER OF DIGGERS HOTLINE

	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												

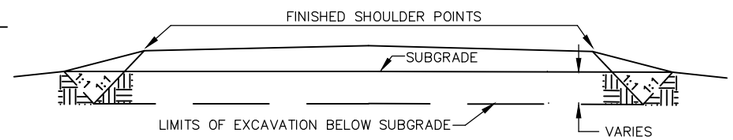
TOTAL PROJECT AREA= 0.42 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.27 ACRES



PLAN VIEW



PROFILE VIEW



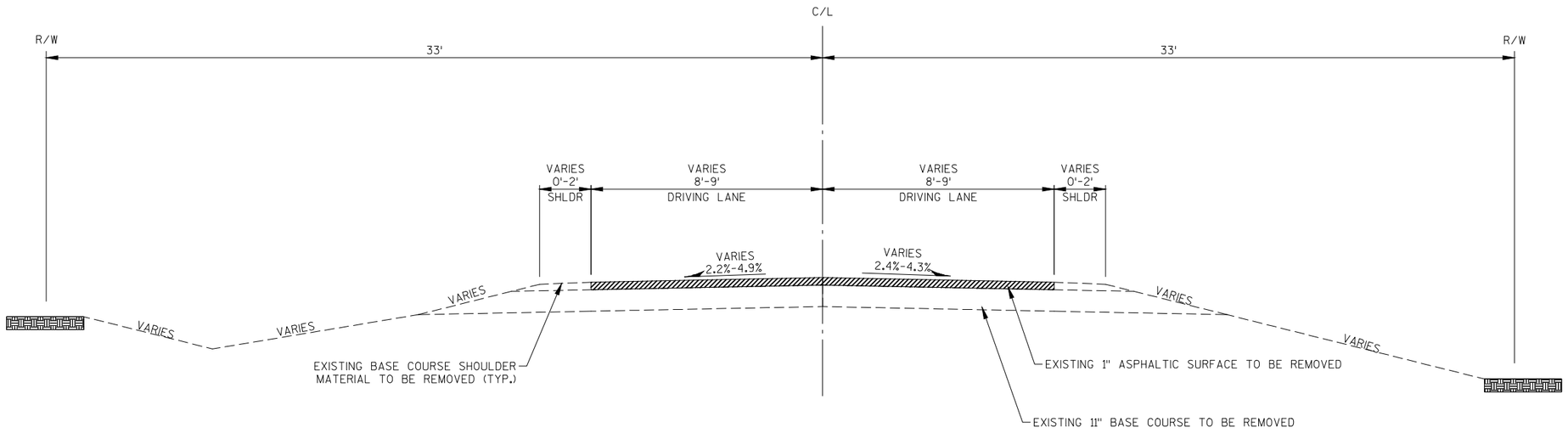
CROSS SECTION VIEW

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.

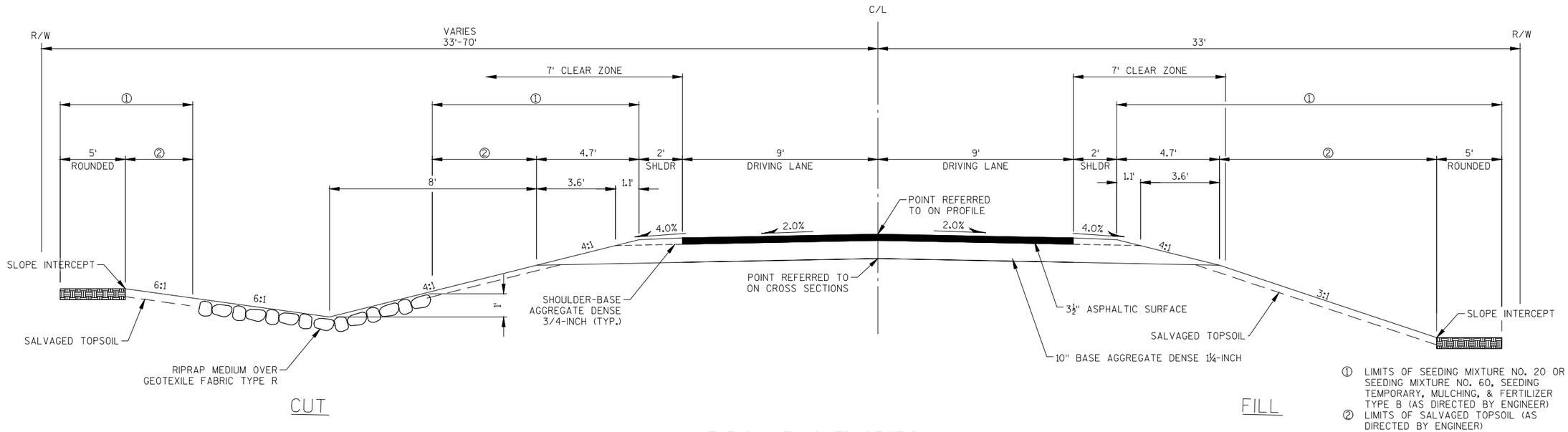
RURAL EXCAVATION BELOW SUBGRADE (E.B.S.)

PROJECT NO: 5295-00-70	HWY: SOUTH ELK RUN ROAD	COUNTY: VERNON	GENERAL NOTES, CONTACTS, UTILITIES, STD ABBREVIATIONS, AND HSG CHART	SHEET 2	E

2



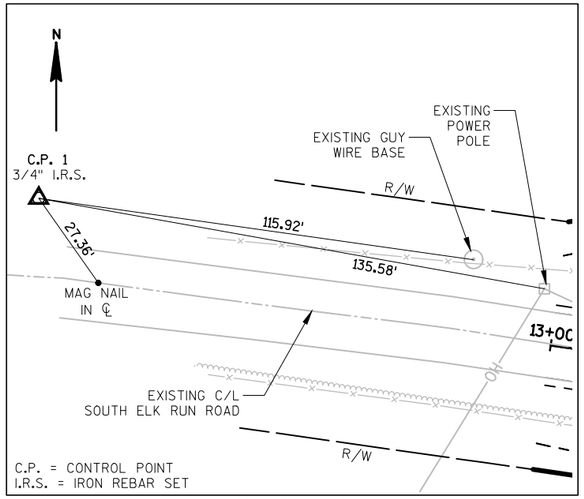
TYPICAL EXISTING SECTION



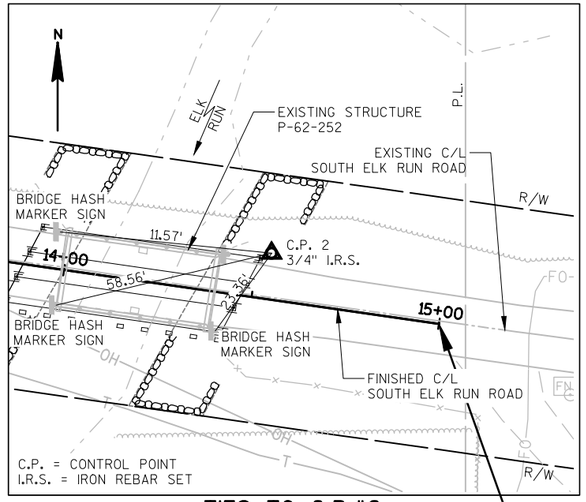
TYPICAL FINISHED SECTION

PROJECT NO: 5295-00-70	HWY: SOUTH ELK RUN ROAD	COUNTY: VERNON	TYPICAL EXISTING SECTION & TYPICAL FINISHED SECTION	SHEET 3	E

FILE NAME : S:\PROJECTS\K51050 S ELK RUN RD, VERNON CO\SHEETSPLAN\TYPICALS\TYPICALS.DWG
LAYOUT : LAYOUT1
PLOT DATE : 6/15/2018
PLOT TIME : 11:52:12 AM
PLOT BY : STRINE, THERESA
PLOT SCALE : 1" = 1'

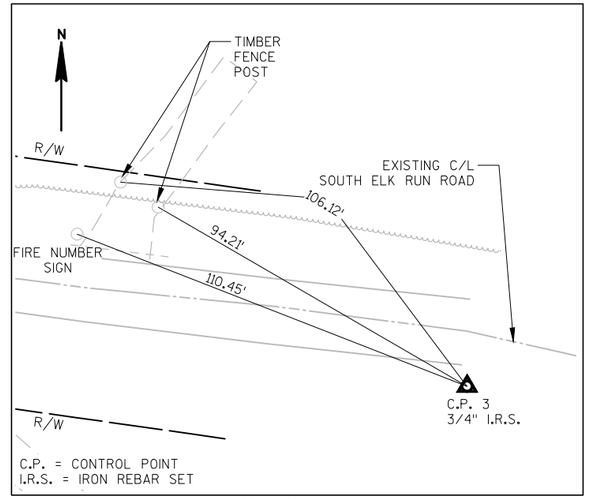


TIES TO C.P.#1
STA. 11+61.30; 19.40' LT.
Y = 149,703.12
X = 742,347.10



TIES TO C.P.#2
STA. 14+53.62; 12.18' LT.
Y = 149,654.59
X = 742,636.01

END PROJECT
STA. 15+00



TIES TO C.P.#3
STA. 16+75.68; 10.00' RT.
Y = 149,601.16
X = 742,852.69

MAINLINE STATION LAYOUT

STATION	Y	X	COMMENTS
13+00	149,664.31	742,482.22	BEGIN PROJECT
13+50	149,657.22	742,531.72	–
13+87.79	149,651.86	742,569.13	END OF DECK
14+00	149,650.13	742,581.21	–
14+48.45	149,643.26	742,629.17	END OF DECK
14+50	149,643.04	742,630.71	–
15+00	149,635.95	742,680.20	END OF PROJECT

▲ CONTROL POINTS

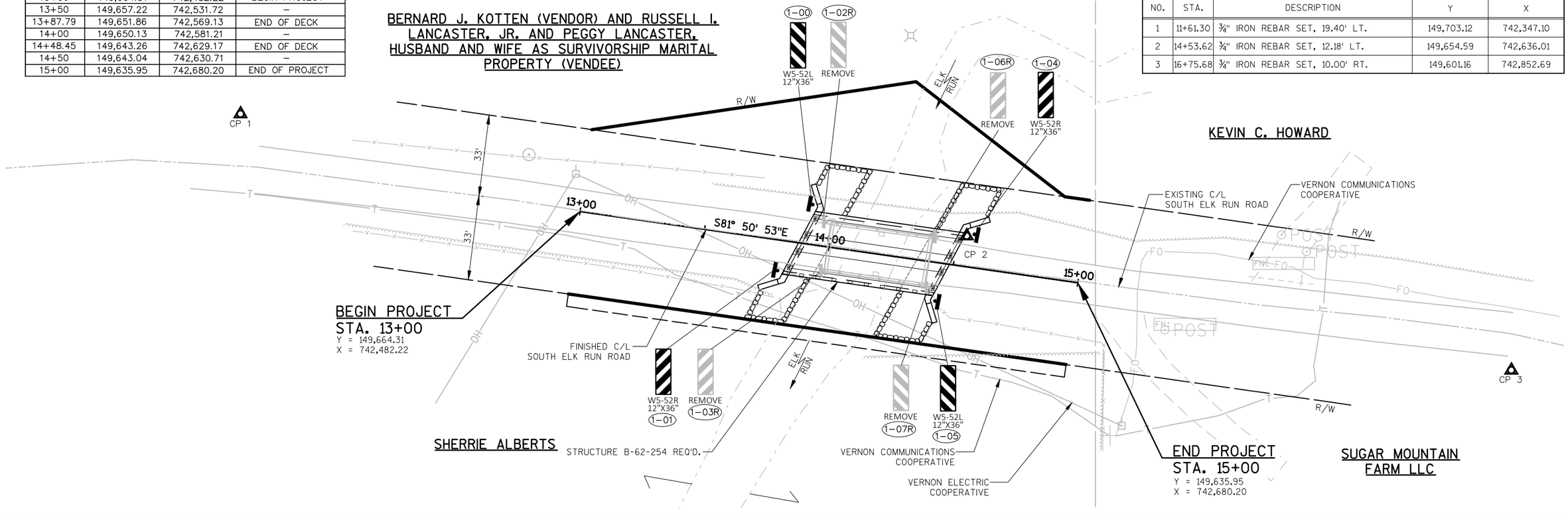
NO.	STA.	DESCRIPTION	Y	X
1	11+61.30	¾" IRON REBAR SET, 19.40' LT.	149,703.12	742,347.10
2	14+53.62	¾" IRON REBAR SET, 12.18' LT.	149,654.59	742,636.01
3	16+75.68	¾" IRON REBAR SET, 10.00' RT.	149,601.16	742,852.69

BERNARD J. KOTTEN (VENDOR) AND RUSSELL I. LANCASTER, JR. AND PEGGY LANCASTER, HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY (VENDEE)

KEVIN C. HOWARD

SHERRIE ALBERTS

SUGAR MOUNTAIN FARM LLC



PROJECT NO: 5295-00-70	HWY: SOUTH ELK RUN ROAD	COUNTY: VERNON	TIES AND ALIGNMENT PLAN	SHEET 4	E

FILE NAME : S:\PROJECTS\K51050 S ELK RUN RD, VERNON CO\SHEETSPLAN\DETAILS\ALIGNMENT AND TIES.DWG
LAYOUT : LAYOUT1
PLOT DATE : 6/15/2018
PLOT TIME : 3:00:09 PM
PLOT BY : STRINE, THERESA
PLOT SCALE : 1" = 1'

5295-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 14+20	LS	1.000	1.000
0008	205.0100	Excavation Common	CY	150.000	150.000
0010	206.1000	Excavation for Structures Bridges (structure) 01. B-62-0254	LS	1.000	1.000
0012	208.0100	Borrow	CY	120.000	120.000
0014	210.1500	Backfill Structure Type A	TON	450.000	450.000
0016	213.0100	Finishing Roadway (project) 01. 5295-00-70	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	20.000	20.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	270.000	270.000
0022	455.0605	Tack Coat	GAL	20.000	20.000
0024	465.0105	Asphaltic Surface	TON	65.000	65.000
0026	502.0100	Concrete Masonry Bridges	CY	123.000	123.000
0028	502.3200	Protective Surface Treatment	SY	200.000	200.000
0030	503.0136	Prestressed Girder Type I 36-Inch	LF	236.000	236.000
0032	505.0400	Bar Steel Reinforcement HS Structures	LB	4,440.000	4,440.000
0034	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	15,250.000	15,250.000
0036	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	8.000	8.000
0038	506.4000	Steel Diaphragms (structure) 01. B-62-0254	EACH	3.000	3.000
0040	513.4061	Railing Tubular Type M	LF	126.000	126.000
0042	516.0500	Rubberized Membrane Waterproofing	SY	12.000	12.000
0044	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	210.000	210.000
0046	606.0200	Riprap Medium	CY	100.000	100.000
0048	606.0400	Riprap Extra-Heavy	CY	230.000	230.000
0050	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	150.000	150.000
0052	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5295-00-70	EACH	1.000	1.000
0054	619.1000	Mobilization	EACH	1.000	1.000
0056	624.0100	Water	MGAL	2.000	2.000
0058	625.0500	Salvaged Topsoil	SY	420.000	420.000
0060	627.0200	Mulching	SY	850.000	850.000
0062	628.1504	Silt Fence	LF	280.000	280.000
0064	628.1520	Silt Fence Maintenance	LF	560.000	560.000
0066	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0068	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0070	628.6005	Turbidity Barriers	SY	190.000	190.000
0072	629.0210	Fertilizer Type B	CWT	1.000	1.000
0074	630.0120	Seeding Mixture No. 20	LB	20.000	20.000

5295-00-70

Line	Item	Item Description	Unit	Total	Qty
0076	630.0160	Seeding Mixture No. 60	LB	3.000	3.000
0078	630.0200	Seeding Temporary	LB	10.000	10.000
0080	630.0300	Seeding Borrow Pit	LB	2.000	2.000
0082	633.5100	Markers Row	EACH	6.000	6.000
0084	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0086	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0088	638.2602	Removing Signs Type II	EACH	4.000	4.000
0090	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0092	642.5001	Field Office Type B	EACH	1.000	1.000
0094	643.0420	Traffic Control Barricades Type III	DAY	1,116.000	1,116.000
0096	643.0705	Traffic Control Warning Lights Type A	DAY	1,736.000	1,736.000
0098	643.0900	Traffic Control Signs	DAY	868.000	868.000
0100	643.5000	Traffic Control	EACH	1.000	1.000
0102	645.0111	Geotextile Type DF Schedule A	SY	110.000	110.000
0104	645.0120	Geotextile Type HR	SY	310.000	310.000
0106	645.0130	Geotextile Type R	SY	250.000	250.000
0108	650.4500	Construction Staking Subgrade	LF	140.000	140.000
0110	650.5000	Construction Staking Base	LF	140.000	140.000
0112	650.6500	Construction Staking Structure Layout (structure) 01. B-62-0254	LS	1.000	1.000
0114	650.9910	Construction Staking Supplemental Control (project) 01. 5295-00-70	LS	1.000	1.000
0116	650.9920	Construction Staking Slope Stakes	LF	140.000	140.000
0118	690.0150	Sawing Asphalt	LF	36.000	36.000
0120	715.0502	Incentive Strength Concrete Structures	DOL	738.000	738.000

ALL ITEMS ARE CATEGORY 010 UNLESS OTHERWISE NOTED

3

CLEARING & GRUBBING

STATION	LOCATION	201.0105 CLEARING (STA)	201.0205 GRUBBING (STA)
13+00-15+00	MAINLINE	2	2
	TOTALS =	2	2

EARTHWORK SUMMARY

FROM/TO STA	LOCATION	205.0100 COMMON EXCAVATION CUT (CY)	AVAILABLE MATERIAL (CY) (1)	UNEXPANDED FILL (CY)	EXPANDED FILL (CY) FACTOR 1.25 (2)	MASS ORDINATE +/- (CY) (3)	208.0100 BORROW (CY)
STA. 13+00 - STA. 15+00	MAINLINE	150	150	216	270	-120	120
	TOTALS =	150	150	216	270	-120	120

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.

3

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)
13+00-15+00	MAINLINE	16	252
-	UNDISTRIBUTED	4	18
	TOTALS =	20	270

ASPHALTIC SURFACE

STATION - STATION	LOCATION	455.0605 TACK COAT (GAL)	465.0105 ASPHALTIC SURFACE (TON)
13+00-15+00	MAINLINE	15	59
-	UNDISTRIBUTED	5	6
	TOTALS =	20	65

RIPRAP MEDIUM

STATION-STATION	LOCATION	606.0200 RIPRAP MEDIUM (CY)	645.0130 GEOTEXTILE TYPE R (SY)
13+00-14+28	MAINLINE, LT.	91	231
-	UNDISTRIBUTED	9	19
	TOTALS =	100	250

WATER

STATION-STATION	LOCATION	624.0100 (MGAL)
13+00-15+00	MAINLINE	2.0
	TOTALS =	2.0

FINISHING ITEMS

STATION - STATION	LOCATION	625.0500 SALVAGED TOPSOIL (SY)	627.0200 MULCHING (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)	630.0300 SEEDING BORROW PIT (LB)
13+00-15+00	MAINLINE	340	600	0.4	16	2	8	1
-	BORROW PIT	-	73	0.1	-	-	-	1
-	UNDISTRIBUTED	80	177	0.5	4	1	2	-
	TOTALS =	420	850	1.0	20	3	10	2

ALL ITEMS ARE CATEGORY 010 UNLESS OTHERWISE NOTED

3

SILT FENCE

STATION - STATION	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)
13+00-13+74	MAINLINE, RT.	76	152
14+17 - 15+00	MAINLINE, RT.	86	172
14+40 - 15+00	MAINLINE, LT.	64	128
-	UNDISTRIBUTED	54	108
TOTALS =		280	560

MOBILIZATION EROSION CONTROL

PROJECT	628.1905 MOBILIZATION EROSION CONTROL (EACH)	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL (EACH)
5295-00-70	4	2
TOTALS =	4	2

TURBIDITY BARRIERS

STATION-STATION	LOCATION	628.6005 (SY)
13+74-14+26	MAINLINE	92
14+17 - 14+40	MAINLINE	64
-	UNDISTRIBUTED	34
TOTALS =		190

MARKERS ROW

PT. NO.	STATION	LOCATION	633.5100 (EACH)
101	13+00.00	MAINLINE, 32.88 LT.	1
102	14+25.00	MAINLINE, 70.00 LT.	1
103	14+90.00	MAINLINE, 33.12 LT.	1
104	15+00.00	MAINLINE, 33.13 LT.	1
105	15+00.00	MAINLINE, 32.87 RT.	1
106	13+00.00	MAINLINE, 33.12 RT.	1
TOTALS =			6

3

PERMANENT SIGNING

SIGN NUMBER	APPROX. STATION	POSITIION	SITE ID	SIGN CODE	SIGN DESCRIPTION	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)
1-00	13+97	LEFT	MAINLINE	W5-52L	BRIDGE HASH MARKS	12X36	1	3.0	---	---
1-01	13+99	RIGHT	MAINLINE	W5-52R	BRIDGE HASH MARKS	12X36	1	3.0	---	---
1-02R	13+97	LEFT	MAINLINE	W5-52L	BRIDGE HASH MARKS	12X36	---	---	1	1
1-03R	13+99	RIGHT	MAINLINE	W5-52R	BRIDGE HASH MARKS	12X36	---	---	1	1
1-04	14+41	LEFT	MAINLINE	W5-52L	BRIDGE HASH MARKS	12X36	1	3.0	---	---
1-05	14+42	RIGHT	MAINLINE	W5-52R	BRIDGE HASH MARKS	12X36	1	3.0	---	---
1-06R	14+41	LEFT	MAINLINE	W5-52L	BRIDGE HASH MARKS	12X36	---	---	1	1
1-07R	14+42	RIGHT	MAINLINE	W5-52R	BRIDGE HASH MARKS	12X36	---	---	1	1
TOTALS =							4	12	4	4

TRAFFIC CONTROL

LOCATION	TRAFFIC CONTROL 643.0420 BARRICADES TYPE III (DAYS)	643.0705 WARNING LIGHTS TYPE A (DAYS)	643.0900 SIGNS (DAYS)	643.5000 TRAFFIC CONTROL (EACH)
PROJECT	1116	1736	868	1
TOTALS =	1116	1736	868	1

CONSTRUCTION STAKING

STATION -STATION	LOCATION	CONSTRUCTION STAKING 650.4500 SUBGRADE (L.F.)	650.5000 BASE (L.F.)	*650.6500 STRUCTURE LAYOUT (01. B-62-0254) (L.S.)	650.9910 SUPPLEMENTAL CONTROL (01.5295-00-70) (L.S.)	650.9920 SLOPES STAKES (L.F.)
13+00-15+00	MAINLINE	140	140	-	-	140
-	PROJECT	-	-	1	1	-
	TOTAL =	140	140	1	1	140

* INDICATES BID ITEM IS CATEGORY 020

SAWING ASPHALT

STATION	LOCATION	690.0150 (L.F.)
13+00	MAINLINE	18
15+00	MAINLINE	18
	TOTAL =	36

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	PROPERTY LINE	PL
ACCESS RIGHTS	AR	RECORDED AS	(100')
ACRES	AC.	REFERENCE LINE	R/L
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR
BARN	B.	REMAINING	REM.
CENTERLINE	C/L	RIGHT-OF-WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC.
CORNER	COR.	SHED	S.
CONVEYANCE OF RIGHTS	CR	STATION	STA.
DOCUMENT	DOC.	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE.	VOLUME	V.
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
- R/W MONUMENT — ○ ● (SET)
- R/W STANDARD — △ ▲ (SET)
- SIGN — ISIGN
- SECTION CORNER MONUMENT
- SECTION CORNER SYMBOL
- FEE (HATCH VARIES)
- TEMPORARY LIMITED EASEMENT
- PERMANENT LIMITED EASEMENT
- R/W BOUNDARY POINT — RWB20
- PARCEL NUMBER — 8
- UTILITY PARCEL NUMBER — 92
- SIGN NUMBER (OFF PREMISE) — 21-1
- BUILDING

- PROPOSED R/W LINE
- EXISTING H.E. LINE
- PROPERTY LINE
- LOT & TIE LINES
- SLOPE INTERCEPTS
- CORPORATE LIMITS
- NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)
- NO ACCESS (BY ACQUISITION)
- NO ACCESS (BY STATUTORY AUTHORITY)
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- EXISTING CENTERLINE
- PROPOSED REFERENCE LINE
- PARALLEL OFFSET
- ENCROACHMENT — E-D/TYPE
- HIGHWAY EASEMENT

CONVENTIONAL UTILITY SYMBOLS

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

	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER	⊠	

NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, VERNON 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.

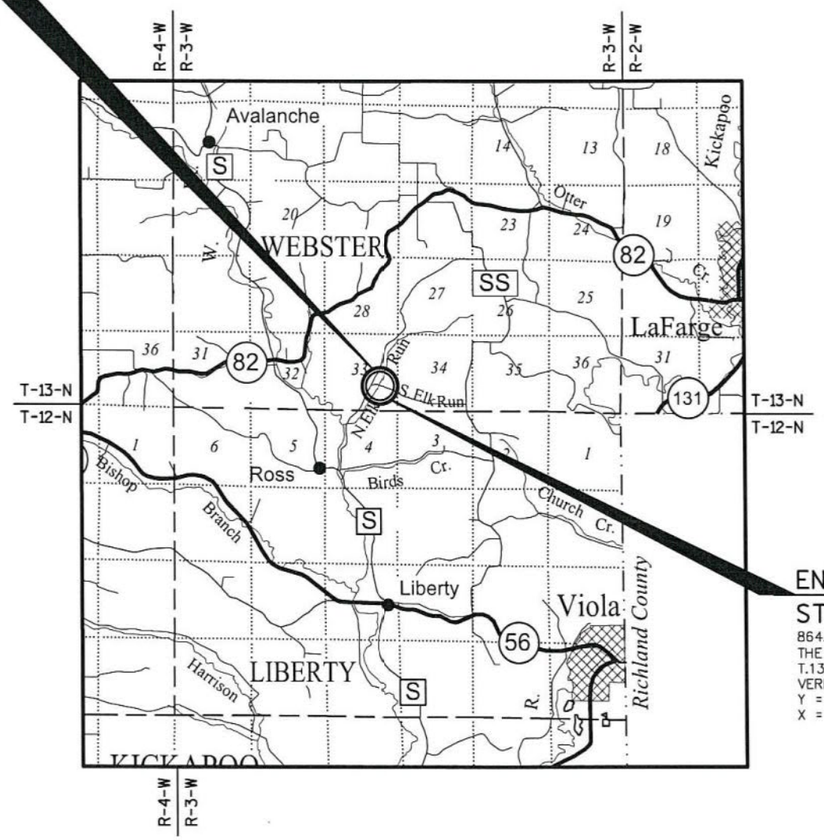
RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD."

The most current Right of Way information should be viewed in DOTView using the Real Estate Project ID. The Plat information contained in this AsBuilt Plan may not be the final records.

BEGIN RELOCATION ORDER

STA. 13+00

836.43' SOUTH AND 1479.83' WEST OF THE EAST CORNER OF SECTION 33, T.13N., R.3W., TOWN OF WEBSTER, VERNON COUNTY, WI
Y = 149,664.31
X = 742,482.22



END RELOCATION ORDER

STA. 15+00

864.79' SOUTH AND 1281.85' WEST OF THE EAST CORNER OF SECTION 33, T.13N., R.3W., TOWN OF WEBSTER, VERNON COUNTY, WI
Y = 149,635.95
X = 742,680.20

N

LAYOUT

SCALE 0 — 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.038 MI.

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
5295-00-00		
FEDERAL PROJECT NUMBER	4.01	2

PLAT OF RIGHT-OF-WAY REQUIRED FOR

TOWN OF WEBSTER, SOUTH ELK RUN ROAD
(ELK RUN BRIDGE B-62-0254)

TOWN ROAD — VERNON COUNTY

CONSTRUCTION PROJECT NUMBER
5295-00-70

JEWELL
associates engineers, inc.
Engineers - Architects - Surveyors

560 SUNRISE DRIVE
SPRING GREEN, WI 53588
PHONE : 608.588.7484
FAX : 608.588.9322

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

WISCONSIN
SCOTT D. WARNER
S-2524
RICHLAND CENTER, WI
05-09-2018
LAND SURVEYOR

REVISION DATE

APPROVED FOR TOWN OF WEBSTER
DATE: 3/20/18 (NAME/TITLE) Chairman

E

FILE NAME : S:\Projects\K51050 S Elk Run Rd, Vernon Co\RW\RW Title.dwg
PLOT DATE : 12/6/2017 8:42 AM
PLOT BY : Strine, Theresa
PLOT NAME :
PLOT SCALE : 1:1
WISDOT/CADDS SHEET 50

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES REQ.
1	BERNARD J. KOTTEN (VENDOR) AND RUSSELL I. LANCASTER, JR. AND PEGGY LANCASTER, HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY (VENDEE)	FEE	0.08	0.15	0.23	–
2	SHERRIE ALBERTS	FEE, TLE	–	0.15	0.15	0.02
201	VERNON ELECTRIC COOPERATIVE	RELEASE OF RIGHTS				
202	VERNON COMMUNICATIONS COOPERATIVE	RELEASE OF RIGHTS				

NOTE: EXISTING C/L OF SOUTH ELK RUN ROAD WAS BASED ON CENTERLINE OF EXISTING PAVEMENT.

BASIS OF EXISTING RIGHT-OF-WAY FOR SOUTH ELK RUN ROAD WAS BASED ON COUNTY RECORDS, THE CENTERLINE OF EXISTING PAVEMENT, AND WIS. STATUTE 82.31(2).

NOTE: AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM THE TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED. 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 WEBSTER.

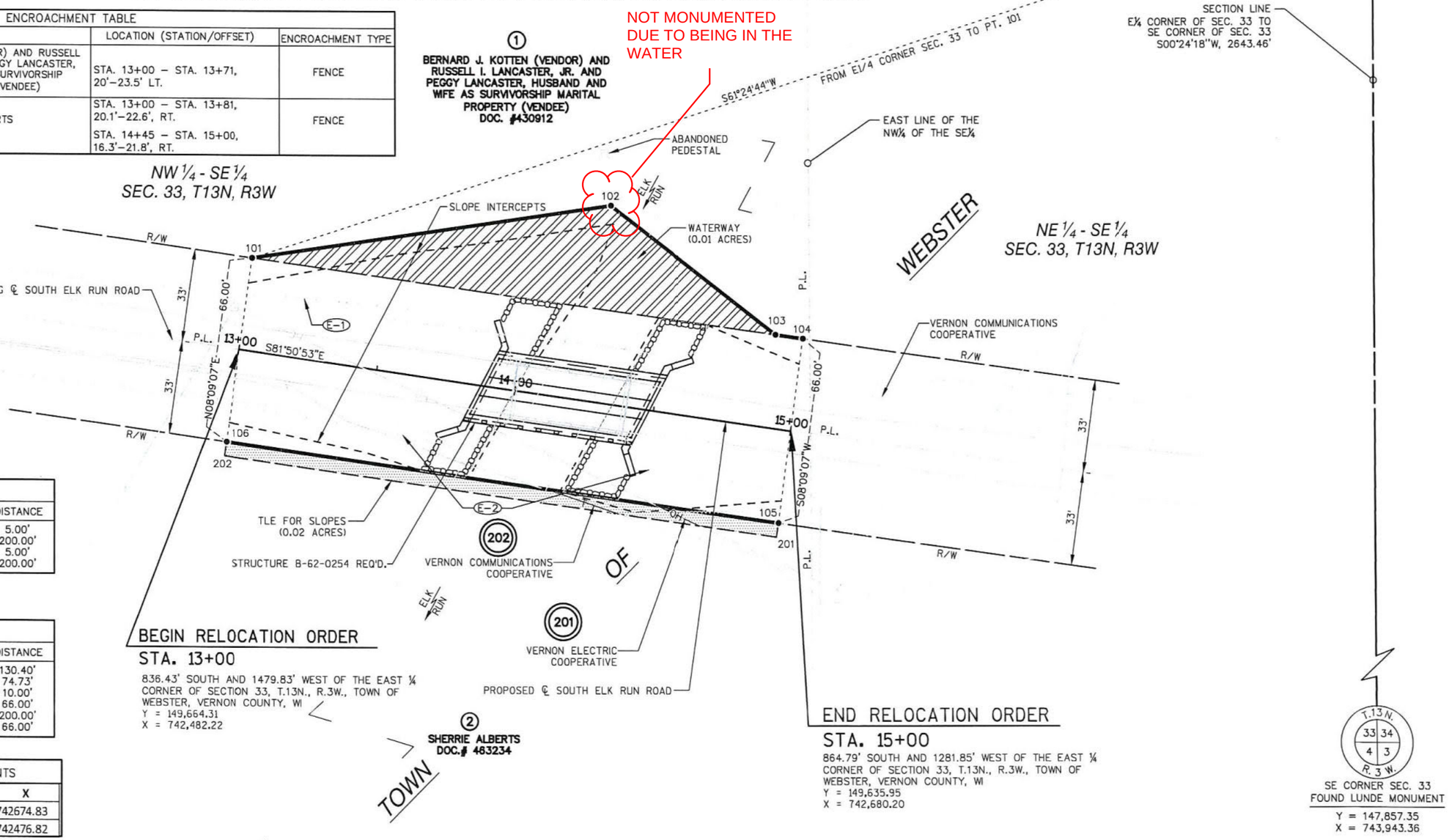
COORDINATE TABLE – NEW R/W POINTS				
Point #	Station	Offset	Y	X
101	13+00.00	32.88 LT.	149696.86	742486.88
102	14+25.00	70.00 LT.	149715.88	742615.89
103	14+90.00	33.12 LT.	149670.16	742675.00
104	15+00.00	33.13 LT.	149668.75	742684.90
105	15+00.00	32.87 RT.	149603.42	742675.54
106	13+00.00	33.12 RT.	149631.53	742477.53

ENCROACHMENT TABLE			
ENCROACHMENT	PROPERTY OWNER	LOCATION (STATION/OFFSET)	ENCROACHMENT TYPE
E-1	BERNARD J. KOTTEN (VENDOR) AND RUSSELL I. LANCASTER, JR. AND PEGGY LANCASTER, HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY (VENDEE)	STA. 13+00 – STA. 13+71, 20'–23.5' LT.	FENCE
E-2	SHERRIE ALBERTS	STA. 13+00 – STA. 13+81, 20.1'–22.6', RT. STA. 14+45 – STA. 15+00, 16.3'–21.8', RT.	FENCE

TLE LINE TABLE		
POINT TO POINT	BEARING	DISTANCE
105 TO 201	S08°09'07"W	5.00'
201 TO 202	N81°55'15"W	200.00'
202 TO 106	N08°09'07"E	5.00'
106 TO 105	S81°55'15"E	200.00'

RIGHT OF WAY LINE TABLE		
POINT TO POINT	BEARING	DISTANCE
101 TO 102	N81°36'45"E	130.40'
102 TO 103	S52°16'43"E	74.73'
103 TO 104	S81°55'15"E	10.00'
104 TO 105	S08°09'07"W	66.00'
105 TO 106	N81°55'15"W	200.00'
106 TO 101	N08°09'07"E	66.00'

COORDINATE TABLE – T.L.E. POINTS				
Point #	Station	Offset	Y	X
201	15+00.00	37.87 RT.	149598.47	742674.83
202	13+00.00	38.12 RT.	149626.58	742476.82



REVISION DATE	DATE 3/20/18	SCALE, FEET 0 20 40	HWY: SOUTH ELK RUN ROAD	R/W PROJECT NUMBER: 5295-00-00	PLAT SHEET 4.02	
	GRID FACTOR		COUNTY: VERNON	CONSTRUCTION PROJECT NUMBER: 5295-00-70	PS&E SHEET 10	E

RIPRAP MEDIUM LOCATION

OVERHEAD LINE RELOCATED

LEGEND

- RIPRAP EXTRA HEAVY OVER GRANULAR FILTER LAYER NO. 1 AGGREGATE WITH CHINKING REQ'D. (CATEGORY 020)
- RIPRAP MEDIUM OVER GEOTEXTILE FABRIC TYPE R (CATEGORY 010)
- DIRECTION OF FLOW
- XXXXXXXXX SAWING ASPHALT
- SILT FENCE
- EDGE OF WATER
- WETLANDS
- TURBIDITY BARRIER

BERNARD J. KOTTEN (VENDOR) AND RUSSELL I. LANCASTER, JR. AND PEGGY LANCASTER, HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY (VENDEE)

KEVIN C. HOWARD

SHERRIE ALBERTS

SUGAR MOUNTAIN FARM LLC

BEGIN PROJECT
STA. 13+00
Y=149,664.31
X=742,482.22

END PROJECT
STA. 15+00
Y= 149,635.95
X= 742,680.20

STA. 13+00 - STA. 13+71, LT.
REMOVING FENCE BY OTHERS

STA. 13+00 - STA. 15+00
CLEARING & GRUBBING REQ'D.

STA. 13+00 - STA. 13+81, RT.
STA. 14+45 - STA. 15+00, RT.
REMOVING FENCE BY OTHERS

REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS
STA. 14+20 (P-62-252)
SINGLE-SPAN STEEL DECK GIRDER STRUCTURE
18.0' CLEAR ROADWAY WIDTH
40.1' OVERALL LENGTH

STRUCTURE B-62-254 REQ'D.

TLE REQ'D

VERNON ELECTRIC COOPERATIVE

VERNON COMMUNICATIONS COOPERATIVE

EXISTING F.E. TO REMAIN

EXISTING P.E TO REMAIN

EXISTING C/L SOUTH ELK RUN ROAD

SOUTH ELK RUN ROAD

BM 2 — BM 3 — BM 4

WETLAND DETERMINATION (TYP.)

STA. 13+00 23.9', LT.
STA. 13+00 12.9', LT.
STA. 13+50 41.2', LT.
STA. 13+51 30.7', LT.
STA. 13+59 8.7', LT.
STA. 14+22 43.9', LT.
STA. 14+27 63.8', LT.
STA. 14+94 7.9', LT.
STA. 13+50 8.7', RT.
STA. 14+85 7.9', RT.

SLOPE INTERCEPTS
FINISHED C/L SOUTH ELK RUN ROAD

13+00 — 14+00 — 15+00 — S81°50'53"E

(ASPHALT)

R/W — 33' — 10:1 — OH — FO — T — P.L. — ELK RUN

L=90.00'
K=31.47
PI STA 14+16.00
EL 832.22

FINISHED ℄ PROFILE SOUTH ELK RUN ROAD

2.90% — 0.04%

STA. 13+00
EL. 828.86
MATCH EXISTING

STA. 15+00
EL. 832.25
MATCH EXISTING

EXISTING C/L PROFILE SOUTH ELK RUN ROAD

PC STA 13+71.00
EL 830.92

PT STA 14+61.00
EL 832.24

HIGH WATER100
EL = 824.09

HIGH WATER2
EL = 821.05

OBSERVED WATER
EL = 820.12
(12-16-2016)

EXISTING C/L ELEVATION

FINISHED C/L ELEVATION

828.62	828.40	828.17	828.14	828.10	828.28	828.86	828.86	829.44	829.44	830.19	830.02	830.94	830.60	831.46	831.16	831.70	831.62	831.63	831.95	831.74	832.16	832.07	832.24	832.24	832.24	832.25	832.25	832.25	832.57	832.87	833.36	834.23	835.11	836.54	838.02
11+80	12+00	12+20	12+40	12+60	12+80	13+00	13+20	13+40	13+60	13+80	14+00	14+20	14+40	14+60	14+80	15+00	15+20	15+40	15+60	15+80	16+00	16+20	16+40	16+60	16+80	17+00	17+20	17+40	17+60						

EARTHWORK SUMMARY

EXCAVATION COMMON	=	150 C.Y.
FILL	=	216 C.Y.
FILL EXPANSION (25%)	=	270 C.Y.
BORROW	=	120 C.Y.

STA. 14+18.12
STRUCTURE B-62-254 REQ'D.
SINGLE-SPAN 36-INCH PRESTRESSED CONCRETE GIRDER
CLEAR ROADWAY WIDTH = 24.0'
O.A.L. = 60.67'
SKEW = 20° L.H.F.
STREAMBED EL. = 816.12

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
1	11+61	3/4" X 24" IRON REBAR SET, 19.4' LT	827.93
~~2~~	~~14+54~~	~~3/4" X 24" IRON REBAR SET, 12.2' LT~~	~~831.34~~
3	16+76	3/4" X 24" IRON REBAR SET, 10.0' RT	838.34
~~4~~	~~12+96~~	~~STAR SPIKE IN PPOL, 14.4' LT~~	~~831.10~~

PROJECT NO: 5295-00-70	HWY: SOUTH ELK RUN ROAD	COUNTY: VERNON	PLAN AND PROFILE: MAINLINE	SHEET 11	E

FILE NAME : S:\PROJECTS\K51050 S ELK RUN RD, VERNON CO\SHEETSPLAN\PLAN & PROFILE SHEETS\050101-PP.DWG
LAYOUT NAME - 050101-PP - LAYOUT1

PLOT DATE : 6/18/2018 8:11 AM PLOT BY : STRINE, THERESA PLOT NAME : PLOT SCALE : 1 IN:40 FT

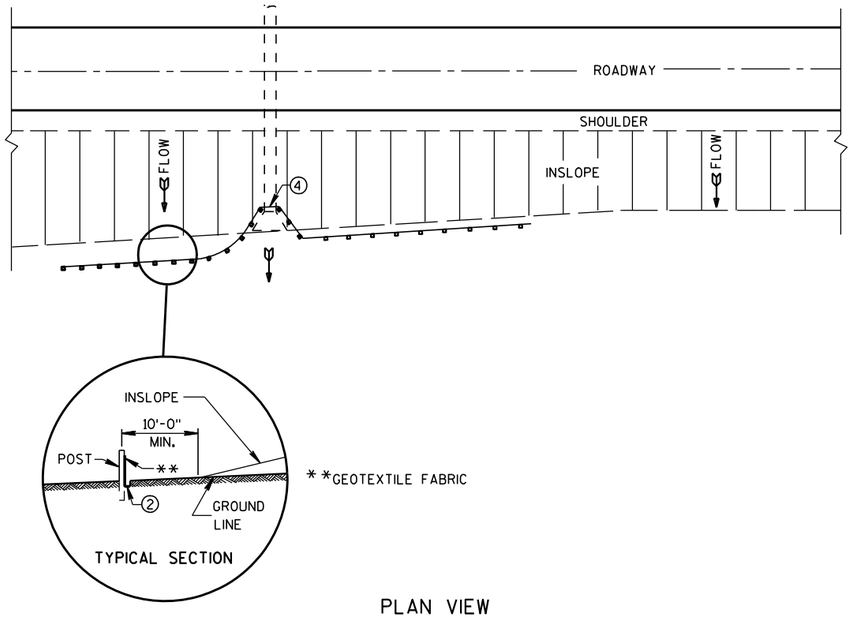
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

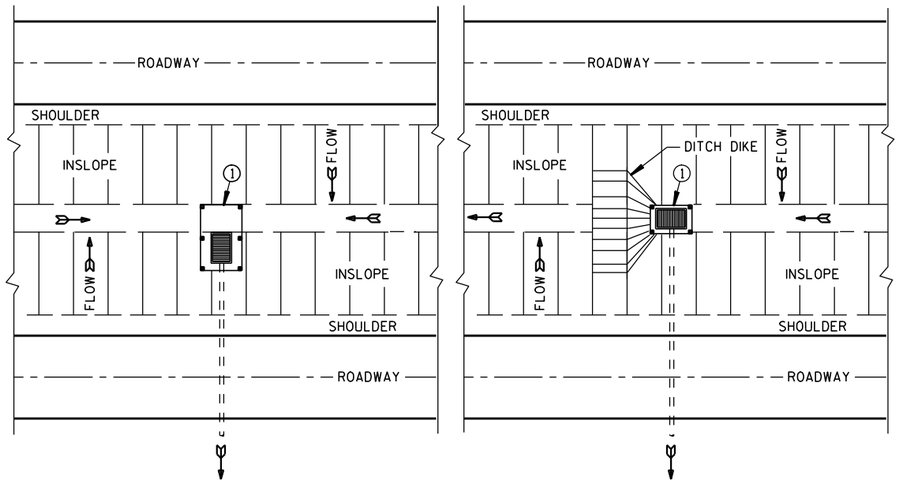
6

6



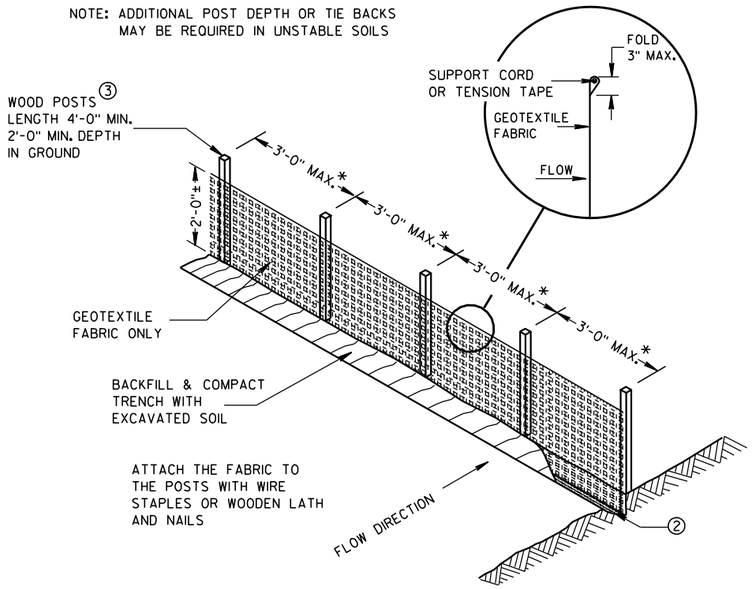
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



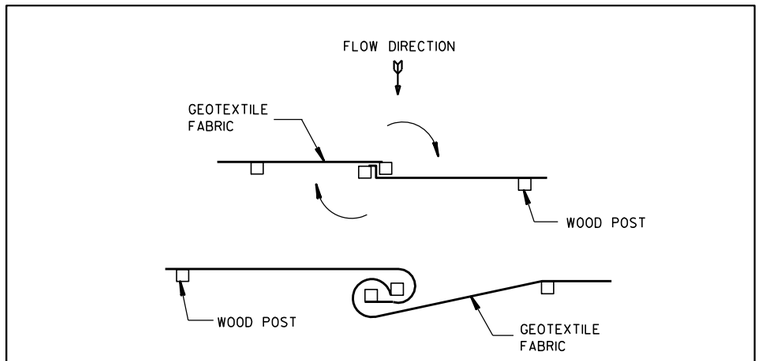
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

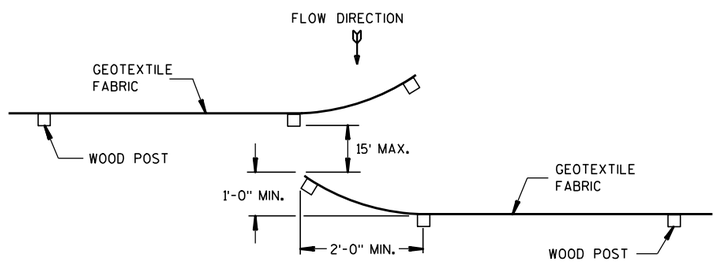


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE



TWIST METHOD



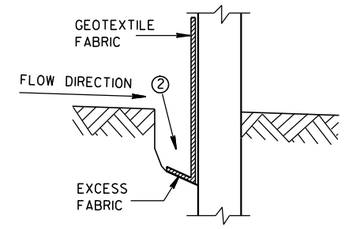
HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5

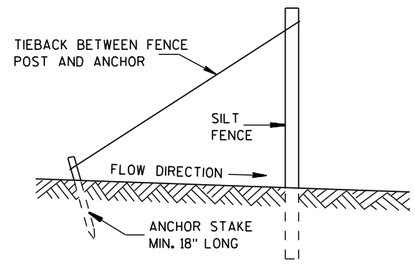
GENERAL NOTES

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

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



TRENCH DETAIL



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

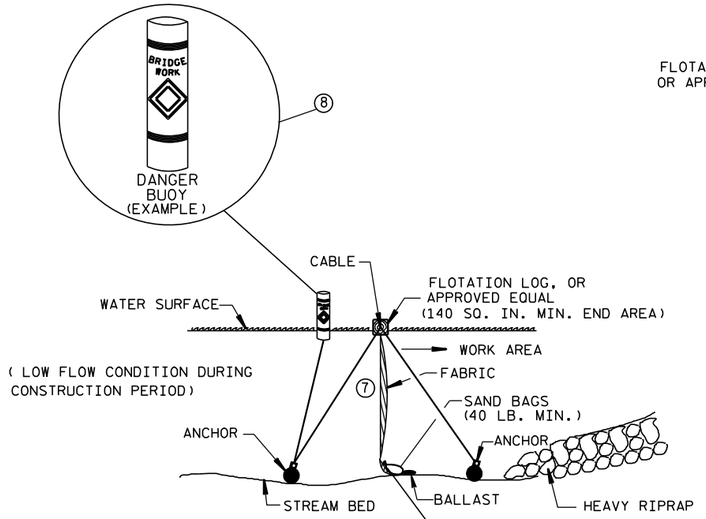
SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

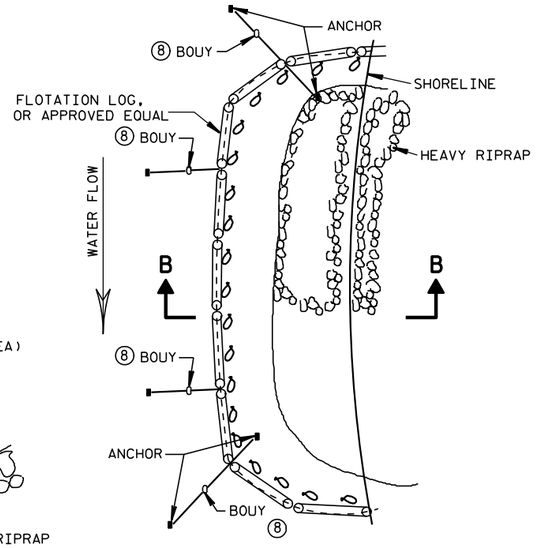
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

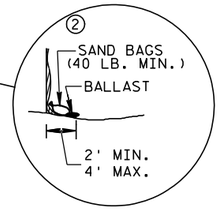
S.D.D. 8 E 9-6

S.D.D. 8 E 9-6

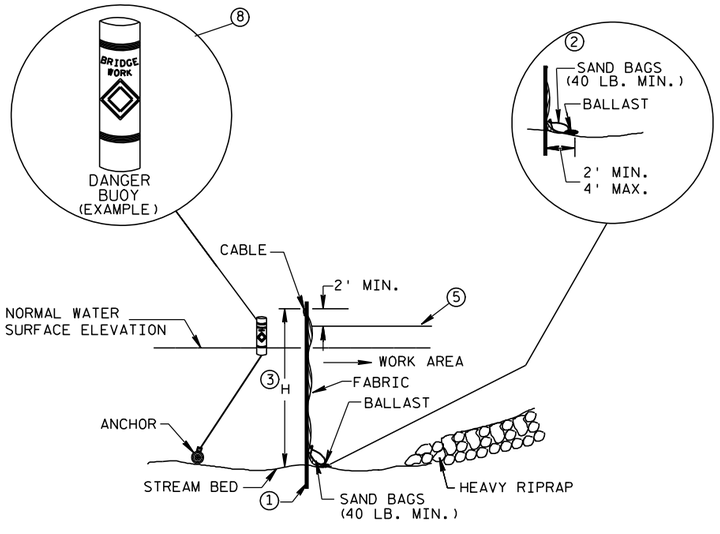


SECTION B-B

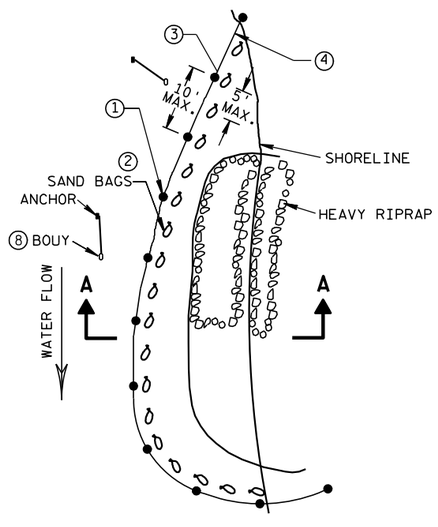




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

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

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

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

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

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

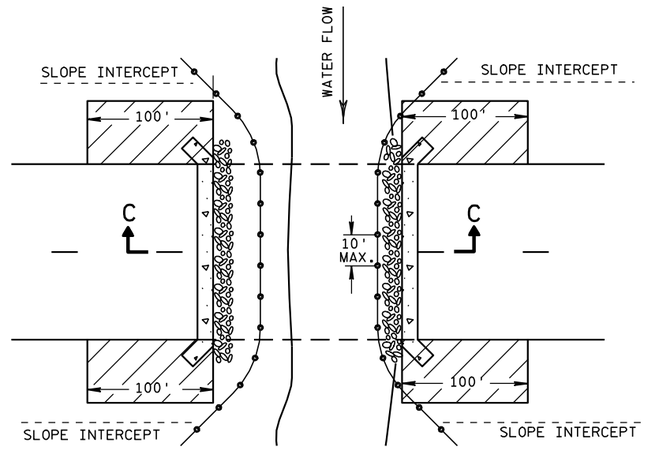
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

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

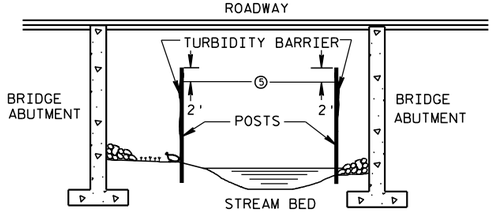
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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

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



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

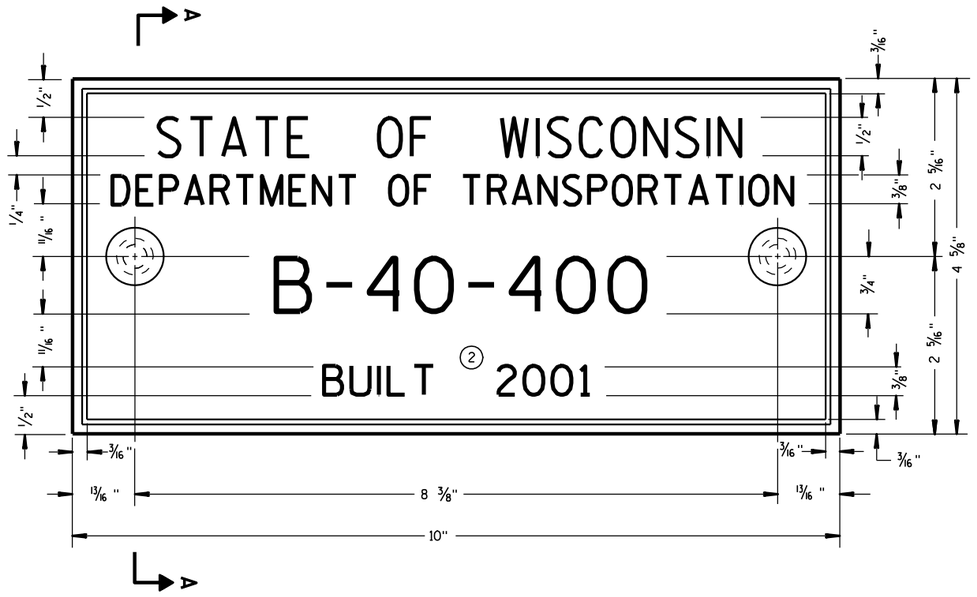
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 11-2

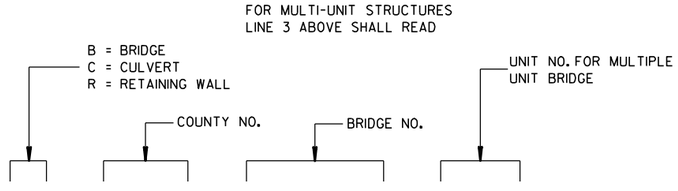
6

S.D.D. 8 E 11-2



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

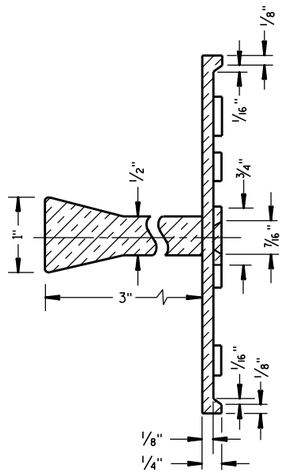
GENERAL NOTES

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

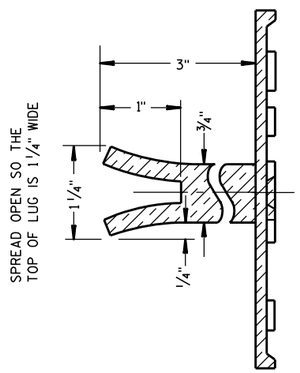
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

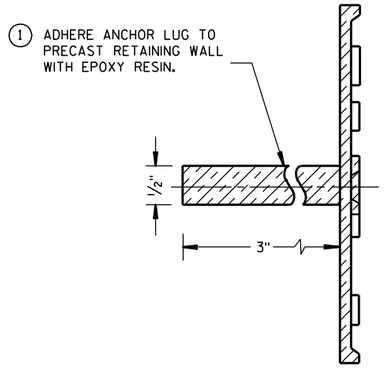
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

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

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S.D.D. 12 A 3-10

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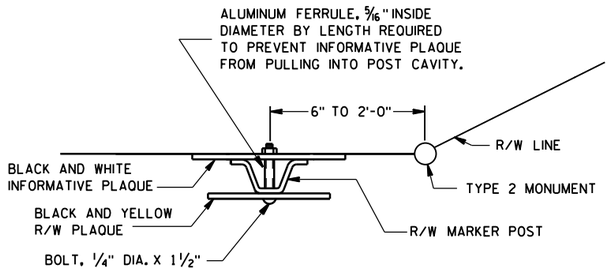
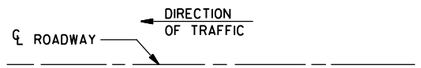
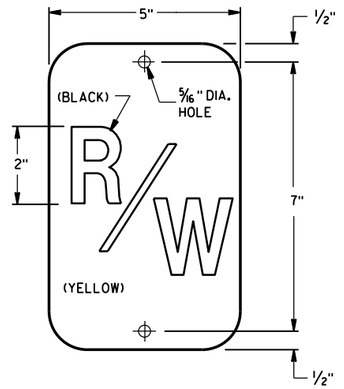
S.D.D. 12 A 3-10



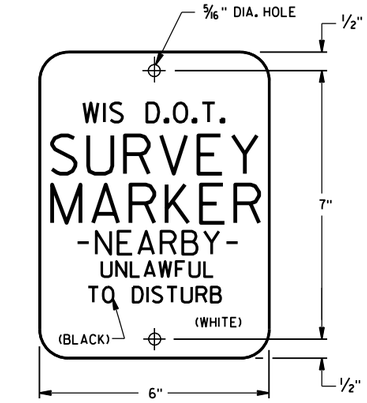


PLAN VIEW



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.

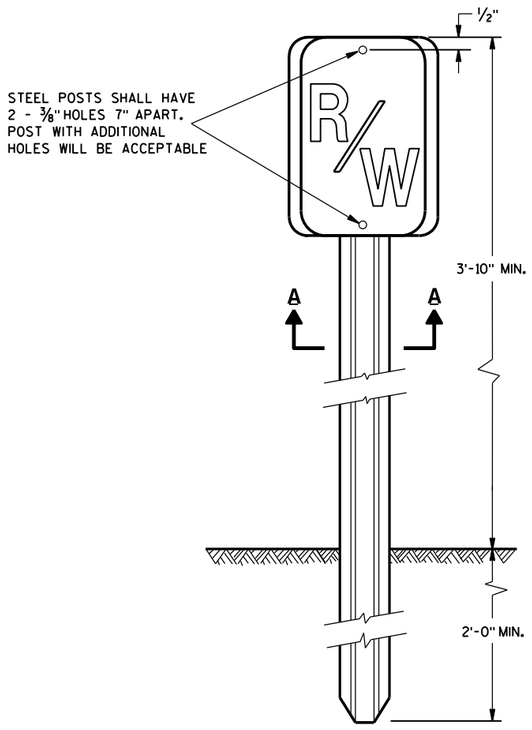
A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

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

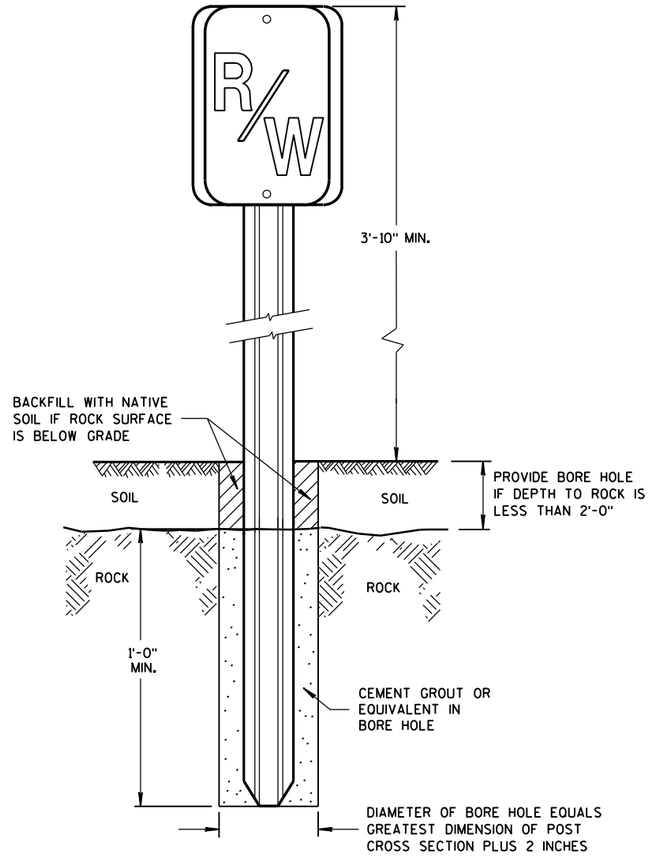
STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK TO 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.

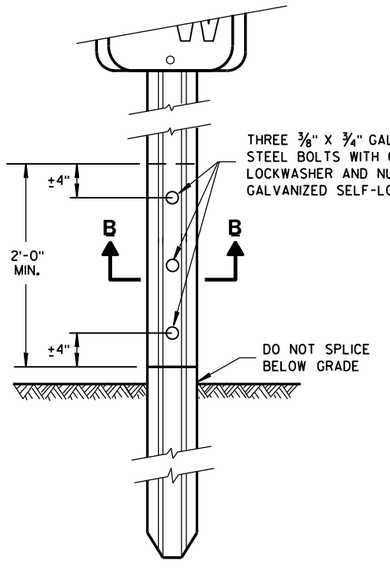
FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT. DEPENDING ON THE STABILITY OF THE ROCK.



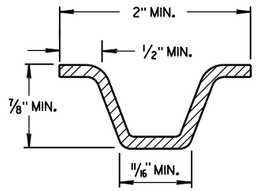
FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)

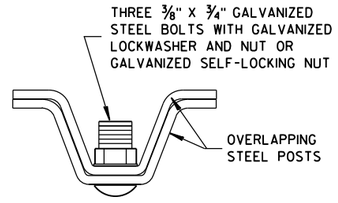


FRONT VIEW
SPLICE DETAIL



MIN. WEIGHT 1.12 LB./FT.

SECTION A-A



SECTION B-B

MARKER POST FOR RIGHT-OF-WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

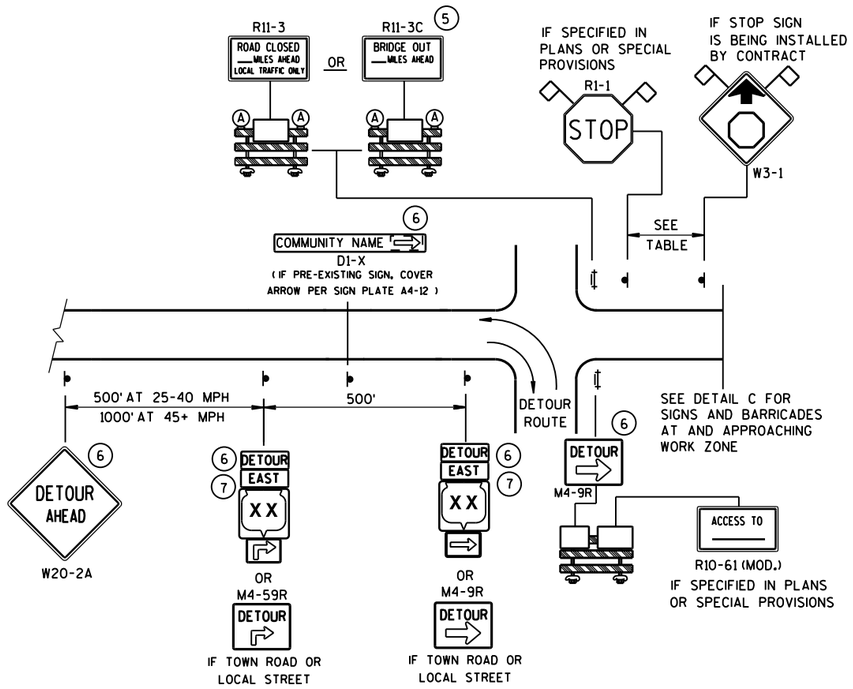
APPROVED
2/18/2016 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MA[illegible]INEER
FHWA

6

S.D.D. 15 A 1-13a

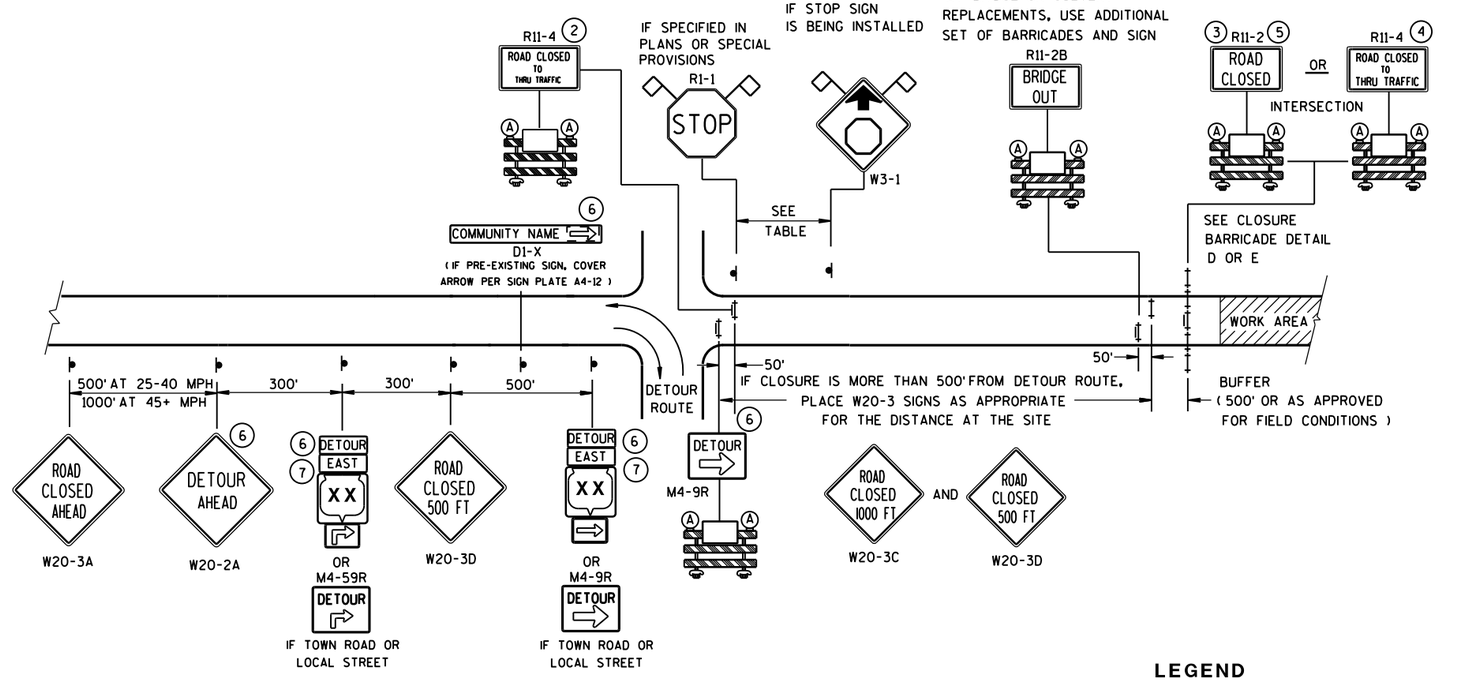
6

S.D.D. 15 A 1-13a



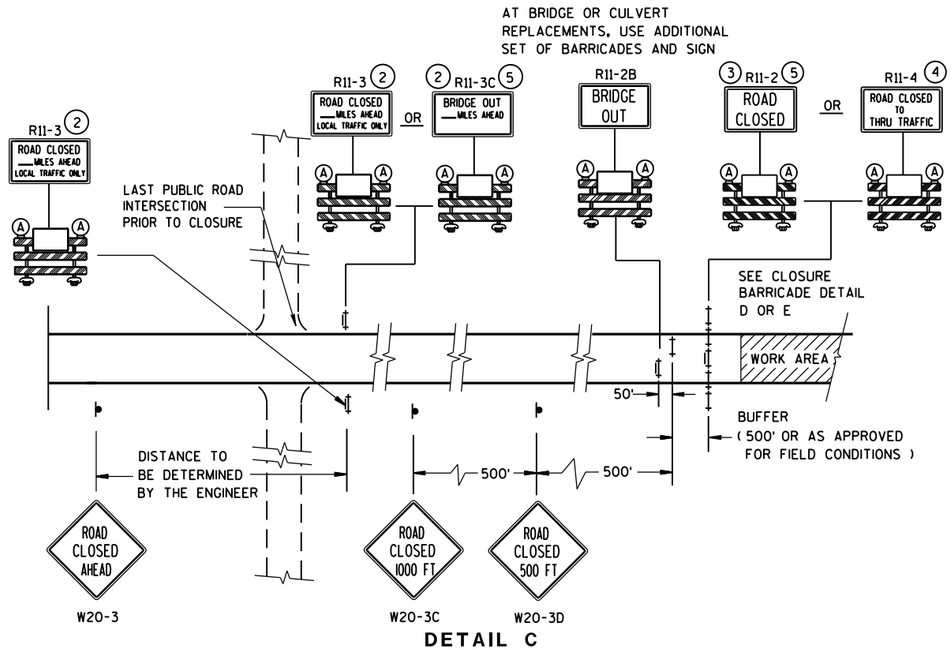
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

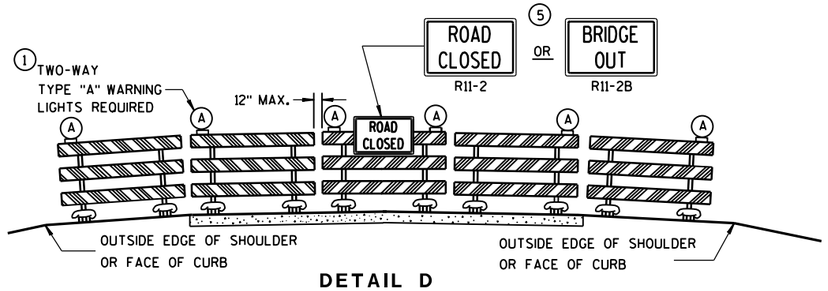
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

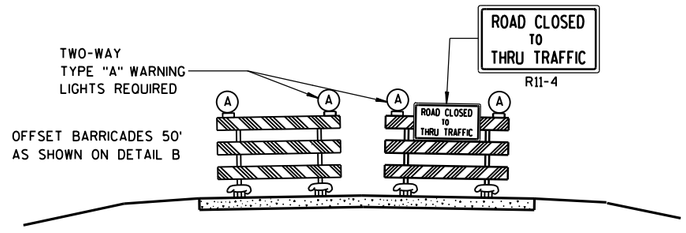
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

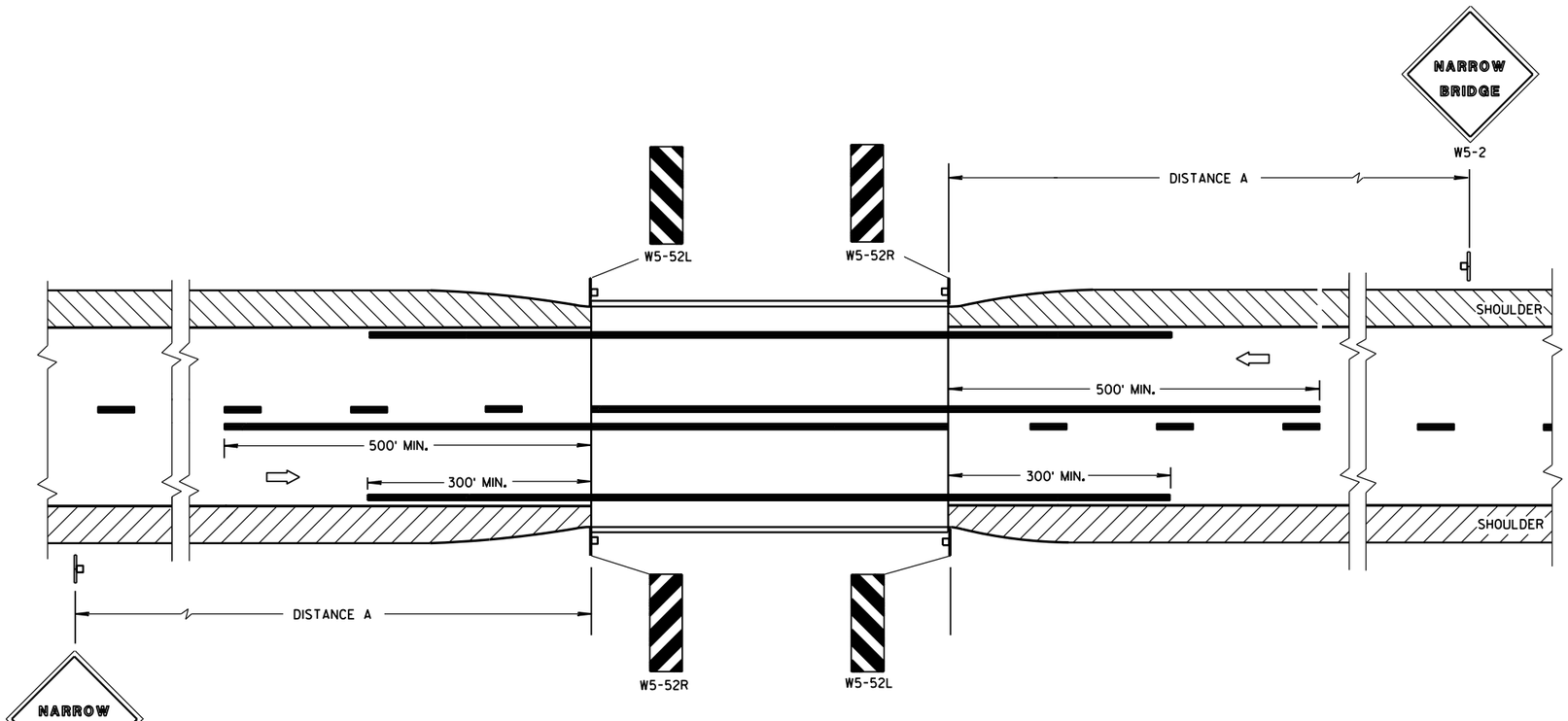
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FHWA — FIC

6

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



SITUATION 1

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

DISTANCE TABLE

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

GENERAL NOTES

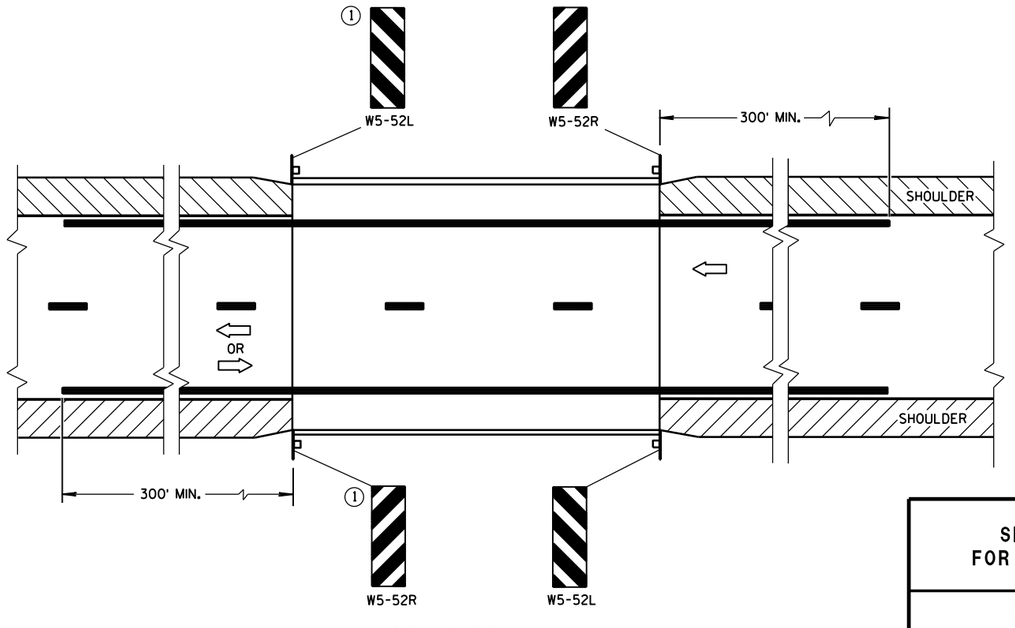
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

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

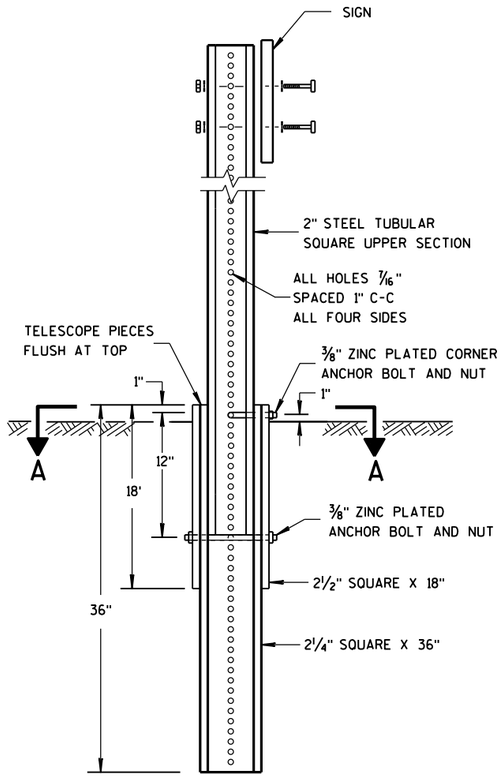
SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

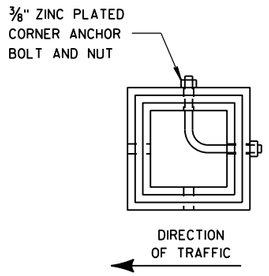
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]EER
FHWA

6

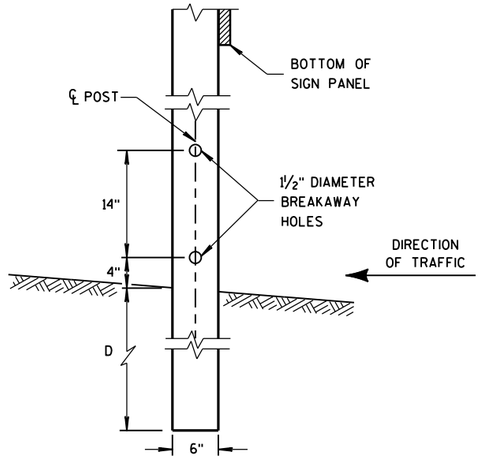
S.D.D. 15 C 6-9



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



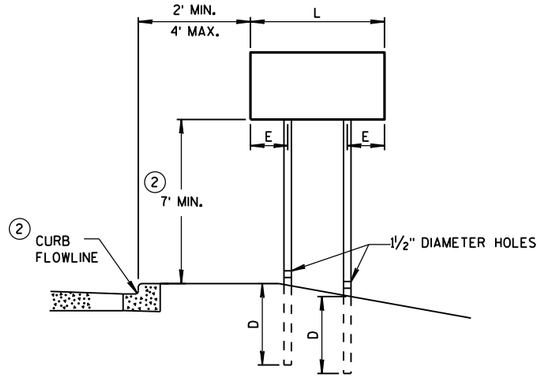
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

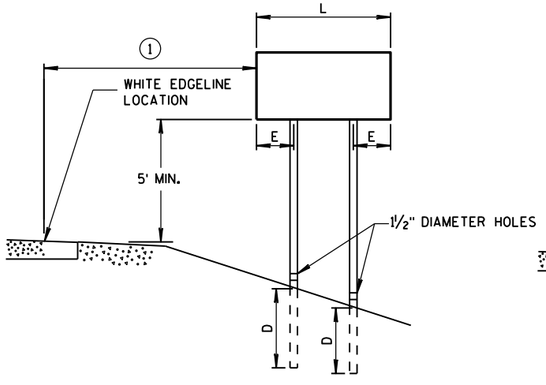
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

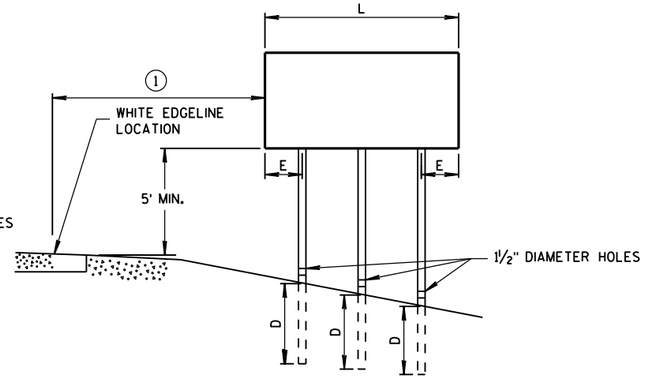
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

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

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

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

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

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

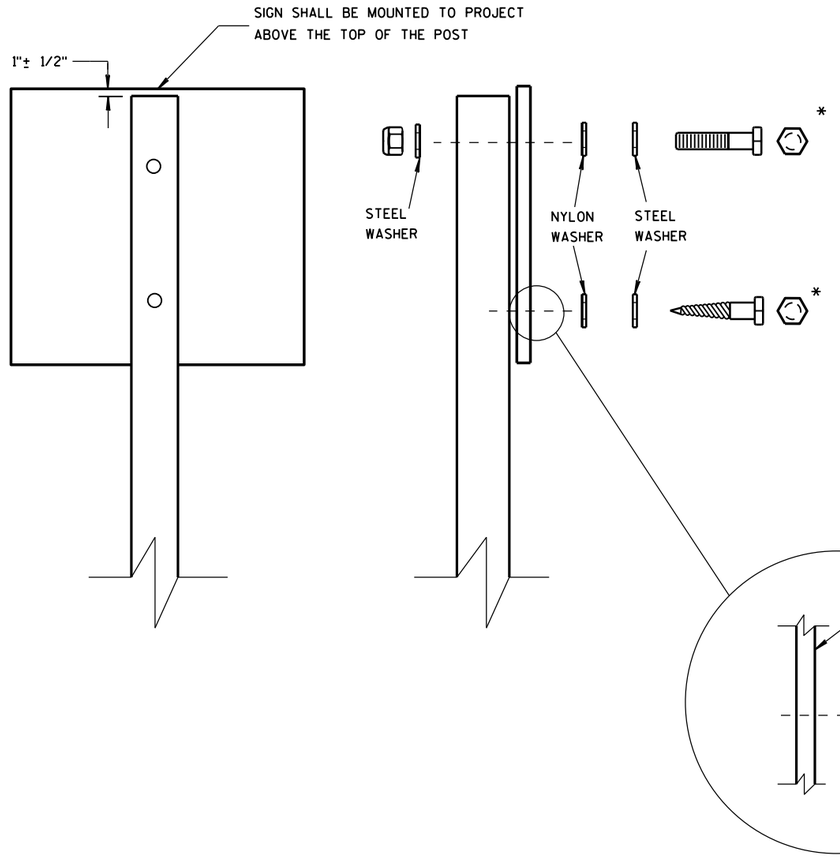
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

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

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

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

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

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

WASHERS (ALL POSTS) -

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

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

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

6

6

S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

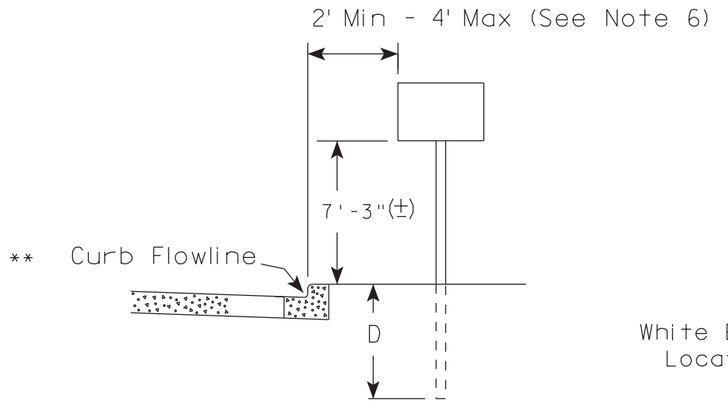
APPROVED

June 2017
DATE

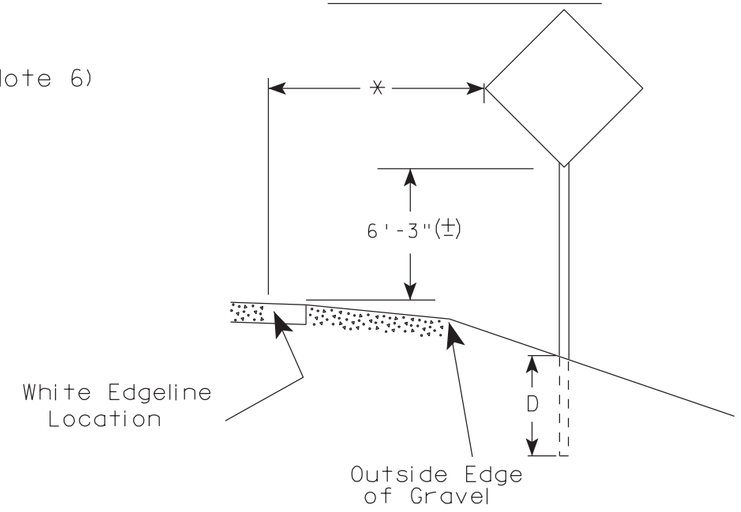
/S/ Andrew Heldtke
WORK ZONE ENG

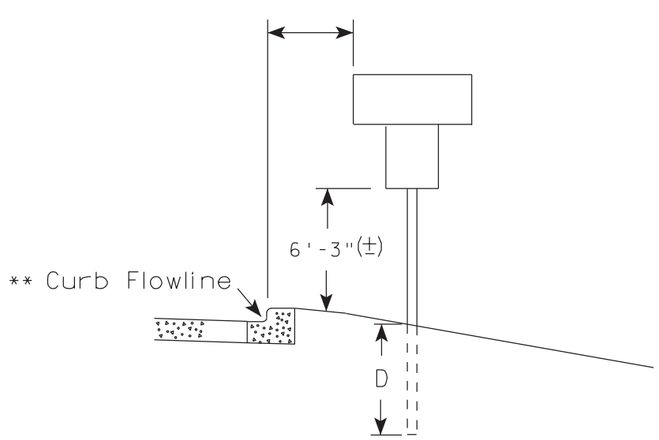
FHWA

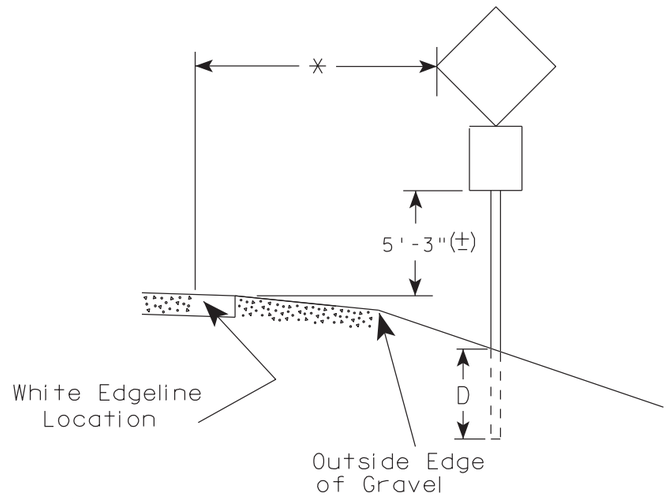
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

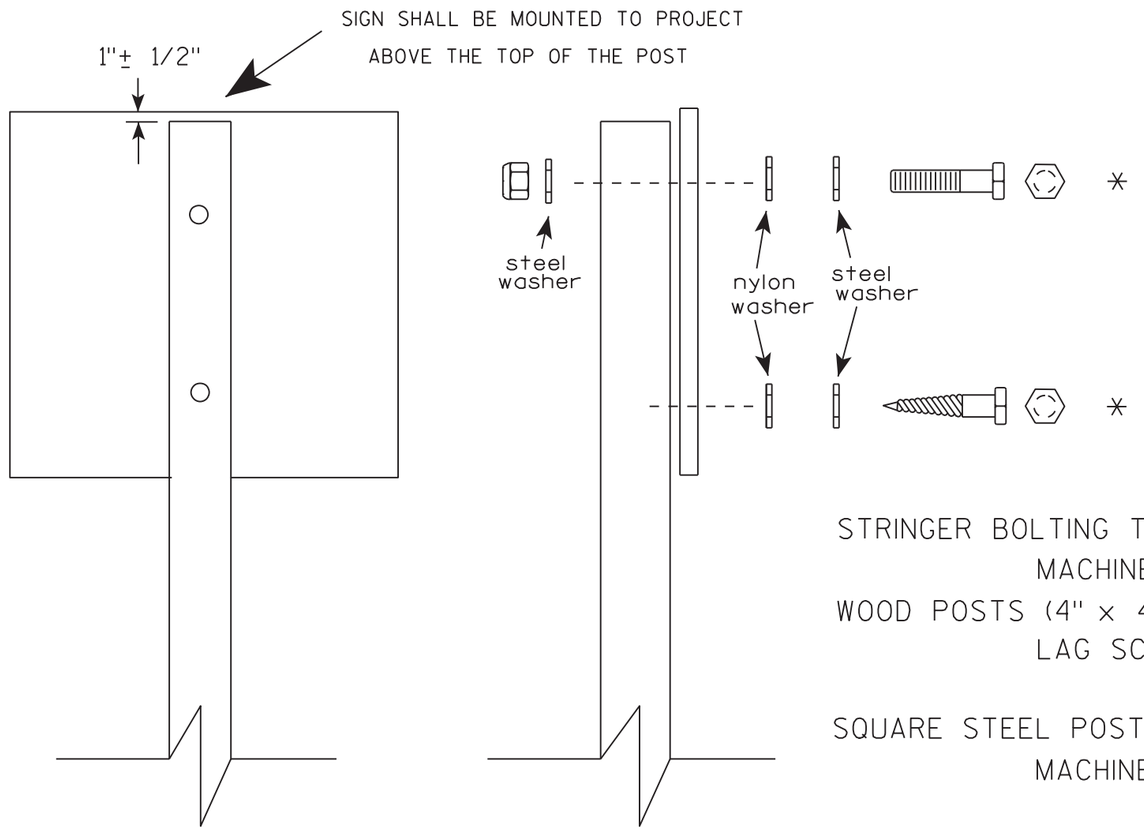
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

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

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

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

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

WOOD POSTS (4" x 4" or 4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

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

WASHERS (ALL POSTS) -

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

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

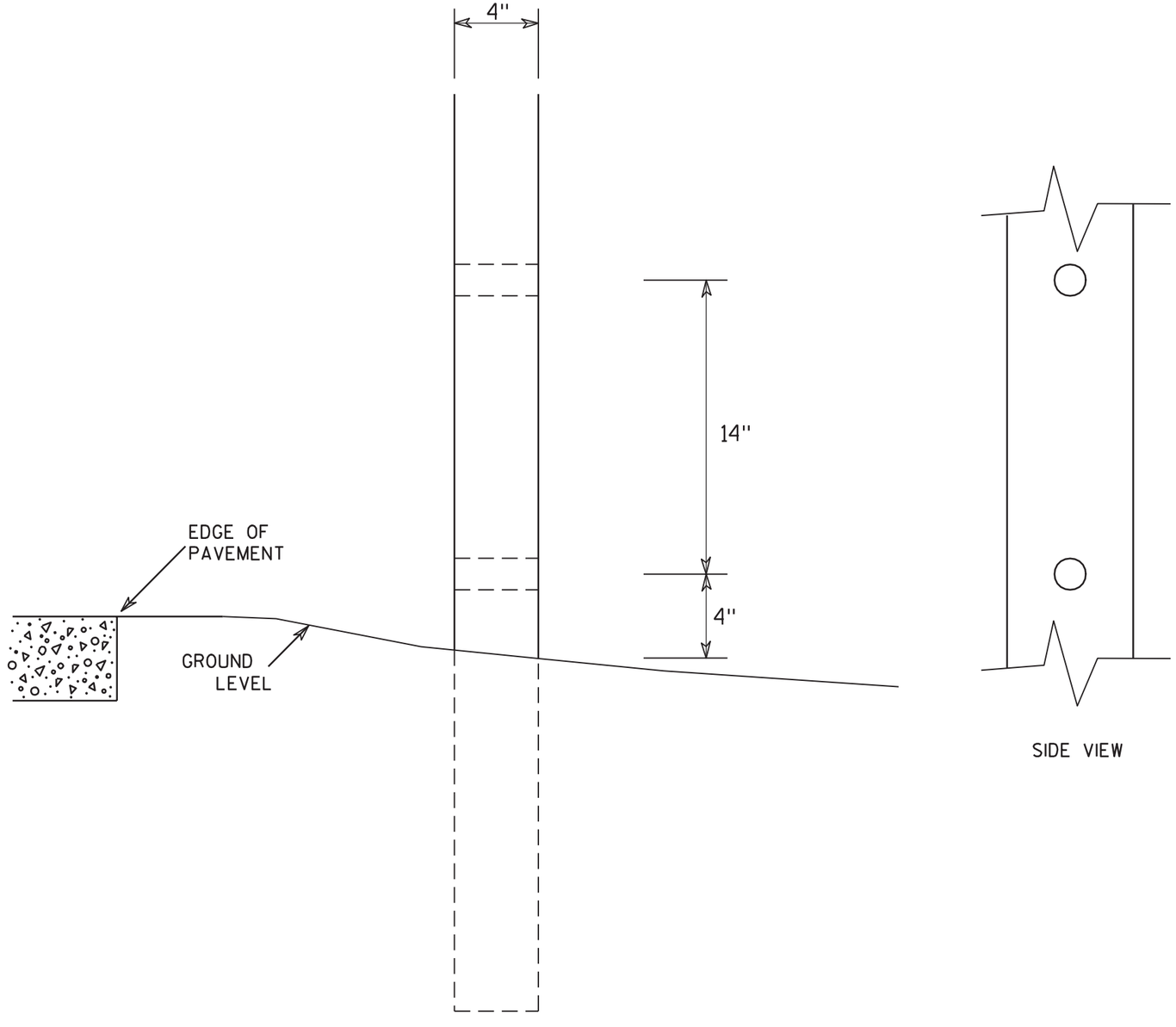
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E



SIDE VIEW

GENERAL NOTES

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

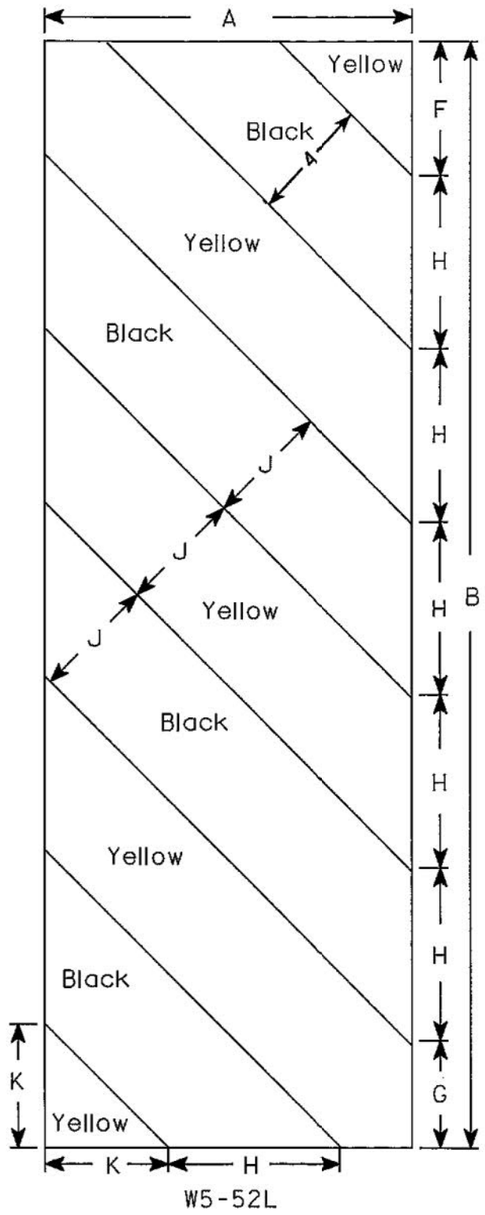
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

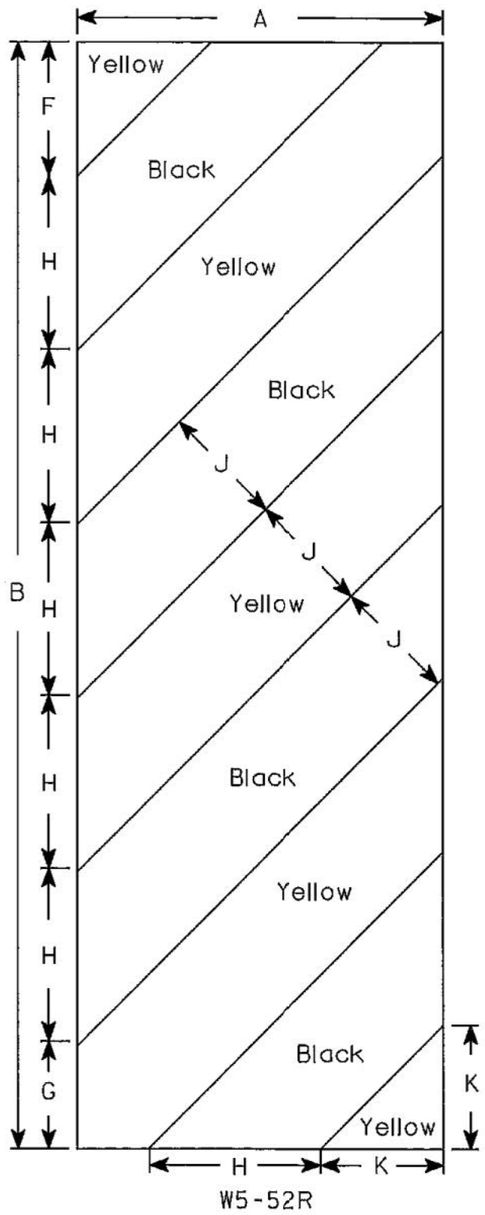
APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 24	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

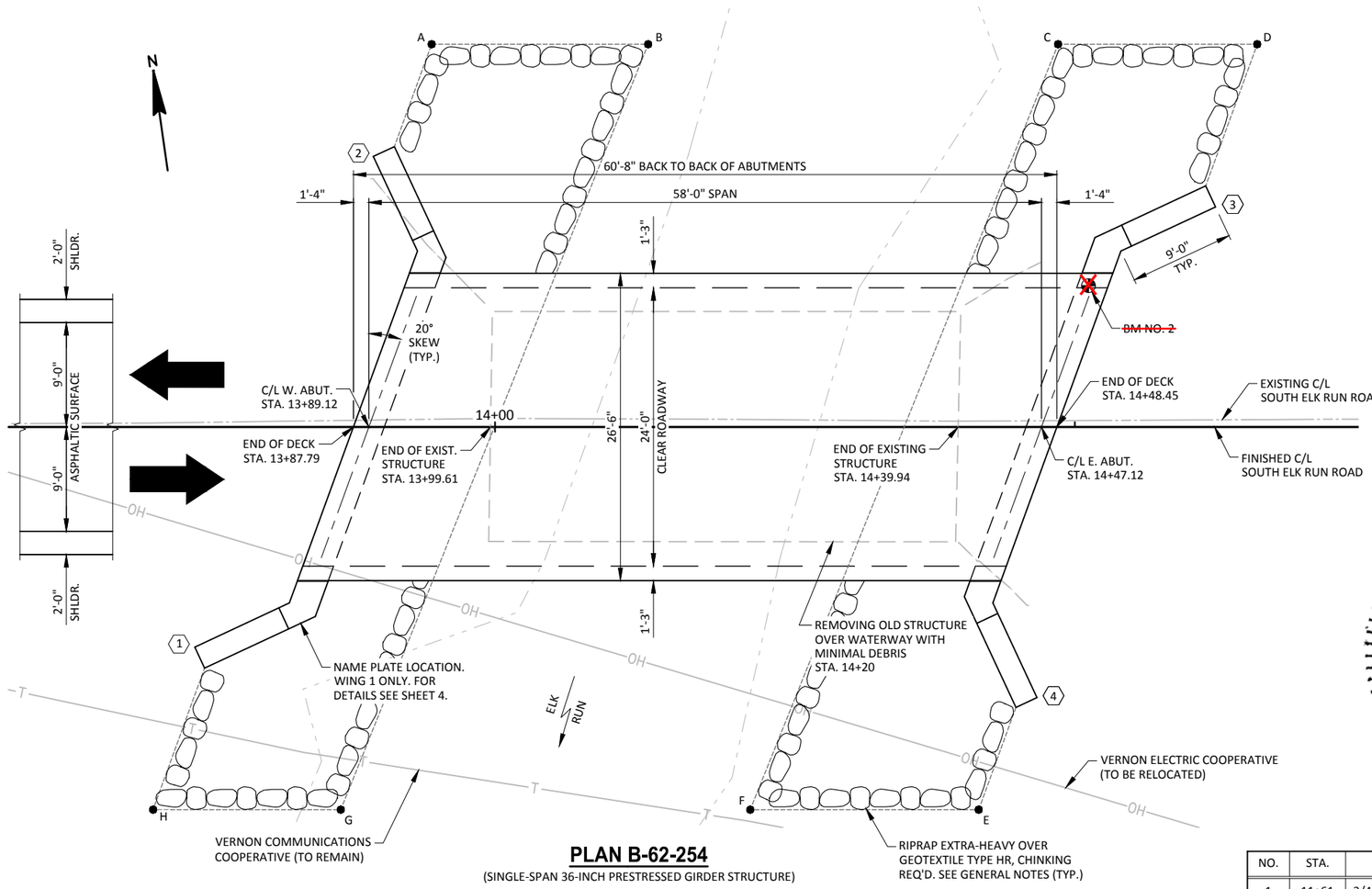
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

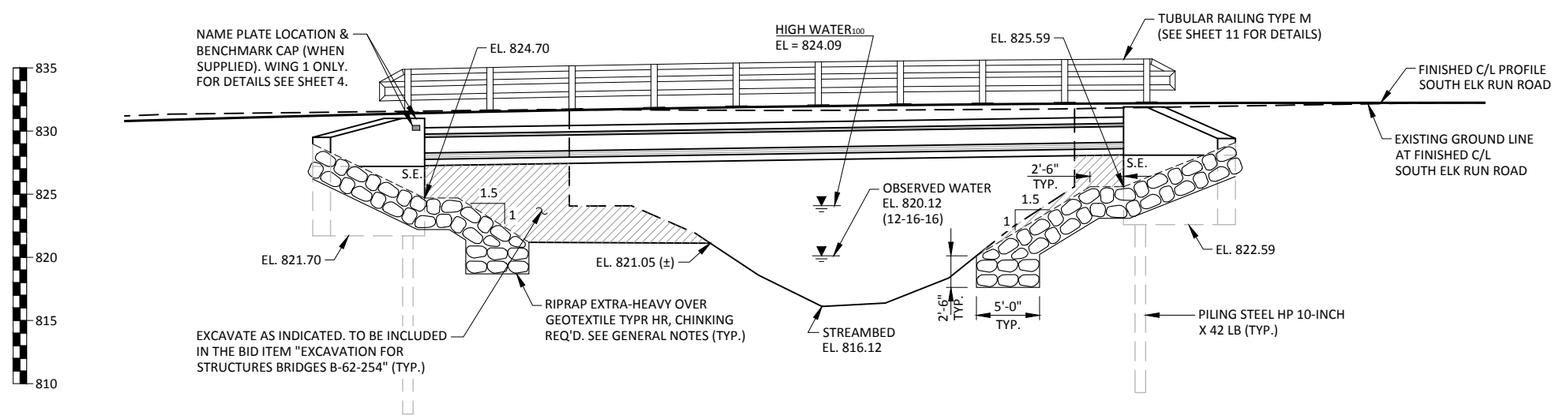
STATE PROJECT NUMBER

5295-00-70



PLAN B-62-254

(SINGLE-SPAN 36-INCH PRESTRESSED GIRDER STRUCTURE)



ELEVATION

(NORMAL TO ELK RUN)

⬡ INDICATES WING NUMBER

RIPRAP EXTRA HEAVY LAYOUT

POINT	STATION	OFFSET
A	13+95	33' LT.
B	14+13	33' LT.
C	14+49	33' LT.
D	14+66	33' LT.
E	14+42	33' RT.
F	14+22	33' RT.
G	13+87	33' RT.
H	13+71	33' RT.

Protective surface treatment used= The Euclid Company Baracade Silane 40

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
1	11+61	3/4" IRON REBAR SET, 19.4' LT	827.93
~~2~~	~~14+54~~	~~3/4" IRON REBAR SET, 12.2' LT~~	~~831.34~~
3	16+76	3/4" IRON REBAR SET, 10.0' RT	838.34
~~4~~	~~12+96~~	~~STAR SPIKE IN PPOL, 14.4' LT~~	~~831.10~~

DESIGN DATA

LIVE LOAD:

DESIGN LOADING — HL-93
INVENTORY RATING FACTOR — RF=1.19
OPERATING RATING FACTOR — RF=1.63
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.
36-INCH PRESTRESSED GIRDER CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS 0.6 INCH DIA. ULTIMATE TENSILE STRENGTH — fy = 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 130 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 15 FT PILE LENGTHS AT BOTH ABUTMENTS.

**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. (2019) — 58
A.D.T. (2039) — 70
DESIGN SPEED — 30 M.P.H.

HYDRAULIC DATA

100 YEAR FREQUENCY
DRAINAGE AREA — 2.9 SQ. MI.
Q_{100} TOTAL — 860 C.F.S.
THROUGH STRUCTURE — 860 C.F.S.
OVERTOPPING ROADWAY — N/A
VELOCITY - THROUGH STRUCTURE — 4.9 F.P.S.
WATERWAY AREA - THROUGH STRUCTURE — 177 SQ. FT.
HIGH $WATER_{100}$ ELEVATION — 824.09
SCOUR CRITICAL CODE — 5

EROSION CONTROL
Q_2 — 150 C.F.S.
HIGH $WATER_2$ ELEVATION — 821.05

LIST OF DRAWINGS

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

BRIDGE OFFICE CONTACT
WILLIAM DREHER, PE
(608) 266-8489

NO.	DATE	REVISION	BY

JEWELL associates engineers, inc.
Engineers - Architects - Surveyors

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SOR — 08/07/18
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-62-254

SOUTH ELK RUN ROAD OVER ELK RUN

COUNTY	TOWN/~~CITY/VILLAGE~~
VERNON	WEBSTER

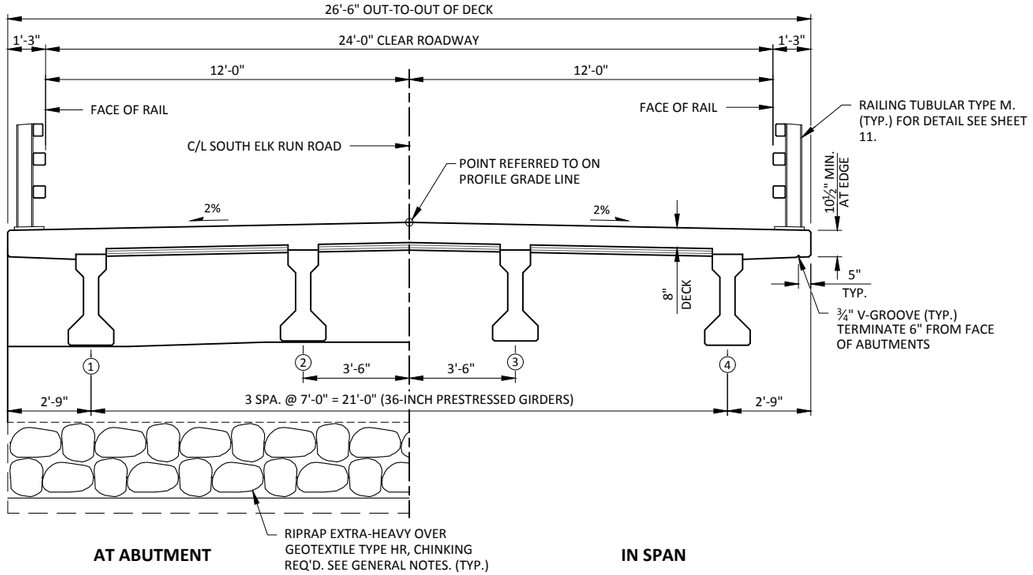
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

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

GENERAL PLAN

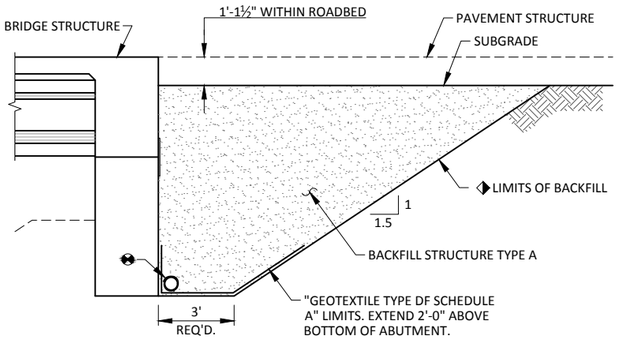
SHEET 1 OF 11
26

STATE PROJECT NUMBER
5295-00-70



PROPOSED CROSS-SECTION THROUGH ROADWAY

LOOKING EAST



BACKFILL STRUCTURE DETAIL

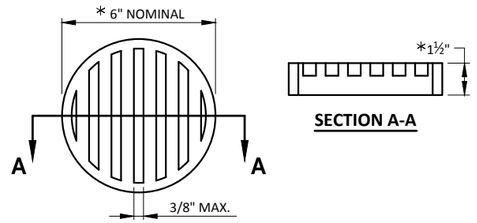
ABUTMENT BODY SHOWN - WING WALLS SIMILAR
(TYPICAL AT BOTH ABUTMENTS)

◆ BACKFILL STRUCTURE TYPE A PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO THE BID ITEM "EXCAVATION FOR STRUCTURES B-62-254". 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."

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	W. ABUT.	SUPER.	E. ABUT.	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MIN. DEBRIS STA. 14+20	LS	--	--	--	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-62-254	LS	--	--	--	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	225	--	225	450
502.0100	CONCRETE MASONRY BRIDGES	CY	31	61	31	123
502.3200	PROTECTIVE SURFACE TREATMENT	SY	--	200	--	200
503.0136	PRESTRESSED GIRDER TYPE I 36-INCH	LF	--	236	--	236
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,200	--	2,200	4,440
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,430	12,390	1,430	15,250
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	--	8	--	8
506.4000	STEEL DIAPHRAGMS B-62-254	EACH	--	3	--	3
513.4061	RAILING TUBULAR TYPE M	LF	--	126	--	126
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	--	6	12
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	105	--	105	210
606.0400	RIPRAP EXTRA-HEAVY	CY	110	--	120	230
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	75	--	75	150
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	55	--	55	110
645.0120	GEOTEXTILE TYPE HR	SY	150	--	160	310
	NON-BID ITEMS					
	FILLER	SIZE	--	--	--	½" & ¾"
	NAME PLATE					



RODENT SCREEN

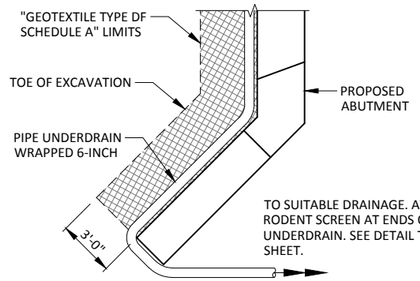
NOTES:

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

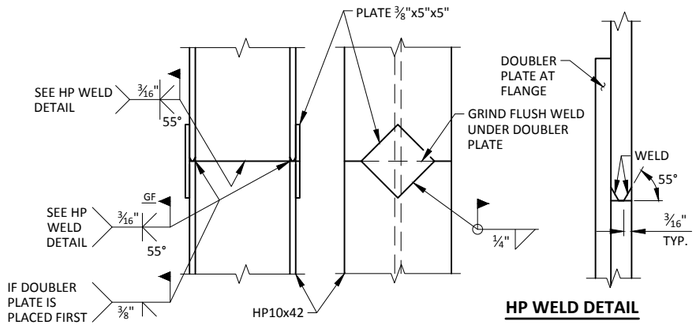
ORIENT SCREEN SO SLOTS ARE VERTICAL.

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 DETAILS

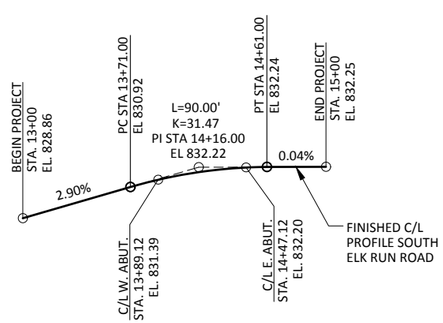


HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE SPLICE DETAIL

STEEL "HP" PILE MATERIAL SHALL BE ASTM A 572 GRADE 50.



PROFILE GRADE LINE

SOUTH ELK RUN ROAD

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

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 EXTRA-HEAVY OVER 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 RIPRAP EXTRA-HEAVY, FILL VOIDS AND CORRECT SEGREGATED AREAS BY LAYING RIPRAP WITH CLOSE BROKEN JOINTS. EVEN THE FINISHED SURFACE BY CHINKING SPACES BETWEEN STONES ACCORDING TO SECTION 606.3.2(1) OF THE STANDARD SPECIFICATIONS.

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.

APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF THE DECK, THE SIDES OF THE DECK, AND THE EXTERIOR 12" OF THE UNDERSIDE OF THE DECK (CONCRETE MATERIAL ONLY).

THE EXISTING STRUCTURE IS A SINGLE-SPAN STEEL DECK GIRDER STRUCTURE WITH A CONCRETE DECK SUPPORTED ON TIMBER ABUTMENTS. THE STRUCTURE HAS A 20.0' OVERALL WIDTH AND IS 40.1' 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.

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

HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET, WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-254

DRAWN BY	JZ	PLANS CK'D.	PTB

CROSS SECTIONS & QUANTITES

SHEET 2 OF 11

27

STATE PROJECT NUMBER

5295-00-70

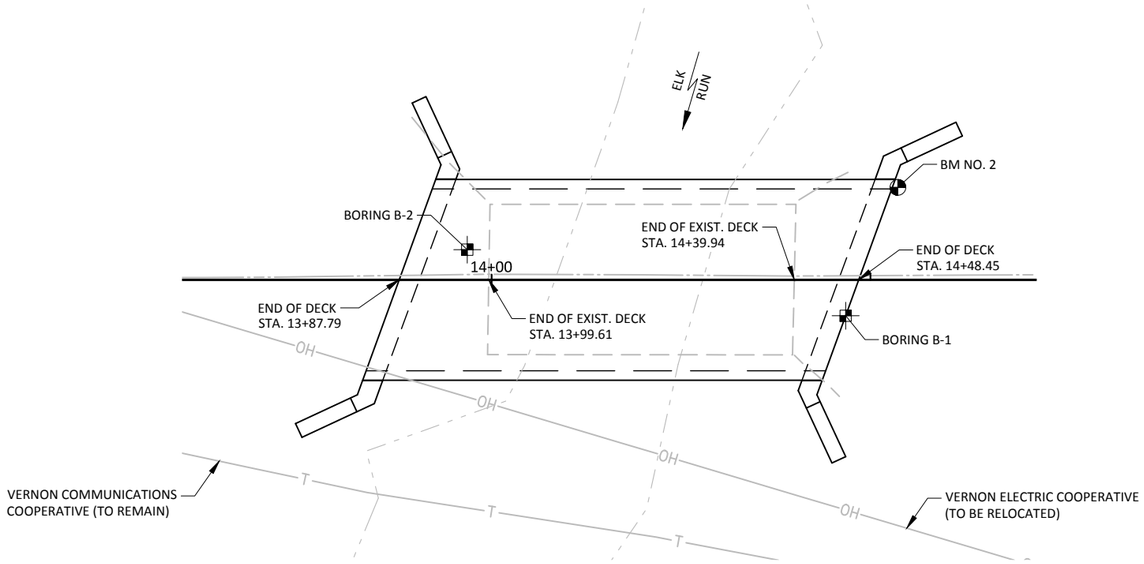
MATERIAL SYMBOLS

Asphalt, Topsoil, Peat, Concrete, Fill, Gravel, Sand, Clay, Silt, Boulders or Cobbles, Limestone, Bedrock (unknown), Shale, Sandstone, Igneous/meta

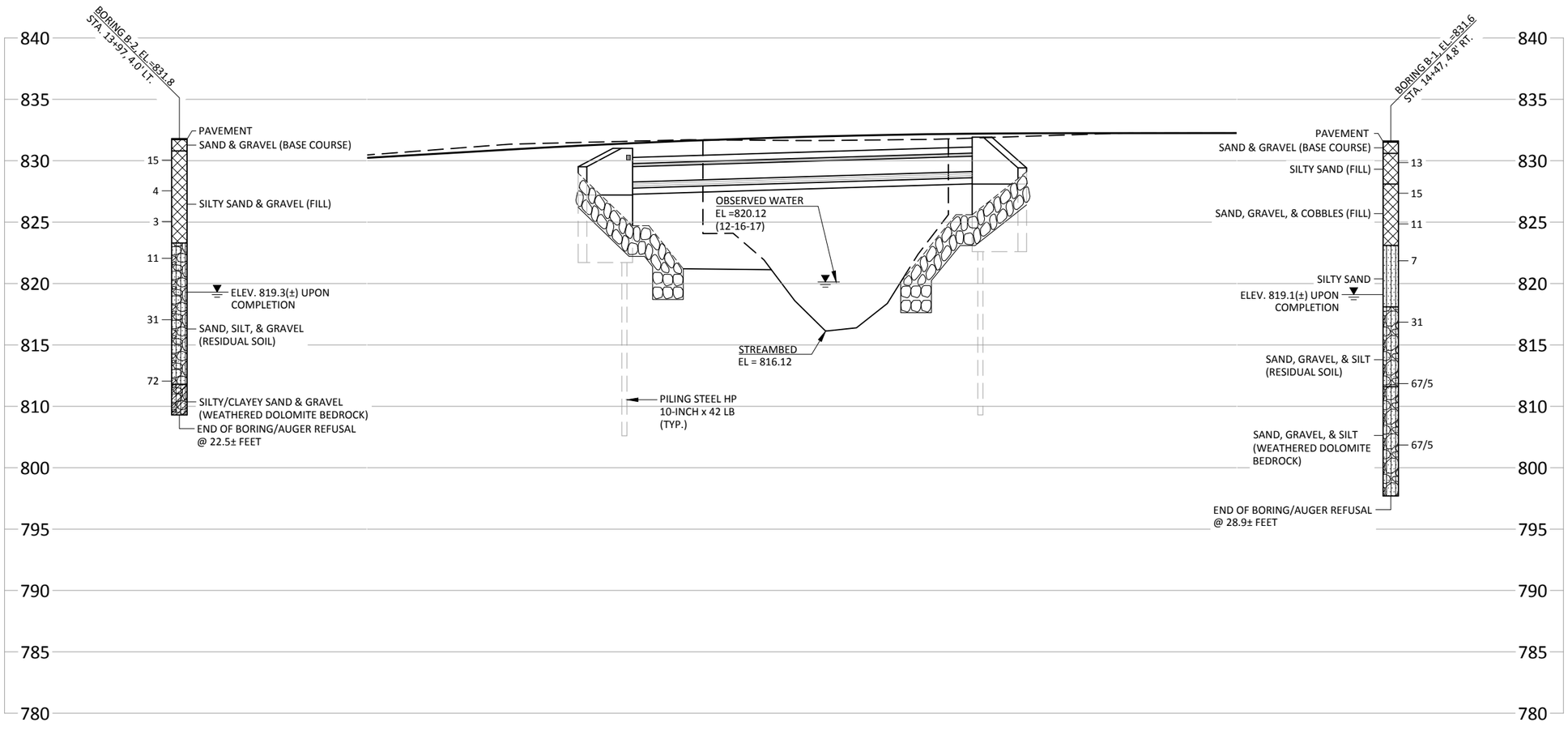
SOIL BORINGS

BORING NUMBER	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	03/02/17	149,654.5	742,578.6
2	03/02/17	149,638.8	742,626.8

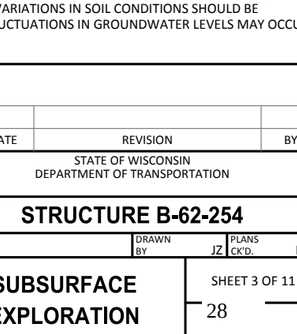
BORINGS & REPORT COMPLETED BY: NUMMELIN TESTING SERVICES, INC.
5620 WOODLAND DRIVE
WAUNAKEE, WI 53597



PLAN B-62-254



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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-254

DRAWN BY JZ | PLANS CK'D. PTB

SUBSURFACE EXPLORATION

SHEET 3 OF 11

28

STATE PROJECT NUMBER

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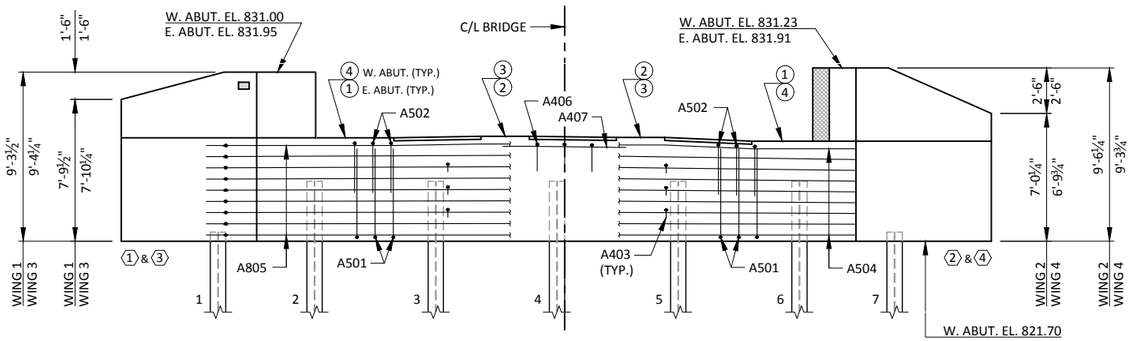
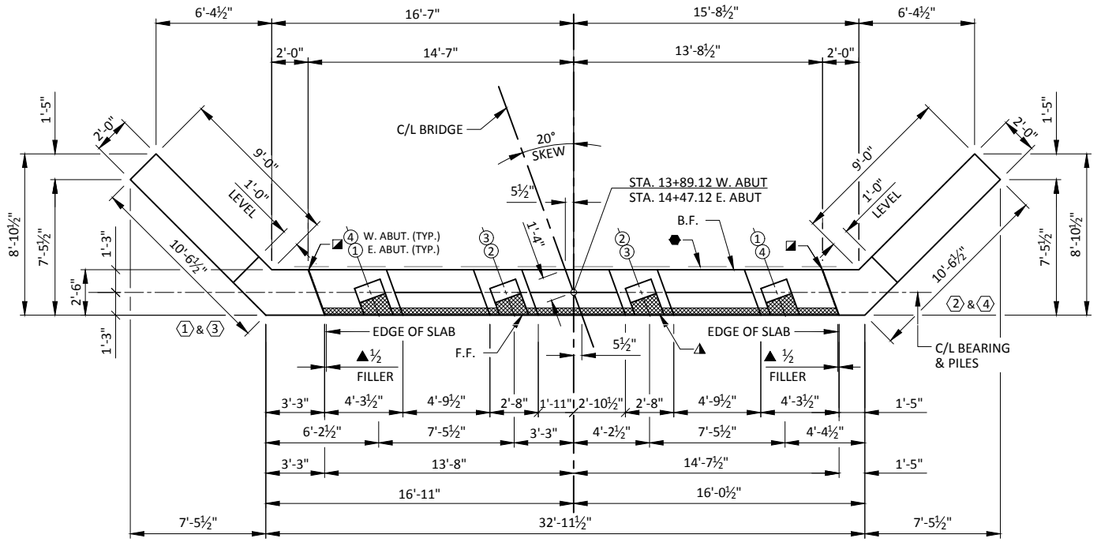


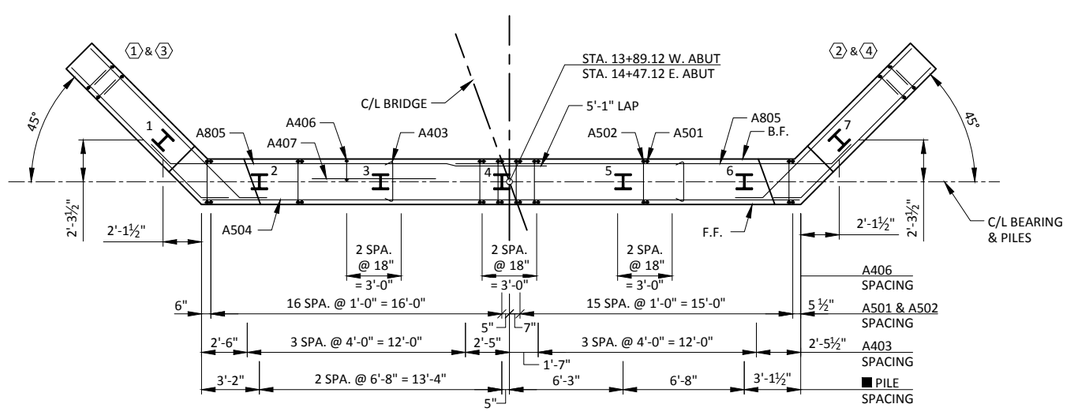
BACK FACE BAR STEEL REINF. **FRONT FACE BAR STEEL REINF.**

ELEVATION

(WEST ABUTMENT LOOKING WEST)
(EAST ABUTMENT LOOKING EAST)



PLAN



LAYOUT

NOTES

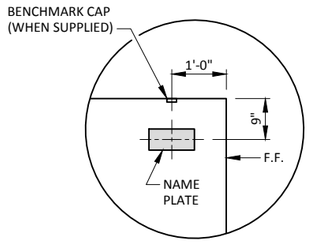
SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 5 FOR BILL OF BARS.

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

SPACE REINFORCEMENT TO MISS PILING

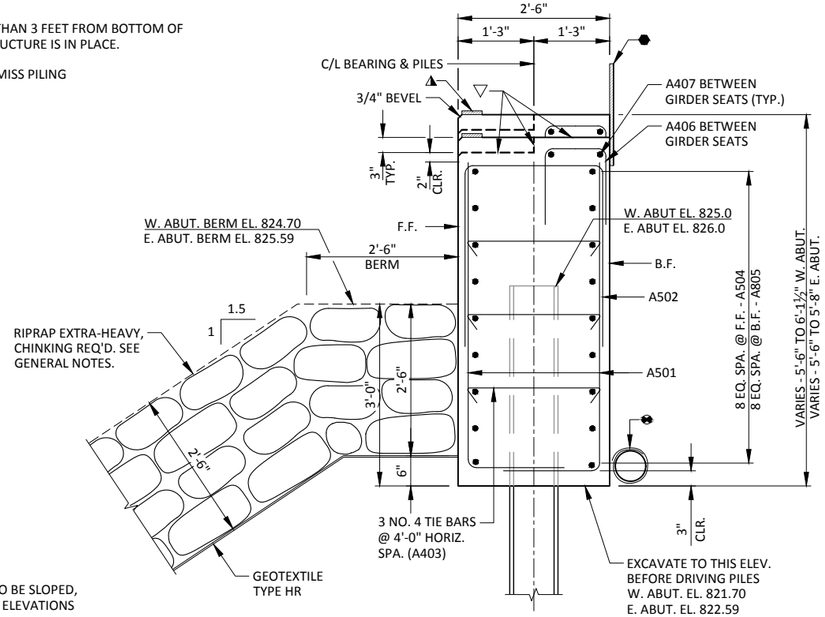
F.F. - FRONT FACE

B.F. - BACK FACE



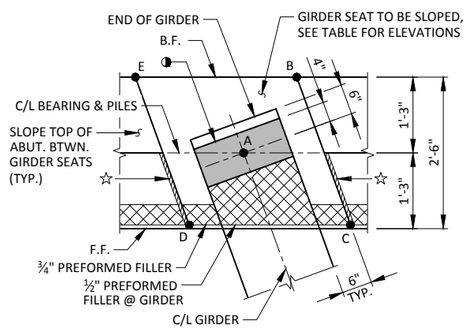
NAME PLATE AND BENCHMARK CAP DETAIL

WING 1 ONLY

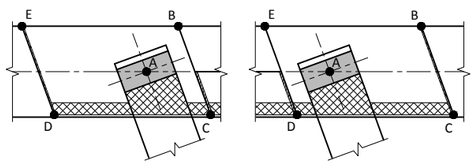


ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 130 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 15 FT PILE LENGTH AT BOTH ABUTMENTS.

TYPICAL SECTION THROUGH ABUTMENT BODY



TYP. INTERIOR GIRDER



WINGS 1 & 3 **WINGS 2 & 4**

GIRDER SEAT DETAILS

GIRDER SEAT ELEVATIONS

	GIRDER LINE	POINT ON GIRDER SEAT				
		A	B	C	D	E
WEST ABUT.	①	827.39	827.38	827.44	827.41	827.36
	②	827.47	827.45	827.50	827.49	827.44
	③	827.41	827.39	827.44	827.43	827.38
	④	827.20	827.18	827.23	827.21	827.15
EAST ABUT.	①	828.13	828.14	828.11	828.13	828.16
	②	828.26	828.27	828.24	828.25	828.28
	③	828.24	828.25	828.22	828.23	828.26
	④	828.09	828.09	828.06	828.08	828.11

LEGEND

- ◪ 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 EXCEPT USE ½" PREFORMED FILLER UNDER GIRDERS.
- ■ PILE SPACING MEASURED AT BASE OF ABUTMENT BODY.
- ⬌ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. 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."
- ☆ ¾" CORK FILLER ON VERTICAL GIRDER SEAT FACES THAT RUN PARALLEL WITH GIRDER.
- ◑ ½"x8"x1'-6" ELASTOMERIC BEARING PAD.
- ▽ STEEL TROWEL ENTIRE TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ⬡ INDICATES WING NUMBER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-254

DRAWN BY JZ | PLANS CK'D. PTB

ABUTMENTS

SHEET 4 OF 11

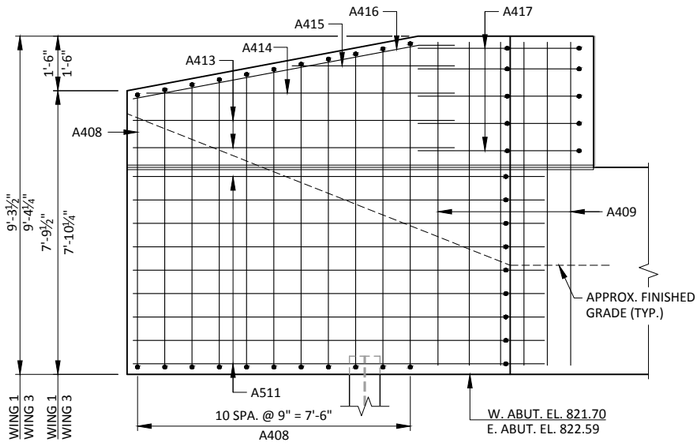
29

8

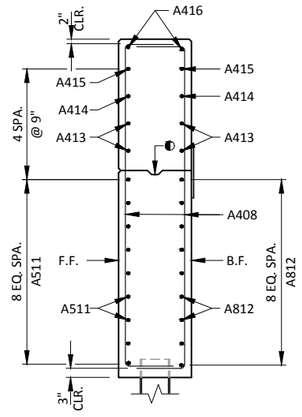
8

STATE PROJECT NUMBER

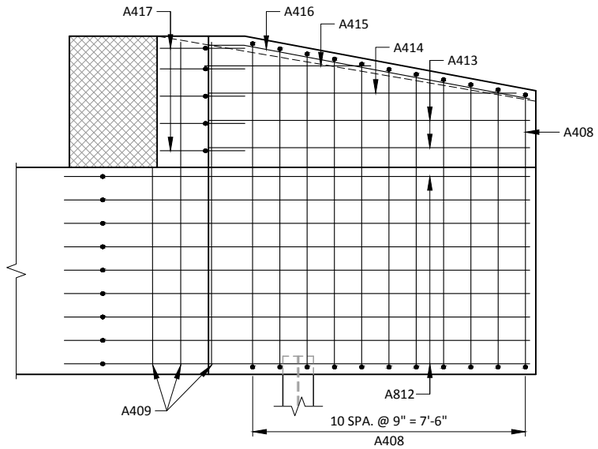
5295-00-70



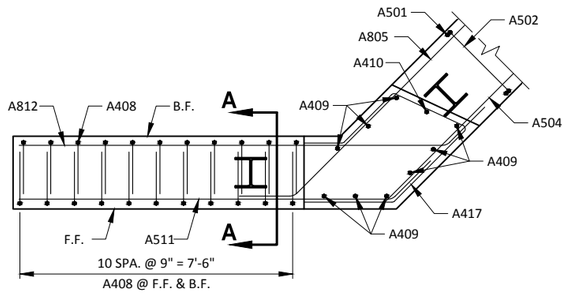
F.F. ELEVATION - WING 1 & 3



SECTION A-A



B.F. ELEVATION - WING 1 & 3



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".

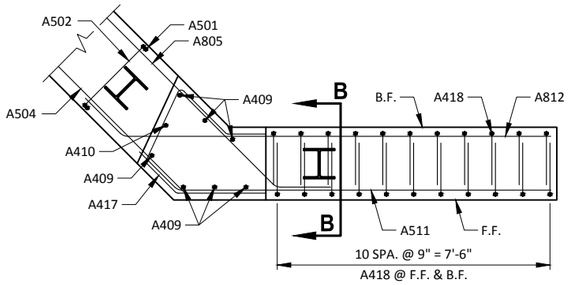
NOTES

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

BILL OF BARS
TWO ABUTMENTS SHOWN

4,440 LB (COATED)
2,860 LB (UNCOATED)

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	BAR SERIES	LOCATION
A501	132	6-6	X			BODY - VERT. - F.F & B.F.
A502	66	8-7	X			BODY - VERT. - TOP
A403	48	2-8	X			TIE BARS
A504	18	32-10				BODY - HORIZ. - F.F.
A805	36	22-6	X			BODY - HORIZ. - B.F.
A406	18	3-3	X			BODY - VERT. - TOP BETWEEN SEATS
A407	12	6-9				BODY - HORIZ. - TOP BETWEEN SEATS
A408	44	10-7	X	X	⚹	WING 1 & 3 - VERT. - F.F. & B.F.
A409	32	8-10		X		WINGS - VERT.
A410	4	4-8		X		WINGS - VERT. - TOP
A511	36	11-8	X	X		WINGS - HORIZ. - F.F.
A812	36	13-3	X	X		WINGS - HORIZ. - B.F.
A413	8	8-10		X		WING 1 & 3 - HORIZ. - F.F. & B.F.
A414	4	8-5		X		WING 1 & 3 - HORIZ. - F.F. & B.F.
A415	4	4-6		X		WING 1 & 3 - HORIZ. - F.F. & B.F.
A416	4	9-0	X	X		WING 1 & 3 - HORIZ. - F.F. & B.F.
A417	10	10-4	X	X		WING 1 & 3 - HORIZ. - TOP
A418	44	10-4	X	X	⚹	WING 2 & 4 - VERT. - F.F. & B.F.
A419	8	8-10		X		WING 2 & 4 - HORIZ. - F.F. & B.F.
A420	4	6-10		X		WING 2 & 4 - HORIZ. - F.F. & B.F.
A421	4	4-6		X		WING 2 & 4 - HORIZ. - F.F. & B.F.
A422	4	9-3	X	X		WING 2 & 4 - HORIZ. - F.F. & B.F.
A423	10	8-6	X	X		WING 2 & 4 - HORIZ. - TOP

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

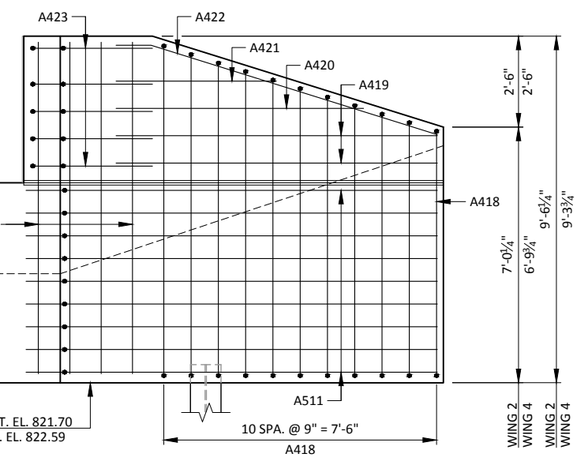
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

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

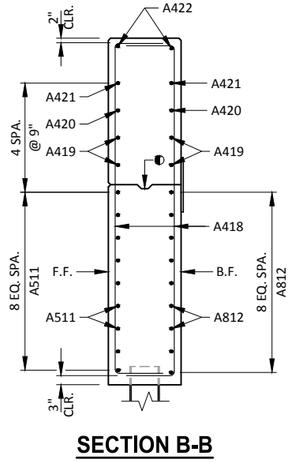
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
A408	4 SERIES OF 11	11-3 TO 9-11
A418	4 SERIES OF 11	11-6 TO 9-2

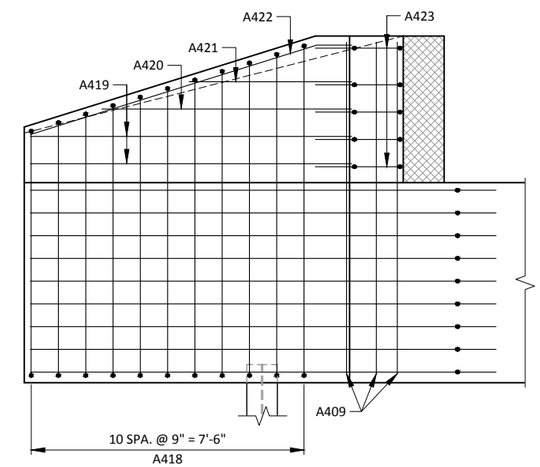
BUNDLE AND TAG EACH SERIES SEPARATELY.



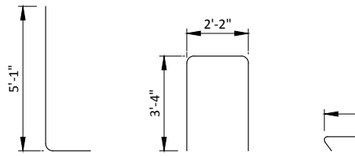
F.F. ELEVATION - WING 2 & 4



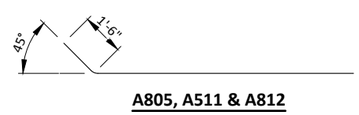
SECTION B-B



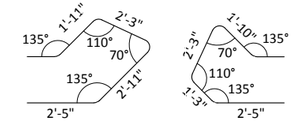
B.F. ELEVATION - WING 2 & 4



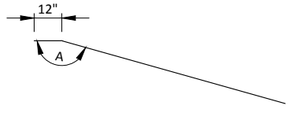
A501 A502 A403 A406 A408 & A418



A805, A511 & A812



A417 A423



MARK	'A'
A416	169°23'
A422	162°39'

A416 & A422

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-254

DRAWN BY JZ | PLANS CK'D. PTB

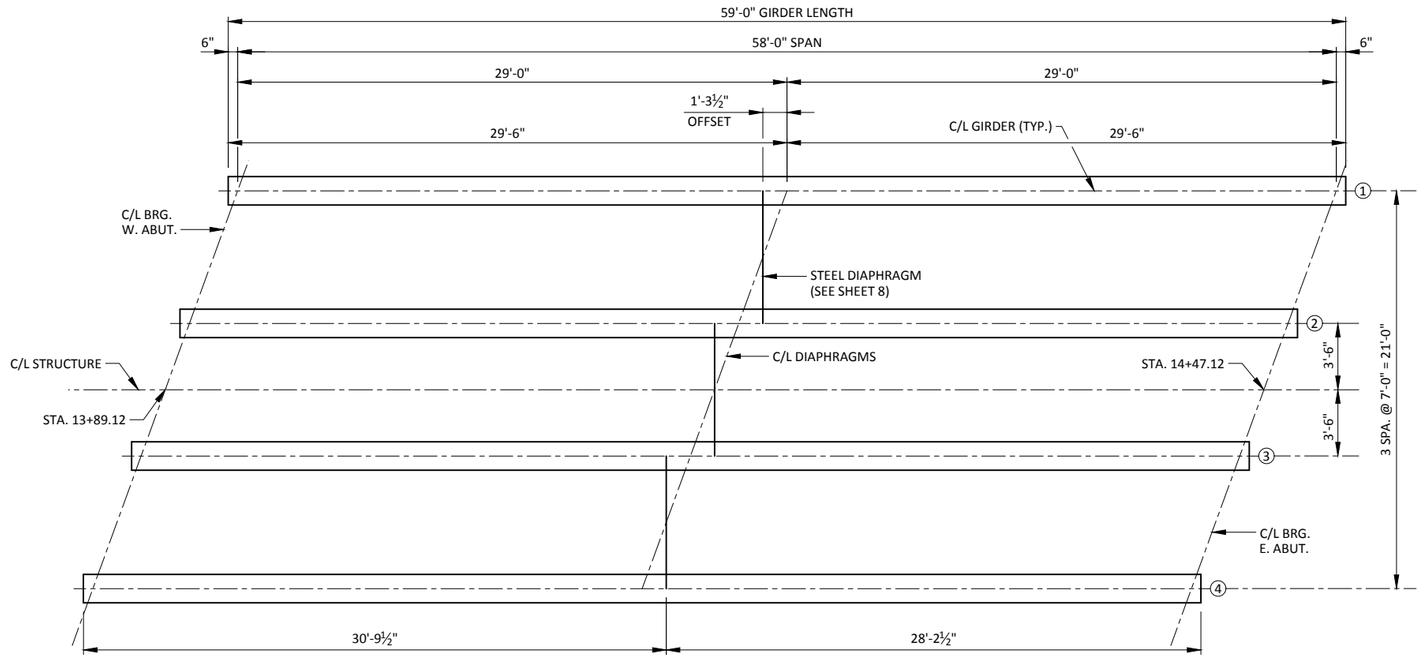
ABUTMENT DETAILS

SHEET 5 OF 11

30

STATE PROJECT NUMBER

5295-00-70



BILL OF BARS
SUPERSTRUCTURE

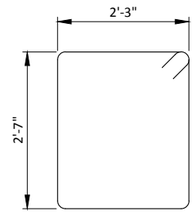
12,390 LB (COATED)

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	LOCATION
S501	60	10-3	X	X	ABUT. DIAPHRAGM - VERT.
S502	60	5-10	X	X	ABUT. DIAPHRAGM - VERT. - TOP
S603	4	1-8		X	ABUT. DIAPHRAGM - HORIZ. - FRONT - ENDS
S604	12	2-3		X	ABUT. DIAPHRAGM - HORIZ. - FRONT - ENDS
S605	6	5-5		X	ABUT. DIAPHRAGM - HORIZ. - FRONT
S606	18	6-6		X	ABUT. DIAPHRAGM - HORIZ. - FRONT
S607	12	27-10		X	ABUT. DIAPHRAGM - HORIZ. - BACK
S408	12	4-4		X	ABUT. DIAPHRAGM - HORIZ. - BOT.
S409	36	3-3	X	X	ABUT. DIAPHRAGM - VERT. - BOT.
S510	16	6-0		X	ABUT. DIAPHRAGM - GIRDER WEB
S511	207	27-10		X	DECK - TOP & BOT. - TRANSVERSE
S412	142	31-0		X	DECK - TOP & BOT. - LONGITUDINAL
S613	36	12-0	X	X	DECK - RAIL POSTS
S614	64	6-0		X	DECK - RAIL POSTS - INTERIOR
S615	4	12-0	X	X	DECK - RAIL POSTS - ENDS
S616	16	6-0	X	X	DECK - RAIL POSTS - ENDS

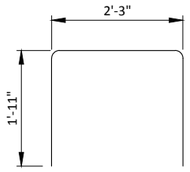
NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

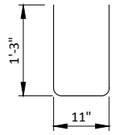
GIRDER LAYOUT



S501

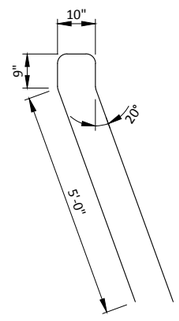


S502

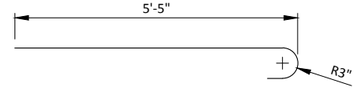


S409

S613



S615



S616

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-254

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GIRDER LAYOUT

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8

STATE PROJECT NUMBER
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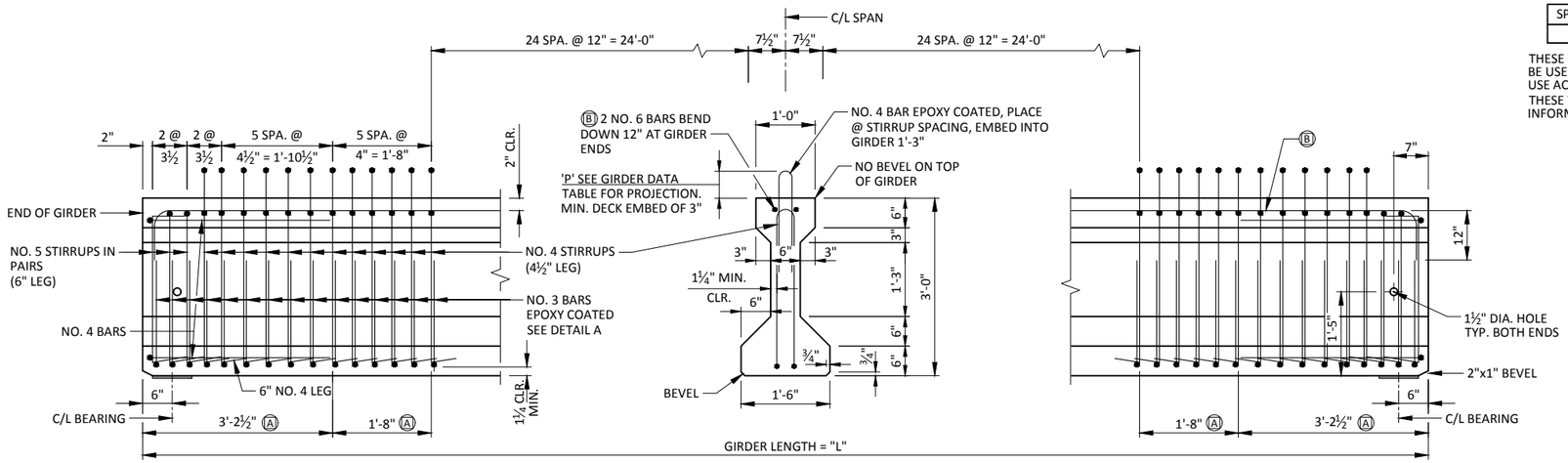
THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN

SPAN	CAMBER (IN.)
1	1.4"

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



36-INCH GIRDER - SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ (2) #6 BARS, FULL LENGTH, MIN. LAP = 4'-5"

GIRDER NOTES

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

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

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

PRESTRESSING STRANDS SHALL BE 0.6-INCH DIAMETER 7-WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270 KSI.

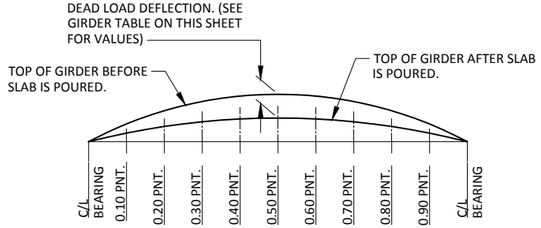
STRANDS SHALL BE FLUSH WITH THE ENDS OF THE GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINEOUS JOINT SEALER.

SPACING SHOWN FOR NO. 4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

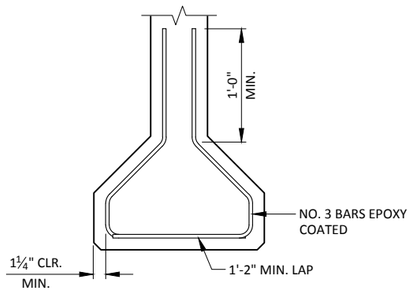
AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE SHEET 8.

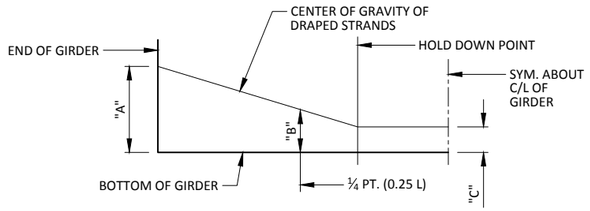
DATA SHOWN IN DEFLECTION DATA IS THEORETICAL AND MAY VARY WITH CONCRETE STRENGTH, VARIABLE PRESTRESS CONDITIONS AND PRESTRESS LOSES.



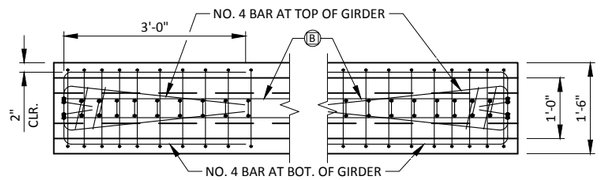
DEAD LOAD DEFLECTION DIAGRAM



DETAIL A

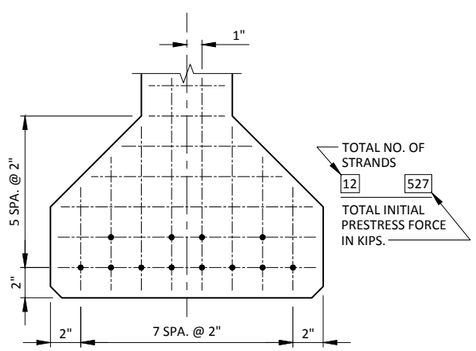


DRAPED STRAND PROFILE



TOP VIEW OF GIRDER ENDS

Ⓑ NO. 5 "B" BARS MAY BE SPLICED, USE 53" MIN. LAP.



TYP. STRAND PATTERN

GIRDER DATA

SPAN	LINE	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.)									CONC. STRGTH. f'c (K.S.I.)	STIRRUP PROJECTION "P"			DIA. OF STRAND (IN.)	DRAPED PATTERN					
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10		1ST 1/3	MID 1/3	END 1/3		TOTAL NO. OF STRANDS	f'ci (K.S.I.) *	(IN.) "A"	"B" MIN.	"B" MAX.	"C"
1	1-4	59'-0"	1/8	3/8	1/2	1/2	5/8	1/2	1/2	3/8	1/8	8.0	6"	6"	6"	0.6"	12	4.8	31	10	13	3

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

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36-INCH PRESTRESSED GIRDER DETAILS

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FILE NAME : S:\PROJECTS\K51050 S ELK RUN RD, VERNON CO\STRUCTURE\CAD FILES\FINALS\07 36-INCH PRESTRESSED GIRDER DETAILS.DWG
PLOT DATE : 8/6/2018 8:12:45 AM
PLOT BY : BOLAND, PATRICK
PLOT SCALE : 1" = 1'
LAYOUT : 36-INCH PRESTRESSED GIRDER DETAILS

STATE PROJECT NUMBER

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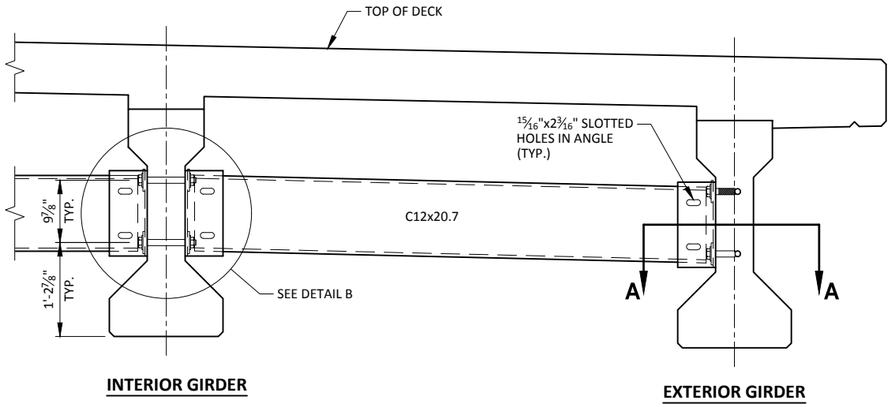
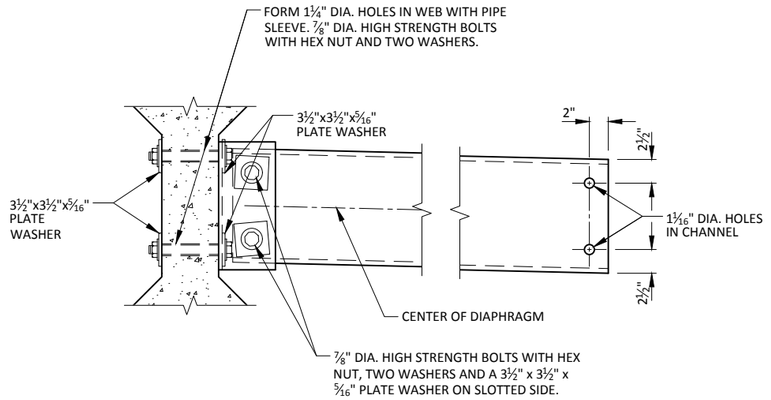


INTERIOR GIRDER **EXTERIOR GIRDER**

PART TRANSVERSE SECTION AT DIAPHRAGM



DETAIL B

(FOR STAGGERED DIAPHRAGMS)

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-62-254", EACH.

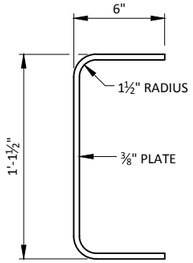
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

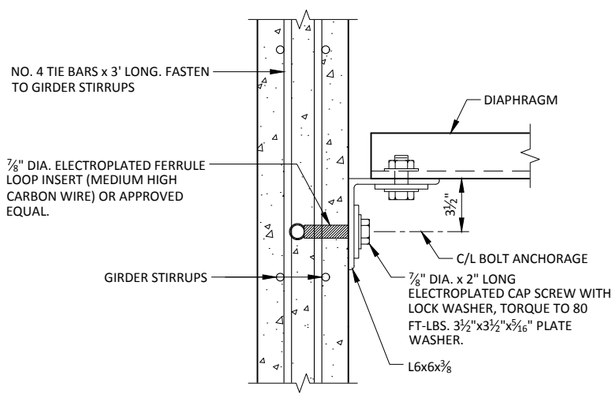
ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS ¼ TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

PLACE ONE DIAPHRAGM AT MID-LENGTH OF GIRDER AS INDICATED ON SHEET 6.

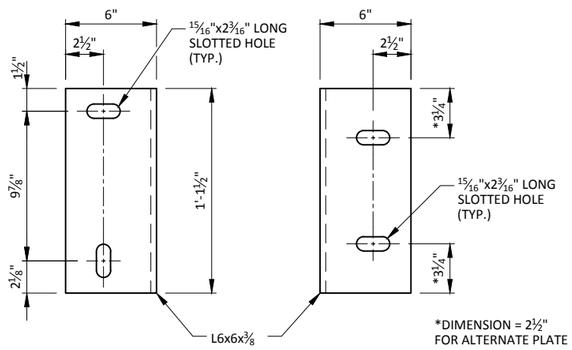


SECTION THROUGH ALTERNATE DIAPHRAGM



SECTION A-A

(FOR EXTERIOR ATTACHMENT)



GIRDER FACE **DIAPHRAGM FACE**

DIAPHRAGM SUPPORT

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STRUCTURE B-62-254

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STEEL DIAPHRAGM

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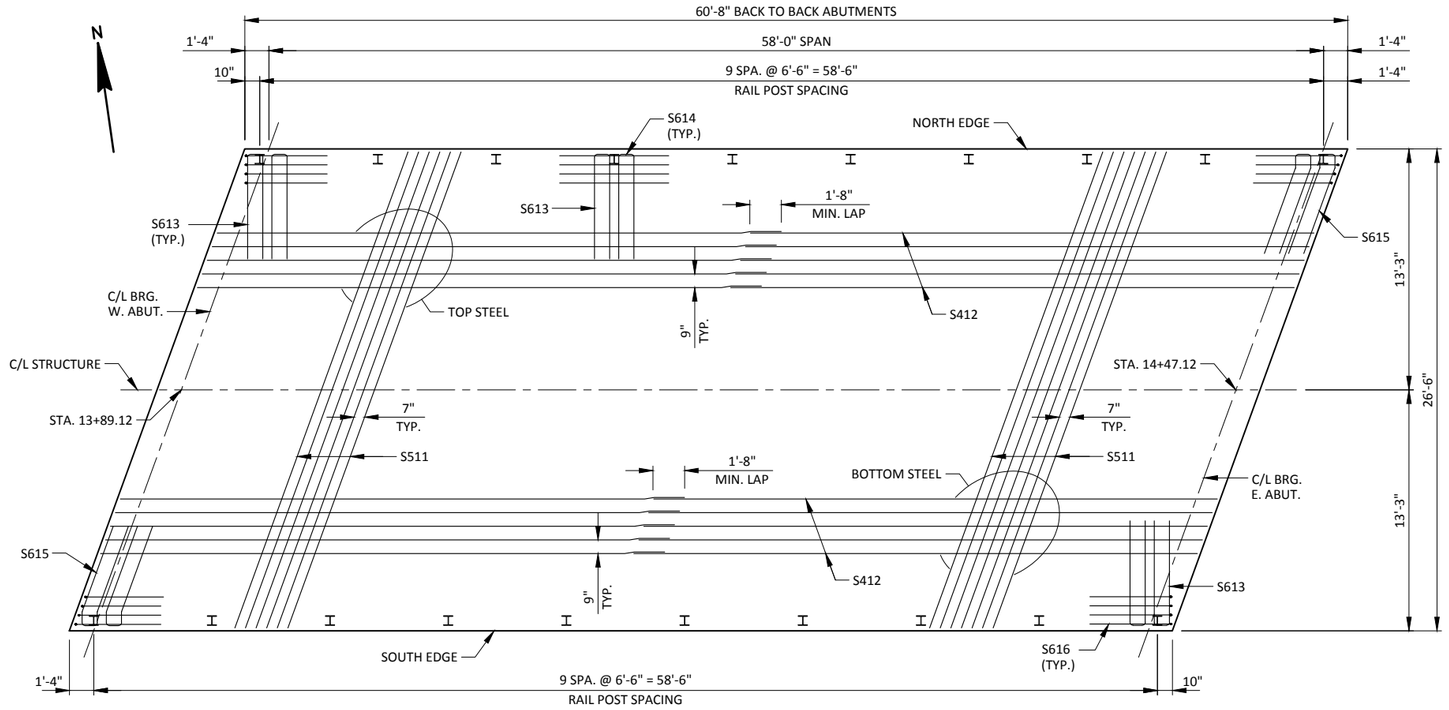


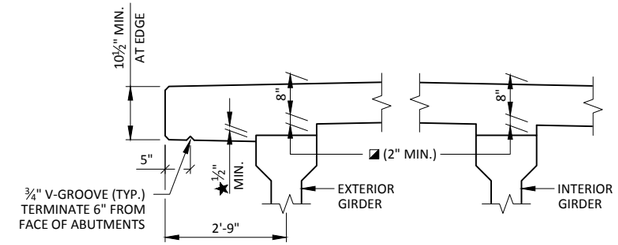
PLAN

NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 6 FOR BILL OF BARS.

T.D. - TOP OF DECK
T.G. - TOP OF GIRDER

ELEVATIONS SHOWN AT THE TOP OF GIRDER ARE FOR THE MATERIAL AS ERECTED.



IF 2" MINIMUM HAUNCH HEIGHT "◪" CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. MAXIMUM HAUNCH HEIGHT EQUALS "STIRRUP PROJECTION" MINUS 3".

TO DETERMINE "◪" (AFTER GIRDERS ARE IN PLACE):
OBTAIN THE ELEVATIONS OF THE TOP OF GIRDER AT THE C/L OF SUBSTRUCTURE UNITS AND AT EACH $\frac{1}{10}$ POINT FOR EVERY GIRDER AND ALL SPANS, THEN PROCEED WITH THE PROCESS SHOWN BELOW.

TOP OF DECK ELEVATION AT THE FINAL GRADE
-TOP OF GIRDER ELEVATION
+DEAD LOAD DEFLECTION
-SLAB THICKNESS
=HAUNCH HEIGHT "◪"

NOTE: AN AVERAGE HAUNCH "◪" OF 2.6" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

★ SLAB THICKNESS SHALL BE INCREASED AS NECESSARY TO CONCEAL INTERSECTION OF SLAB AND TOP OF GIRDER AT ALL FACIA GIRDERS.

SLAB HAUNCH DETAIL

ELEVATIONS AT TOP OF DECK

GIRDER LINE		C/L BRG. W. ABUT.	0.10 PT.	0.20 PT.	0.30 PT.	0.40 PT.	0.50 PT.	0.60 PT.	0.70 PT.	0.80 PT.	0.90 PT.	C/L BRG. E. ABUT.
N. EDGE	T.D.	831.24	831.36	831.47	831.56	831.65	831.73	831.80	831.85	831.90	831.93	831.96
①	T.D.	831.27	831.39	831.50	831.60	831.69	831.77	831.84	831.90	831.95	831.98	832.01
②	T.D.	831.35	831.48	831.60	831.70	831.80	831.88	831.95	832.02	832.07	832.11	832.14
C/L	T.D.	831.39	831.52	831.64	831.75	831.85	831.93	832.01	832.07	832.13	832.17	832.20
③	T.D.	831.29	831.42	831.55	831.66	831.76	831.84	831.92	831.99	832.05	832.09	832.13
④	T.D.	831.09	831.23	831.35	831.47	831.57	831.67	831.75	831.82	831.88	831.93	831.97
S. EDGE	T.D.	831.01	831.15	831.28	831.39	831.50	831.60	831.68	831.75	831.82	831.87	831.91

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SUPERSTRUCTURE

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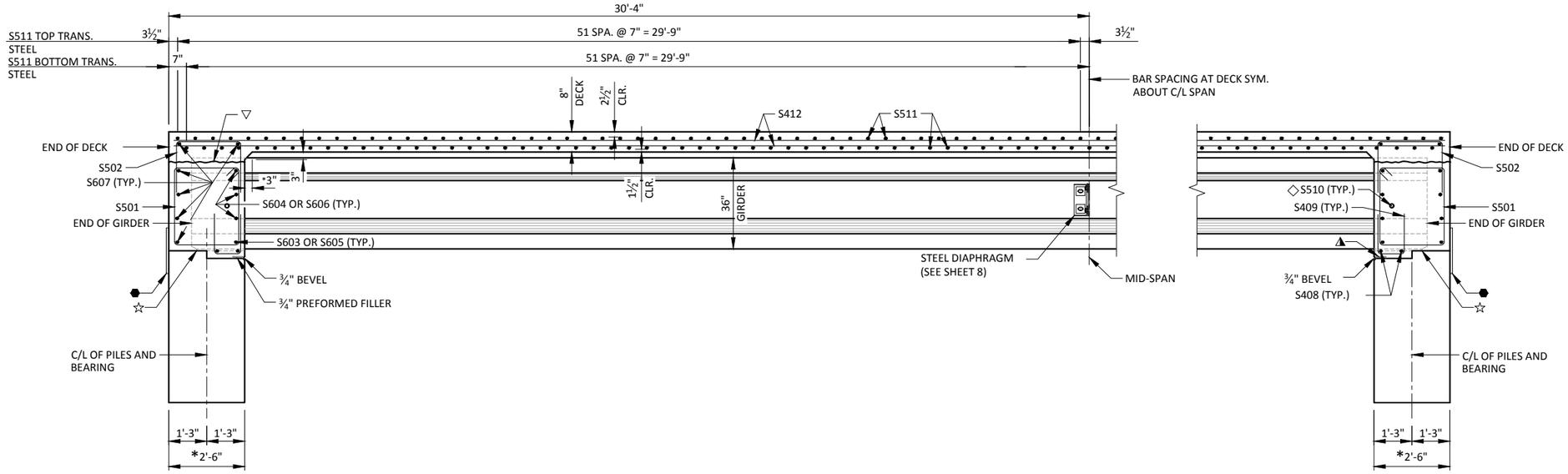
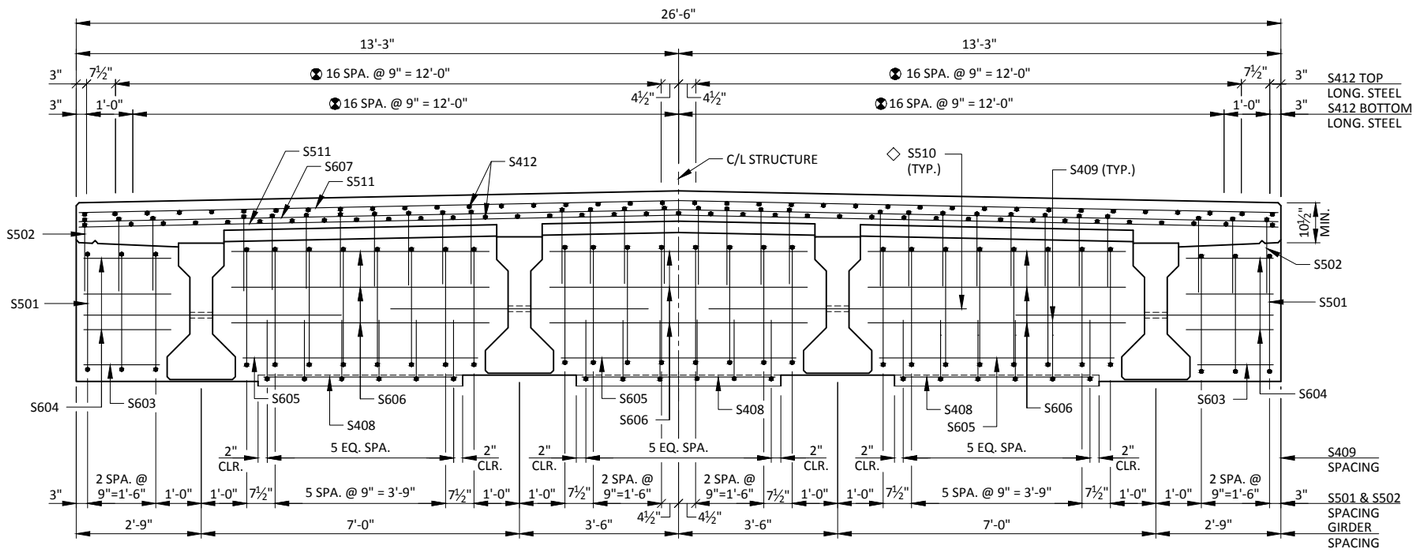


PARTIAL LONGITUDINAL SECTION



CROSS SECTION THROUGH ROADWAY

BAR SPACING IN DIAPHRAGM SYM. ABOUT C/L STRUCTURE

NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 6 FOR BILL OF BARS.

LEGEND

- ⬣ 18" RUBBERIZED MEMBRANE WATERPROOFING (HORIZONTAL)
- ☆ ½" NON-LAMINATED ELASTOMERIC BEARING PAD AND ¾" PREFORMED FILLER.
- ◭ 4"x¾" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- ◇ (1) 1½" DIAMETER HOLE IN WEB FOR (2) S510 HORIZONTAL BARS. BARS TO BE PLACED SYMMETRICAL ABOUT C/L OF GIRDERS. FIELD BEND BARS ALONG SKEW.
- ⧓ MEASURED PARALLEL TO C/L OF ROADWAY.
- ✱ DIMENSION IS TAKEN NORMAL TO C/L SUBSTRUCTURE.
- ▽ OPTIONAL CONSTRUCTION JOINT. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF THE DIAPHRAGM POUR

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STRUCTURE B-62-254

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SUPERSTRUCTURE DETAILS

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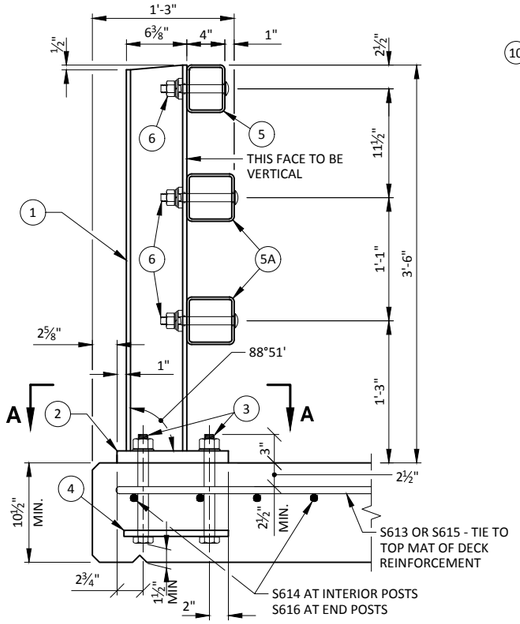
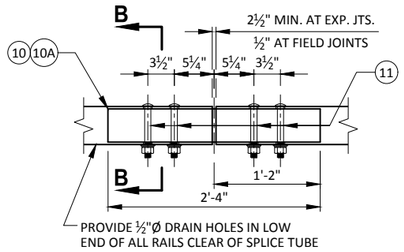
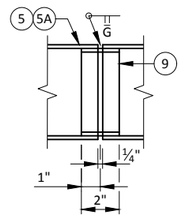


SECTION THROUGH RAILING ON DECK

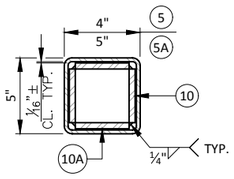


FIELD ERECTION JOINT DETAIL

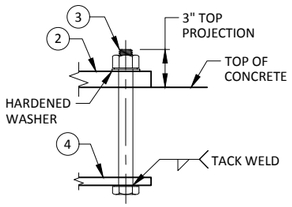


SHOP RAIL SPLICE DETAIL

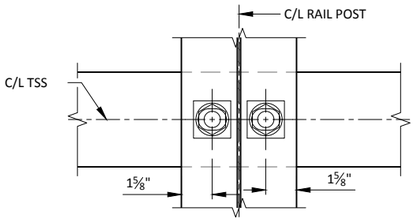
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



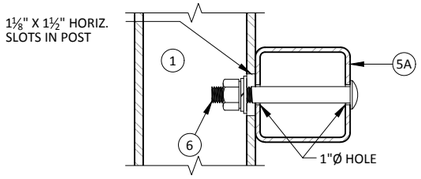
SECTION B-B



ANCHOR BOLTS



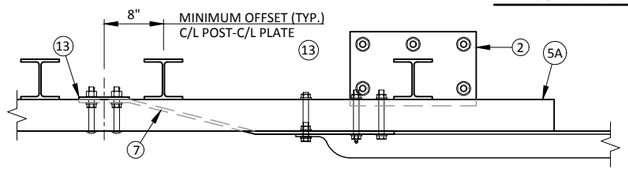
SECTION THROUGH POST WEB



SECTION THROUGH RAIL

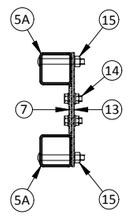
NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

TYPICAL RAIL TO POST CONNECTIONS

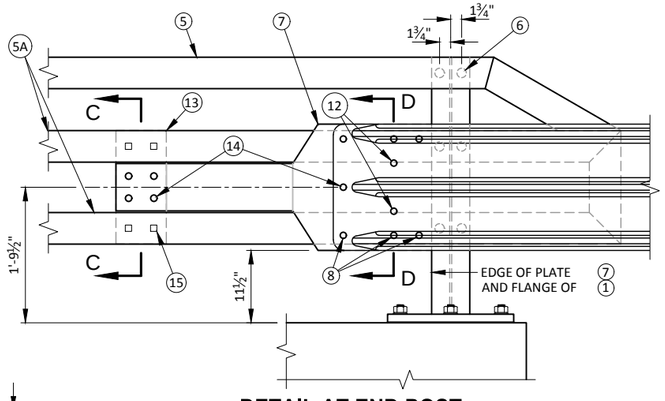


TOP VIEW AT END POST

(THRIE BEAM RAIL ATTACHMENT)

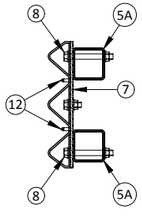


SECTION C-C



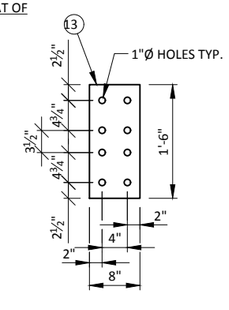
DETAIL AT END POST

(THRIE BEAM RAIL ATTACHMENT)



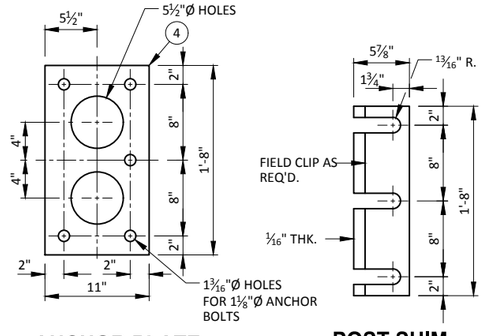
SECTION D-D

SECTION A-A



ANCHOR PLATE

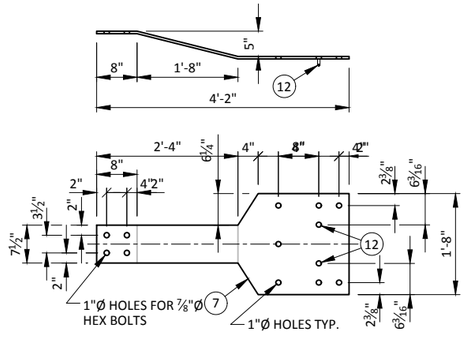
AT BEAM GUARD ATTACHMENT



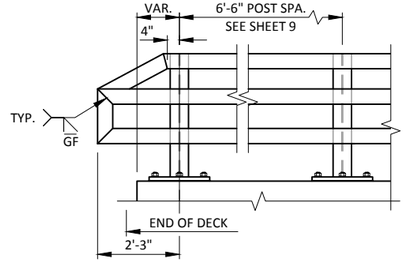
ANCHOR PLATE

AT RAIL TO DECK CONNECTION

POST SHIM DETAIL



BACK-UP PLATE DETAIL



PART ELEVATION OF RAILING

LEGEND

1. W6x25 WITH 1⅛" x 1½" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
2. PLATE 1¼"x11¾"x1'-8" WITH 1⁵⁄₁₆"x1⅝" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.
3. ASTM A449 - 1⅛" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG. USE 10¾" LONG AT ALL OTHER LOCATIONS.
4. ⅝"x11"x1'-8" ANCHOR PLATE (GALVANIZED) WITH 1³⁄₁₆" DIA. HOLES FOR ANCHOR BOLTS NO. 3
5. TSS 5x4x¼ STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
5A. TSS 5x5x¼ STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
6. ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, ³⁄₁₆"x1⅝"x1⅝" WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION).
7. ½" THK. BACK-UP PLATE WITH 2 -⅞"x1½" THREADED SHOP WELDED STUDS (NO. 12). BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY ABOUT TUBES NO. 5A.
8. 1" DIA. HOLES IN PLATE NO. 7 & TUBES NO. 5A FOR ⅞" DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. 6 HOLES IN TUBES AND PLATE NO. 7.
9. SPLICE SLEEVE FABRICATED FROM ¼" PLATE. PROVIDE "SLIDING FIT".
10. ¾"x3⅝"x2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
10A. ¾"x2⅜"x2'-4" PLATE USED IN NO. 5, ¾"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 AT FIELD JOINTS AND 1⁵⁄₁₆"x2¼" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A.
12. ⅞" DIA. BY 1½" LONG THREADED SHOP WELDED STUDS (2 REQ'D).
13. ⅜"x8"x1'-6" PLATE. BOLT TO RAIL AS SHOWN IN DETAIL. REQ'D. AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYM. ABOUT TUBES NO. 5A.
14. ⅞" DIA. x 2" LONG A325 HEX BOLT WITH NUT AND WASHER (5 REQ'D.).
15. 1" DIA. HOLES IN TUBES NO. 5A FOR ⅞" A325 ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER (4 REQ'D.). 4 HOLES IN TUBES.

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. RAILS SHALL BE SPLICED IN A PANEL OVER EXPANSION JOINTS.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
7. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
8. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
9. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.
10. THIS RAILING MEETS NCHRP REPORT 350 EVALUATION CRITERIA FOR TEST LEVEL 4 (TL-4).

STATE PROJECT NUMBER

5295-00-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-254

DRAWN BY JZ | PLANS CK'D. PTB

TUBULAR RAILING TYPE M

SHEET 11 OF 11

FILE NAME : S:\PROJECTS\K51050 S ELK RUN RD, VERNON CO\STRUCTURE\CAD FILES\FINALS\11 TUBULAR RAILING TYPE M.DWG
LAYOUT : TUBULAR RAILING TYPE M
PLOT DATE : 8/6/2018
PLOT TIME : 8:13:21 AM
PLOT BY : BOLAND, PATRICK
PLOT SCALE : 1" = 1'

EARTHWORK-MAINLINE

	AREA (SF)		INCREMENTAL VOL (CY)			CUMMULATIVE VOLUME (CY)			
STATION	CUT	FILL	CUT NOTE 1	FILL NOTE 2	FILL (25%)	CUT 1.00 NOTE 1	FILL	FILL (25%) NOTE 3	MASS ORDINATE NOTE 4
13+00	22	0	0	0	0	0	0	0	0
13+50	37	55	56	52	65	56	52	65	-9
13+88	37	55	53	78	99	109	130	164	-55
13+88	0	0	0	0	0	109	130	164	-55
14+48	0	0	0	0	0	109	130	164	-55
14+48	18	83	0	0	0	109	130	164	-55
14+50	18	83	3	8	9	112	138	173	-61
15+00	22	0	38	78	97	150	216	270	-120
		TOTALS =	150	216	270	150	216	270	-120

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

9

9

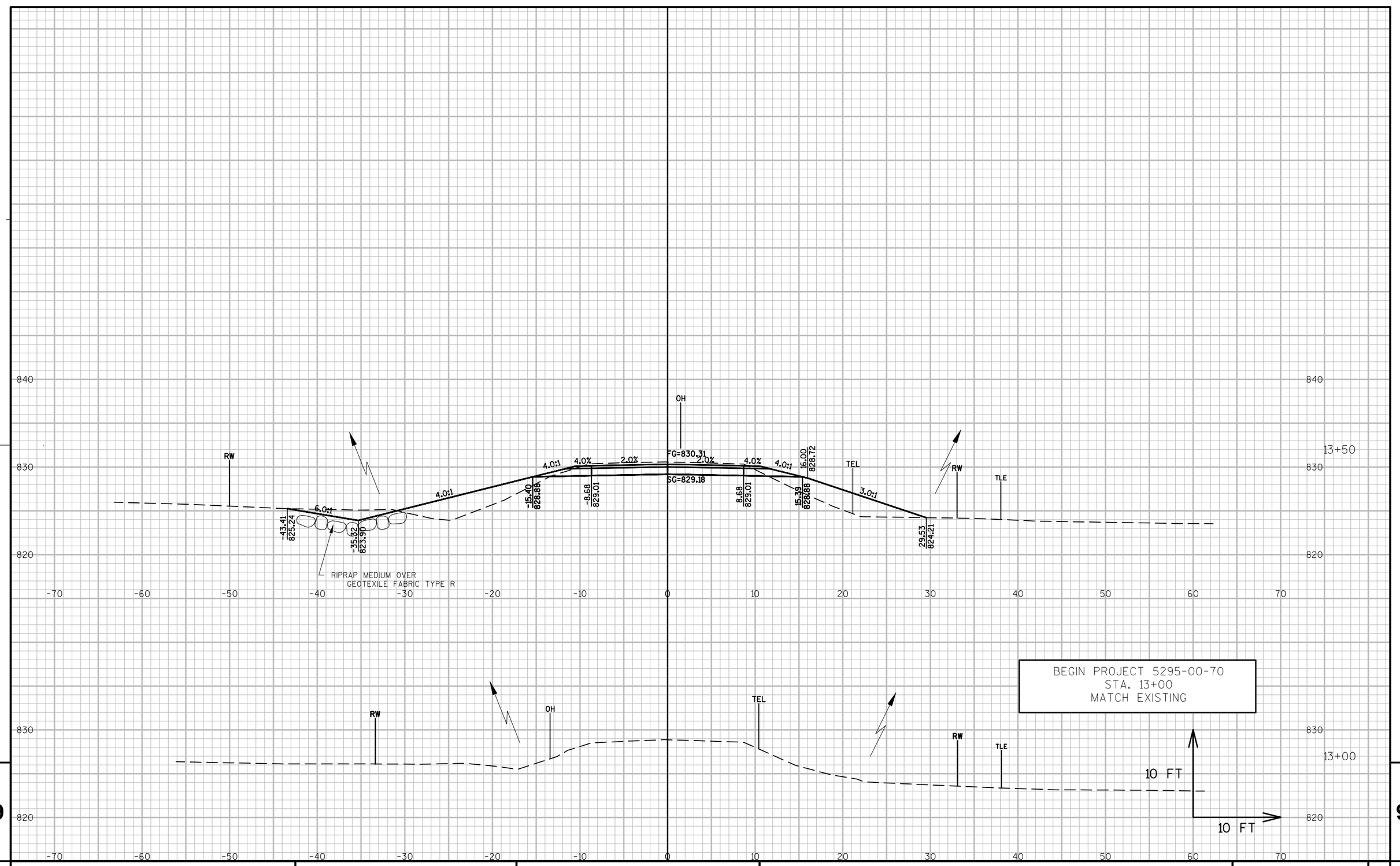
PROJECT NO: 5295-00-70 | HWY: SOUTH ELK RUN ROAD | COUNTY: VERNON | EARTHWORK | SHEET 37 | E

FILE NAME : S:\PROJECTS\K51050 S ELK RUN RD, VERNON CO\SHEETSPLAN\DETAILS\EARTHWORK.DWG
LAYOUT : LAYOUT

PLOT DATE : 6/15/2018
PLOT TIME : 10:27:26 AM

PLOT BY : STRINE, THERESA

PLOT SCALE : 1" = 1'



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9

PROJECT NO: 5295-00-70	HWY: SOUTH ELK RUN ROAD	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 38	E

840
830
820
810
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

RW
-33.00
822.92
-13.25
825.59
VARIES
RIPRAP EXTRA HEAVY
~~OVER GRANULAR FILTER~~
~~LAYER NO. 1 AGGREGATE~~
WITH CHINKING REQ'D.
2.0%
FG=832.21
2.0%
4.0%
4.0:1
SG=831.08
11.56
830.95
18.29
830.72
3.0:1
OH
RW
TLE
TEL
36.58
824.62
14+48

STRUCTURE B-62-254 REQ'D

GEOTEXTILE TYPE HR USED UNDER HEAVY RIPRAP AS CALLED OUT OTHER PLACES. NO ITEM INCLUDED FOR NO.1 AGGREGATE

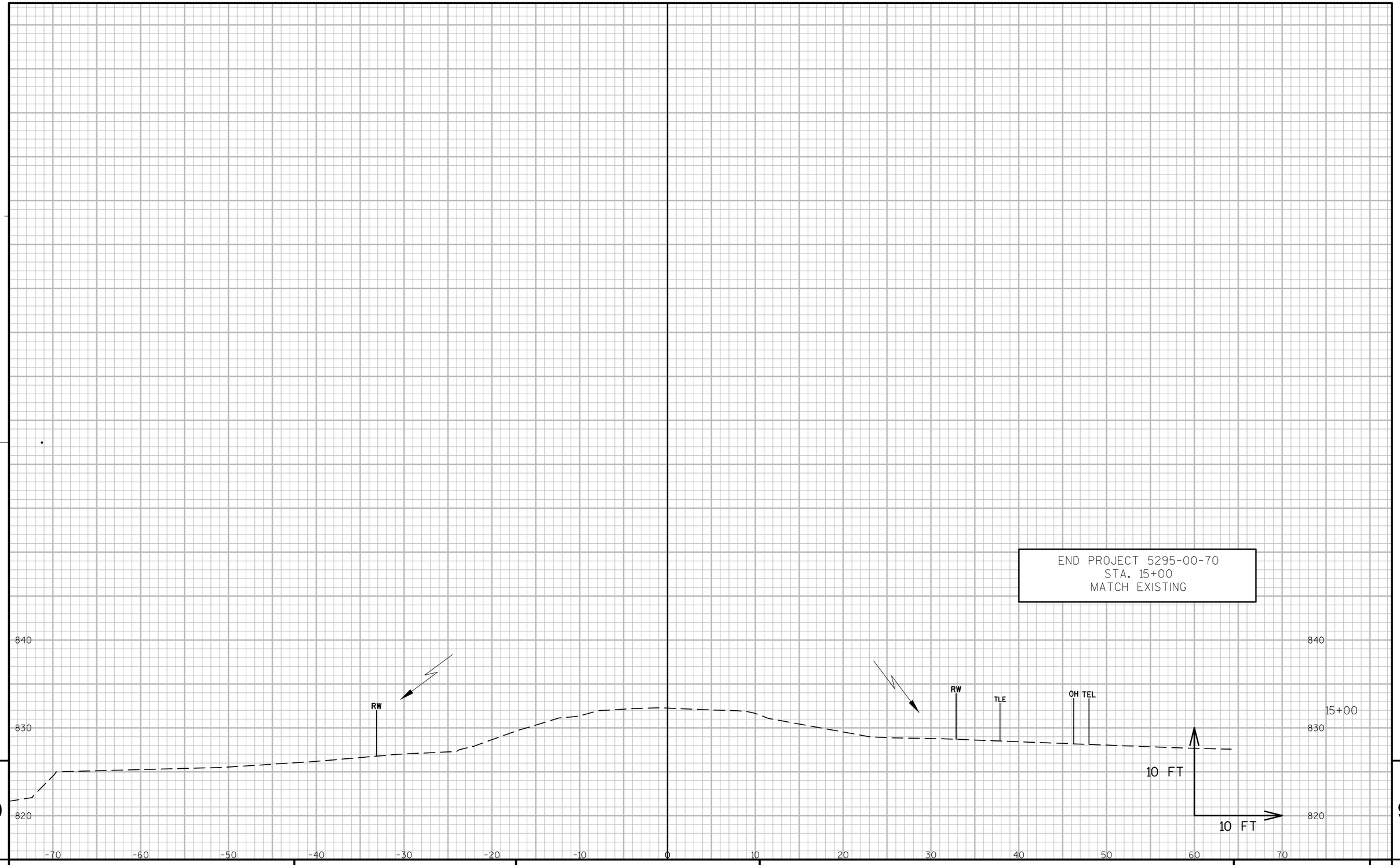
RW
-53.94
825.54
6.0:1
-42.94
823.71
RIPRAP MEDIUM OVER GEOTEXTILE FABRIC TYPE R
4.0:1
-18.29
829.87
4.0%
2.0%
FG=831.36
2.0%
-11.56
830.00
SG=830.24
OH
13.25
824.70
VARIES
TEL
RW
TLE
33.00
820.20
RIPRAP EXTRA HEAVY
~~OVER GRANULAR FILTER~~
~~LAYER NO. 1 AGGREGATE~~
WITH CHINKING REQ'D.
13+88
10 FT
10 FT

9

PROJECT NO: 5295-00-70	HWY: SOUTH ELK RUN ROAD	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 39	E

FILE NAME : S:\PROJECTS\K51050 S ELK RUN RD, VERNON CO\DESIGN\CORRIDORS\CRDR-S ELK RUN RD.DWG PLOT DATE : 6/15/2018 2:33 PM PLOT BY : STRINE, THERESA PLOT NAME : PLOT SCALE : 1 IN:10 FT

END PROJECT 5295-00-70
STA. 15+00
MATCH EXISTING



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PROJECT NO:5295-00-70	HWY: SOUTH ELK RUN ROAD	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 40	E

Notes

Wisconsin Department of Transportation

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through innovation and exceptional service.

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