SWL MAR 2017

PROJECT ID: 5296-00-70
WITH: N/A

COUNTY: VERNON

ORDER OF SHEETS

TOTAL SHEETS = 48

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

READSTOWN - USH 14
(SPRING VALLEY CREEK BRIDGE B-62-0247)

CTH T
VERNON COUNTY

STATE PROJECT NUMBER
5296-00-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5296-00-70	WISC 2017098	1

DESIGN DESIGNATION

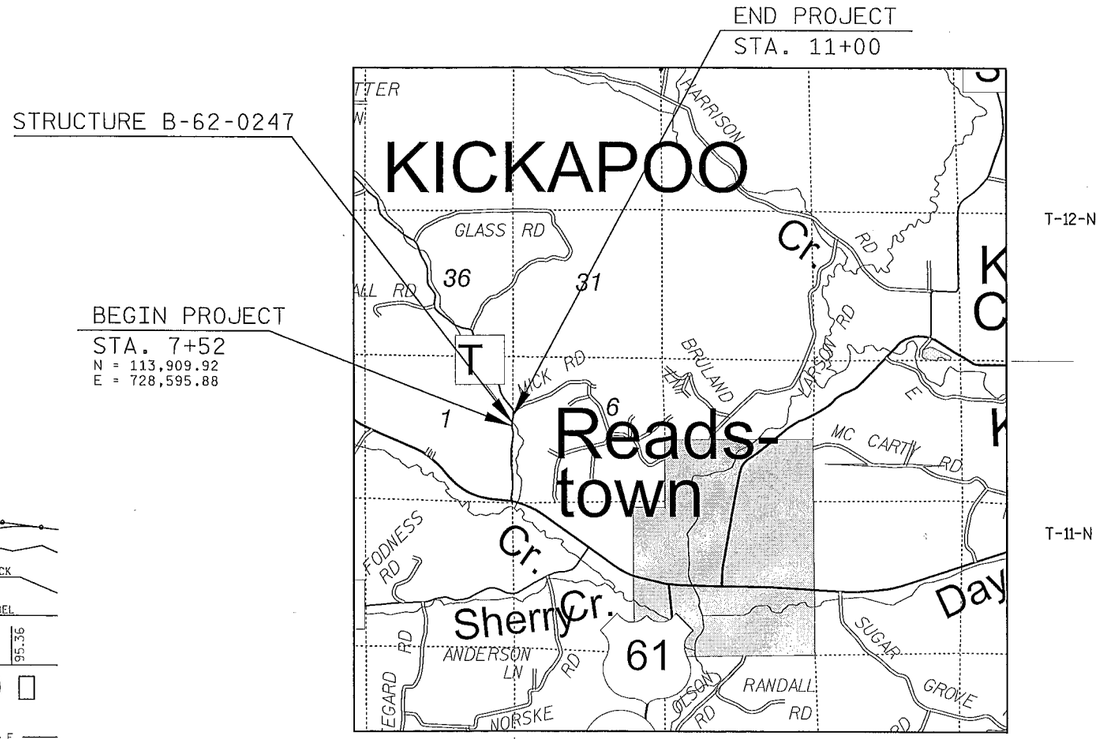
A.A.D.T.	2017	=	190
A.A.D.T.	2037	=	230
D.H.V.		=	46
D.D.		=	60/40
T.		=	6.0%
DESIGN SPEED		=	25 MPH
ESALS		=	37,000

CONVENTIONAL SYMBOLS

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

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

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



LAYOUT
SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.066 MI

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

ACCEPTED FOR
COUNTY OF VERNON

10/12/16 (Date) Chad Hewitt (Highway Commissioner)

ORIGINAL PLANS PREPARED BY

MSA PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL DEVELOPMENT • ENVIRONMENTAL
1230 Smith Boulevard Baraboo, WI 53913
608-356-2771 1-800-362-4905 Fax: 608-356-2770

WISCONSIN
LEAH J. RHODES
E-41726
BARABOO
WI
PROFESSIONAL ENGINEER

DATE: 10/6/16 Leah J. Rhodes (Professional Engineer)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor: MSA PROFESSIONAL SERVICES, INC.
Designer: MSA PROFESSIONAL SERVICES, INC.
Management Consultant: KL ENGINEERING, INC.

APPROVED FOR THE DEPARTMENT
DATE: 10/20/16 Management Consultant Engineer

E

STANDARD ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
<	ANGLE
ASPH	ASPHALTIC
AC	ASPHALT CEMENT
ADT	AVERAGE DAILY TRAFFIC
B & B	BALLED AND BURLAPPED
BM	BENCH MARK
CB	CATCH BASIN
℄ OR C/L	CENTER LINE
C-C	CENTER TO CENTER
CONC	CONCRETE
CO	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CY	CUBIC YARD
CULV	CULVERT
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA OR ϕ	DIAMETER
DIST	DISTRICT
DWY	DRIVEWAY
E	EAST
X	EAST GRID COORDINATE
EB	EASTBOUND
ELEC	ELECTRIC
EL OR ELEV	ELEVATION
EMB	EMBANKMENT
EW	ENDWALL
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
EXP	EXPANSION
F-F	FACE TO FACE
FERT	FERTILIZER
FE	FIELD ENTRANCE
F/L	FLOW LINE
FT	FOOT
GN	GRID NORTH
HR	HANDICAP RAMP
HT	HEIGHT
CWT	HUNDREDWEIGHT
HYD	HYDRANT
IN DIA	INCH DIAMETER
INL	INLET
ID	INSIDE DIAMETER
I	INTERSECTION ANGLE
IE	INVERT ELEVATION
IP	IRON PIPE OR PIN
JCT	JUNCTION
L	LENGTH OF CURVE
LF	LINEAR FOOT
LC	LONG CHORD OF CURVE
LCB	LONG CHORD BEARING
LS	LUMP SUM
MH	MANHOLE
N	NORTH
Y	NORTH GRID COORDINATE
OE	OUTLET ELEVATION
OL	OUT LOT
OD	OUTSIDE DIAMETER
OH	OVERHEAD LINES
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
LB	POUND
PE	PRIVATE ENTRANCE
R OR RAD	RADIUS
RR	RAILROAD
R	RANGE
℄ OR R/L	REFERENCE LINE
REQD	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
RD	ROAD
SALV	SALVAGED
SAN	SANITARY SEWER
SECT	SECTION
SHLDR	SHOULDER
SW	SIDEWALK
S	SOUTH
SB	SOUTHBOUND
SPECS	SPECIFICATIONS
SQ	SQUARE
SF OR SQ FT	SQUARE FEET
SY	SQUARE YARD
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STD	STANDARD
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAYS
STA	STATION
SS	STORM SEWER
T	TANGENT
TEL	TELEPHONE
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
T	TON
TC	TOP OF CURB
TN	TOWN
TRANS	TRANSITION
T	TRUCKS (percent of)
TYP	TYPICAL
UNCL	UNCLASSIFIED
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
VERT	VERTICAL
VC	VERTICAL CURVE
VOL	VOLUME
WM	WATER MAIN
WV	WATER VALVE
W	WEST
WB	WESTBOUND
YD	YARD

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 0.64 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.48 ACRES

DESIGN CONTACT

MSA PROFESSIONAL SERVICES, INC.
ATTN: LEAH RHODES, PE
1230 SOUTH BOULEVARD
BARABOO, WI 53913
608-355-8945
LRHODES@MSA-PS.COM

COUNTY CONTACT

VERNON COUNTY
ATTN: PHIL HEWITT, COMMISSIONER
602 NORTH MAIN STREET
VIROQUA, WI 54665
608-637-5452
PHIL.HEWITT@VERNONCOUNTY.ORG

DNR LIAISON

WISCONSIN DEPARTMENT OF
NATURAL RESOURCES
ATTN: KAREN KALVELAGE
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
608-785-9115
KAREN.KALVELAGE@WISCONSIN.GOV

UTILITIES

BURIED TELEPHONE:
VERNON COMMUNICATIONS COOPERATIVE
ATTN: TODD TUNKS
103 NORTH MAIN STREET
P.O. BOX 20
WESTBY, WI 54667
PHONE: 608-632-0615
TTUNKS@VERNONTEL.COM

OVERHEAD ELECTRIC:
VERNON ELECTRIC COOPERATIVE
ATTN: MONTE TEWALT
110 SAUGSTAD ROAD
WESTBY, WI 54667
PHONE: 608-634-7472
MTEWALT@VERNONELECTRIC.ORG

* NOT A MEMBER OF DIGGERS HOTLINE

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

GENERAL NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER. OVERSOW PERMANENT SEEDING AREAS WITH TEMPORARY SEED AT 3 LBS. PER 1000 SQUARE FEET.

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

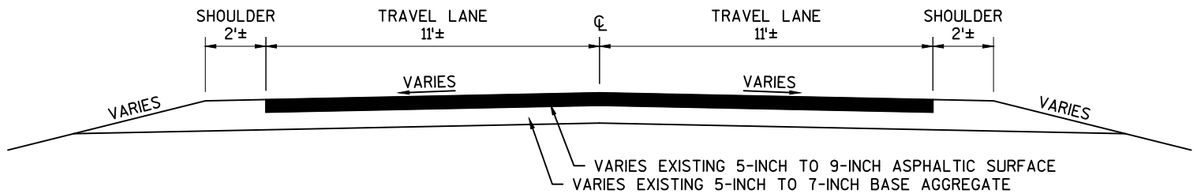
NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO USGS NAVD 88 (2012 ADJUSTED). BENCHMARKS WERE LOCATED IN THE FIELD USING GPS TECHNOLOGY.

THE 4" ASPHALTIC SURFACE SHALL CONSIST OF A 1¾" UPPER LAYER WITH 12.5MM NOMINAL SIZE AGGREGATE AND A 2¼" LOWER LAYER WITH 19.0MM NOMINAL SIZE AGGREGATE.

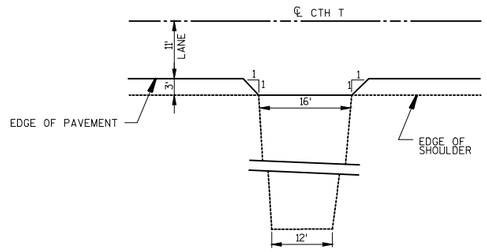
SILT FENCE AND TURBIDITY BARRIER TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER AND IN PLACE PRIOR TO CONSTRUCTION OR BRIDGE REMOVAL.

WETLANDS ARE PRESENT OUTSIDE THE EXISTING TOE OF SLOPE, AREAS OUTSIDE THE SLOPE INTERCEPTS SHALL NOT BE DISTURBED.

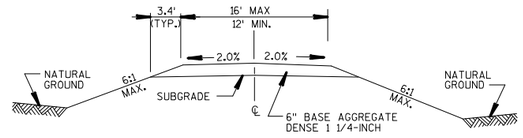


EXISTING TYPICAL SECTION

CTH T

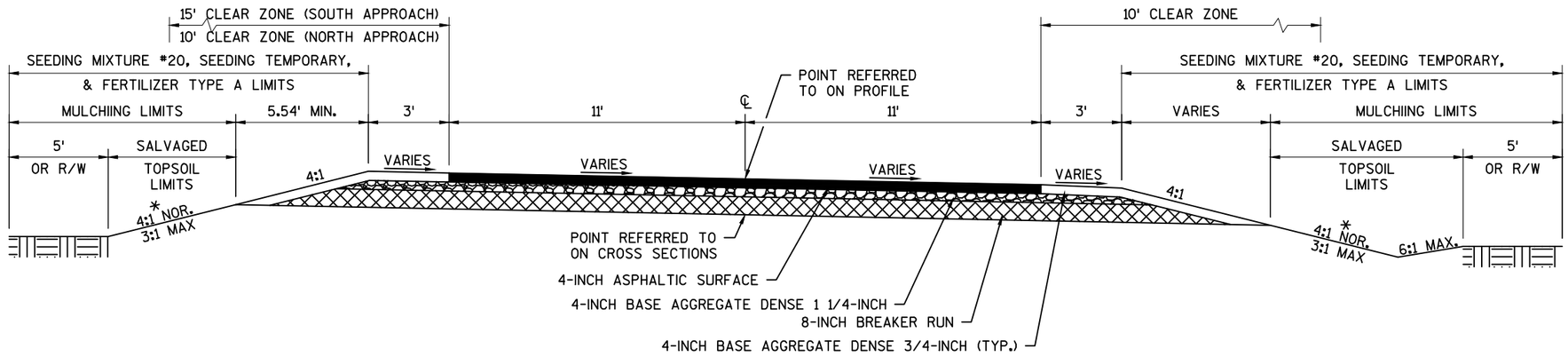


FIELD ENTRANCE PLAN



FIELD ENTRANCE TYPICAL SECTION

FIELD ENTRANCE DETAILS



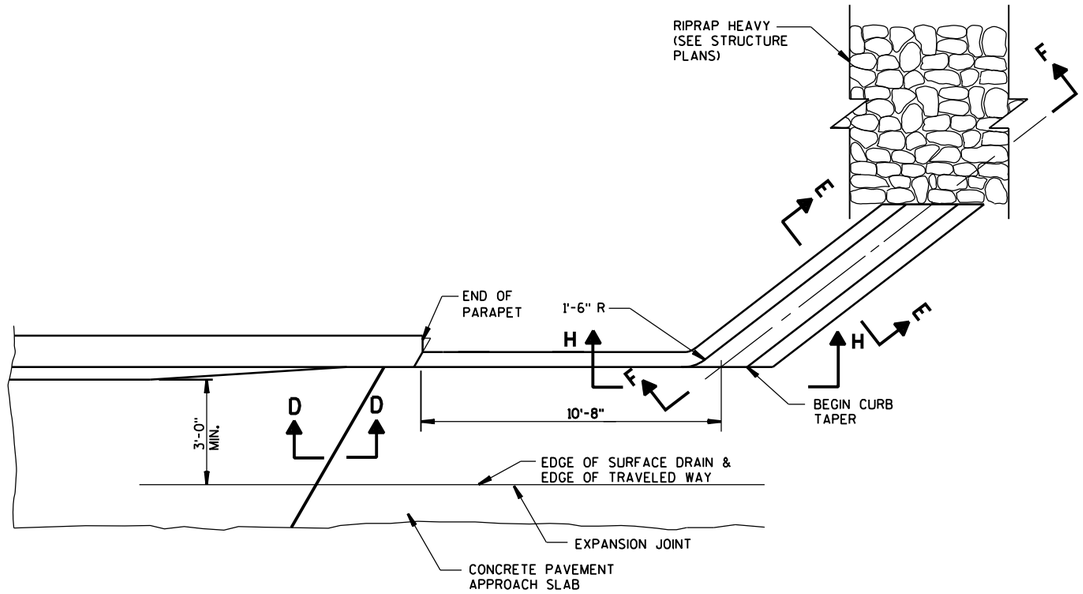
FINISHED TYPICAL SECTION

CTH T

* EROSION MAT URBAN CLASS I, TYPE B.
(SEE PLAN & PROFILE FOR LOCATIONS)

PROJECT NO: 5296-00-70	HWY: CTH T	COUNTY: VERNON	TYPICAL SECTION / CONSTRUCTION DETAILS	SHEET 3	E

FILE NAME : P:\7300S\7330S\7339\07339010\CADD\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020301_TS - 020301_TS
PLOT DATE : 10/13/2016 3:37 PM PLOT BY : JOLIE SNYDER PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42



CONCRETE SURFACE DRAIN

(WING 1 ONLY)

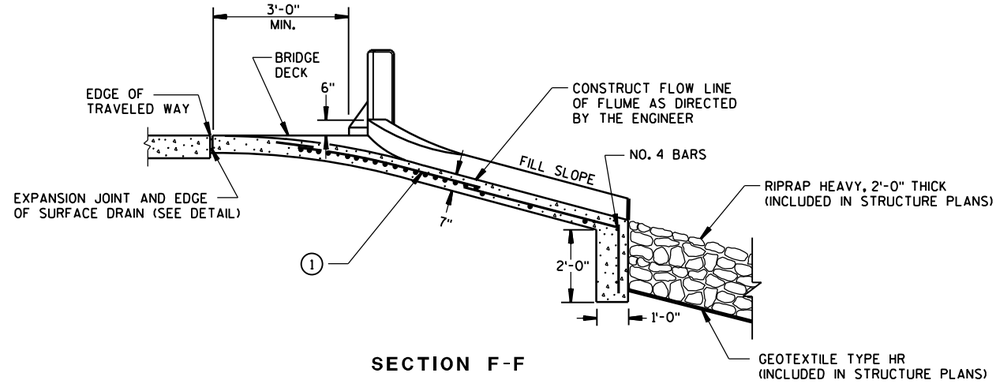
FOR SECTIONS D-D, E-E AND H-H, AND FOR EXPANSION JOINT DETAIL, SEE SDD 8D2, CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES.

GENERAL NOTES

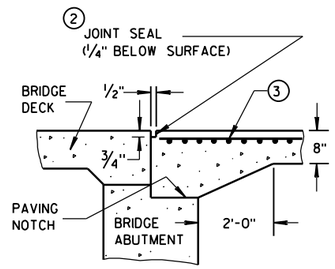
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.



SECTION F-F



CONCRETE PAVEMENT 8-INCH SPECIAL

(WINGS 2, 3, & 4)

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.

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

(2) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED

(3) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.

PROJECT NO: 5296-00-70	HWY: CTH T	COUNTY: VERNON	CONCRETE SURFACE DRAIN & CONCRETE PAV'T SPECIAL DETAILS	SHEET 4	E

2

BM 2
DOUBLE NAIL
STA 9+16.75, 84.43' LT
Y = 114,080.61
X = 728,498.32

79.96'

PT: 9+44.89

CP 2
10" NAIL
STA 9+61.45, 20.73' LT
Y = 114,120.69
X = 728,567.51

N

PC: 7+70.43

BP: 5+99.45

PK NAIL
STA 6+00.00 0.0' LT
Y = 113,761.45
X = 728,628.46

6+00

40.33'

20.97'

PK NAIL
STA 6+50.00 0.0' LT
Y = 113,810.29
X = 728,617.74

7+00

8+00

9+00

28.48'

10+00

102.32'

11+00

46.09'

CP 1
10" NAIL
STA 6+36.87, 16.35' RT
Y = 113,800.97
X = 728,636.53

GUY

SIGN

SIGN

BM 1
CHISELED +
STA 9+73.60, 5.02' RT
Y = 114,129.03
X = 728,594.74

CP 3
10" NAIL
STA 10+58.63, 11.29' RT
Y = 114,212.29
X = 728,613.12

MATCH LINE
STA. 11+50

OH

T

PT: 15+55.16

15+00

MATCH LINE
STA. 11+50

PC: 12+02.26

PT: 13+56.21

PC: 13+56.21

PK NAIL
STA 14+00.00 0.0' LT
Y = 114,552.47
X = 728,616.13

14+00

12+00

13+00

PK NAIL
STA 13+50.00 0.0' LT
Y = 114,503.38
X = 728,625.30

32.73'

32.23'

118.77'

CP 4
PK NAIL
STA 13+75.32, 19.66' RT
Y = 114,532.06
X = 728,641.08

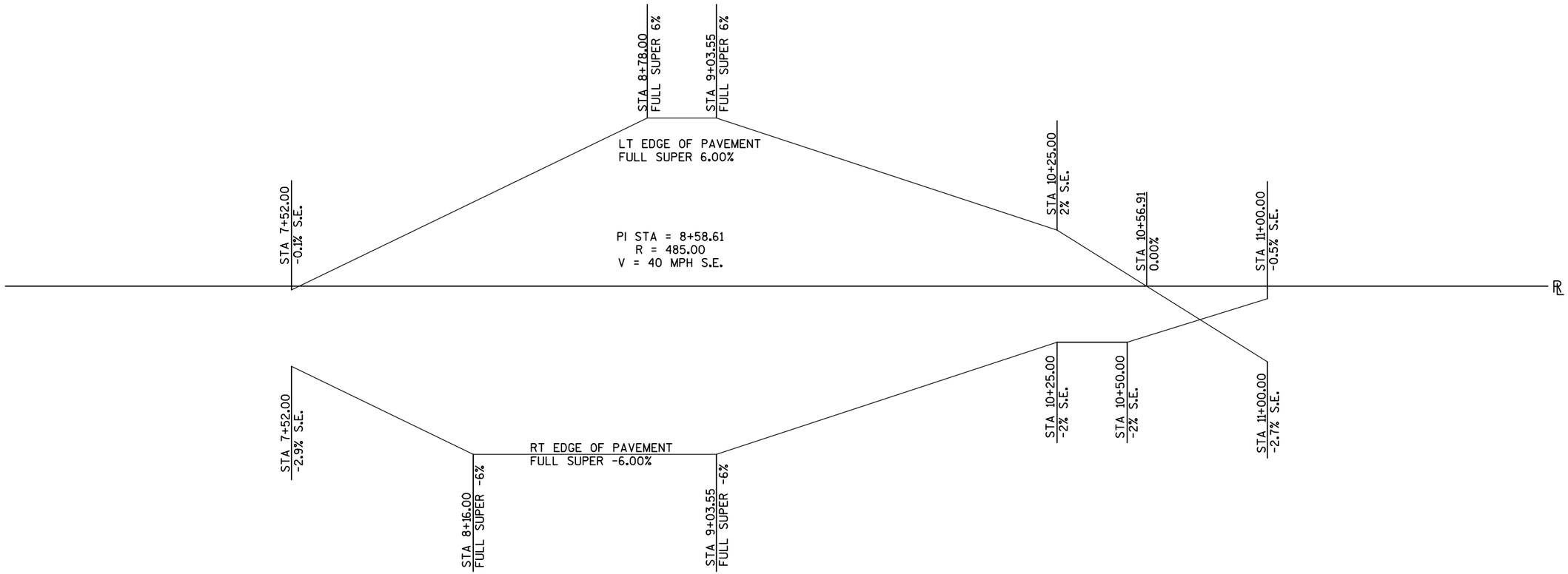
BM 3
PK NAIL IN TOP OF 36" CMP
STA 12+61.07, 21.81' RT
Y = 114,413.61
X = 728,649.83

CVLT

GUY

N

PROJECT NO: 5296-00-70	HWY: CTH T	COUNTY: VERNON	CONTROL POINT TIES & COORDINATES	SHEET 5	E



SUPERELEVATION DIAGRAM

PROJECT NO:5296-00-70	HWY: CTH T	COUNTY: VERNON	SUPERELEVATION DIAGRAM	SHEET 6	E

5296-00-70

Line	Item	Item Description	Unit	Total	Qty
0010	201.0105	Clearing	STA	2.000	2.000
0020	201.0205	Grubbing	STA	2.000	2.000
0030	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. Sta. 10+00	LS	1.000	1.000
0040	205.0100	Excavation Common **P**	CY	566.000	566.000
0050	206.1000	Excavation for Structures Bridges (structure) 01. B-62-247	LS	1.000	1.000
0060	210.1500	Backfill Structure Type A	TON	530.000	530.000
0070	213.0100	Finishing Roadway (project) 01. 5296-00-70	EACH	1.000	1.000
0080	305.0110	Base Aggregate Dense 3/4-Inch	TON	125.000	125.000
0090	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	222.000	222.000
0100	311.0110	Breaker Run	TON	465.000	465.000
0110	415.0410	Concrete Pavement Approach Slab	SY	104.000	104.000
0120	416.1010	Concrete Surface Drains	CY	2.000	2.000
0130	455.0605	Tack Coat	GAL	33.000	33.000
0140	465.0105	Asphaltic Surface	TON	145.000	145.000
0150	502.0100	Concrete Masonry Bridges	CY	225.000	225.000
0160	502.3200	Protective Surface Treatment	SY	205.000	205.000
0170	502.3210	Pigmented Surface Sealer	SY	41.000	41.000
0180	505.0400	Bar Steel Reinforcement HS Structures	LB	5,380.000	5,380.000
0190	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	26,840.000	26,840.000
0200	516.0500	Rubberized Membrane Waterproofing	SY	14.000	14.000
0210	550.0500	Pile Points	EACH	14.000	14.000
0220	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	330.000	330.000
0230	606.0300	Riprap Heavy	CY	220.000	220.000
0240	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	180.000	180.000
0250	619.1000	Mobilization	EACH	1.000	1.000
0260	624.0100	Water	MGAL	47.000	47.000
0270	625.0500	Salvaged Topsoil	SY	530.000	530.000
0280	627.0200	Mulching	SY	1,000.000	1,000.000
0290	628.1504	Silt Fence	LF	510.000	510.000
0300	628.1520	Silt Fence Maintenance	LF	510.000	510.000
0310	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0320	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0330	628.2008	Erosion Mat Urban Class I Type B	SY	280.000	280.000
0340	628.6005	Turbidity Barriers	SY	250.000	250.000
0350	629.0205	Fertilizer Type A	CWT	1.000	1.000
0360	630.0120	Seeding Mixture No. 20	LB	36.000	36.000
0370	630.0200	Seeding Temporary	LB	36.000	36.000
0380	633.5100	Markers Row	EACH	10.000	10.000

5296-00-70

Line	Item	Item Description	Unit	Total	Qty
0390	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0400	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0410	638.2602	Removing Signs Type II	EACH	4.000	4.000
0420	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0430	642.5001	Field Office Type B	EACH	1.000	1.000
0440	643.0100	Traffic Control (project) 01. 5296-00-70	EACH	1.000	1.000
0450	645.0120	Geotextile Type HR	SY	420.000	420.000
0460	646.0106	Pavement Marking Epoxy 4-Inch	LF	1,392.000	1,392.000
0470	650.4500	Construction Staking Subgrade	LF	300.000	300.000
0480	650.5000	Construction Staking Base	LF	300.000	300.000
0490	650.6500	Construction Staking Structure Layout (structure) 01. B-62-247	LS	1.000	1.000
0500	650.7000	Construction Staking Concrete Pavement	LF	42.000	42.000
0510	650.9910	Construction Staking Supplemental Control (project) 01. 5296-00-70	LS	1.000	1.000
0520	650.9920	Construction Staking Slope Stakes	LF	300.000	300.000
0530	690.0150	Sawing Asphalt	LF	44.000	44.000
0540	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
0550	715.0502	Incentive Strength Concrete Structures	DOL	1,350.000	1,350.000
0560	SPV.0180	Special 01. Concrete Pavement 8-Inch Special	SY	24.000	24.000

201.0105 CLEARING
201.0205 GRUBBING

STATION	-	STATION	LOCATION	CLEARING STA	GRUBBING STA
9+00	-	11+00	RIGHT	2	2
		TOTALS:		2	2

205.0100 EXCAVATION COMMON **P**

LOCATION	EXC. COMMON CY (3)	FILL CY (1)	EXPANDED FILL CY (2)	WASTE CY
STA 7+52 - STA. 9+65.56	419	106	139	280
STA 10+14.44 - STA 11+00	147	176	229	-82
TOTALS:	566	282	368	198

(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.
(2) - FILL EXPANSION 30%
(3) - EXISTING ASPHALTIC PAVEMENT IS INCLUDED IN COMMON EXCAVATION TOTALS. SEE EARTHWORK TABLE.

305.0110 BASE AGGREGATE DENSE 3/4-INCH
305.0120 BASE AGGREGATE DENSE 1 1/4-INCH
311.0110 BREAKER RUN
624.0100 WATER

STATION	-	STATION	BASE AGGREGATE DENSE 3/4-INCH TON	BASE AGGREGATE DENSE 1 1/4-INCH TON	BREAKER RUN TON	WATER* MGAL
7+52.00	-	9+65.56	92	160	330	12
10+14.44	-	11+00.00	33	60	135	5
8+38 (FE, RT)				2		
		TOTALS:	125	222	465	17

*ADDITIONAL QUANTITY INCLUDED WITH EROSION CONTROL ITEMS

SPV.0180.01 CONCRETE PAVEMENT 8-INCH SPECIAL
415.0410 CONCRETE PAVEMENT APPROACH SLAB

STATION	-	STATION	PAVEMENT 8-INCH SPECIAL SY	APPROACH* SLAB SY
9+45	-	9+74	10	52
10+06	-	10+35	14	52
		TOTALS:	24	104

*QUANITITY INCLUDES CONCRETE PAVEMENT APPROACH SLAB (NON-REINFORCED)

416.1010 CONCRETE SURFACE DRAINS

LOCATION	DRAINS CY
WING 1	2.0
TOTAL:	2.0

455.0605 TACK COAT
465.0105 ASPHALTIC SURFACE

STATION	-	STATION	TACK COAT GAL	ASPHALTIC SURFACE TON
7+52.00	-	9+45.00	24.5	107
10+35.00	-	11+00.00	8.5	38
		TOTALS:	33	145

P - PAY PLAN QUANTITY

NOTE:
ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010.

625.0500 SALVAGED TOPSOIL
627.0200 MULCHING
629.0205 FERTILIZER TYPE A
630.0120 SEEDING MIXTURE NO. 20
630.0200 SEEDING TEMPORARY
624.0100 WATER

STATION	-	STATION	LOCATION	SALVAGED TOPSOIL SY	MULCHING SY	FERTILIZER CWT	SEEDING #20 LB	SEEDING TEMPORARY LB	WATER* MGAL
7+52	-	9+90	LT	160	295	0.25	11	11	9
7+52	-	9+60	RT	30	145	0.15	7	7	6
10+25	-	11+00	LT	25	70	0.05	3	3	2
9+75	-	11+00	RT	215	290	0.20	9	9	8
UNDISTRIBUTED				100	200	0.20	6	6	5
		TOTALS:		530	1000	1	36	36	30

*ADDITIONAL QUANTITY INCLUDED WITH BASE AGGREGATE ITEMS.

628.1504 SILT FENCE
628.1520 SILT FENCE MAINTENANCE

STATION	-	STATION	LOCATION	FENCE LF	MAINT. LF
7+52.00	-	9+90.00	LT	250	250
7+52.00	-	9+42.00	RT	180	180
10+75.00	-	11+00.00	LT	30	30
UNDISTRIBUTED			-	50	50
			TOTALS:	510	510

628.6005 TURBIDITY BARRIERS

LOCATION	SY
SOUTH ABUT	90
NORTH ABUT	160
TOTAL:	250

633.5100 MARKERS ROW

STATION	OFFSET	LOCATION	EACH
9+00	34.60	LT	1
9+00	31.45	RT	1
9+75	37.45	LT	1
9+75.82	53.37	RT	1
10+00	45.00	LT	1
10+00	60.00	RT	1
10+75	50.00	RT	1
10+90	45.00	LT	1
11+25	33.00	LT	1
11+25	33.00	RT	1
		TOTAL:	10

628.2008 EROSION MAT URBAN CLASS I TYPE B

LOCATION	URBAN CLASS I TYPE B SY
STA 9+03 - STA 9+34, RT	28
STA 10+06 - STA 10+93, RT	215
STA 10+65 - STA 10+78, LT	11
UNDISTRIBUTED	26
TOTALS:	280

634.0612 POSTS WOOD 4x6-INCH x 12-FT
637.2230 SIGNS TYPE II REFLECTIVE F
638.2602 REMOVING SIGNS TYPE II
638.3000 REMOVING SMALL SIGN SUPPORTS

STATION	LOCATION	SIGN CODE	SIZE	SIGNS TYPIE II REFLECTIVE F SF	WOOD POSTS EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	COMMENTS
9+45	RT	-	-	-	-	-	-	WEIGHT LIMIT POSTING (REMOVED BY COUNTY)
9+56	RT	W5-52R	12"x36"	3	1	-	-	OBJECT MARKER
9+72	RT	-	-	-	-	1	1	EXISTING OBJECT MARKER
9+74	LT	W5-52L	12"x36"	3	1	-	-	OBJECT MARKER
9+85	LT	-	-	-	-	1	1	EXISTING OBJECT MARKER
10+06	RT	W5-52L	12"x36"	3	1	-	-	OBJECT MARKER
10+14	RT	-	-	-	-	1	1	EXISTING OBJECT MARKER
10+24	LT	W5-52R	12"x36"	3	1	-	-	OBJECT MARKER
10+28	LT	-	-	-	-	1	1	EXISTING OBJECT MARKER
10+60	LT	-	-	-	-	-	-	WEIGHT LIMIT POSTING (REMOVED BY COUNTY)
		TOTALS:		12	4	4	4	

646.0106 PAVEMENT MARKING EPOXY 4-INCH

STATION	-	STATION	LOCATION	PAVEMENT MARKING YELLOW LF	PAVEMENT MARKING WHITE LF
7+52	-	11+00	CENTERLINE - DOUBLE SOLID	696	-
7+52	-	11+00	EDGELINE LT & RT - SOLID	-	696
			TOTAL:	1392	

650.4500 CONSTRUCTION STAKING SUBGRADE
650.5000 CONSTRUCTION STAKING BASE
650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT
650.9920 CONSTRUCTION STAKING SLOPE STAKES
650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 5296-00-70

STATION	-	STATION	SUBGRADE LF	BASE LF	CONCRETE PAV'T LF	SLOPE STAKES LF	SUPPLEMENTAL CONTROL LS
7+52	-	9+65.56	214	214	-	214	-
9+45	-	9+66	-	-	21	-	-
10+14	-	10+35	-	-	21	-	-
10+14.44	-	11+00	86	86	-	86	-
		TOTALS:	300	300	42	300	1

690.0150 SAWING ASPHALT

STATION	LF
7+52	22
11+00	22
TOTAL:	44

NOTE:
ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010.

CONVENTIONAL SYMBOLS

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

SECTION CORNER SYMBOL (18 / 23 24 / 16 15 / 9)
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN — SIGN
OFF-PREMISE SIGN — I-25 — SIGN

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) — IP

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	□
TELEPHONE POLE	●	⌀
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	✖	✖

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

PARCEL NUMBER (25)
UTILITY NUMBER (40)
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA

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

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), 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 ¾" X 24" REBAR) AND ARE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

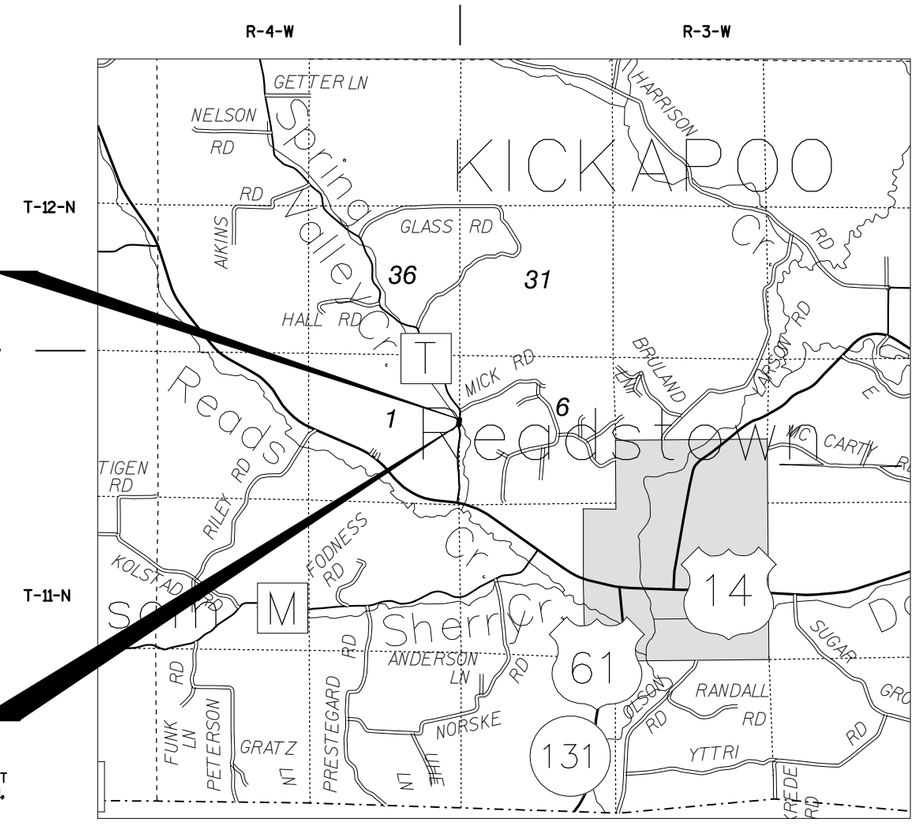
RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

N

CAUTION
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.

END RELOCATION
ORDER STA. 11+25.00
Y = 114,279.59
X = 728,611.45
523.91 FEET NORTH OF AND 33.60 FEET WEST OF THE EAST QUARTER CORNER OF SECTION 1, T-11-N, R-4-W, TOWN OF KICKAPOO, VERNON COUNTY, WI

BEGIN RELOCATION
ORDER STA. 9+00.00
Y = 114,056.67
X = 728,581.29
300.99 FEET NORTH OF AND 63.76 FEET WEST OF THE EAST QUARTER CORNER OF SECTION 1, T-11-N, R-4-W, TOWN OF KICKAPOO, VERNON COUNTY, WI



LAYOUT
SCALE 0 — 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.043 MI

CONVENTIONAL UTILITY SYMBOLS

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

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
5296-00-00		
CONSTRUCTION PROJECT NUMBER 5296-00-70	4.01	2

PLAT OF RIGHT OF WAY REQUIRED FOR

READSTOWN - USH 14

(SPRING VALLEY CREEK BRIDGE B-62-0247)

CTH T — VERNON COUNTY

ORIGINAL PLAT PREPARED BY

MSA PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL DEVELOPMENT • ENVIRONMENTAL
1230 South Boulevard Baraboo, WI 53913
608-356-2771 1-800-362-4505 Fax: 608-356-2770
Web Address: www.msa-ps.com

WISCONSIN
GREGORY P. RHINEHART
S-1478
FRIENDSHIP, WI
LAND SURVEYOR

7/7/2016 (Date)
Gregory P. Rhinehart (Professional Land Surveyor)

REVISION DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR VERNON COUNTY

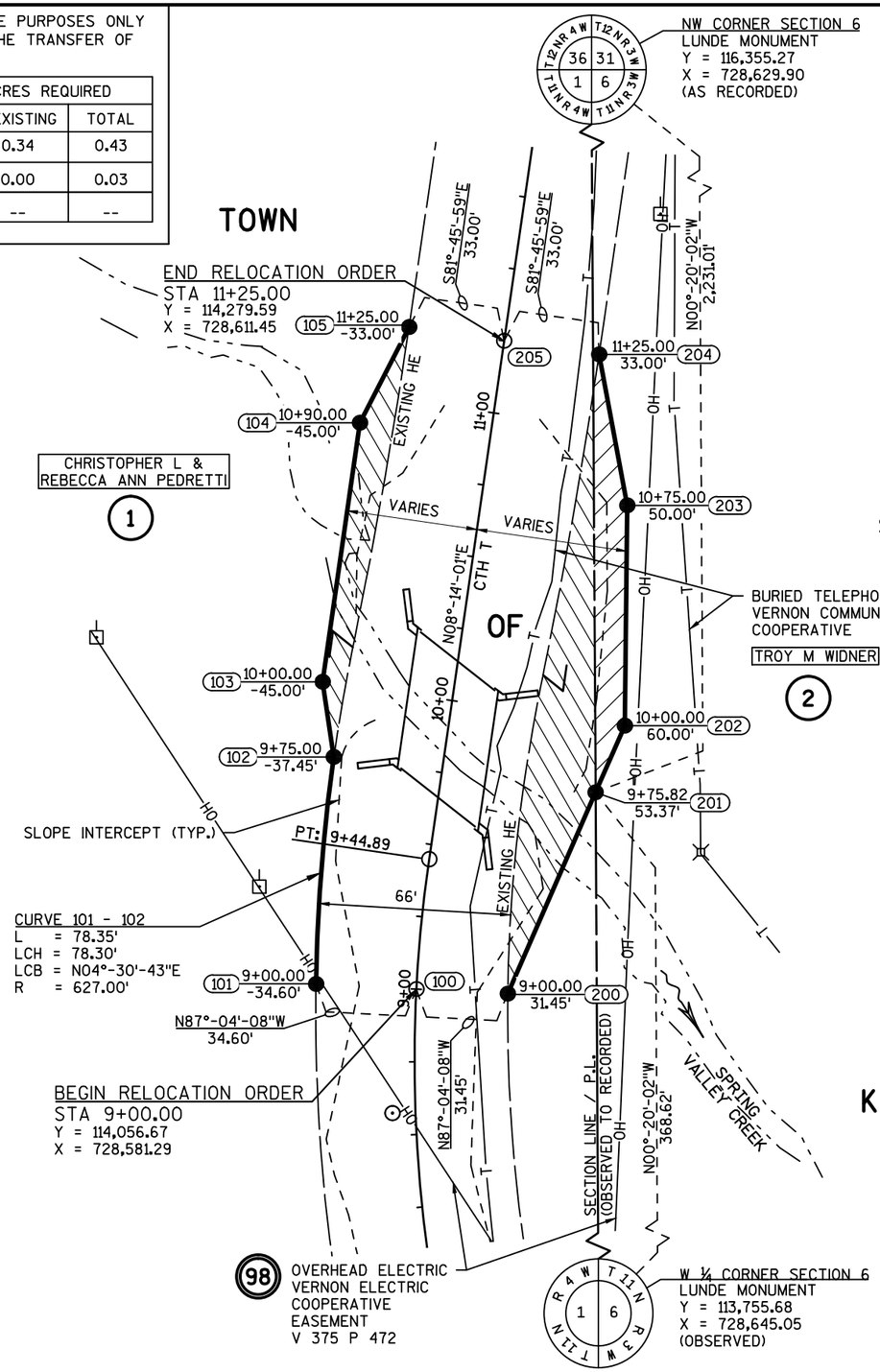
DATE:_____ _____ (Signatu

FILE NAME : P:\7300S\7330S\7339\07339010\CADD\RW\7339010 PLATTITLE.DWG
LAYOUT NAME - 7339010 PLATTITLE - 4.01
PLOT DATE : 7/7/2016 9:09 AM
PLOT BY : BRAD LEE
PLOT NAME :
WISDOT/CADDS SHEET 50

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED		
			NEW	EXISTING	TOTAL
1	CHRISTOPHER L & REBECCA ANN PEDRETTI	FEE	0.09	0.34	0.43
2	TROY M WIDNER	FEE	0.03	0.00	0.03
98	VERNON ELECTRIC COOPERATIVE	RELEASE OF RIGHTS	--	--	--



R/W COURSE TABLE

COURSE	BEARING	DISTANCE
102 - 103	N08°-33'-47"W	26.11'
103 - 104	N08°-14'-01"E	90.00'
104 - 105	N27°-09'-12"E	37.00'
204 - 203	S10°-32'-52"E	52.81'
203 - 202	S00°-38'-20"W	75.66'
202 - 201	S23°-34'-09"W	25.07'
201 - 200	S23°-34'-09"W	75.54'

R/W POINT COORDINATES

PT. NO.	Y	X
* 100	114,056.67	728,581.29
101	114,058.44	728,546.74
102	114,136.49	728,552.90
103	114,162.32	728,549.01
104	114,251.39	728,561.90
105	114,284.31	728,578.79
200	114,055.06	728,612.70
201	114,124.30	728,642.91
202	114,147.28	728,652.93
203	114,222.94	728,653.78
204	114,274.86	728,644.11
* 205	114,279.59	728,611.45

* NON-MONUMENTED R/W POINT

REVISION DATE			

DATE JULY 7, 2016
GRID FACTOR N/A
SCALE, FEET 0 25 50
HWY: CTH T
COUNTY: VERNON
STATE R/W PROJECT NUMBER 5296-00-00
CONSTRUCTION PROJECT NUMBER 5296-00-70
PLAT SHEET 4.02
PS&E SHEET --12
E

FILE NAME : 7339010 PLAT.DWG
LAYOUT NAME - 7339010 PLAT - 4.02
PLOT DATE : 7/7/2016 9:25 AM
PLOT BY : BRAD LEE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 75

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- RIPRAP HEAVY
- TURBIDITY BARRIER

PI = 8+58.61
Y = 114,014.06
X = 728,573.03
Δ = 20°36'35" R
D = 11°48'49"
T = 88.18'
L = 174.46'
R = 485.00'
PC = 7+70.43
PT = 9+44.89

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1	9+73.6, 5.0' RT	CHIS + SE CORNER OF BRIDGE	815.72
2	9+16.8, 84.4' LT	2 POLE NAILS IN 12" OAK TREE	814.69
3	12+61.1, 21.8' RT	PK TOP OF 36" CMP @ S7476	821.02

PI = 12+79.67
Y = 114,432.66
X = 728,633.60
Δ = 14°53'59" L
D = 9°40'42"
T = 77.41'
L = 153.95'
R = 592.00'
PC = 12+02.26
PT = 13+56.21

BM 2 · BM 1 · BM 3

CHRISTOPHER L & REBECCA PEDRETTI

TROY M WIDNER

OVERHEAD ELECTRIC
VERNON ELECTRIC COOPERATIVE

BURIED TELEPHONE
VERNON COMMUNICATIONS COOPERATIVE

(WOODED) · (LAWN)

CONCRETE PAVEMENT 8-INCH SPECIAL

CONCRETE PAVEMENT APPROACH SLAB (NON-REINFORCED)

CONCRETE PAVEMENT APPROACH SLAB

SAWCUT

CONCRETE SURFACE DRAIN

SLOPE INTERCEPT (TYP.)

CTH T (ASPHALT)

R/W

EXISTING HE

PC: 7+70.43 · PT: 9+44.89 · PC: 12+02.26

7+00 · 8+00 · 9+00 · 10+00 · 11+00 · 12+00 · 13+00

N12°-22'-34"W · N08°-14'-01"E · 66'

STA 8+38 FF RT

SECTION LINE

RIGHT DITCH

SPRING VALLEY CREEK

NO GUY

STA 10+00, STRUCTURE P-62-0128, REMOVE
SINGLE SPAN STEEL DECK GIRDER
19.6' CLEAR ROADWAY WIDTH
42.6' OVERALL LENGTH
30° SKEW LHF

BEGIN PROJECT
STA 7+52
Y = 113,909.92
X = 728,595.88

END PROJECT
STA 11+00
Y = 114,254.84
X = 728,607.87

STA 9+90, STRUCTURE B-62-0247, REQ'D
SINGLE SPAN FLAT CONCRETE SLAB
28.0' CLEAR ROADWAY WIDTH
48.9' OVERALL LENGTH
30° SKEW LHF

* BLEND LAST 20' OF PROFILE TO MATCH EXISTING ELEVATION AND GRADE AT BEGINNING OF PROJECT

EXISTING ℄ PROFILE

FINISHED ℄ PROFILE

VCL = 115.00
K = 26.27

VCL = 110.00
K = 39.53

-2.52% · 1.86% · 4.64% · 4.40%

VPC STA 7+05.12 VPC EL 811.84

VPI STA 7+62.62 VPI EL 810.39

VPT STA 8+20.12 VPT EL 811.46

VPC STA 10+92.00 VPC EL 816.51

VPI STA 11+47.00 VPI EL 817.53

VPT STA 12+02.00 VPT EL 820.08

STA 12+25.00 EL 821.15

HIGH WATER 100 ELEV. 809.76

SPECIAL DITCH RIGHT

820 · 816 · 812 · 808 · 806

811.97 811.97 · 811.11 811.09 · 811.11 811.16 · 812.00 812.01 · 813.46 812.94 · 815.08 813.87 · 804.88 814.80 · 815.86 815.73 · 816.67 816.67 · 817.97 818.01 · 819.98 819.99 · 822.30 · 824.52

EARTHWORK SUMMARY
STA 7+52 - STA 11+00
EXC COMMON 566 CY
FILL 368 CY
FILL EXPANSION 30%
WASTE 198 CY

PROJECT NO: 5296-00-70	HWY: CTH T	COUNTY: VERNON	PLAN AND PROFILE: CTH T	SHEET 13 E

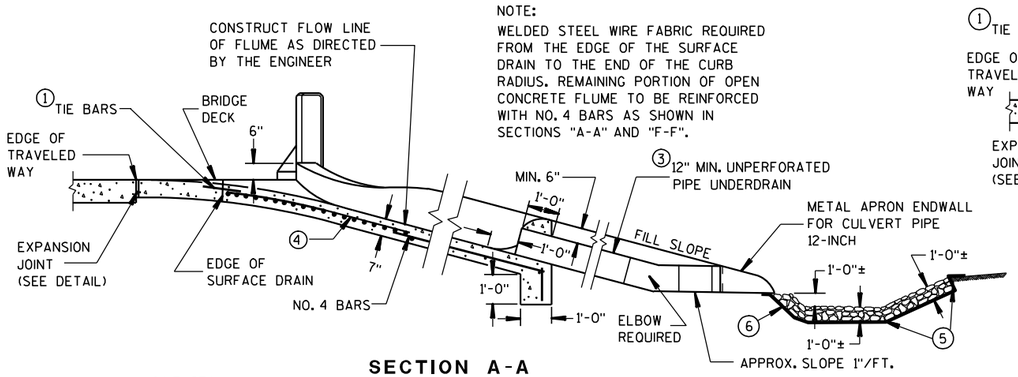
FILE NAME : P:\7300S\7330S\7339\07339010\CADD\DESIGN\ALIPROFS\7339010_ALIPROFFS_CTH T.DWG
7339010_PP1

PLOT DATE : 10/13/2016 3:40 PM · PLOT BY : JOLIE SNYDER · PLOT NAME : · PLOT SCALE : 1 IN:40 FT

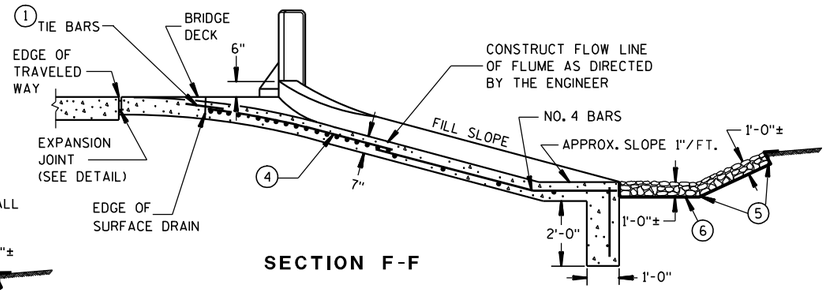
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

08D02-06	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13A03-06	CONCRETE PAVEMENT SHOULDERS
13B02-08A	CONCRETE PAVEMENT APPROACH SLAB
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-11A	RURAL DOWELED CONCRETE PAVEMENT
13C11-11B	RURAL DOWELED CONCRETE PAVEMENT
13C18-03A	CONCRETE PAVEMENT JOINTING
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C06-08	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-16A	PAVEMENT MARKING (MAINLINE)



SECTION A-A



SECTION F-F

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.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

(1) NO. 4 X 2'-0" TIE BARS SPACED AT 3'-0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.

(2) NO. 4 X 2'-0" TIE BARS SPACED AT 12" CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PIPE UNDERDRAIN MAY BE ANY OF THE MATERIALS LISTED IN SECTION 612.2 OF THE STANDARD SPECIFICATIONS EXCEPT DRAIN TILE.

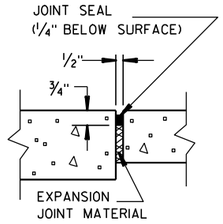
(4) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.

(5) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

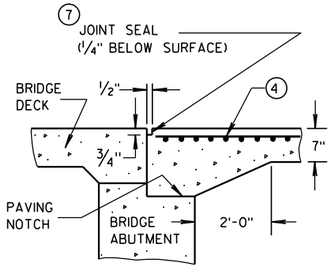
(6) GEOTEXTILE FABRIC, TYPE 'R"

(7) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.

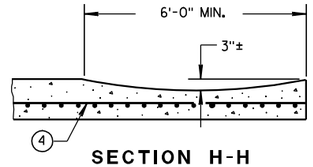
(8) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1½".



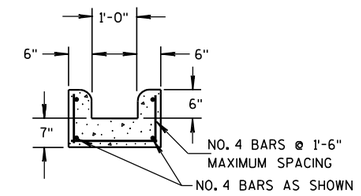
EXPANSION JOINT DETAIL



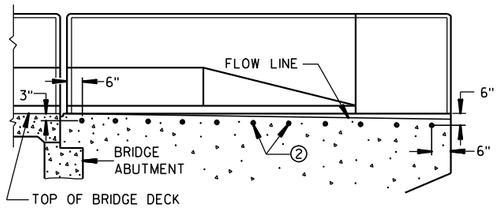
SECTION D-D



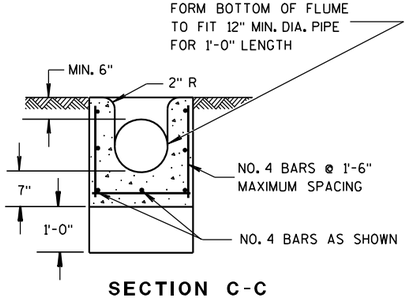
SECTION H-H



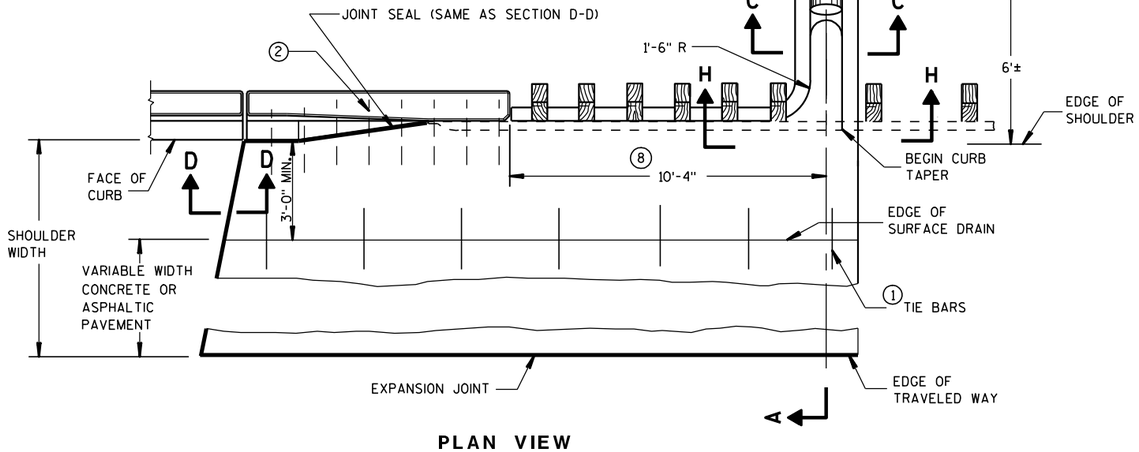
SECTION E-E



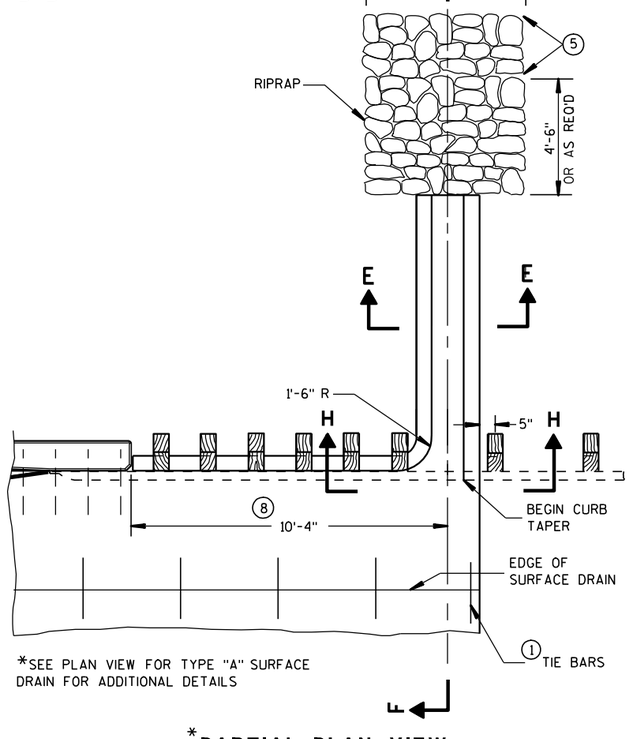
LOCATION OF TIE BARS IN WINGWALL



SECTION C-C



PLAN VIEW
SURFACE DRAIN WITH PIPE
TYPE "A"



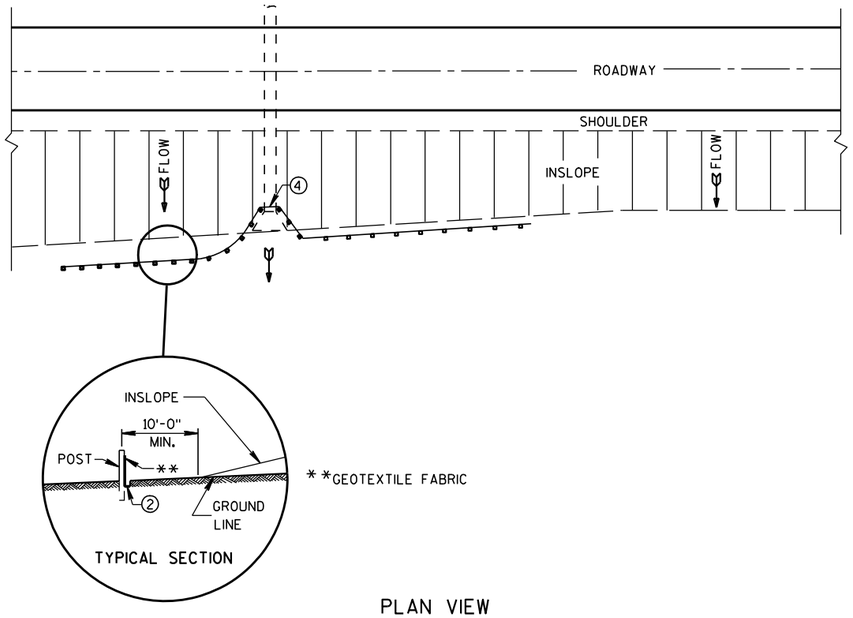
*SEE PLAN VIEW FOR TYPE "A" SURFACE DRAIN FOR ADDITIONAL DETAILS

*PARTIAL PLAN VIEW
SURFACE DRAIN WITHOUT PIPE
TYPE "B"

CONCRETE SURFACE DRAINS
FLUME TYPE
AT STRUCTURES

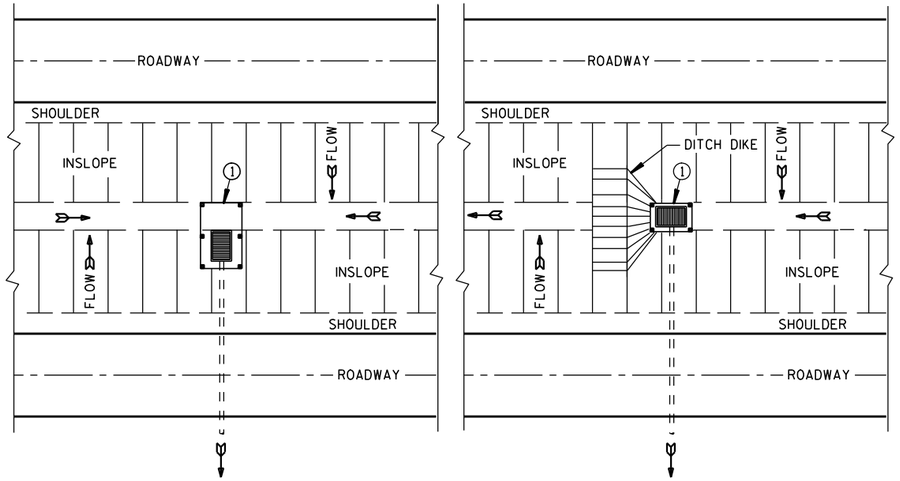
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA



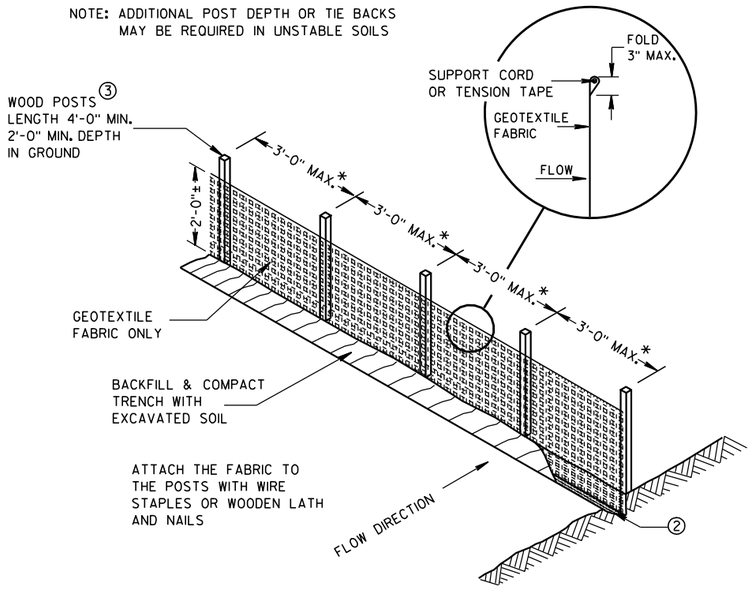
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



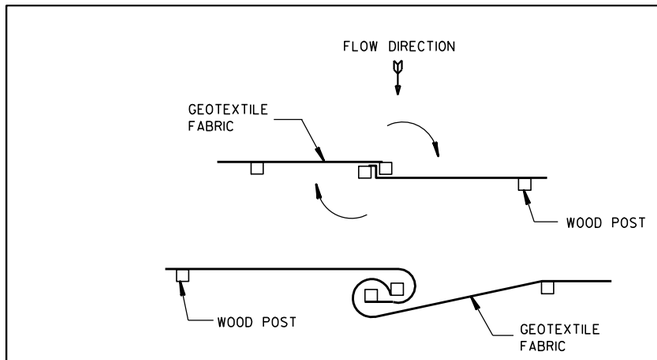
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



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

SILT FENCE

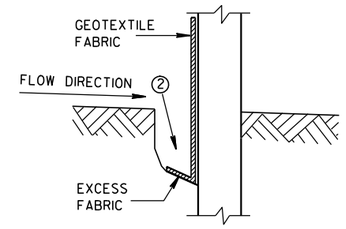


JOINING TWO LENGTHS OF SILT FENCE 5

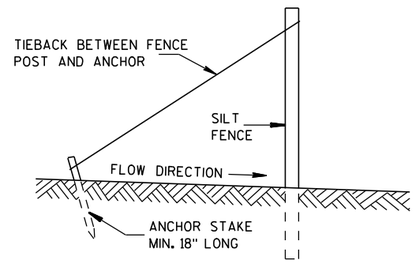
GENERAL NOTES

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

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



TRENCH DETAIL



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

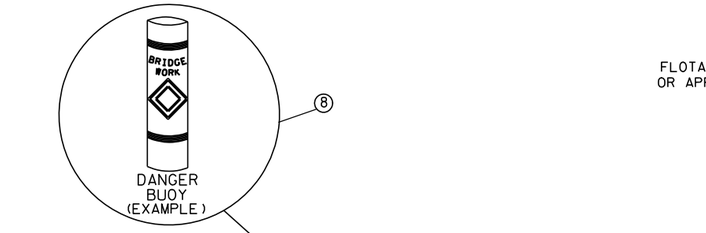
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

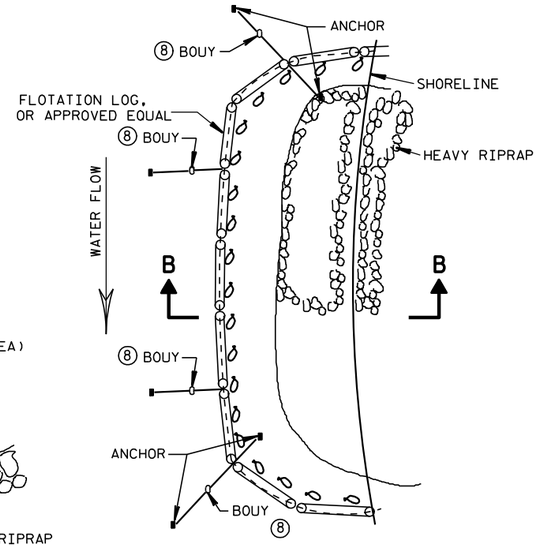
S.D.D. 8 E 9-6

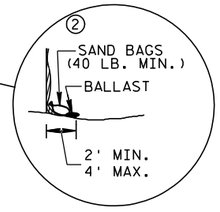
6

S.D.D. 8 E 9-6

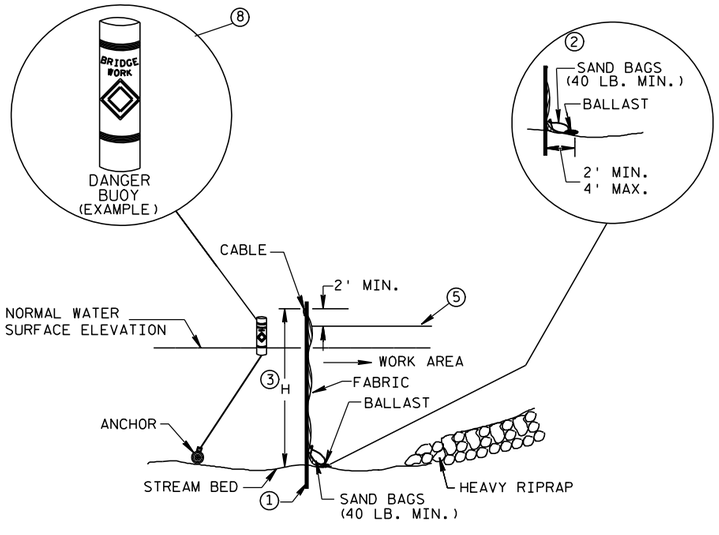


SECTION B-B

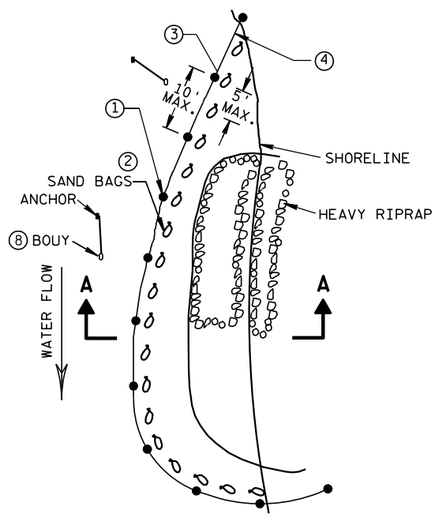




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

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

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

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

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

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

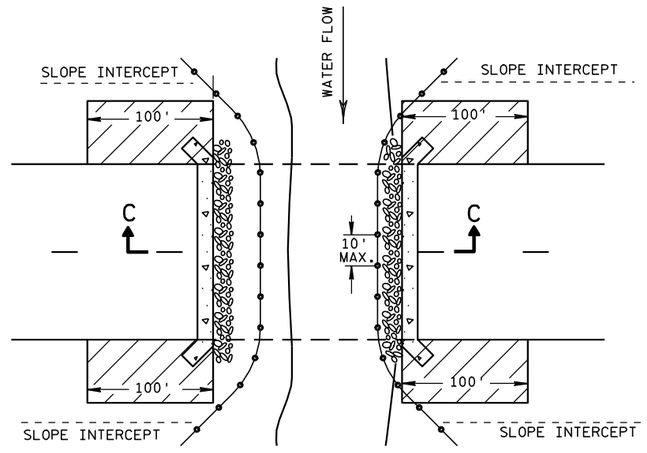
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

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

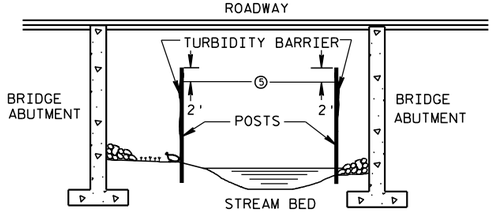
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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

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



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 11-2

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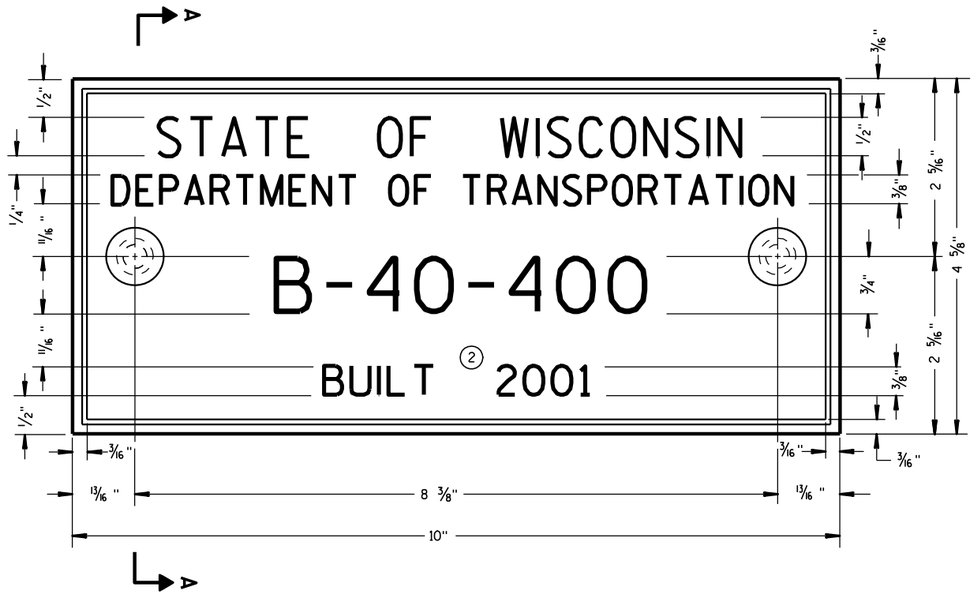
S.D.D. 8 E 11-2



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

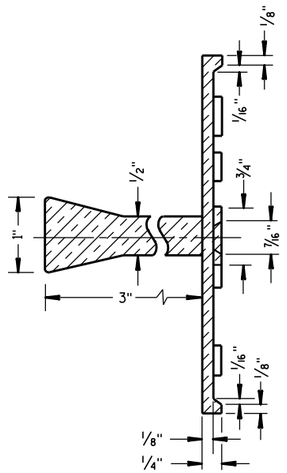
GENERAL NOTES

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

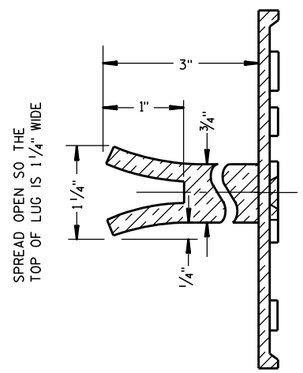
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

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



SECTION A-A



ALTERNATE LUG

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

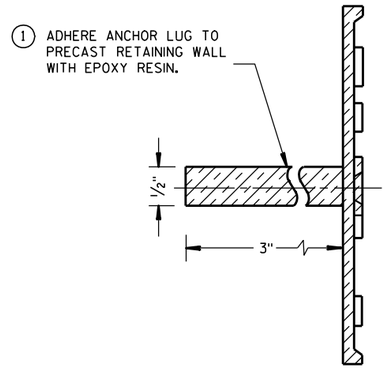
COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

FHWA

6

S.D.D. 12 A 3-10

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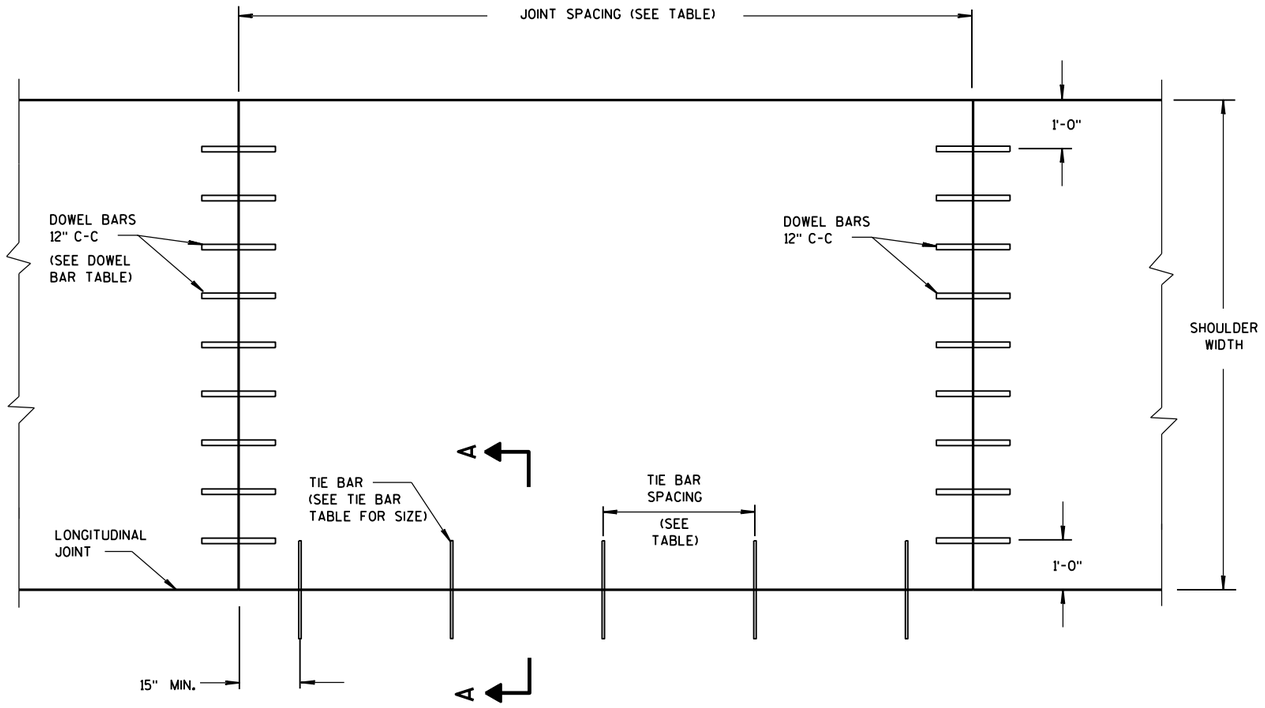
S.D.D. 12 A 3-10



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

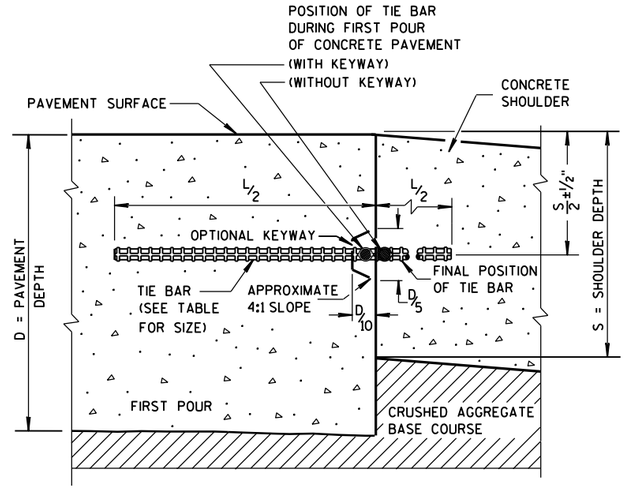
GENERAL NOTES

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.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER***	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

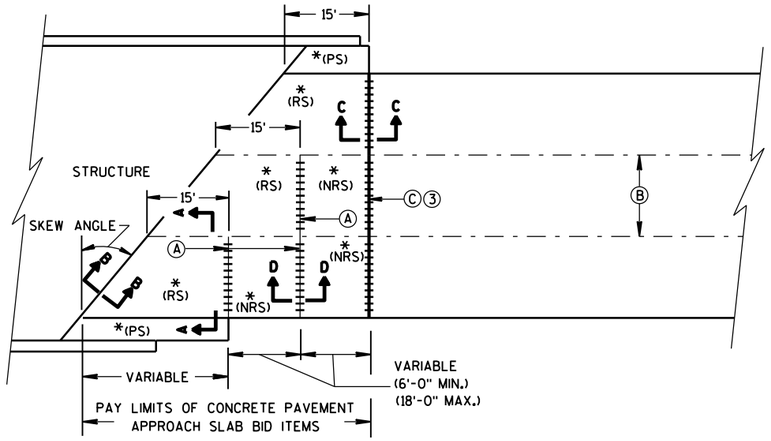
APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEF
FHWA

6

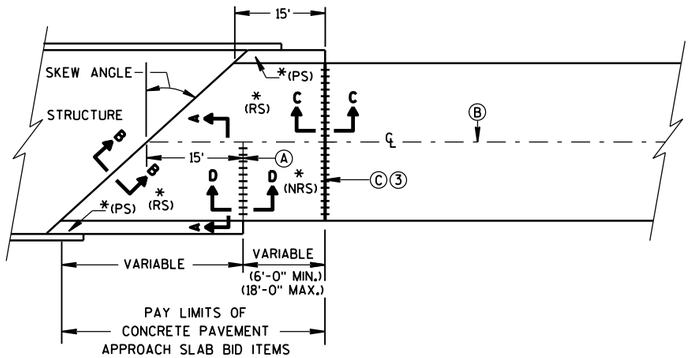
S.D.D. 13 A 3-6

6

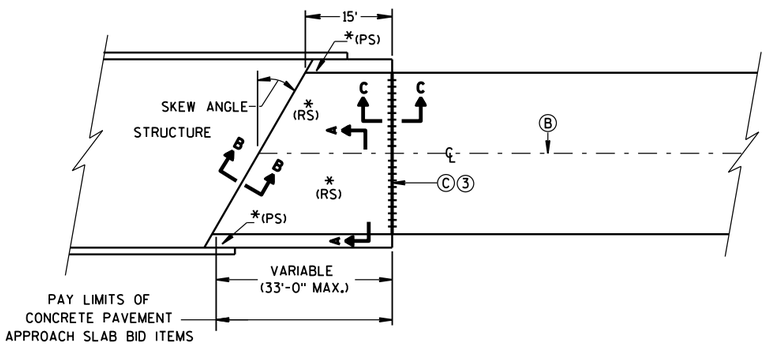
S.D.D. 13 A 3-6



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >20°
(PAVEMENT WIDTH ≤30')



SKEWS ≤20°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

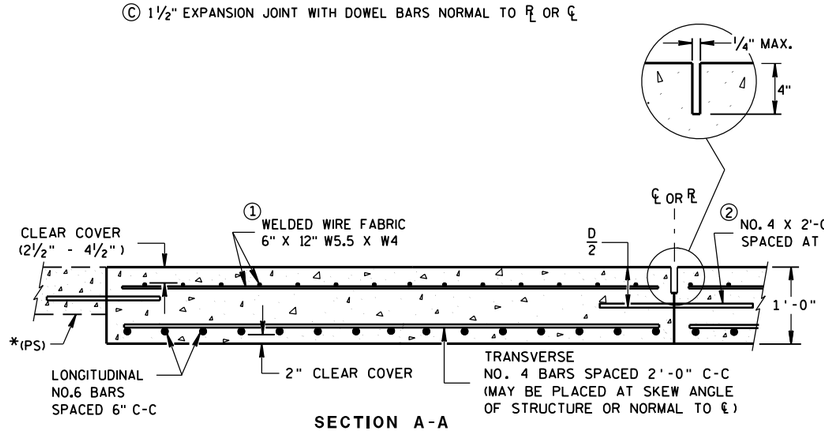
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

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

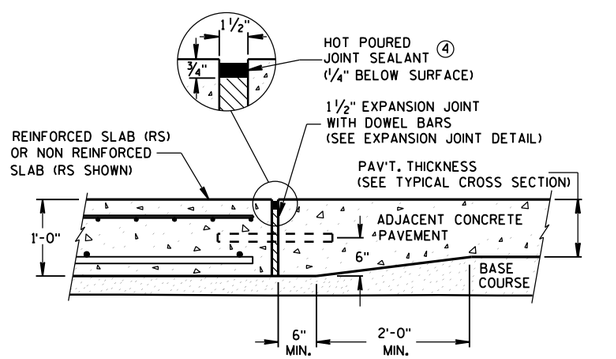
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄

Ⓑ STANDARD LONGITUDINAL JOINT WITH TIE BARS.

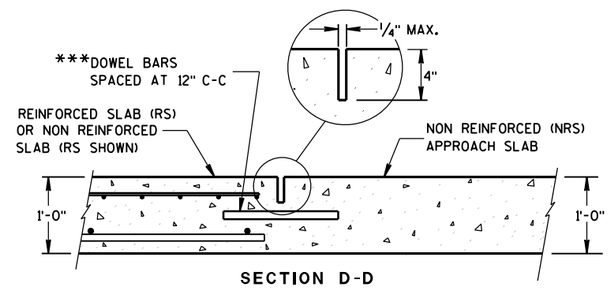
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

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

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

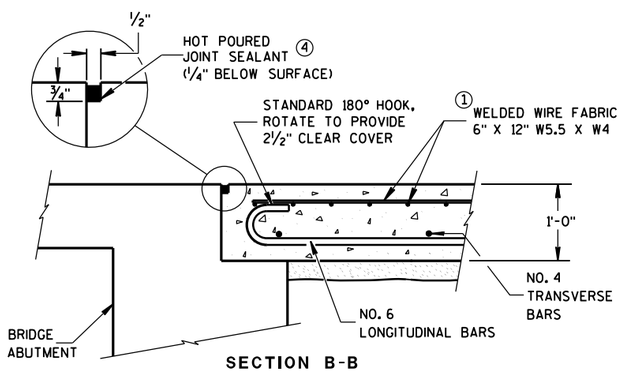
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

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

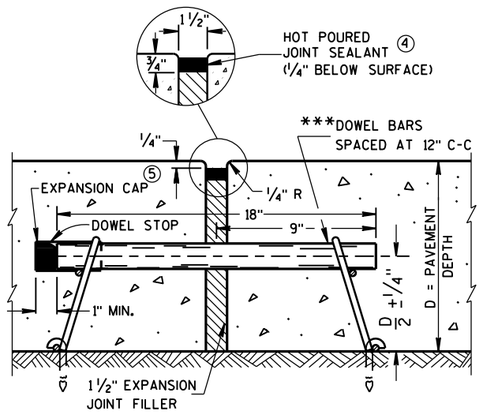
③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

④ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.

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



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

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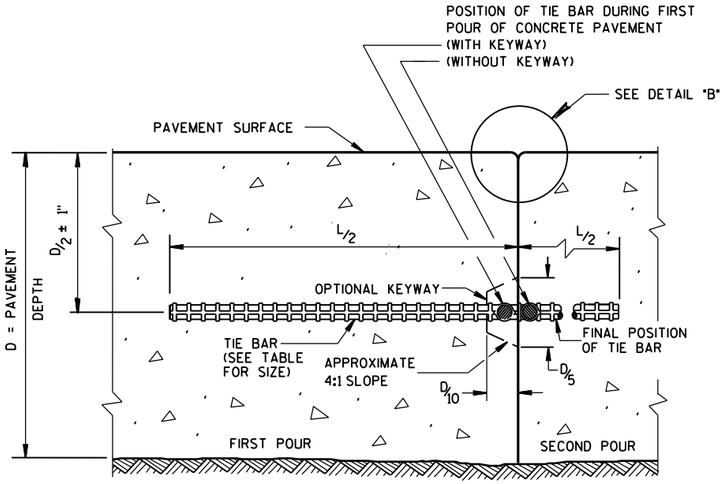
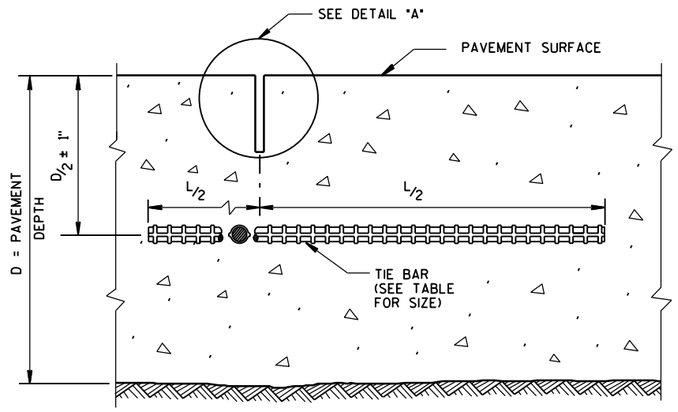
S.D.D. 13 B 2-8a

6

S.D.D. 13 B 2-8a



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

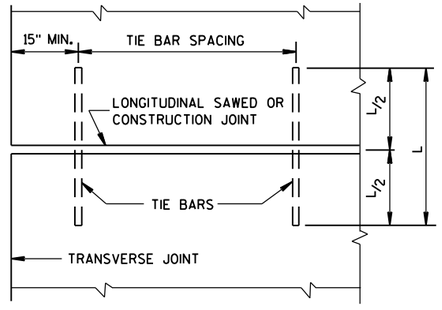
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

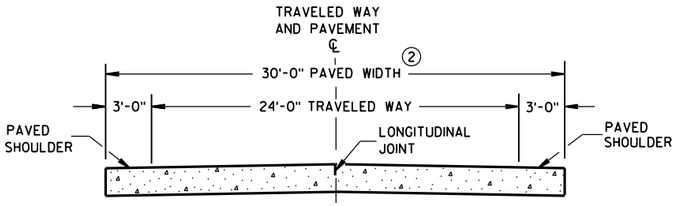
APPROVED
June, 2015
DATE

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

FHWA

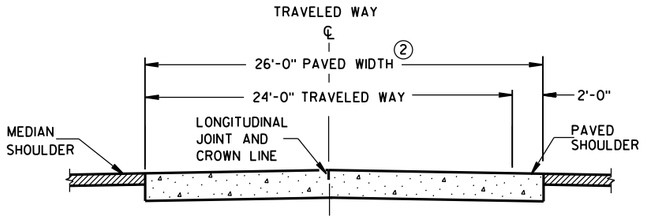
6

S.D.D. 13 C 1-18

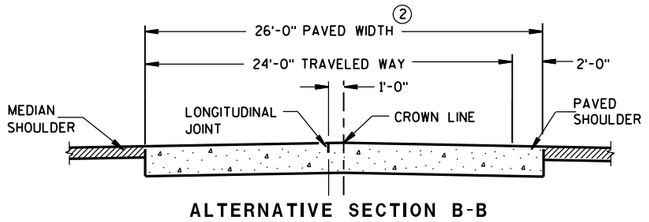


SECTION A-A ①

TWO-LANE TWO-WAY HIGHWAY



SECTION B-B



ALTERNATIVE SECTION B-B ①

DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

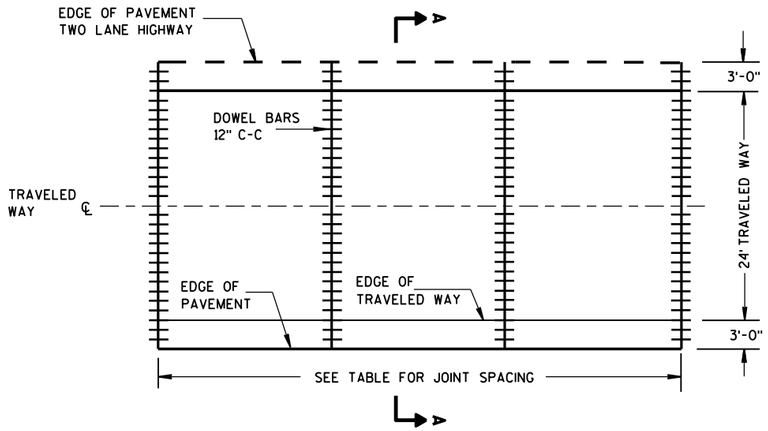
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

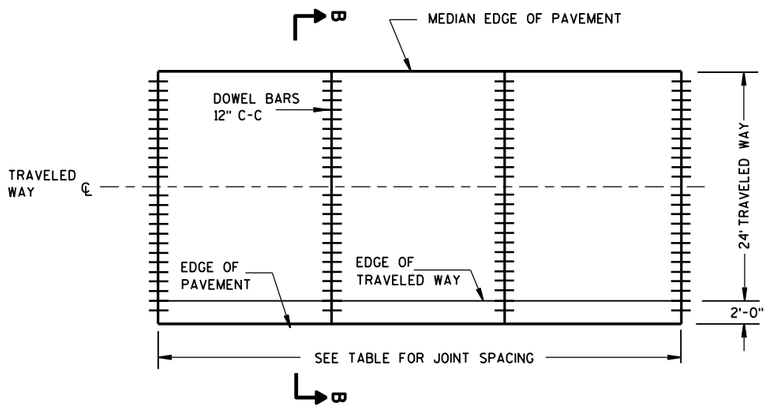
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED
CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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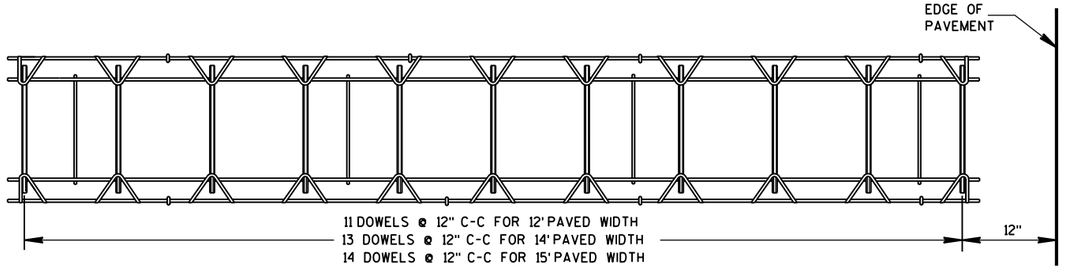
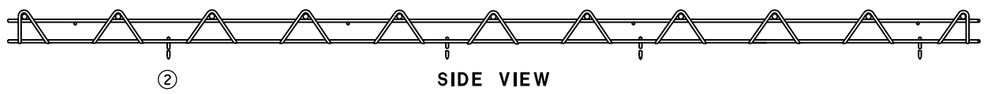
S.D.D. 13 C 11-11a



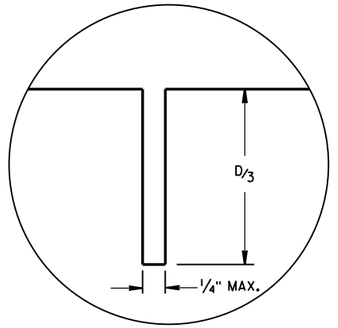
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

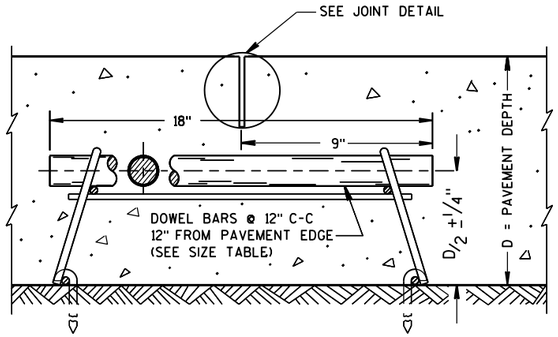
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

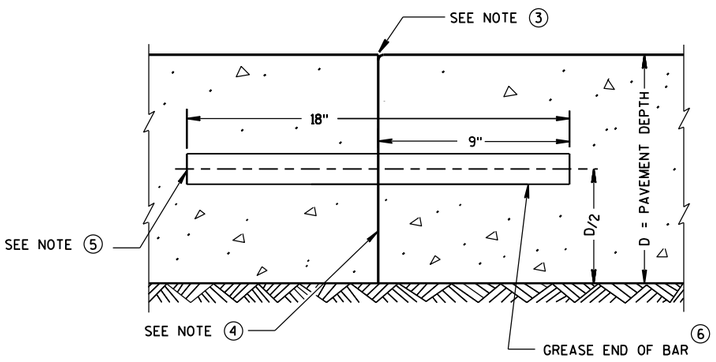
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

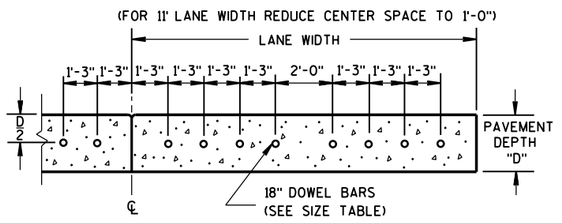
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/3/2013 DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER

FHWA

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S.D.D. 13 C 11-11b

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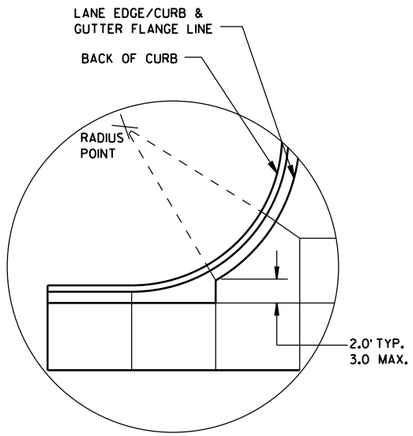
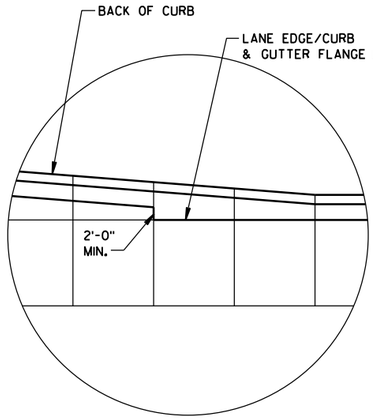
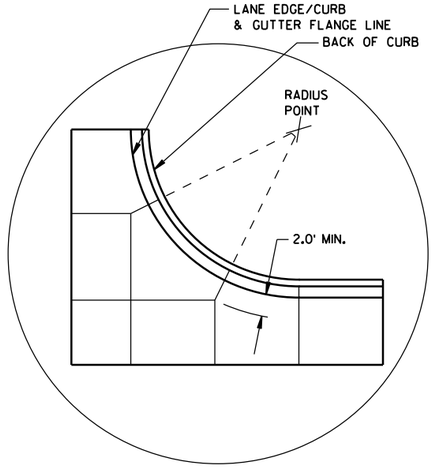
S.D.D. 13 C 11-11b



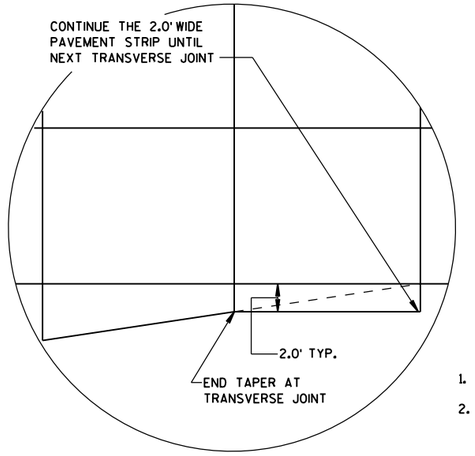
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

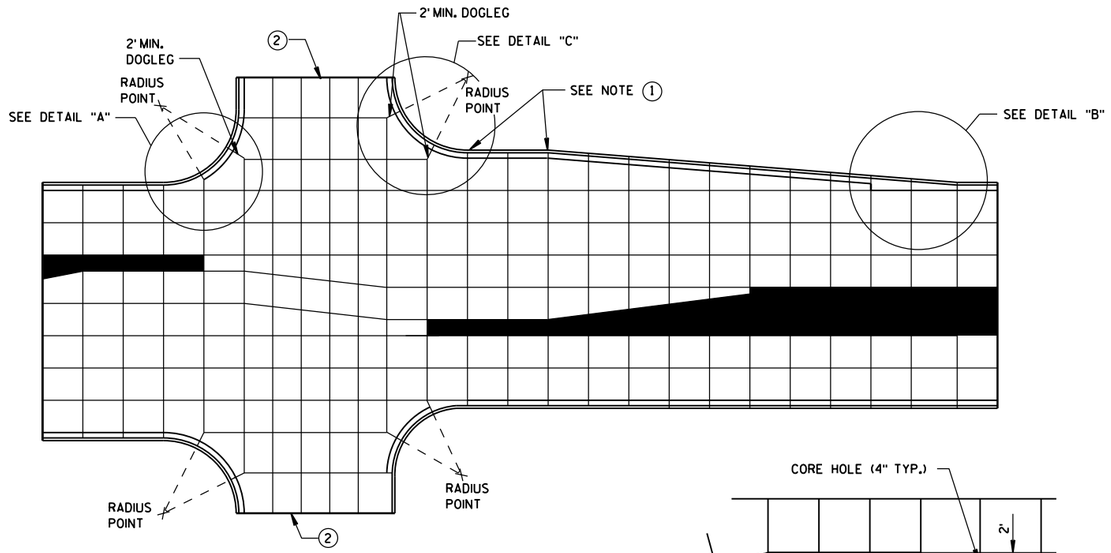
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

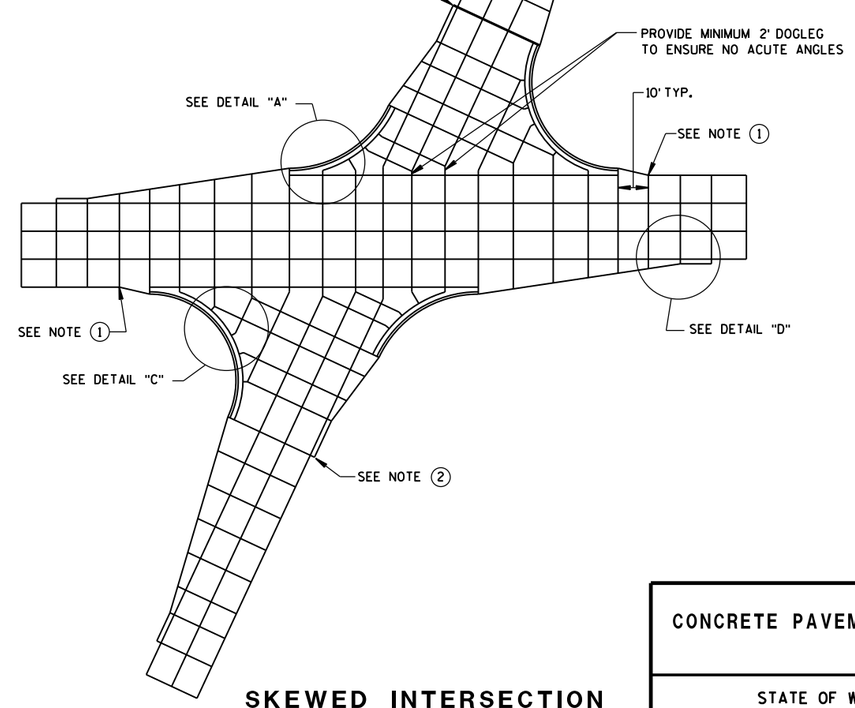
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



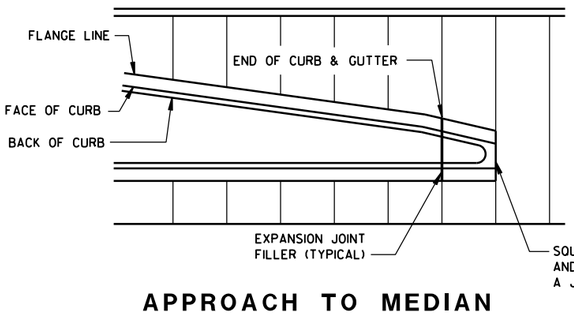
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

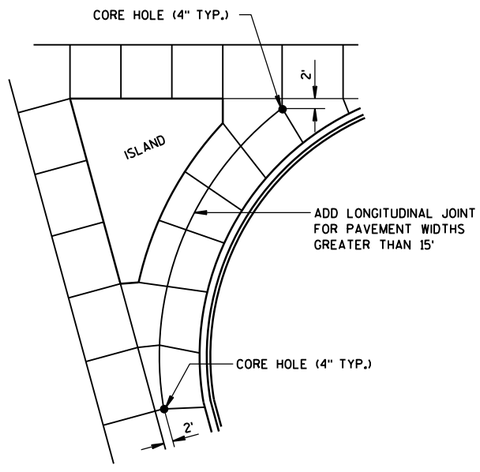
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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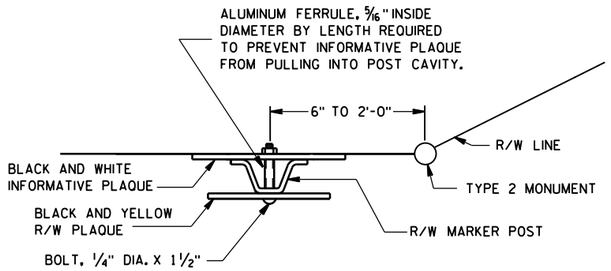
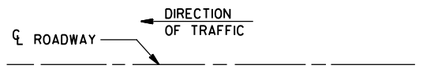
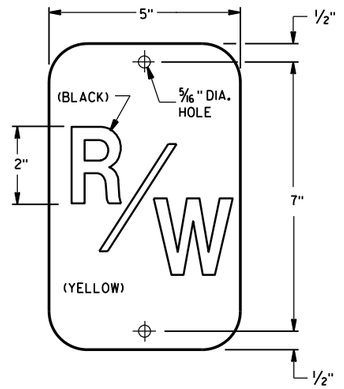
S.D.D. 13 C 18-3a



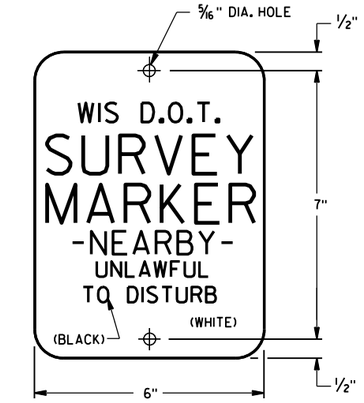


PLAN VIEW



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.

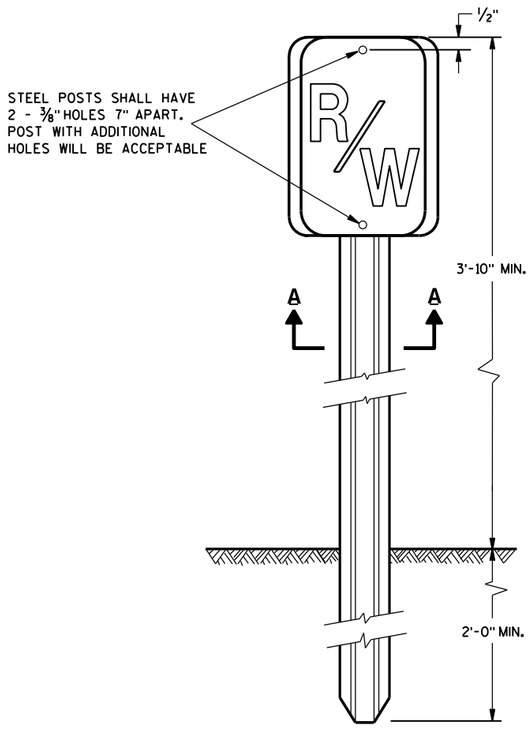
A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

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.

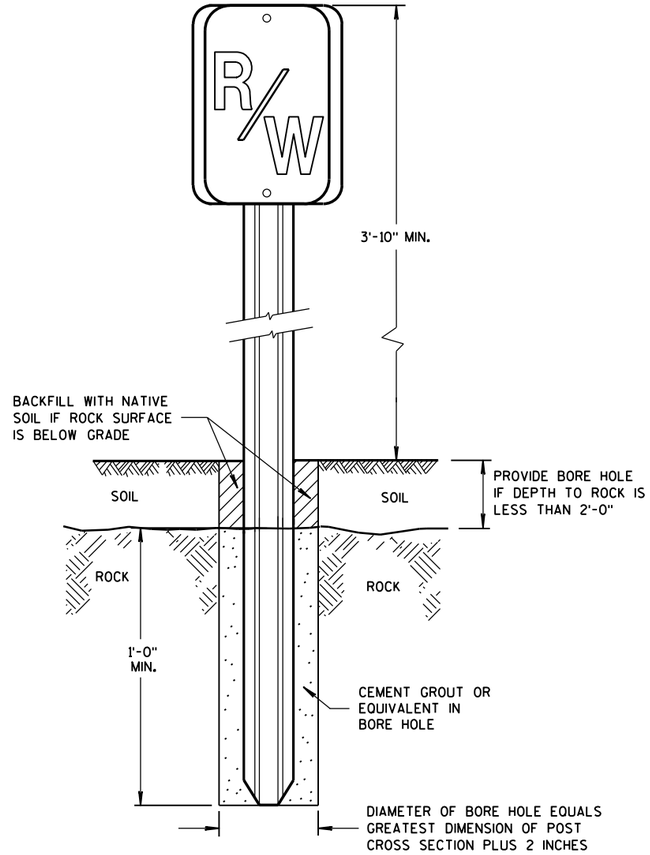
STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

(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.

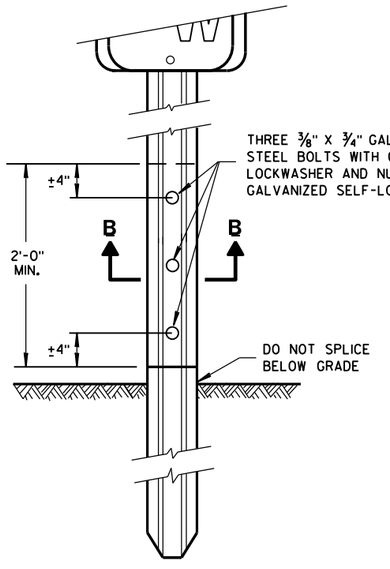
FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT. DEPENDING ON THE STABILITY OF THE ROCK.



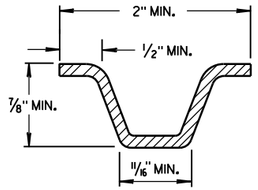
FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)

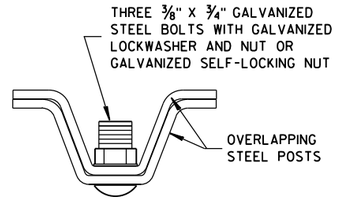


FRONT VIEW
SPLICE DETAIL



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

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

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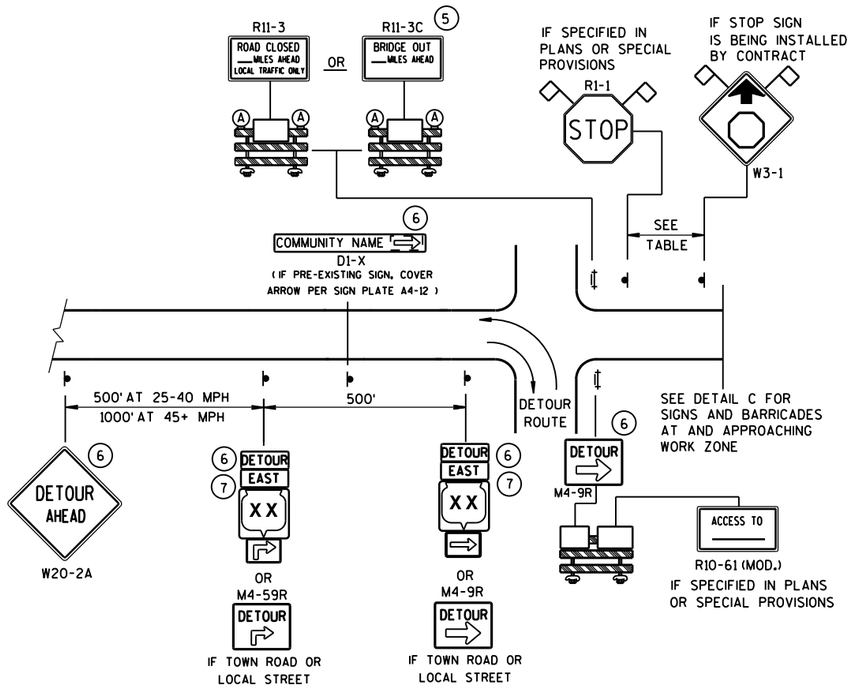
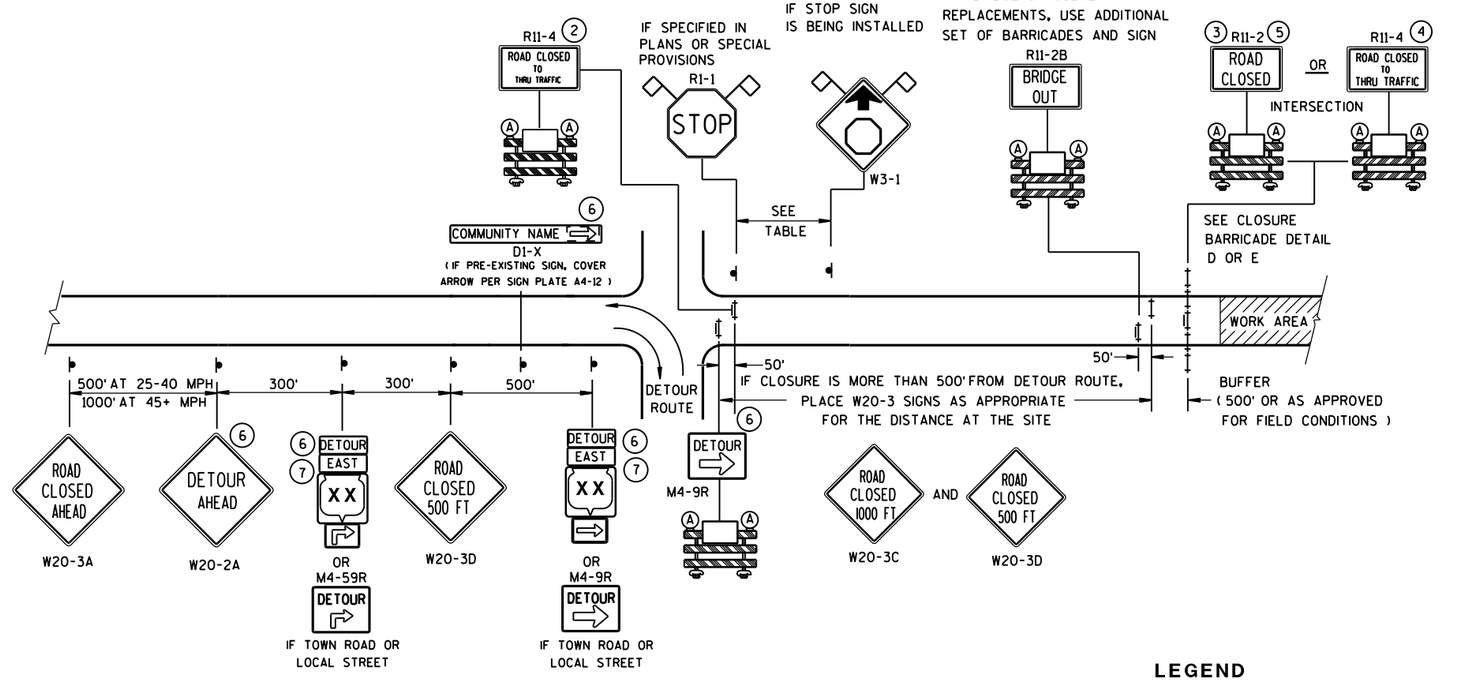
S.D.D. 15 A 1-13a



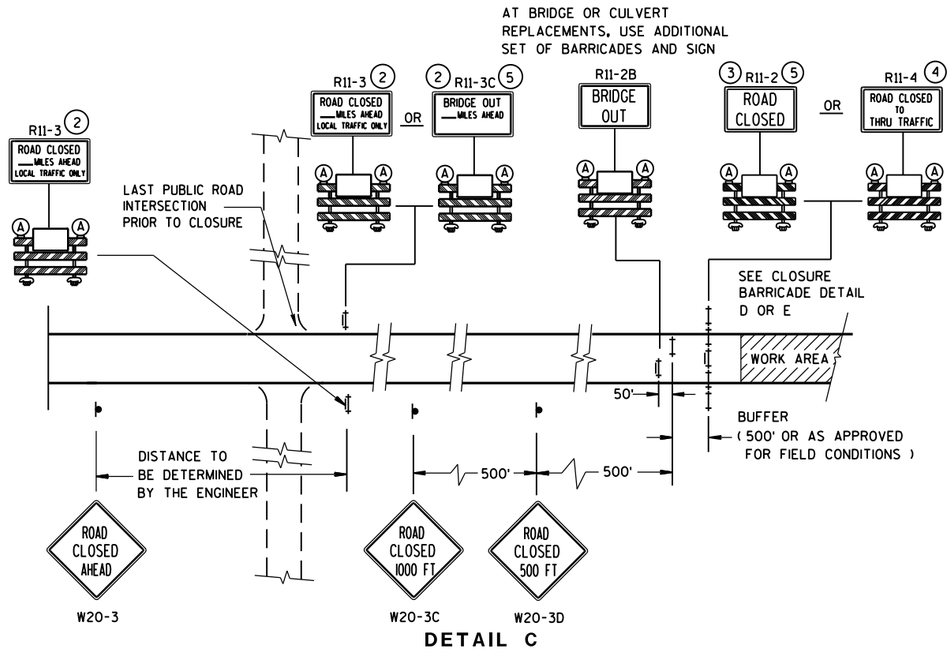
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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)

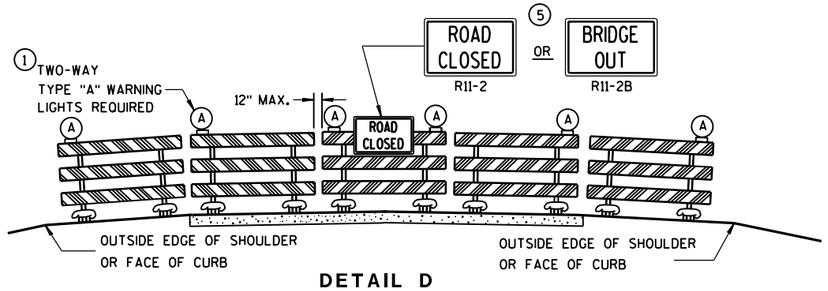
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

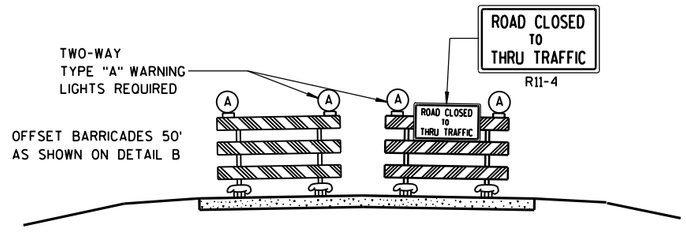
S.D.D. 15 C 2-6a



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

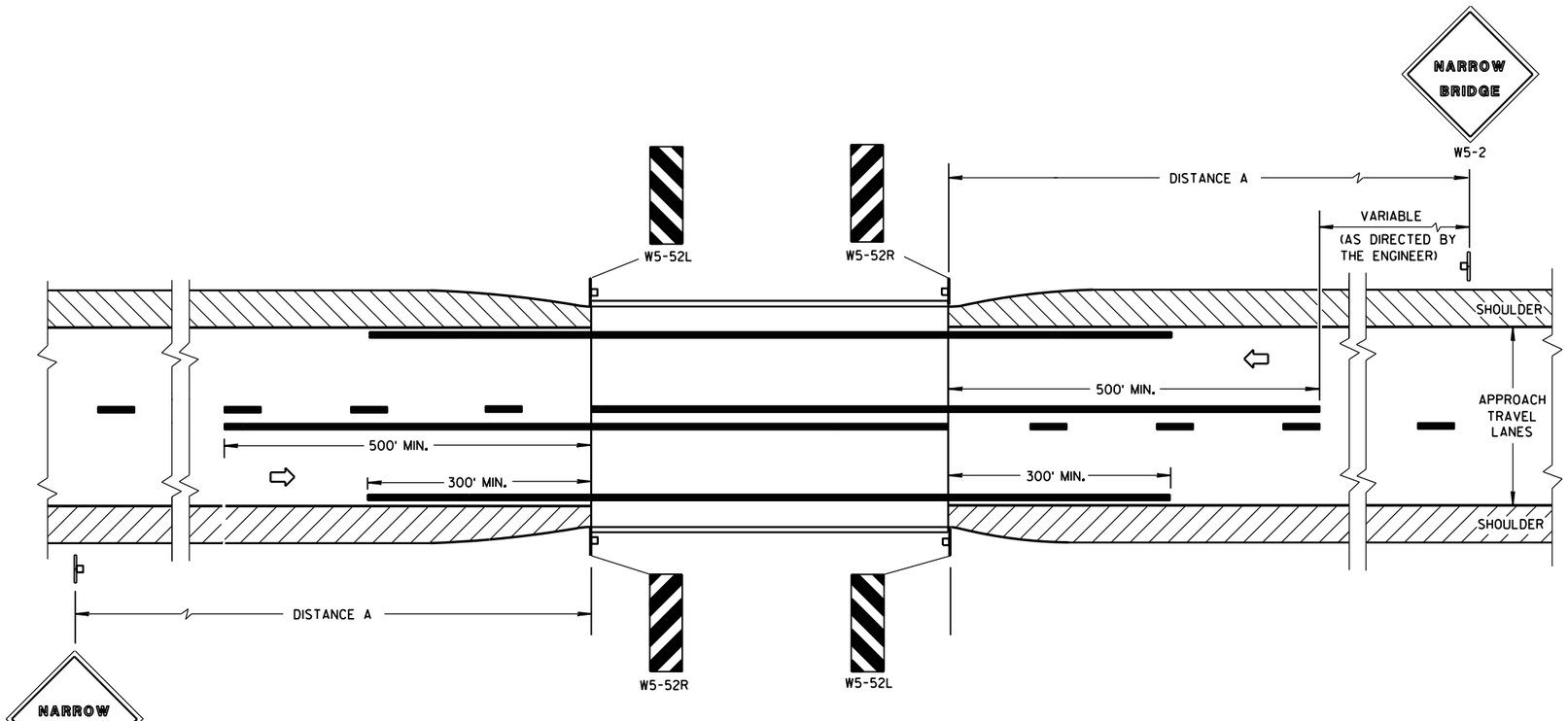
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

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

6

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



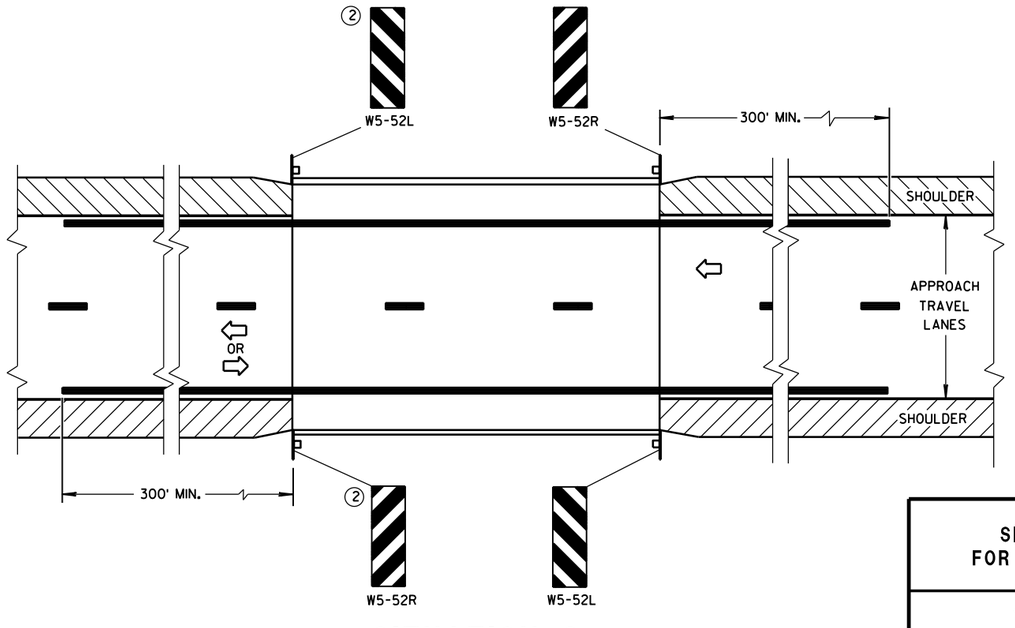
SITUATION 1

WARRANTING CRITERIA:

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

DISTANCE TABLE

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



SITUATION 2

WARRANTING CRITERIA:

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

GENERAL NOTES

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

① LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

② OMIT ON ONE-WAY TRAVELLED WAYS.

③ EDGE OF W5-52 SIGN SHALL BE PLACED IN LINE WITH FACE OF CURB OR PARAPET.

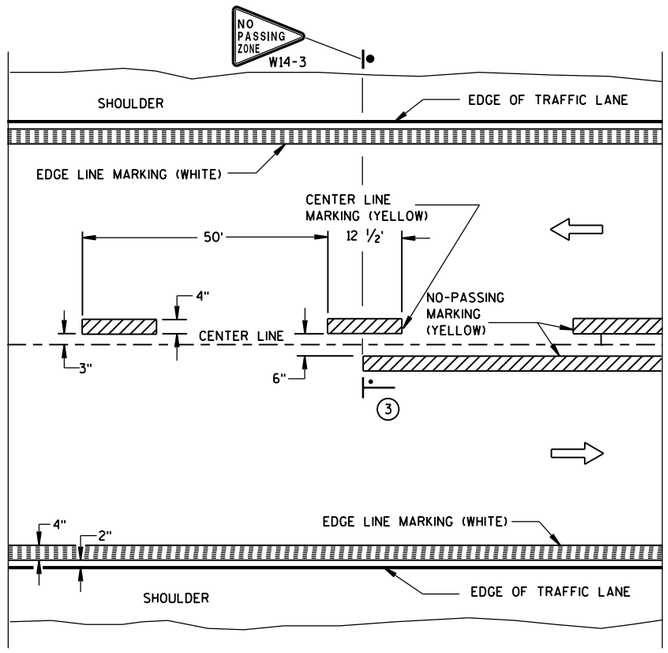
SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

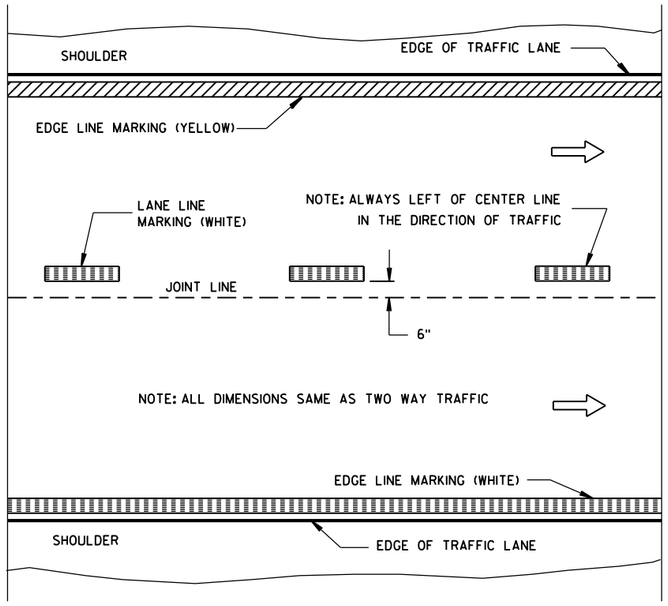
APPROVED
4-18-16 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR ...EER
FHWA

6

S.D.D. 15 C 6-8

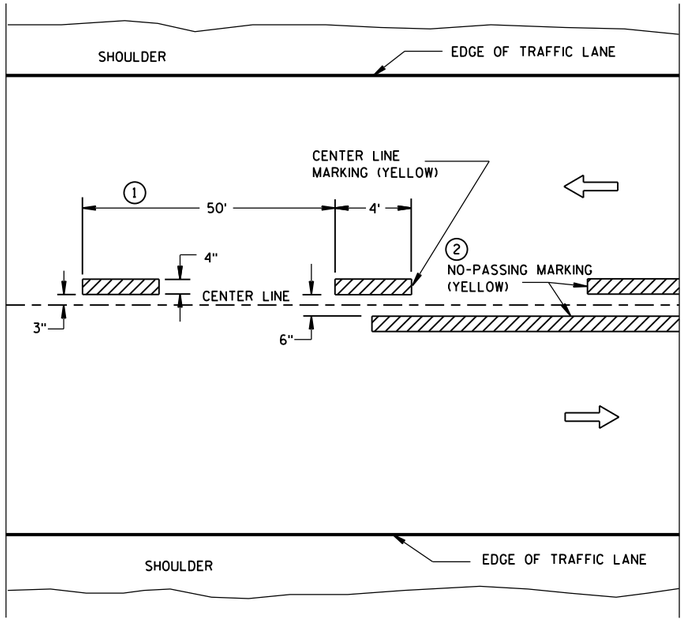


TWO WAY TRAFFIC

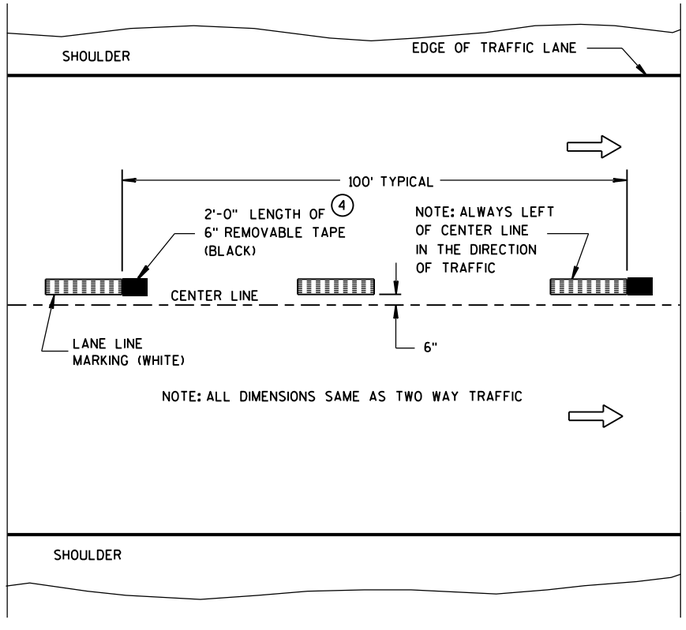


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

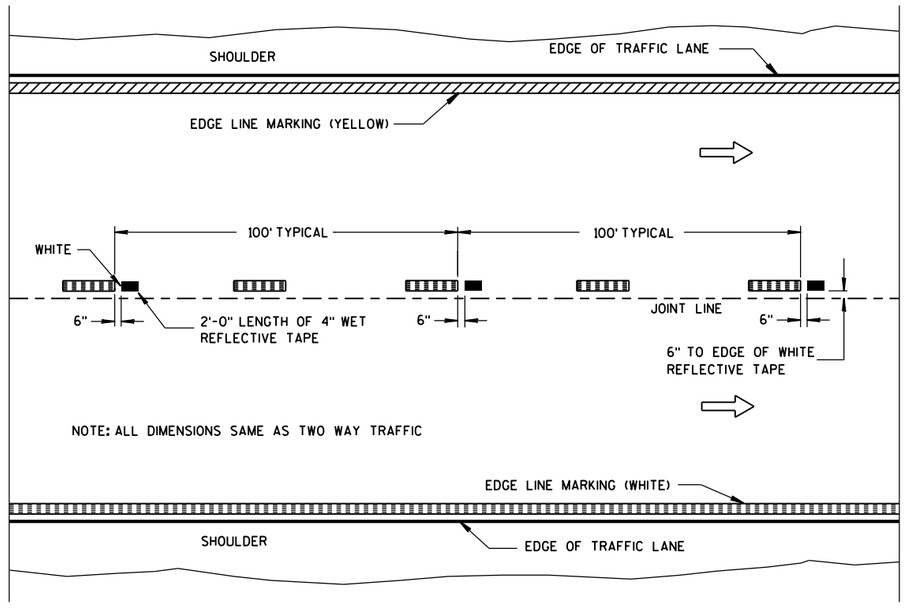
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

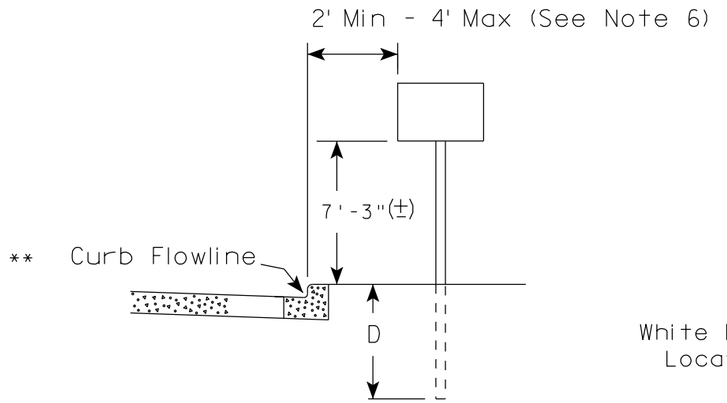
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

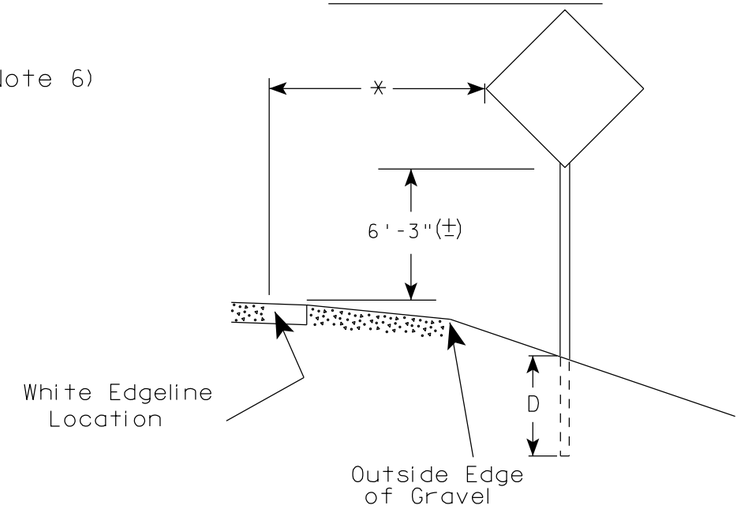
6

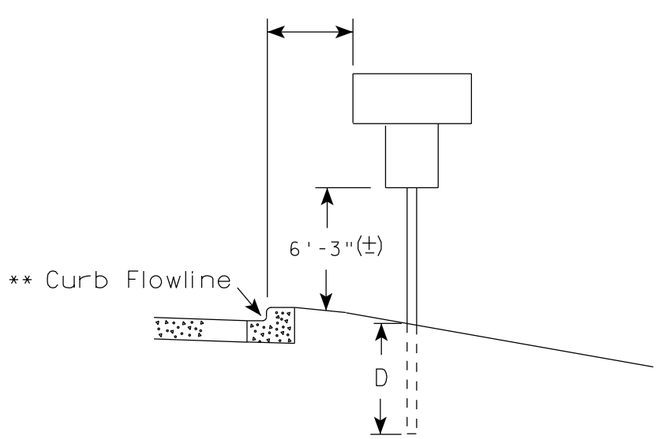
S.D.D. 15 C 8-16a

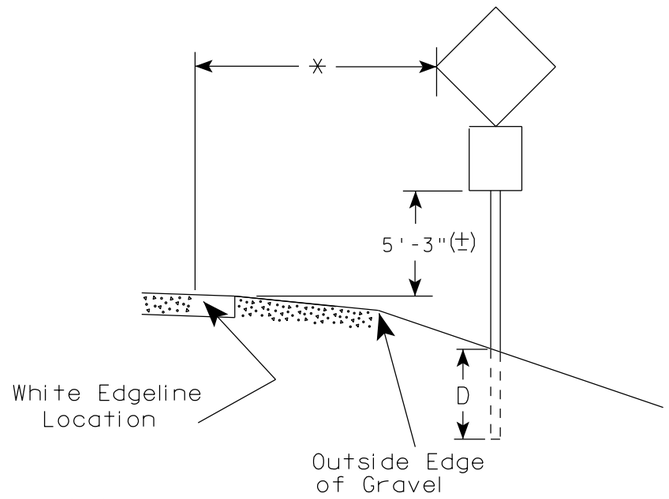
URBAN AREA



RURAL AREA (See Note 2)







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" (±).

POST EMBEDMENT DEPTH

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

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

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

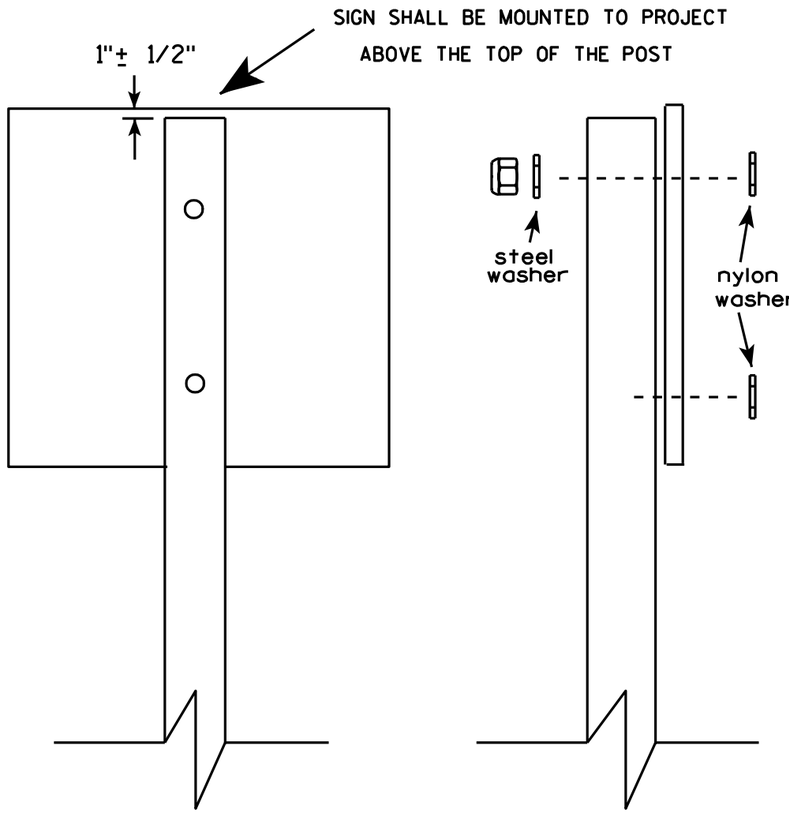
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

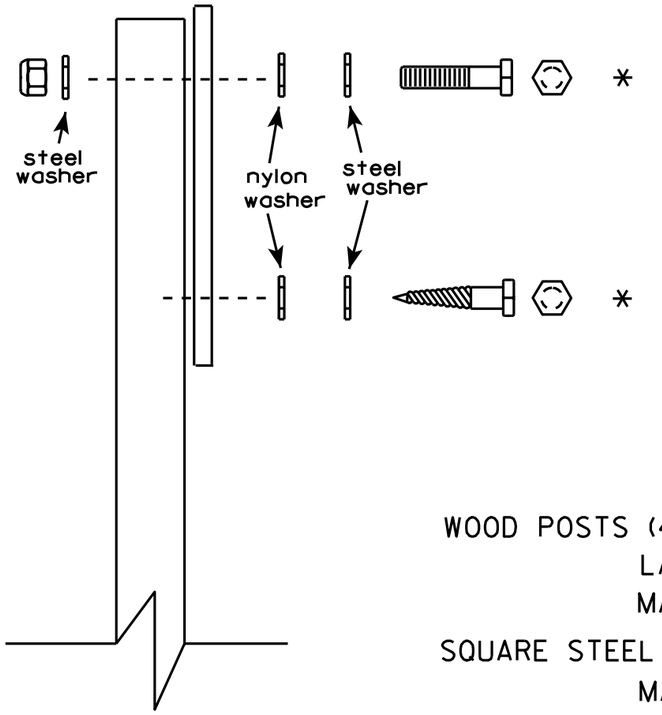
WISCONSIN DEPT OF TRANSPORTATION

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 :

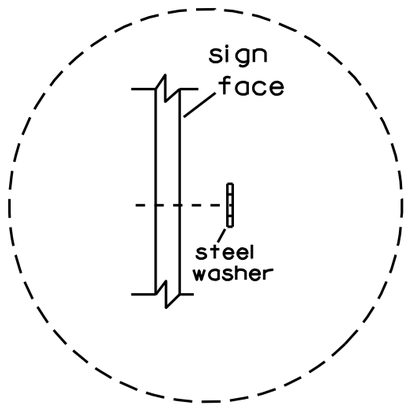
a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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.

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.



Washer Placement when Sign Has Other Than Type H or Type F Face

* 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

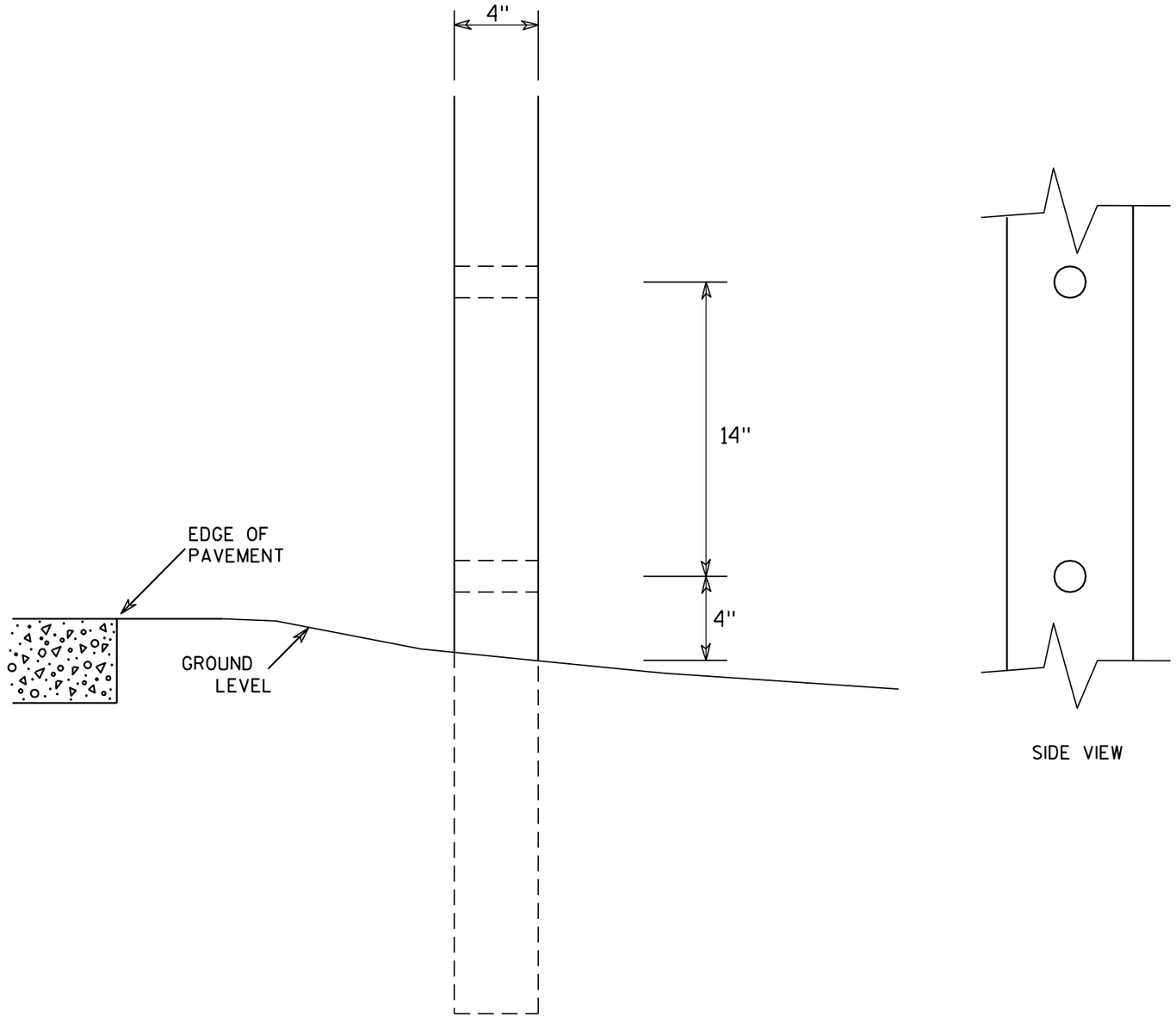
DATE 3/23/10 PLATE NO. A4-8.7

7

7

PROJECT NO:

SHEET NO: 31 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.

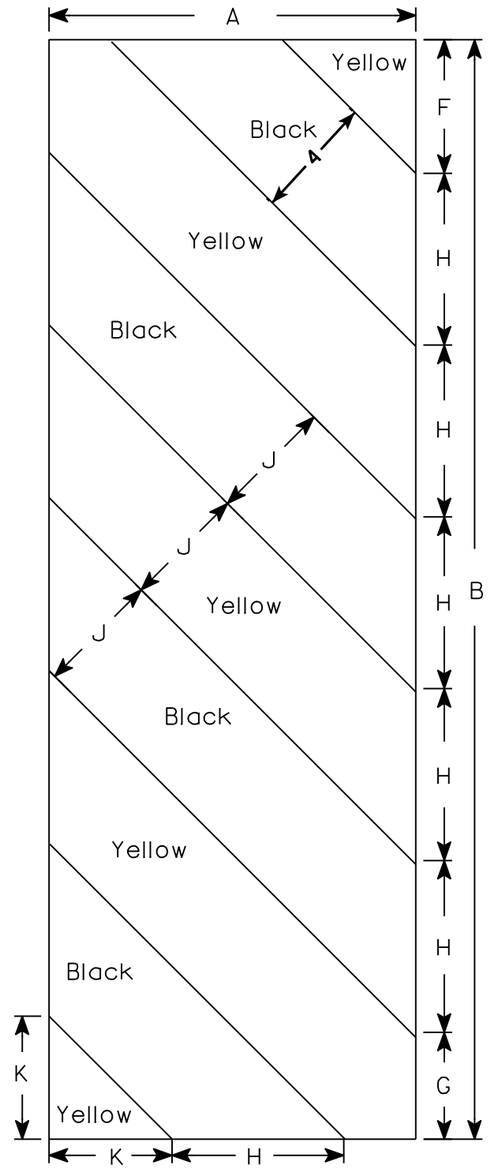
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

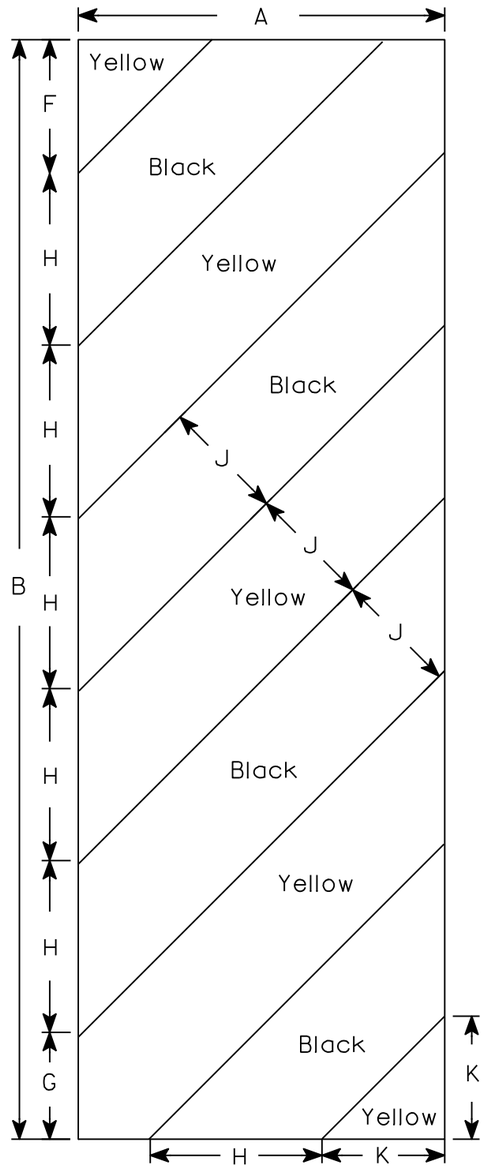
APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 32	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: 33 | E

OVERHEAD ELECTRIC (VERNON ELECTRIC COOPERATIVE)

℄ CURVE DATA
PI STA. 8+58.61
Y = 114,014.06
X = 728,573.03
△ = 20°36'35" R
D = 11°48'49"
T = 88.18'
L = 174.46'
R = 485.00'
PC STA. 7+70.43
PT STA. 9+44.89

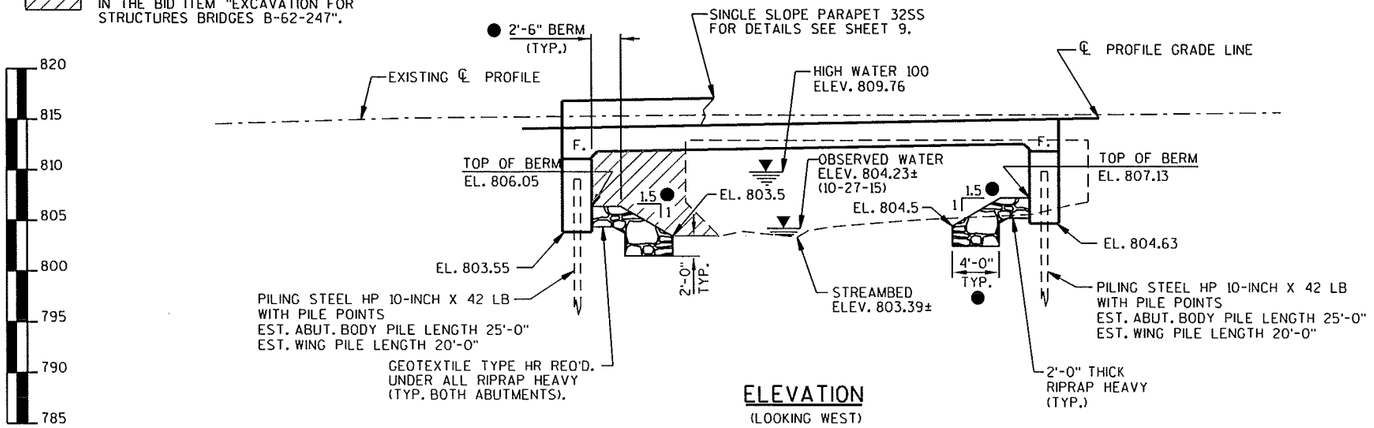
48'-10¾" BACK TO BACK OF ABUTMENTS
1'-5⅜" 46'-0" SINGLE SPAN 1'-5⅜"
30° SKEW (TYP.)
EXISTING STRUCTURE P-62-128 (TO BE REMOVED)
N
5'-0"
2:1
33'-7" (LIMITS OF RIPRAP HEAVY AND GEOTEXTILE TYPE HR)
PAVING NOTCH
END EXISTING STRUCTURE STA. 9+78.7, 4.8'LT.
℄ SOUTH ABUT. STA. 9+67.00
9+50
END OF SLAB STA. 9+66.33
PT STA = 9+44.89
BM 1
14'-0" PARAPETS
14.1'
10+00
6.5'
14'-0" (BETWEEN
1'-5⅜" OUTSIDE OF PARAPET
2:1
16'-0"
30'-0"
PAVING NOTCH
END EXISTING STRUCTURE STA. 10+21.3, 2.7'LT.
10+50
END OF SLAB STA. 10+13.67
℄ NORTH ABUT. STA. 10+13.00
℄ CTH T
36'-0" (LIMITS OF RIPRAP HEAVY AND GEOTEXTILE TYPE HR)
3' SHOULDER
11' LANE
11' LANE
3' SHOULDER
BURIED TELEPHONE (VERNON COMMUNICATIONS COOPERATIVE)
32'-0" (LIMITS OF RIPRAP HEAVY AND GEOTEXTILE TYPE HR)
10'-0"
12'-0"
3:1
2:1
SPRING VALLEY CREEK
1'-5⅜" OUTSIDE OF PARAPET
12'-0" (TYP.) ALL WINGS
4:1
47'-7" (LIMITS OF RIPRAP HEAVY AND GEOTEXTILE TYPE HR)
EL. 808.24 SHAPE RIPRAP HEAVY DITCH TO DRAIN
19'-0"
5'-0"
NAME PLATE & BENCHMARK CAP (WHEN PROVIDED) WING 1 ONLY. FOR LOCATION SEE SHEET 9.

PLAN
(SINGLE SPAN FLAT CONCRETE SLAB)

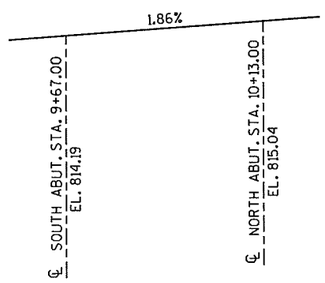
○ - INDICATES WING NUMBER

● - NORMAL TO ℄ OF SUBSTRUCTURE.

▨ - REMOVAL OF THIS MATERIAL IS INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-62-247".



ELEVATION
(LOOKING WEST)



PROFILE GRADE LINE - CTH T

STATE PROJECT NUMBER
5296-00-70

BENCHMARKS ⊕ NAVD 88

NO.	STA./OFFSET	DESCRIPTION	ELEV.
1	9+73.6, 5.0'RT.	CHIS + SE CORNER OF BRIDGE	815.72
2	9+16.8, 84.4'LT.	2 POLE NAILS IN 12" OAK TREE	814.69
3	12+61.1, 21.8'RT.	PK TOP OF 36" CMP ø S7476	821.02

DESIGN DATA

LIVE LOAD:
DESIGN LOADING : HL-93
INVENTORY RATING FACTOR : 1.08
OPERATIONAL RATING FACTOR : 1.40
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS.
STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

TRAFFIC DATA:
A.A.D.T. (2017) = 190
A.A.D.T. (2037) = 230

MATERIAL PROPERTIES:
CONCRETE MASONRY, SLAB & PARAPETS — f'_c = 4,000 P.S.I.
ALL OTHER — f'_c = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 — f_y = 60,000 P.S.I.

FOUNDATION DATA:
ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB. WITH PILE POINTS DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 170 TONS ✳ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS ARE 25'-0" AT THE ABUTMENT BODIES AND 20'-0" AT THE ABUTMENT WINGS.

✳ THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5.

HYDRAULIC DATA:
100 YEAR FREQUENCY
DRAINAGE AREA — 2.4 SQ. MI.
Q_{100} — 940 C.F.S.
VELOCITY — 6.92 FT./SEC.
WATERWAY AREA — 136 SQ. FT.
SCOUR CRITICAL CODE — 8
HIGH WATER $_{100}$ ELEVATION — 809.76
Q_2 ELEVATION (130 C.F.S.) — 806.77
ROADWAY OVERFLOW DESIGN FREQUENCY
OVERTOPPING FREQUENCY — > 100 YEARS

LIST OF DRAWINGS

CONSULTANT DESIGN CONTACT:
JOSHUA SWENO
(608) 355-8852

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

WISCONSIN ☆ JOSHUA R. SWENO E-44384 WAUNAKEE WI ☆ PROFESSIONAL ENGINEER
9/7/2016

NO.	DATE	REVISION	BY

MSA PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL DEVELOPMENT • ENVIRONMENTAL
1230 South Boulevard Baraboo, WI 53913
608-356-2771 1-800-362-4505 Fax: 608-356-2770

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher SDR 11/17/16
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-62-247

CTH T OVER SPRING VALLEY CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
VERNON	KICKAPOO

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JAS	JRS	RLR	JAS

GENERAL PLAN

SHEET 1 OF 9
34

8

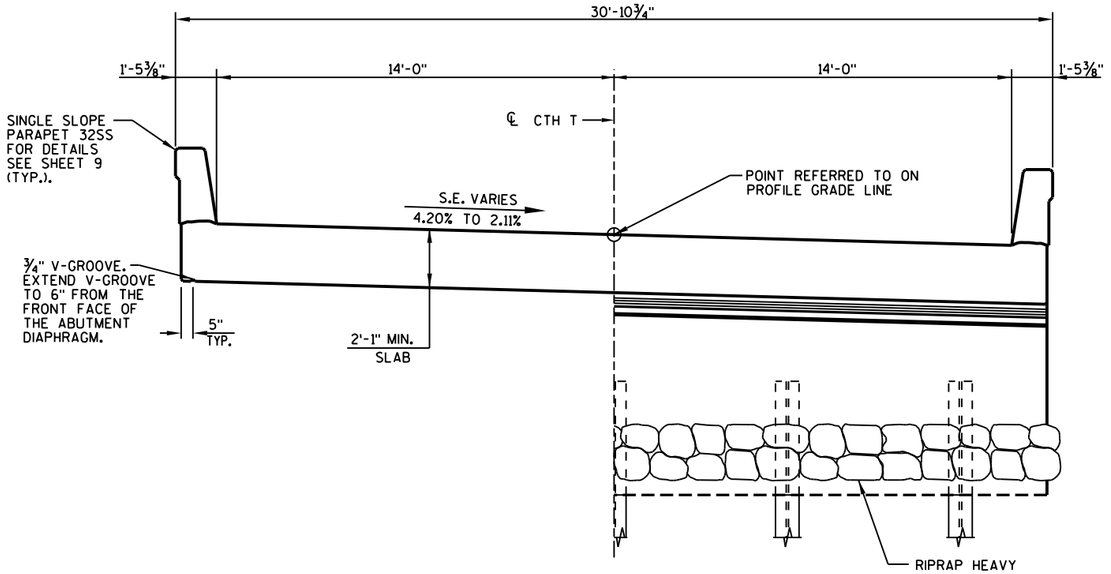
8

FILE= 7399010_01.DGN
DATE= 8/25/2016

7399010_01.dgn 8/25/2016 3:43:29 PM rrabska

STATE PROJECT NUMBER

5296-00-70



IN SPAN AT ABUTMENTS

CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.

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

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

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

THIS STRUCTURE WILL REPLACE THE EXISTING STRUCTURE, P-62-128, A 42.6 FT. LONG, SINGLE SPAN STEEL DECK GIRDER ON FULL RETAINING TIMBER ABUTMENTS WITH 19.6 FT. CLEAR ROAD WIDTH.

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

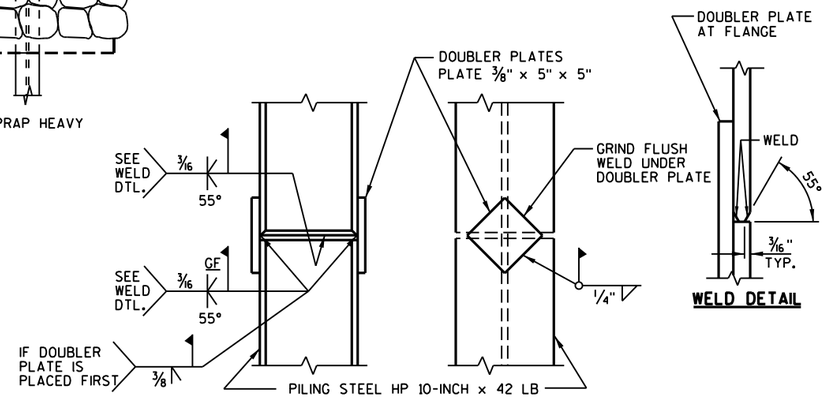
AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CAN NOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE A.

DO NOT PLACE FILL ABOVE 3'-0" FROM THE BOTTOM OF ABUTMENT UNTIL THE SUPERSTRUCTURE IS IN PLACE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF SLAB, TO THE TOPS OF WINGS, AND TO THE EXPOSED FRONT FACES OF WINGS.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE INSIDE FACES, THE TOP FACES, AND THE VERTICAL ENDS OF THE PARAPETS.

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



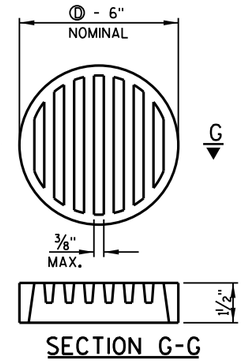
WELD DETAIL

PILE SPLICE DETAILS

RODENT SHIELD NOTES:

ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SHIELD 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 ATTACHEMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH STAINLESS STEEL SHEET METAL SCREWS. THE RODENT SHIELD, PIPE COUPLING AND SCREWS, SHALL BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".



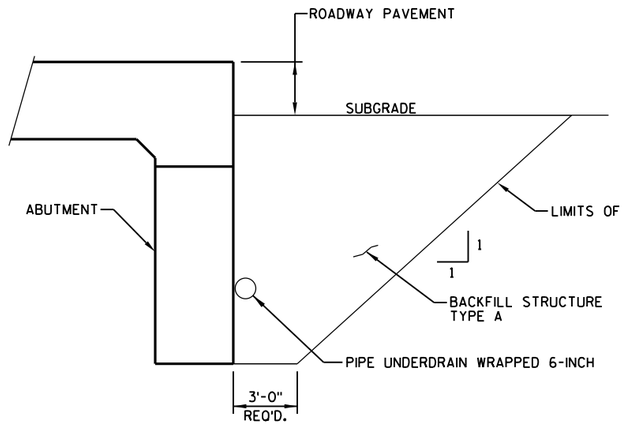
SECTION G-G

RODENT SHIELD

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

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	SOUTH ABUT.	NORTH ABUT.	SUPER	TOTAL
203.0600.S.01	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00	LS	-	-	-	1
206.1000.01	EXCAVATION FOR STRUCTURES BRIDGES B-62-247	LS	-	-	-	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	270	260	-	530
502.0100	CONCRETE MASONRY BRIDGES	CY	48	47	130	225
502.3200	PROTECTIVE SURFACE TREATMENT	SY	28	29	148	205
502.3210	PIGMENTED SURFACE SEALER	SY	-	-	41	41
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2710	2670	0	5380
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1985	1980	22875	26840
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	7	7	-	14
550.0500	PILE POINTS	EACH	7	7	-	14
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	165	165	-	330
606.0300	RIPRAP HEAVY	CY	75	145	-	220
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	90	90	-	180
645.0120	GEOTEXTILE TYPE HR	SY	150	270	-	420
	NON-BID ITEMS					
	PREFORMED FILLER	SIZE				½" & ¾"



STRUCTURE BACKFILL DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-247

DRAWN BY RLR | PLANS CK'D. JAS

CROSS SECTION, QUANTITIES & NOTES

SHEET 7 OF 9

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FILE= 7399010_02.DGN
DATE= 9/7/2016

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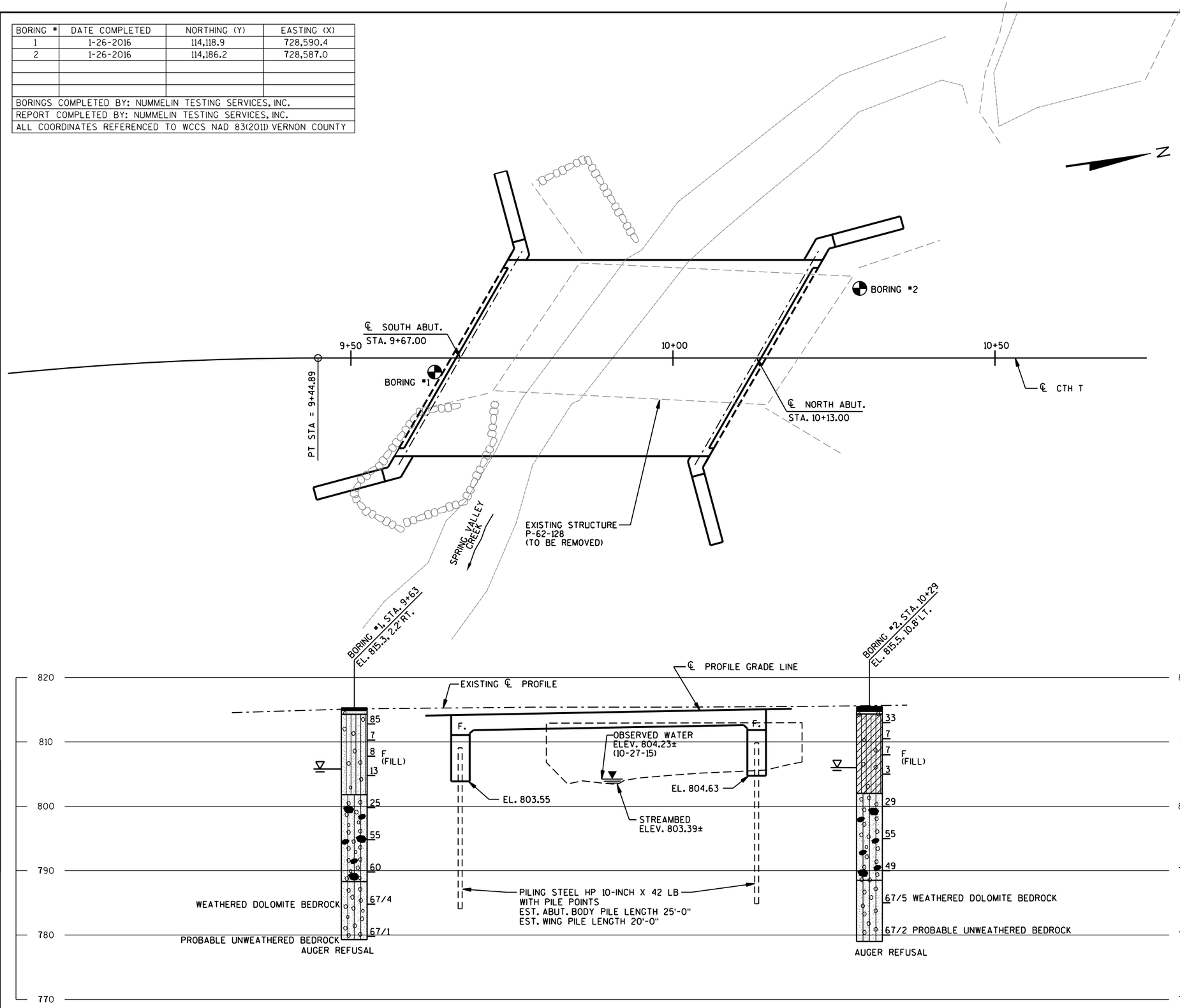
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	1-26-2016	114,118.9	728,590.4
2	1-26-2016	114,186.2	728,587.0
BORINGS COMPLETED BY: NUMMELIN TESTING SERVICES, INC.			
REPORT COMPLETED BY: NUMMELIN TESTING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(2011) VERNON COUNTY			



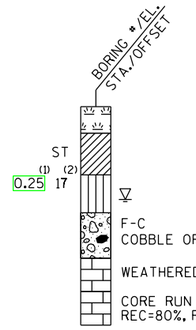
STATE PROJECT NUMBER

5296-00-70

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

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

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-247

DRAWN BY RLR | PLANS CK'D. JAS

SUBSURFACE EXPLORATION

SHEET 3 OF 9
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8

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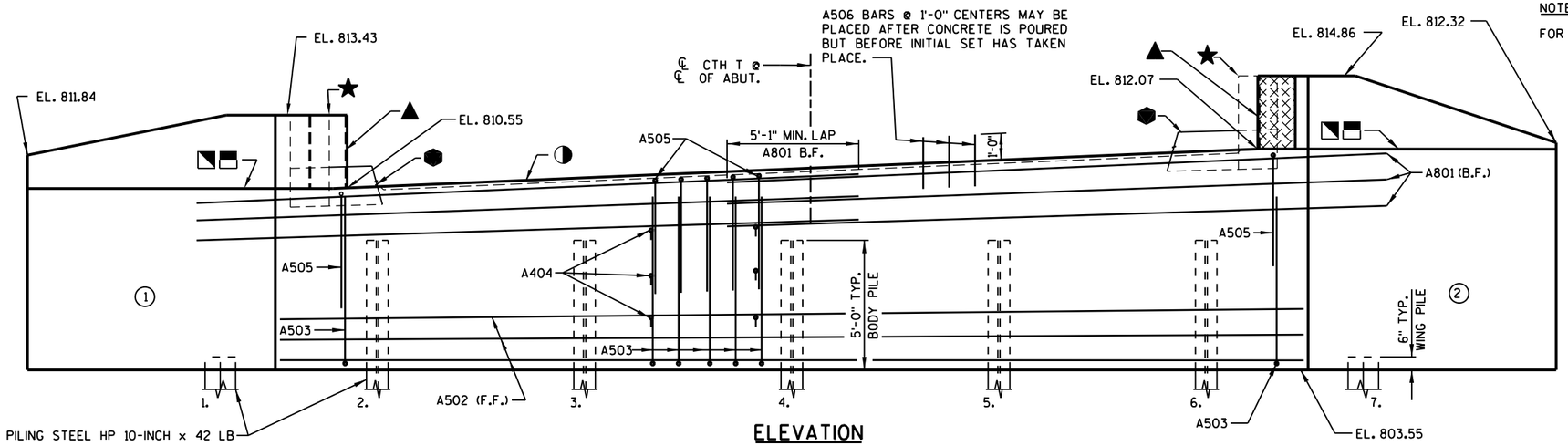
STATE PROJECT NUMBER

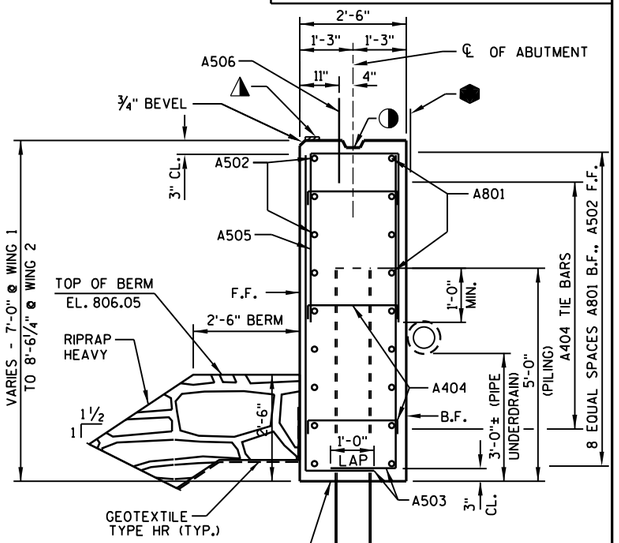
5296-00-70



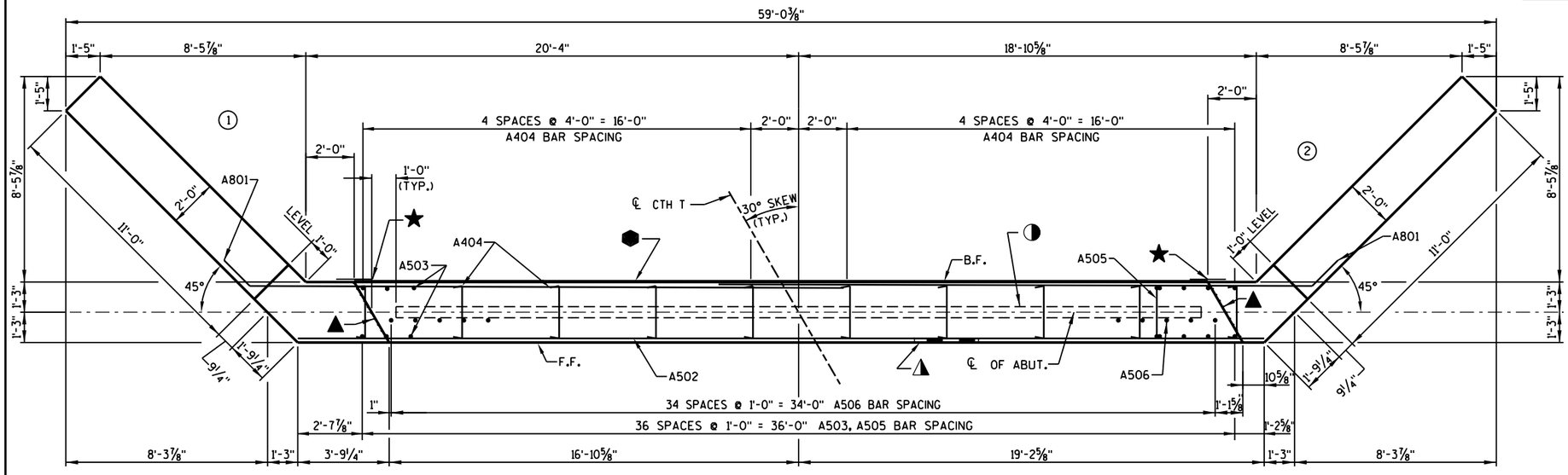
ELEVATION
(LOOKING SOUTH)

NOTE:

FOR WING DETAILS SEE SHEET 5.



TYPICAL SECTION THRU ABUTMENT

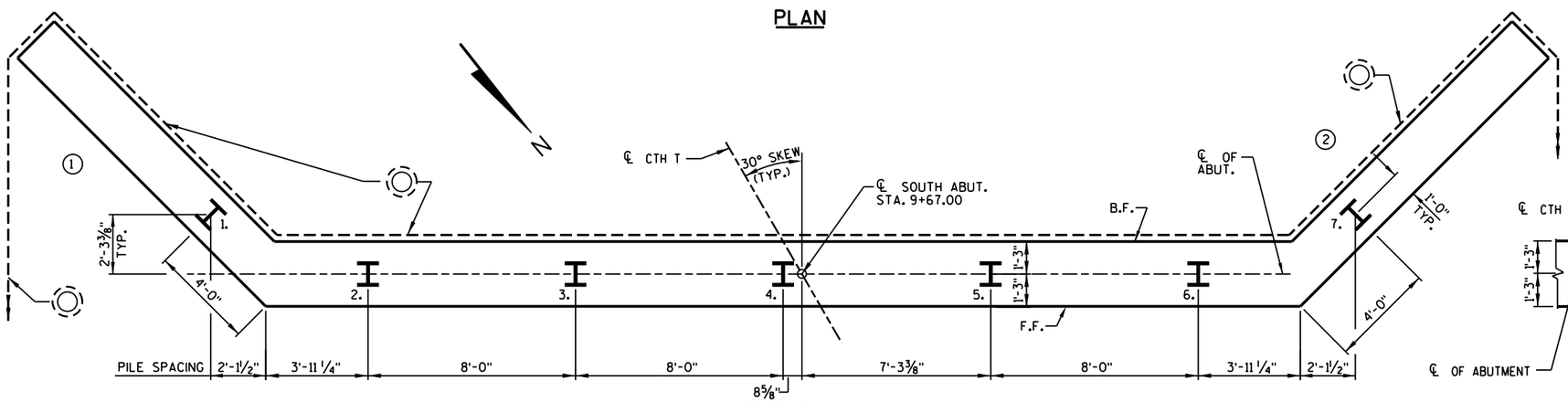


PLAN

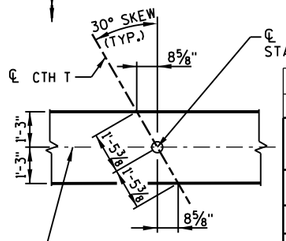
LEGEND

- ◯ — INDICATES WING NUMBER
- ◑ — KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2x6.
- ▲ — ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).
- ◭ — 4"x ¾" FILLER, EXTEND FULL LENGTH OF ABUTMENT BETWEEN EDGES OF SLAB.
- ★ — VERTICAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND FROM 9" BELOW BRIDGE SEAT TO TOP OF WINGS.
- ⬢ — HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND BETWEEN WINGS.
- ▬ — OPTIONAL KEYED CONST. JOINT ON WING FORMED BY BEVELED 2 X 6. IF JOINT IS USED, PLACE ⬢ ON B.F. OF WING. COST OF ⬢ INCLUDED IN BID ITEM "CONCRETE MASONRY BRIDGES".
- ◹ — ¾" "V" GROOVE ON FRONT FACE OF WING WALL, REQUIRED ONLY WHERE CONSTRUCTION JOINT IS USED.
- ◯ — PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE AT FACE OF RIPRAP HEAVY. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE. SEE DETAIL, SHEET 2.

F.F.— FRONT FACE B.F.— BACK FACE CL.— CLEAR



PILE PLAN



LAYOUT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-247

DRAWN BY RLR | PLANS CK'D. JAS

SOUTH ABUTMENT

SHEET 4 OF 9
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DATE= 8/25/2016

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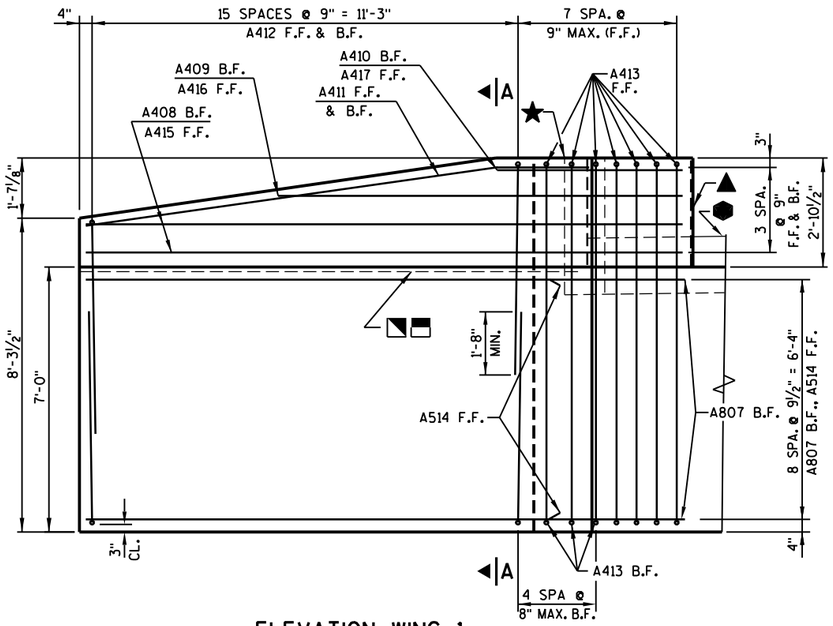
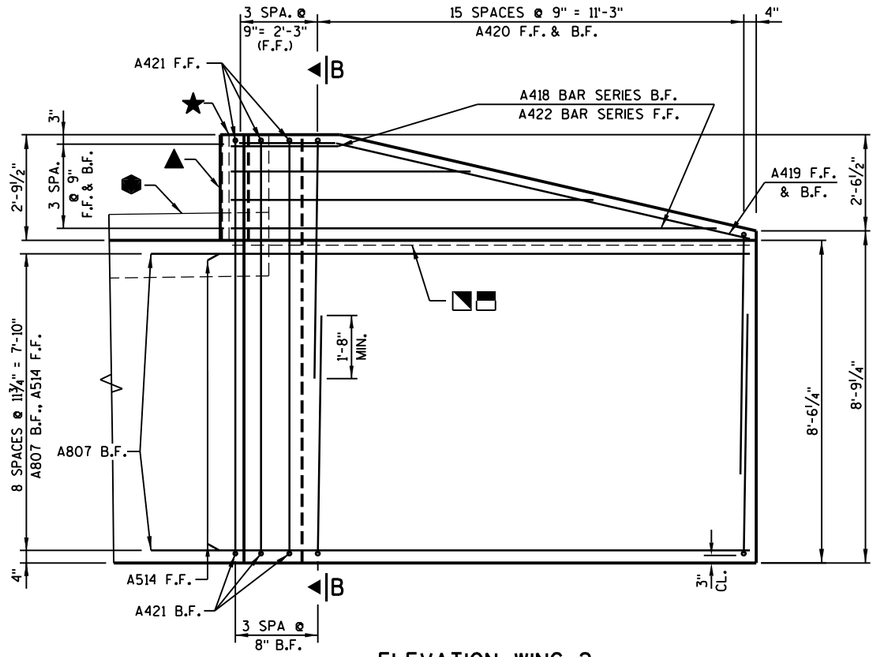
STATE PROJECT NUMBER

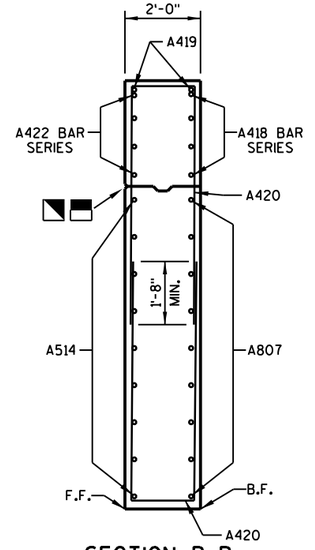
5296-00-70



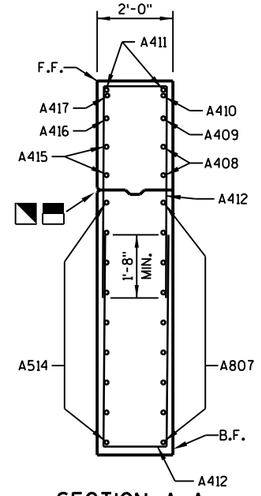
ELEVATION WING 1
(LOOKING AT F.F. OF WING)



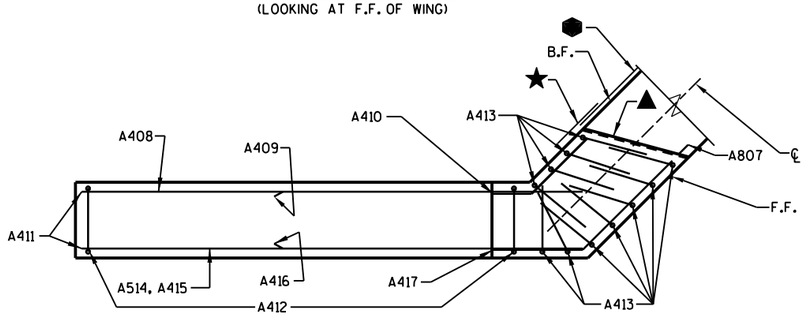
ELEVATION WING 2
(LOOKING AT F.F. OF WING)



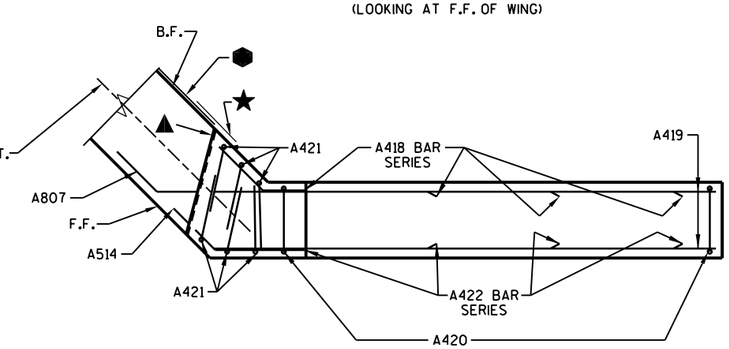
SECTION B-B
THRU WING 2



SECTION A-A
THRU WING 1



PLAN WING 1



PLAN WING 2

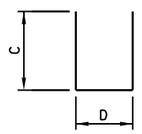
BILL OF BARS

COATED 1985 LBS.
UNCOATED 2710 LBS.

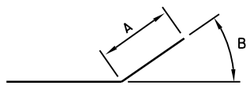
MARK	NUMBER REQUIRED COATED	NUMBER REQUIRED UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION
A801	-	18	25'-11"	X		ABUTMENT BODY - B.F. - HORIZ.
A502	-	9	39'-10"			ABUTMENT BODY - F.F. - HORIZ.
A503	-	74	8'-0"	X		ABUTMENT BODY - F.F. & B.F. - VERT.
A404	-	30	2'-9"	X		ABUTMENT BODY - TIES - HORIZ.
A505	-	37	10'-9"	X		ABUTMENT BODY - TOP - VERT.
A506	35	-	2'-0"			ABUTMENT BODY - TOP DOWEL - VERT.
A807	18	-	16'-2"	X		WINGS - B.F. - HORIZ.
A408	2	-	13'-10"	X		WING 1 - B.F. - HORIZ.
A409	1	-	8'-9"	X		WING 1 - B.F. - HORIZ.
A410	1	-	3'-0"	X		WING 1 - B.F. - HORIZ.
A411	2	-	13'-3"	X		WING 1 - F.F. & B.F. - TOP - HORIZ.
A412	32	-	12'-8"	X		WING 1 - F.F. & B.F. - VERT.
A413	11	-	12'-9"	X		WING 1 - F.F. & B.F. - VERT.
A514	18	-	14'-8"	X		WINGS - F.F. - HORIZ.
A415	2	-	16'-5"	X		WING 1 - F.F. - HORIZ.
A416	1	-	11'-4"	X		WING 1 - F.F. - HORIZ.
A417	1	-	5'-7"	X		WING 1 - F.F. - HORIZ.
A418	4	-	7'-8"	X	Ⓢ	WING 2 - B.F. - HORIZ.
A419	2	-	13'-7"	X		WING 2 - F.F. & B.F. - TOP - HORIZ.
A420	32	-	14'-2"	X		WING 2 - F.F. & B.F. - VERT.
A421	6	-	14'-2"	X		WING 2 - F.F. & B.F. - VERT.
A422	4	-	8'-0"	X	Ⓢ	WING 2 - F.F. - HORIZ.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

SEE LEGEND ON SHEET 4 FOR DESCRIPTION OF ★ ⬢ ◥ ▬ ▲



MARK	C	D
A404	4½"	2'-2"
A505	4'-5"	2'-2"
A412	5'-7"	1'-8"
A413	1'-9"	9'-5"
A420	6'-4"	1'-8"
A421	1'-9"	10'-10"



MARK	A	B
A801 A807 A514	1'-6"	45°
A408 A409 A410	2'-0"	45°
A411	2'-4"	8°
A415 A416 A417	3'-3"	45°
A418	1'-8"	45°
A419	2'-5"	13°
A422	8"	45°

A503

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

BENT BARS IF USED IN BAR SERIES TABLE SHALL BE BENT AFTER CUTTING.

BAR MARK	NO. REQ'D.	LENGTH
A418	1 SERIES OF 4	2'-8" TO 12'-8"
A422	1 SERIES OF 4	3'-0" TO 13'-0"

BAR SERIES TABLE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-247

DRAWN BY RLR | PLANS CK'D. JAS

SOUTH ABUTMENT DETAILS

SHEET 5 OF 9
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DATE= 9/7/2016

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STATE PROJECT NUMBER

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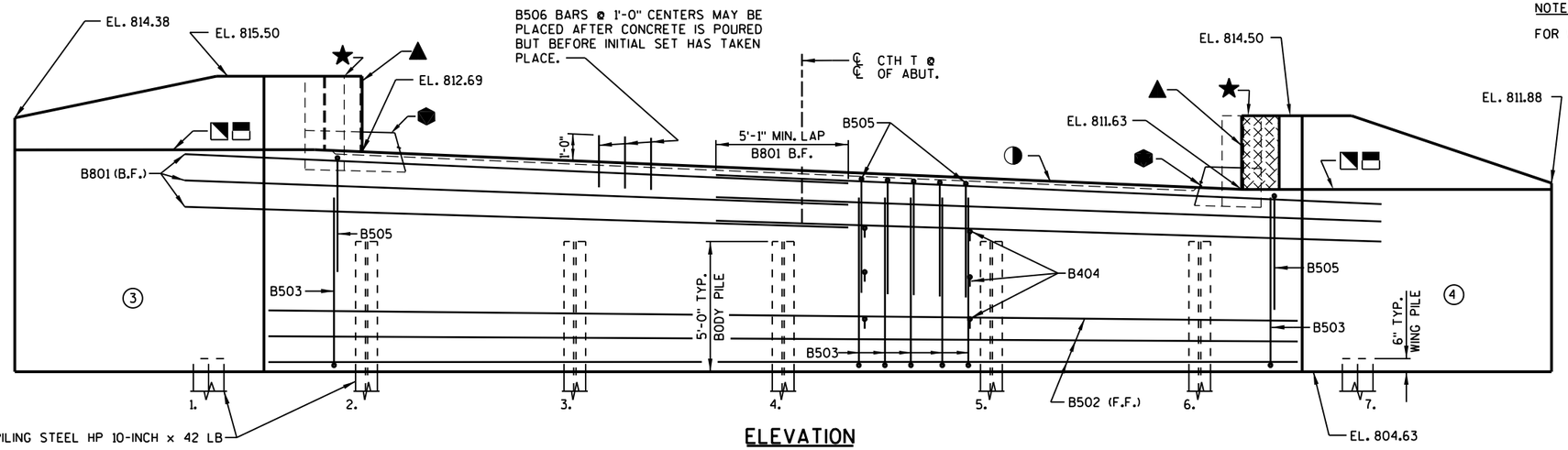
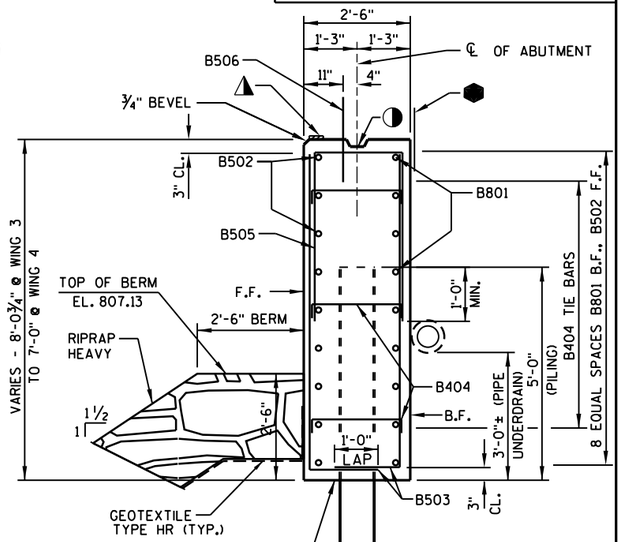


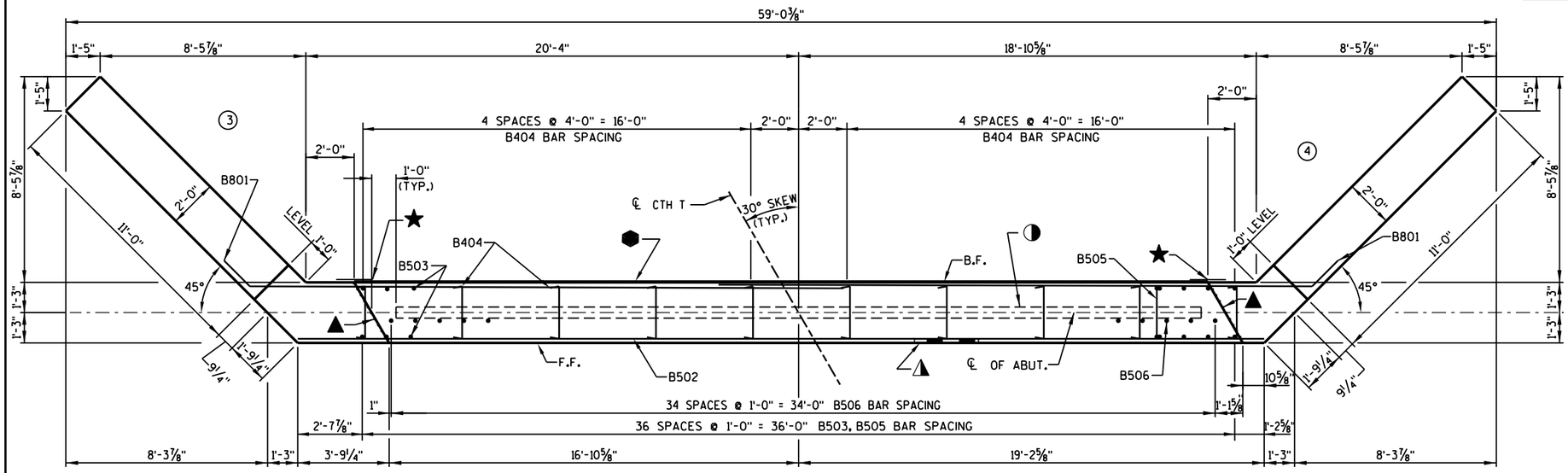
ELEVATION
(LOOKING NORTH)

NOTE:

FOR WING DETAILS SEE SHEET 7.



TYPICAL SECTION THRU ABUTMENT



PLAN

LEGEND

- ◯ — INDICATES WING NUMBER
- ◑ — KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2x6.
- ▲ — ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).
- ◭ — 4"x ¾" FILLER, EXTEND FULL LENGTH OF ABUTMENT BETWEEN EDGES OF SLAB.
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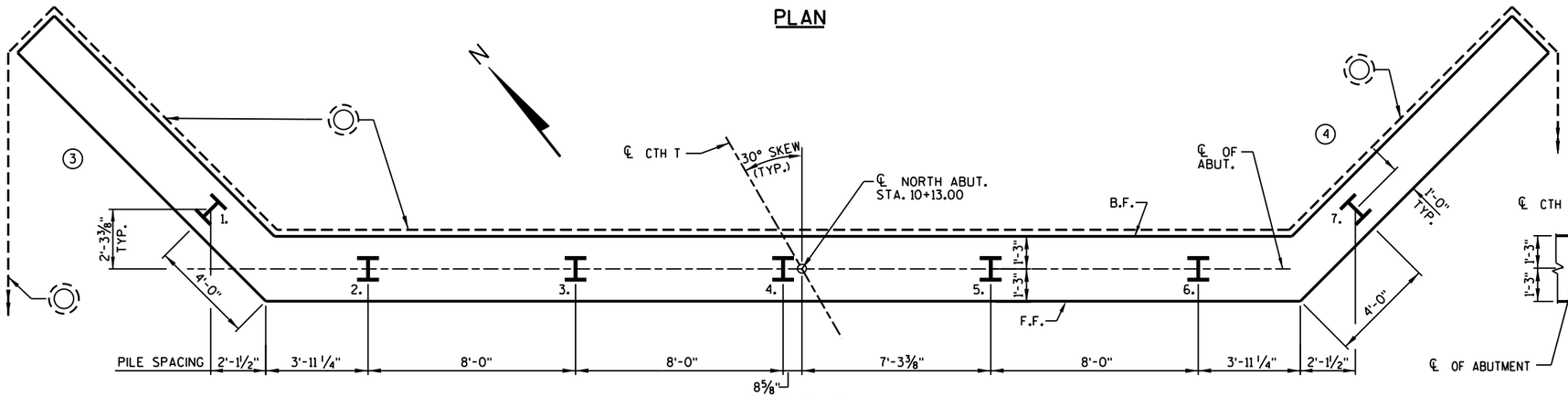
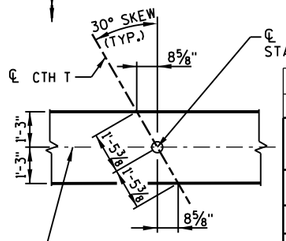
- ◨ — OPTIONAL KEYED CONST. JOINT ON WING FORMED BY BEVELED 2 X 6. IF JOINT IS USED, PLACE ⬢ ON B.F. OF WING. COST OF ⬢ INCLUDED IN BID ITEM "CONCRETE MASONRY BRIDGES".
- ◥ — ¾" "V" GROOVE ON FRONT FACE OF WING WALL, REQUIRED ONLY WHERE CONSTRUCTION JOINT IS USED.
- ◎ — PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE AT FACE OF RIPRAP HEAVY. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE. SEE DETAIL, SHEET 2.

F.F.— FRONT FACE B.F.— BACK FACE CL.— CLEAR



PILE PLAN



LAYOUT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-247

DRAWN BY RLR | PLANS CK'D. JAS

NORTH ABUTMENT

SHEET 6 OF 9
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FILE= 7339010_06.DGN
DATE= 8/25/2016

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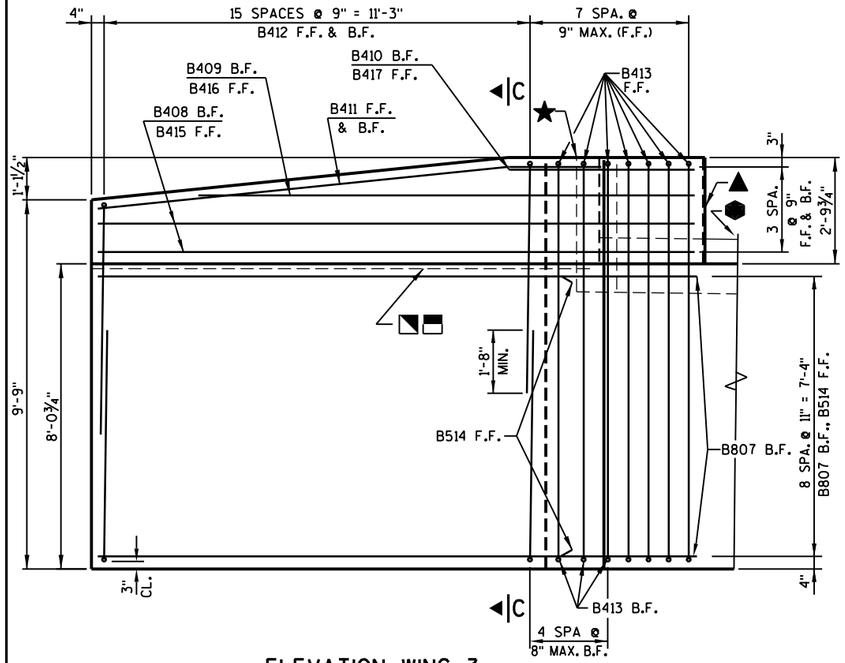
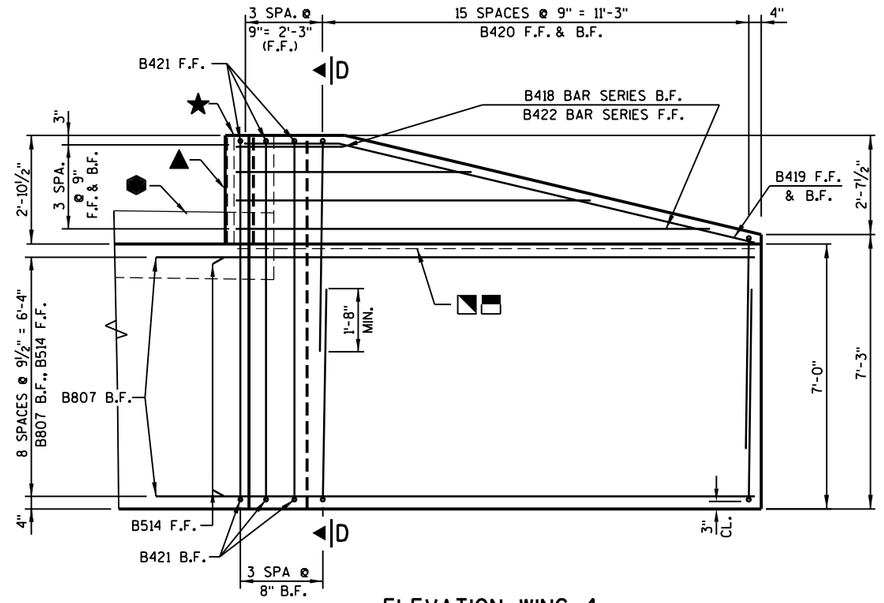
STATE PROJECT NUMBER

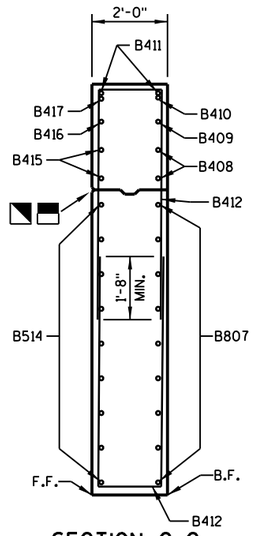
5296-00-70



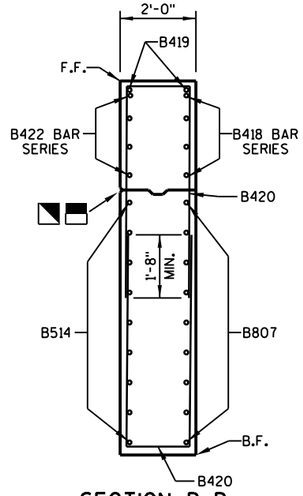
ELEVATION WING 3
(LOOKING AT F.F. OF WING)



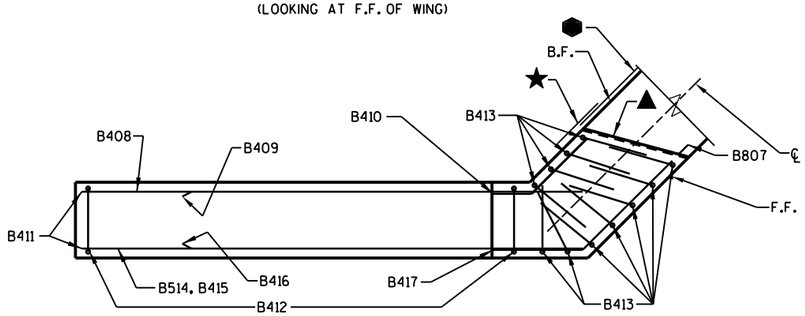
ELEVATION WING 4
(LOOKING AT F.F. OF WING)



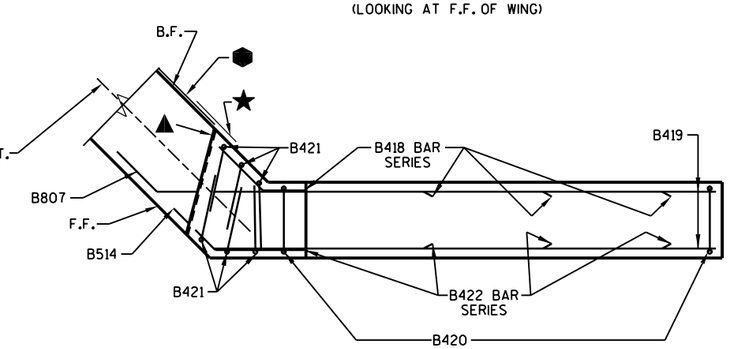
SECTION C-C
THRU WING 3



SECTION D-D
THRU WING 4



PLAN WING 3



PLAN WING 4

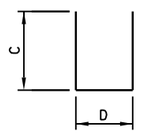
BILL OF BARS

COATED 1980 LBS.
UNCOATED 2670 LBS.

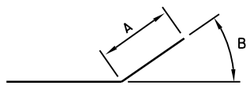
MARK	NUMBER REQUIRED COATED	NUMBER REQUIRED UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION
B801	-	18	25'-11"	X		ABUTMENT BODY - B.F. - HORIZ.
B502	-	9	39'-10"			ABUTMENT BODY - F.F. - HORIZ.
B503	-	74	8'-0"	X		ABUTMENT BODY - F.F. & B.F. - VERT.
B404	-	30	2'-9"	X		ABUTMENT BODY - TIES - HORIZ.
B505	-	37	9'-9"	X		ABUTMENT BODY - TOP - VERT.
B506	35	-	2'-0"			ABUTMENT BODY - TOP DOWEL - VERT.
B807	18	-	16'-2"	X		WINGS - B.F. - HORIZ.
B408	2	-	13'-10"	X		WING 3 - B.F. - HORIZ.
B409	1	-	11'-2"	X		WING 3 - B.F. - HORIZ.
B410	1	-	3'-0"	X		WING 3 - B.F. - HORIZ.
B411	2	-	13'-3"	X		WING 3 - F.F. & B.F. - TOP - HORIZ.
B412	32	-	13'-8"	X		WING 3 - F.F. & B.F. - VERT.
B413	11	-	13'-9"	X		WING 3 - F.F. & B.F. - VERT.
B514	18	-	14'-8"	X		WINGS - F.F. - HORIZ.
B415	2	-	16'-5"	X		WING 3 - F.F. - HORIZ.
B416	1	-	13'-10"	X		WING 3 - F.F. - HORIZ.
B417	1	-	5'-7"	X		WING 3 - F.F. - HORIZ.
B418	4	-	7'-7"	X	Ⓢ	WING 4 - B.F. - HORIZ.
B419	2	-	13'-8"	X		WING 4 - F.F. & B.F. - TOP - HORIZ.
B420	32	-	12'-8"	X		WING 4 - F.F. & B.F. - VERT.
B421	6	-	12'-9"	X		WING 4 - F.F. & B.F. - VERT.
B422	4	-	7'-11"	X	Ⓢ	WING 4 - F.F. - HORIZ.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

SEE LEGEND ON SHEET 6 FOR DESCRIPTION OF ★ ⬢ ◥ ▬ ▲



MARK	C	D
B404	4½"	2'-2"
B505	3'-11"	2'-2"
B412	6'-1"	1'-8"
B413	1'-9"	10'-5"
B420	5'-7"	1'-8"
B421	1'-9"	9'-5"



MARK	A	B
B801 B807 B514	1'-6"	45°
B408 B409 B410	2'-0"	45°
B411	2'-4"	6°
B415 B416 B417	3'-3"	45°
B418	1'-8"	45°
B419	2'-5"	13°
B422	8"	45°

B503

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

BENT BARS IF USED IN BAR SERIES TABLE SHALL BE BENT AFTER CUTTING.

BAR MARK	NO. REQ'D.	LENGTH
B418	1 SERIES OF 4	2'-9" TO 12'-5"
B422	1 SERIES OF 4	3'-1" TO 12'-9"

BAR SERIES TABLE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-247

DRAWN BY RLR | PLANS CK'D. JAS

NORTH ABUTMENT DETAILS

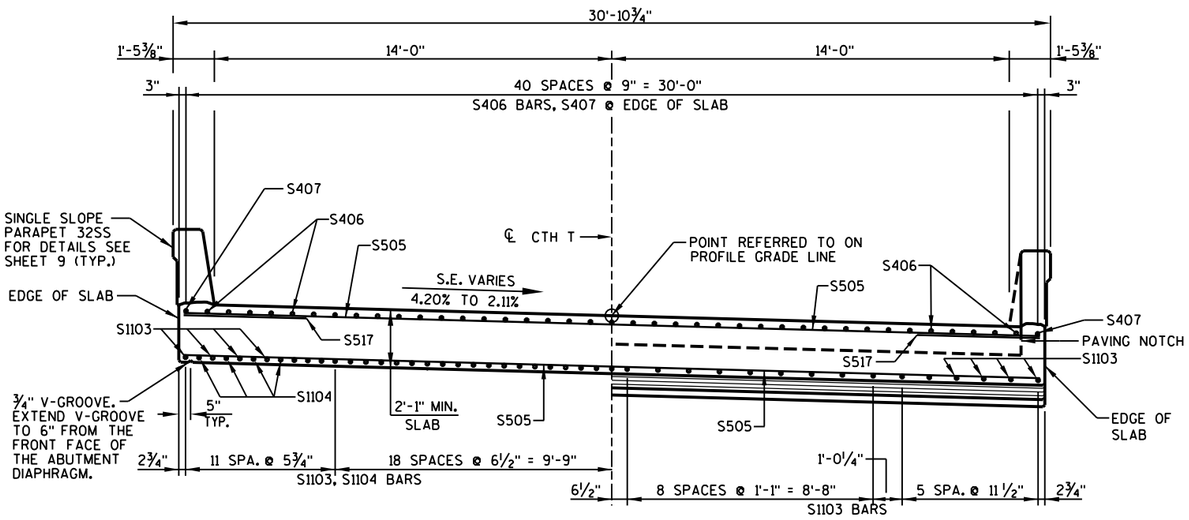
SHEET 7 OF 9
40

FILE= 7339010_07.DGN
DATE= 9/7/2016

7339010_07.dgn 9/7/2016 8:49:16 AM rrabska

STATE PROJECT NUMBER

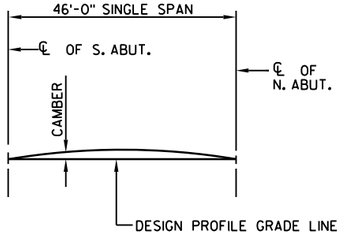
5296-00-70



IN SPAN AT ABUTMENTS

CROSS SECTION THRU BRIDGE

(LOOKING NORTH)



CAMBER DIAGRAM

CAMBER SPANS AS SHOWN ABOVE AND IN THE TABLE OF VALUES TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. DEAD LOAD DEFLECTION APPROXIMATES 1/3 OF CAMBER VALUES SHOWN.

SUPERELEVATION TABLE

LOCATION	CROSS SLOPE (%)
STA. 9+03.55	+6.00
STA. 9+67.00	+3.91
STA. 10+13.00	+2.40
STA. 10+25.00	+2.00

A POSITIVE SIGN INDICATES A CROSS SLOPE DOWN TO THE RIGHT (LOOKING UPSTATION).

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE, FOLLOW THIS PROCEDURE:

TOP OF SLAB ELEVATION AT FINAL GRADE

\- SLAB THICKNESS

\+ CAMBER

\+ FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)

= TOP OF SLAB FALSEWORK ELEVATION

GENERAL NOTES

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

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

ALL TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE PLACED ON THE SKEW.

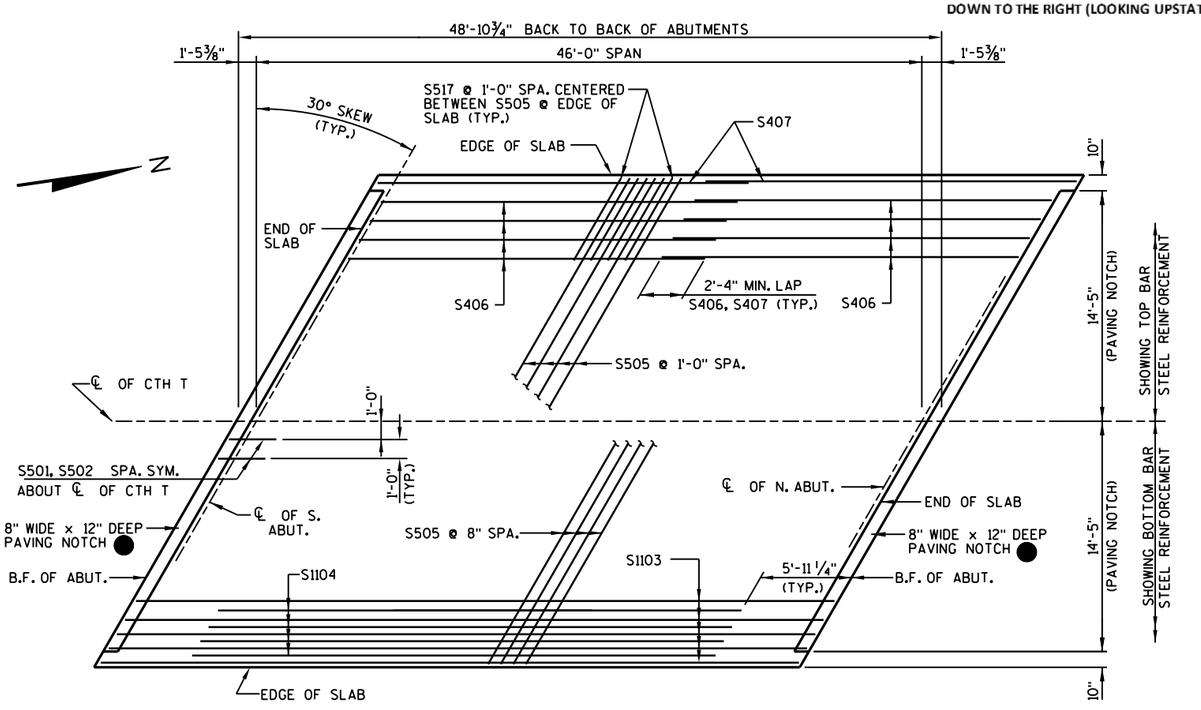
SURVEY TOP OF SLAB ELEVATIONS

LOCATION	SPAN POINT	EAST SLAB EDGE	C/L CTH T	WEST SLAB EDGE
SOUTH ABUT.	1.0			
	1.5			
NORTH ABUT.	2.0			

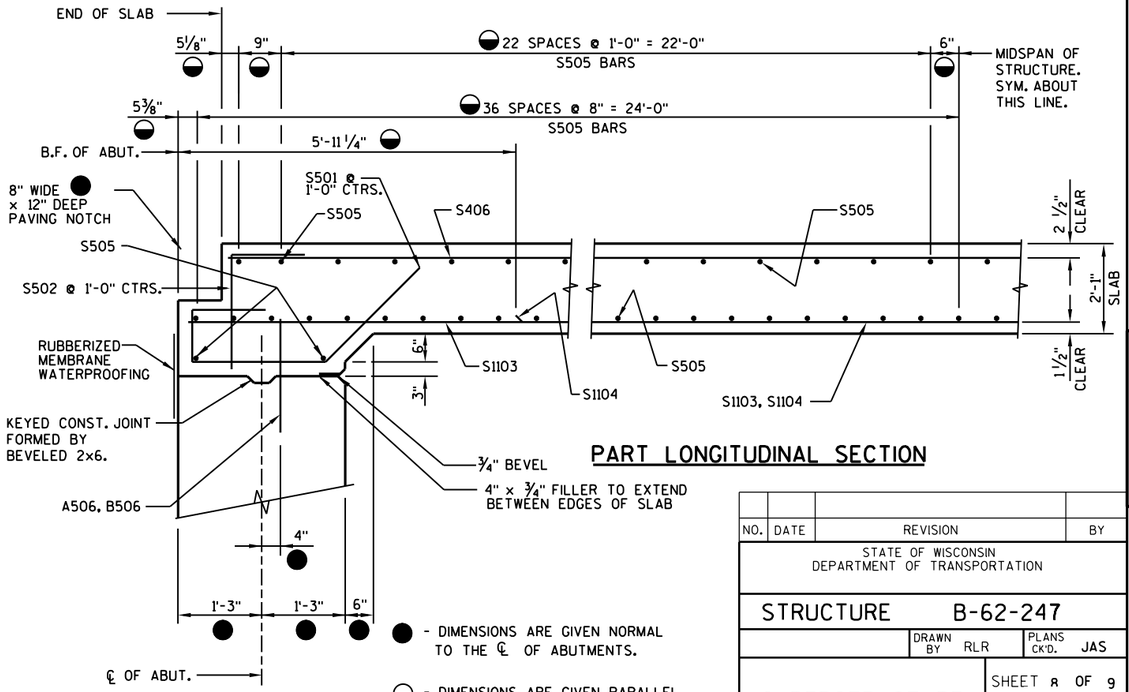
PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ℄ OF ABUTMENTS AND AT THE 0.5 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND CROWN OR ℄. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

TOP OF SLAB ELEVATIONS AND CAMBER VALUES

LOCATION	SPAN POINT	EAST SLAB EDGE	C/L CTH T	WEST SLAB EDGE	CAMBER VALUE (INCHES)
SOUTH ABUT.	1.0	813.43	814.19	814.86	0.00
	1.1	813.54	814.27	814.92	0.58
	1.2	813.65	814.36	814.98	1.10
	1.3	813.75	814.44	815.05	1.50
	1.4	813.86	814.53	815.11	1.76
	1.5	813.97	814.61	815.18	1.85
	1.6	814.07	814.70	815.24	1.76
	1.7	814.18	814.78	815.31	1.50
	1.8	814.29	814.87	815.37	1.10
	1.9	814.39	814.95	815.43	0.58
NORTH ABUT.	2.0	814.50	815.04	815.50	0.00



PLAN



PART LONGITUDINAL SECTION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-247

DRAWN BY RLR | PLANS CK'D. JAS

SUPERSTRUCTURE

SHEET 8 OF 9
41

8

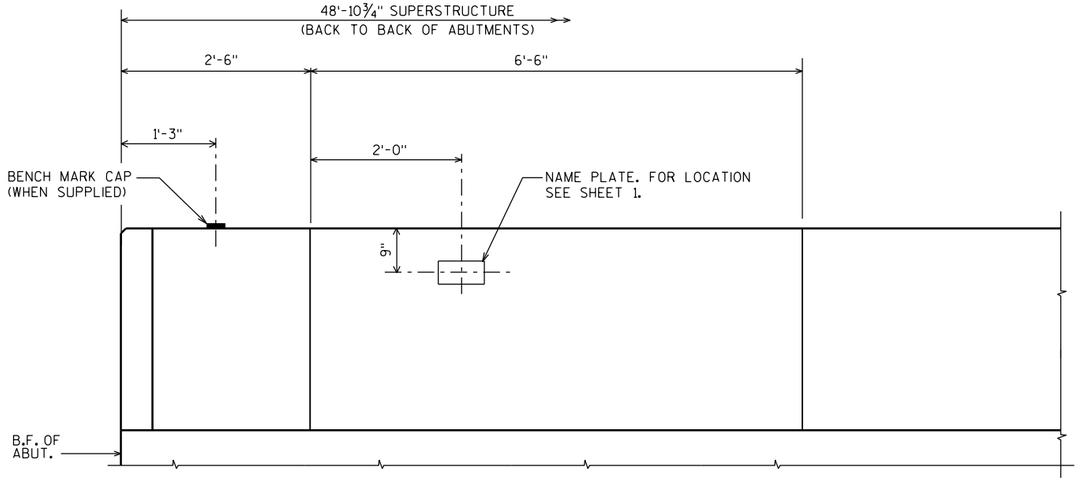
8

FILE= 7339010_08.DGN
DATE= 9/7/2016

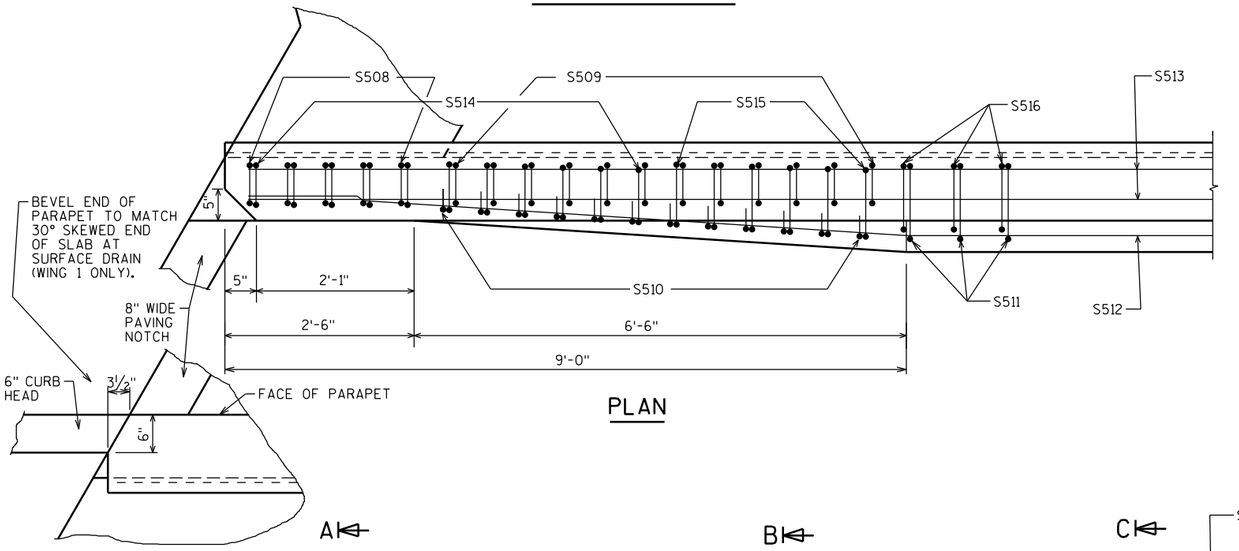
7339010_08.dgn 9/7/2016 8:43:53 AM rrabska

STATE PROJECT NUMBER

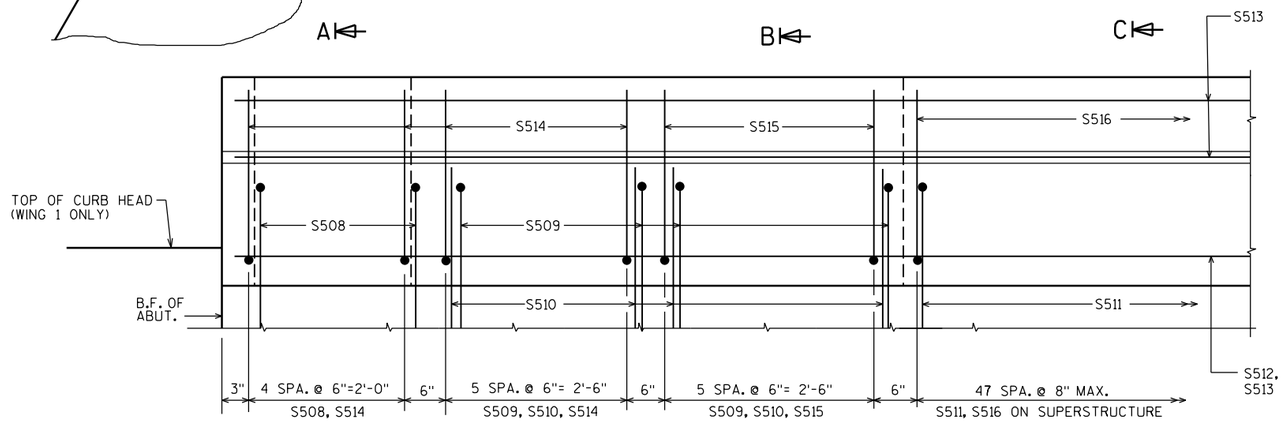
5296-00-70



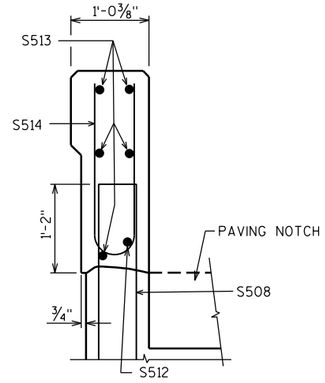
INSIDE ELEVATION



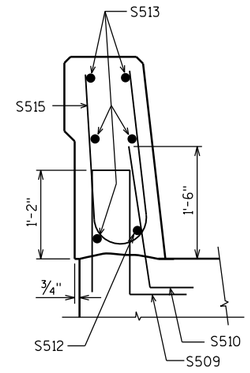
PLAN



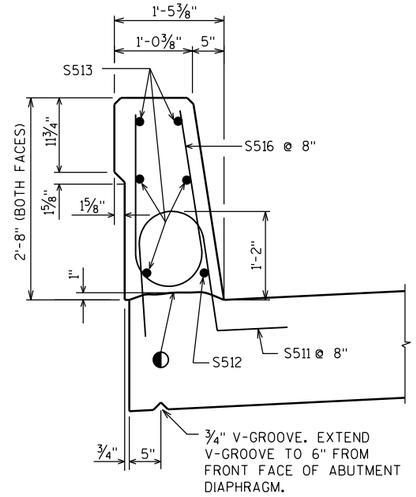
OUTSIDE ELEVATION



SECTION A-A
AT END OF PARAPET

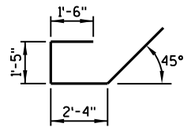


SECTION B-B
AT END OF PARAPET

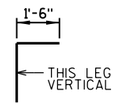


SECTION C-C THRU PARAPET

◐ CONST. JOINT - STRIKE OFF AS SHOWN.



S501



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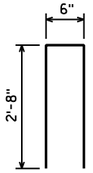

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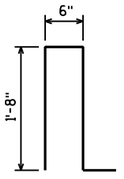
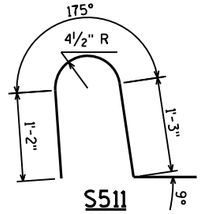


S509

S510



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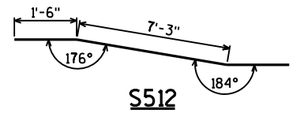

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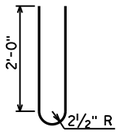

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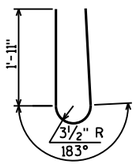

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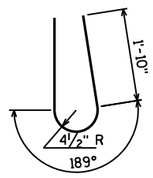

S516

BILL OF BARS (COATED) 22,875 LBS.

MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
S501	62	7'-0"	X	DIAPHRAGM @ ABUTS. - LONGIT.
S502	62	3'-9"	X	DIAPHRAGM @ ABUTS. - VERT.
S1103	30	48'-6"		SLAB BOTTOM - LONGIT.
S1104	29	37'-0"		SLAB BOTTOM - LONGIT.
S505	125	34'-10"		SLAB TOP & BOTTOM - TRANS.
S406	78	24'-9"		SLAB TOP - LONGIT.
S407	4	25'-6"		SLAB TOP @ EDGE OF SLAB - LONGIT.
S508	20	5'-7"	X	SLAB & PARAPET END - STIRRUP - VERT.
S509	48	4'-4"	X	SLAB & PARAPET END - STIRRUP - VERT.
S510	48	2'-9"	X	SLAB & PARAPET END - VERT.
S511	96	4'-5"	X	SLAB & PARAPET - STIRRUP - VERT.
S512	4	25'-6"	X	PARAPET - LONGIT.
S513	10	48'-2"		PARAPET - LONGIT.
S514	44	4'-9"	X	PARAPET END - STIRRUP - VERT.
S515	24	4'-10"	X	PARAPET END - STIRRUP - VERT.
S516	96	5'-0"	X	PARAPET - STIRRUP - VERT.
S517	94	5'-0"		SLAB TOP @ EDGE OF SLAB - TRANS.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.
EPOXY COAT ALL SUPERSTRUCTURE BAR STEEL REINFORCEMENT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-247

DRAWN BY RLR | PLANS CK'D. JAS

SINGLE SLOPE
PARAPET 32SS

SHEET 9 OF 9
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FILE= 7339010_09.DGN
DATE= 9/7/2016

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PROJECT I.D. 5296-00-70 EARTHWORK SUMMARY

STA	EXCAVATION COMMON CY	EXCAVATION ROCK CY	FILL (1) CY	EXPANDED FILL (2) CY	WASTE CY	BORROW CY
7+52.00						
	78	0	5	7	71	-71
8+00.00						
	59	0	12	16	43	-43
8+38.00						
	110	0	14	18	92	-92
9+00.00						
	99	0	33	43	56	-56
9+40.00						
	73	0	42	55	18	-18
9+65.56						
STRUCTURE B-62-0247						
10+14.44						
	54	0	93	121	-67	67
10+45.00						
	52	0	66	86	-34	34
10+75.00						
	41	0	17	22	19	-19
11+00.00						
SUBTOTALS						
SOUTH APPROACH	419	0	106	139	280	-280
NORTH APPROACH	147	0	176	229	-82	82
UNUSABLE PAVEMENT (3)						121
TOTALS	**566**	**0**	**282**	**368**	**198**	**-77**

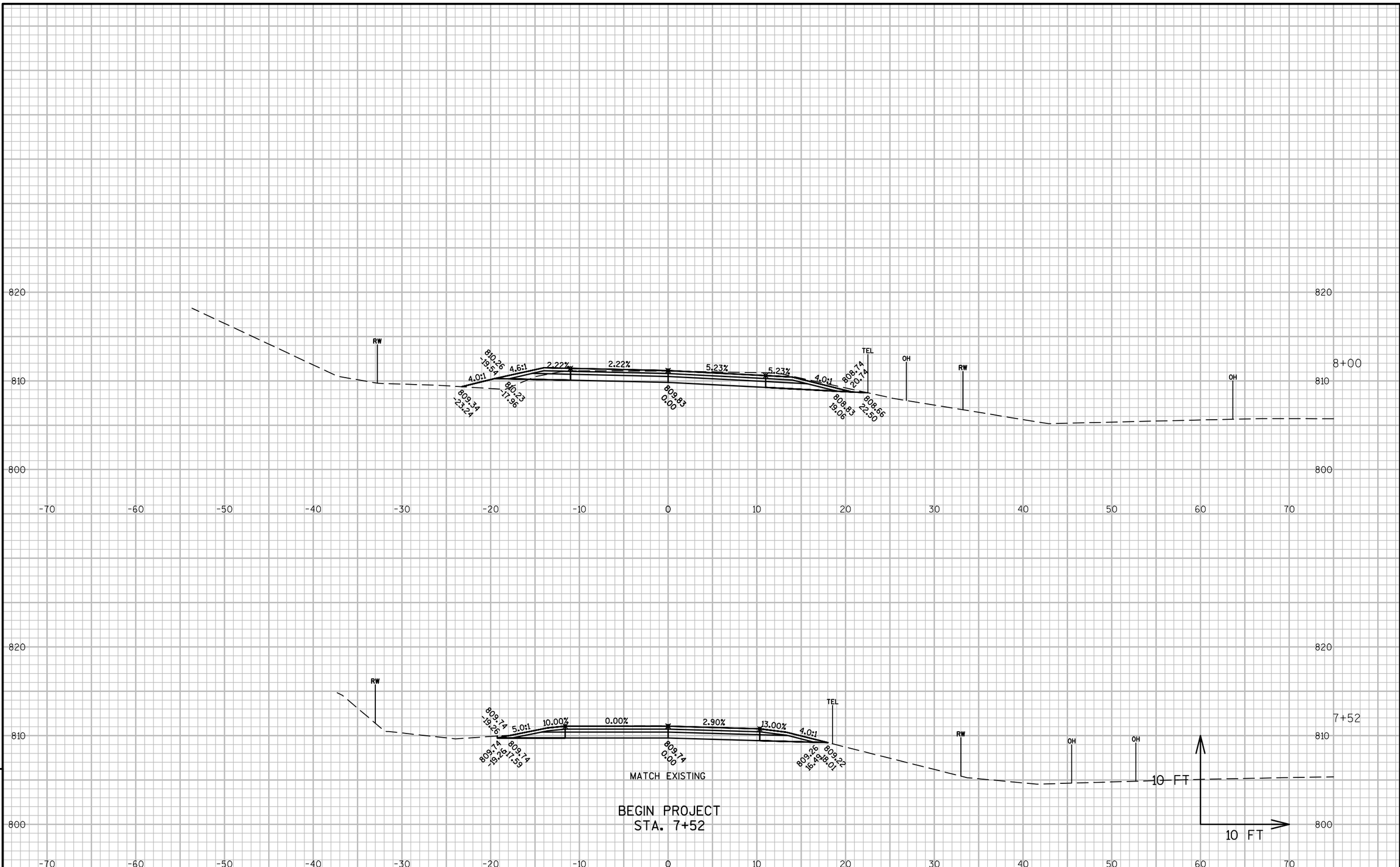
(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.
(2) - FILL EXPANSION 30%
(3) - EXISTING PAVEMENT BASED ON AVE THK OF 5" AT THE S. APPR & 9" AT THE N. APPR OF ASPHALT PER BORING LOG.

9 9

PROJECT NO: 5296-00-70 | HWY: CTH T | COUNTY: VERNON | EARTHWORK | SHEET E

FILE NAME : P:\7300s\7330s\7339\07339010\Documents\Estimate\7339010_MiscQty & Earthwork Borders.dgn PLOT DATE : 6/20/2016 PLOT BY : jsnyder PLOT NAME : PLOT SCALE : 1:20 WISDOT/CADDS SHEET 49

7339010_MiscQty & Earthwork Borders.dgn 6/20/2016 10:48:37 AM jsnyder



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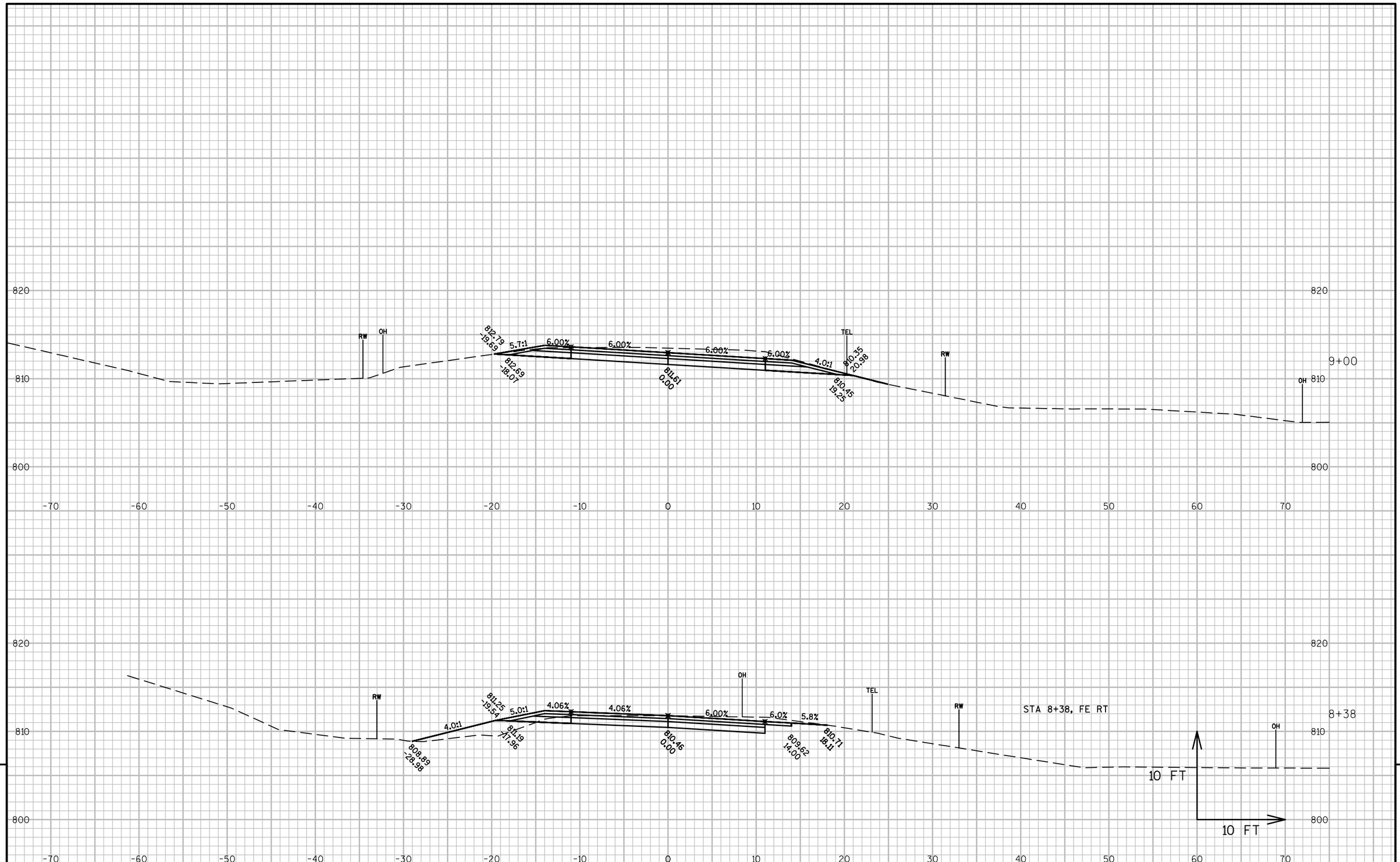
WISDOT/CADDS SHEET 49



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PROJECT NO: 5296-00-70	HWY: CTH T	COUNTY: VERNON	CROSS SECTIONS: CTH T	SHEET 45	E

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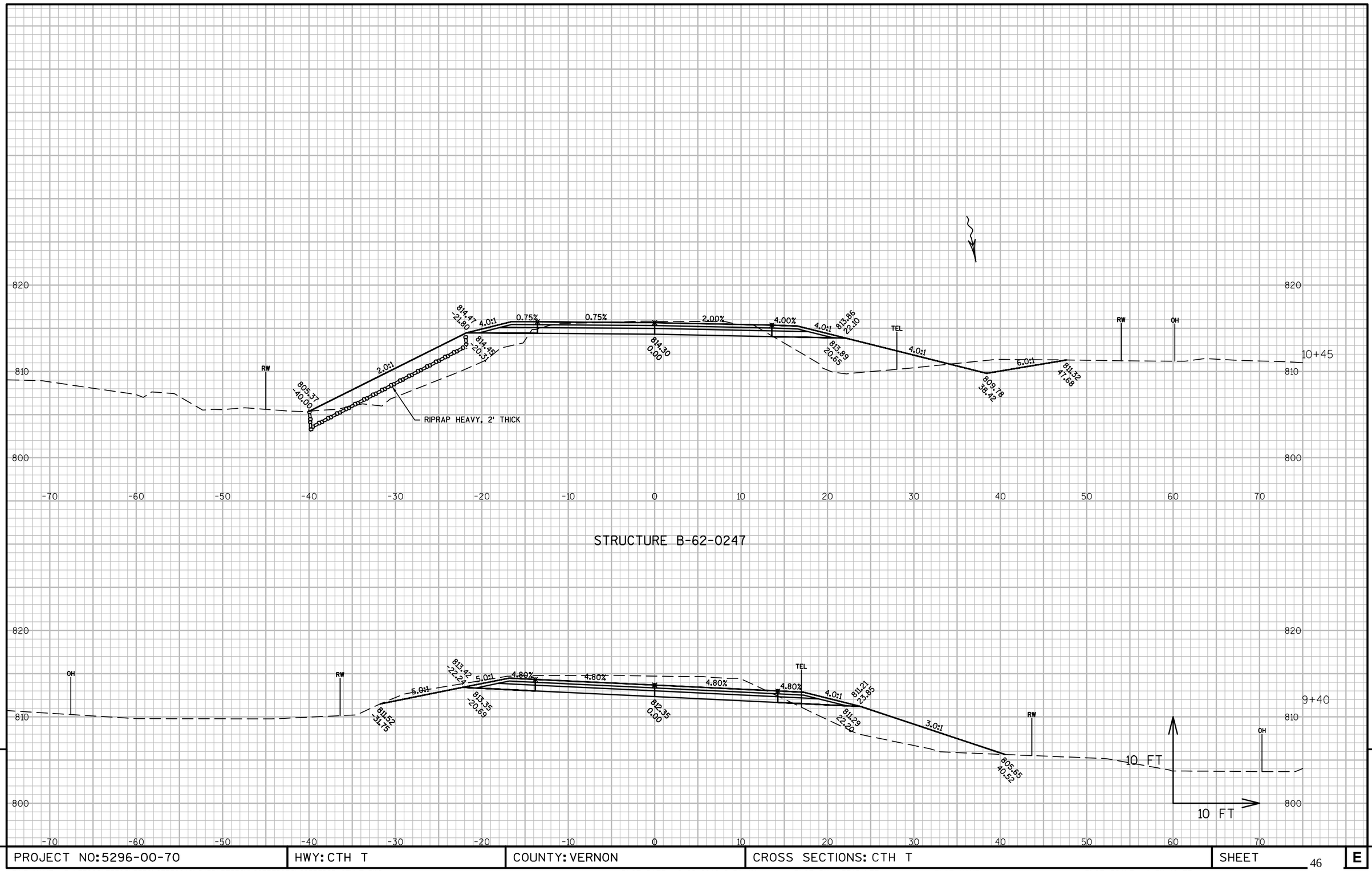
WISDOT/CADDS SHEET 49



PROJECT NO: 5296-00-70	HWY: CTH T	COUNTY: VERNON	CROSS SECTIONS: CTH T	SHEET 46	E

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LAYOUT NAME - 090203_XS

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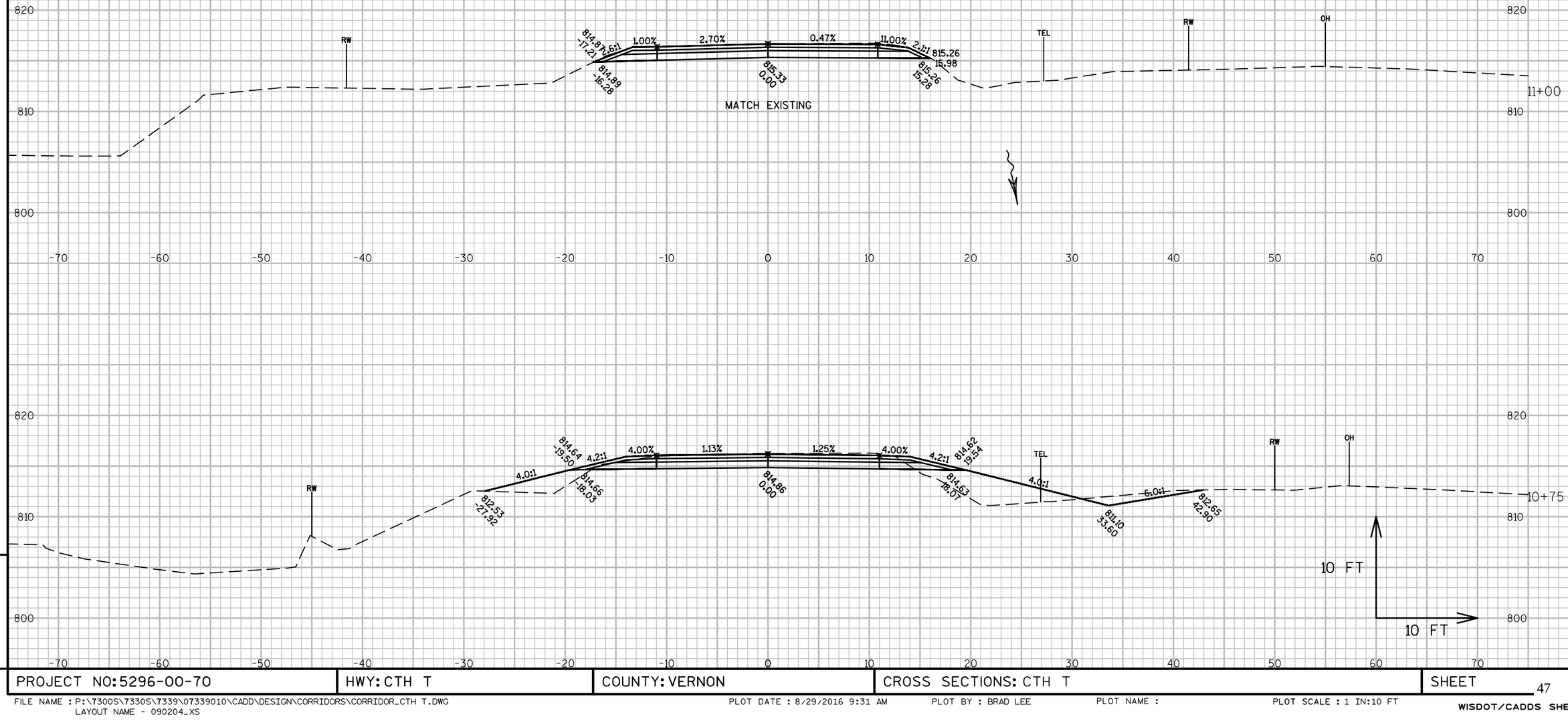
WISDOT/CADDS SHEET 49

END PROJECT
STA. 11+00



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LAYOUT NAME - 090204_XS

PLOT DATE : 8/29/2016 9:31 AM PLOT BY : BRAD LEE PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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through innovation and exceptional service.

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