EAU

PROJECT ID: 8914-00-70

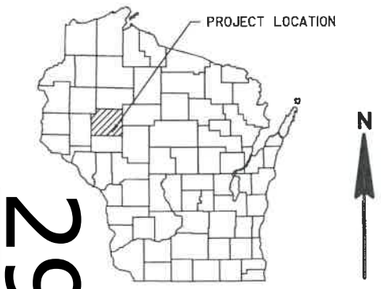
WITH: N/A

COUNTY: CHIPPEWA

NOVEMBER 2017

ORDER OF SHEETS

TOTAL SHEETS = 46



29

DESIGN DESIGNATION 8914-00-70

A.A.D.T.	2018	=	120
A.A.D.T.	2038	=	170
D.H.V.		=	17
D.D.		=	50/50
T.		=	10%
DESIGN SPEED		=	40 MPH
ESALS		=	44,000

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 (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CTH O - CTH S

LITTLE DRYWOOD CREEK BRIDGE B-09-0306

CTH K

CHIPPEWA COUNTY

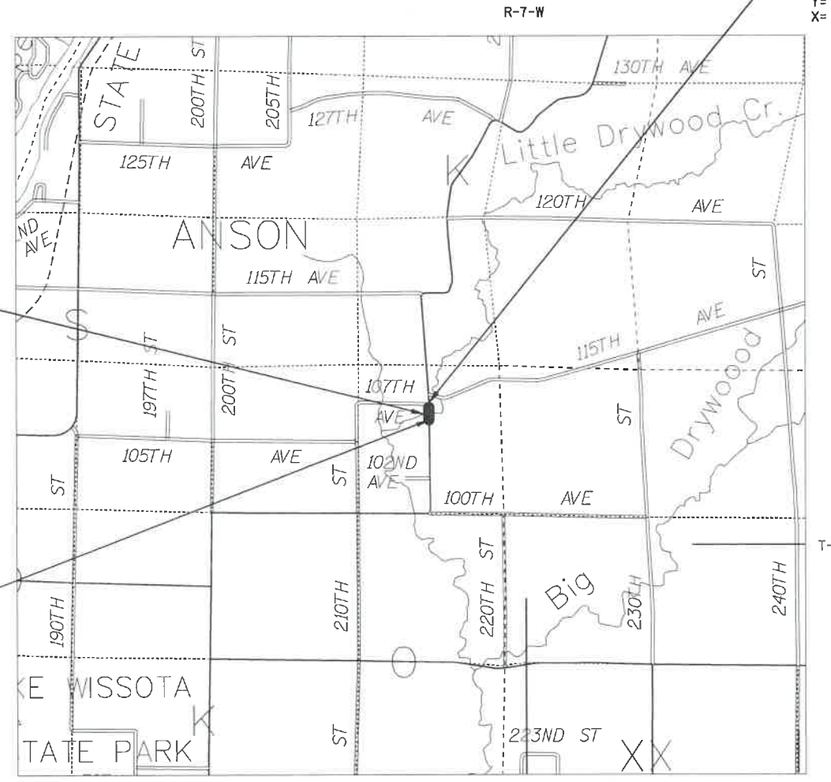
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8914-00-70	WISC 2017528	1

STATE PROJECT NUMBER
8914-00-70

END PROJECT
STA 11+75
Y= 152023.298
X= 211623.206

STRUCTURE B-09-0306
STA 10+00

BEGIN PROJECT
STA 8+00
Y= 151648.429
X= 211633.126



LAYOUT
SCALE 0 — 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.071 MI

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, CHIPPEWA COUNTY

ACCEPTED FOR
COUNTY of CHIPPEWA
7-10-17 (Date)
Highway Commissioner (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

SEH WISCONSIN
TARA L. KRISTA 37975 CHIPPEWA FALLS, WI
PROFESSIONAL ENGINEER
7-10-17 (Date)
(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor SEH
Designer SEH
Management Consultant KNIGHT E/A INC.
C.O. Examiner

APPROVED FOR THE DEPARTMENT
DATE: 7/24/17
(Management Consultant Signature)

E

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 = 0.68 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.58 ACRES

GENERAL NOTES:

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

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

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

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

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH SALVAGED TOPSOILED, FERTILIZED, TEMPORARY SEEEDED, SEEDED AND MULCHED.

ALL PAVEMENT DIMENSIONS AND STATIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS.

3.5 INCH ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 1.75 INCH UPPER LAYER AND A 1.75 INCH LOWER LAYER.

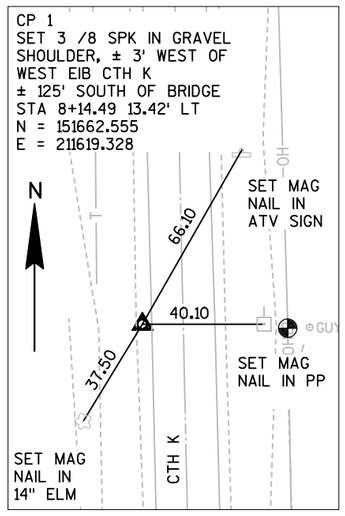
SILT FENCE IS TO BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, AND IN PLACE PRIOR TO BRIDGE REMOVAL.

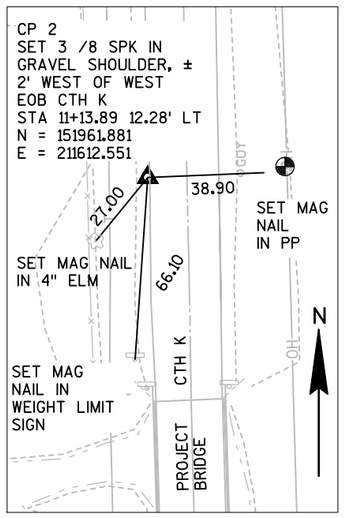
WISDOT MONUMENTS WILL BE SUPPLIED BY THE STATE AND INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

UTILITY CONTACTS

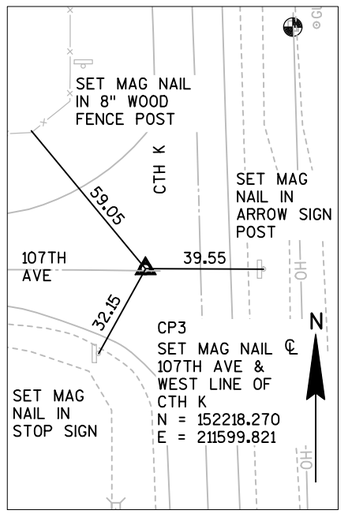
CENTURYLINK
PO BOX 78
HAWKINS, WI 54530
TELEPHONE: 715.492.0214
ATTENTION: TIM CEGLER
EMAIL: TIMOTHY.CEGLER@CENTURYLINK.COM

CHIPPEWA VALLEY ELECTRIC COOPERATIVE
317 SOUTH 8TH STREET
CORNELL, WI 54745
TELEPHONE: 715.239.6800
ATTENTION: BOB WRUCK
EMAIL: RWRUCK@CVE.COOP





ALIGNMENT TIES



ALIGNMENT DATA CTH K

Tangent Data

Description	PT Station	Northing	Easting
Start:	7+00.000	151548.464	211635.771
End:	11+87.293	152035.586	211622.881

Tangent Data

Parameter	Value	Parameter	Value
Length:	487.29	Course:	N 01° 30' 56.9396" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	11+87.293	152035.586	211622.881
End:	13+00.000	152148.226	211618.994

Tangent Data

Parameter	Value	Parameter	Value
Length:	112.71	Course:	N 01° 58' 34.3439" W

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

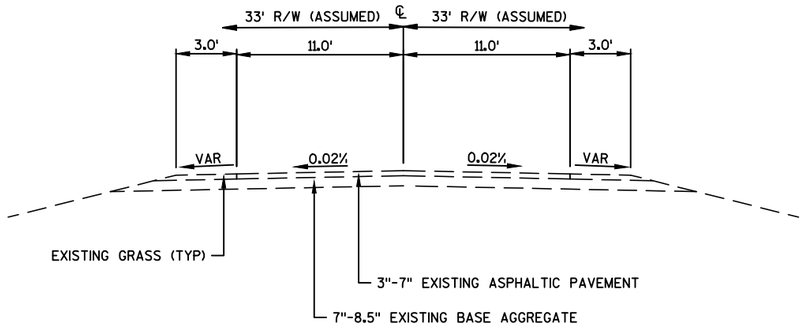
DESIGN CONTACT
SEH
10 NORTH BRIDGE STREET
CHIPPEWA FALLS, WI 54729
TELEPHONE: 715.720.6291
ATTENTION: TARA KRISTA
EMAIL: TKRISTA@SEHINC.COM

MUNICIPAL CONTACT
CHIPPEWA COUNTY HIGHWAY DEPARTMENT
801 EAST GRAND AVENUE
CHIPPEWA FALLS WI, 54729
TELEPHONE: 715.726.7914
ATTENTION: FRED ANDERSON
EMAIL: FANDERSON@CO.CHIPPEWA.WI.US

WDNR CONTACT
DNR WEST CENTRAL REGION HQ
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54702
TELEPHONE: 715.839.1609
ATTENTION: CHRIS WILLGER
EMAIL: CHRISTOPHERJ.WILLGER@WISCONSIN.GOV

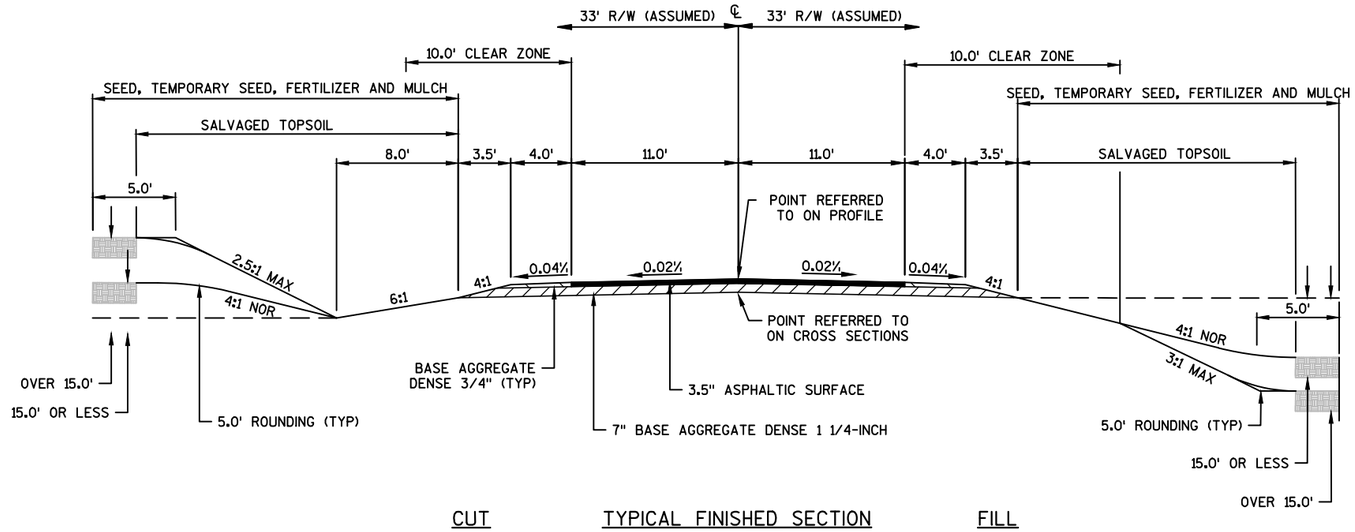
FILE NAME : P:\AE\C\CHIPH\134766\CIVIL 3D\SHEETSPLAN\020101-GN.DWG
LAYOUT NAME - 020101-GN - 020101 GN
PLOT DATE : 8/2/2017 3:55 PM PLOT BY : SEH PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 42

2



TYPICAL EXISTING SECTION

STA 8+00 TO STA 9+59.80
STA 10+40.20 TO STA 11+75



CUT TYPICAL FINISHED SECTION FILL

STA 8+00 TO STA 9+53.75
STA 10+46.25 TO STA 11+75

PROJECT NO: 8914-00-70	HWY: CTH K	COUNTY: CHIPPEWA	TYPICAL SECTIONS	SHEET 3	E

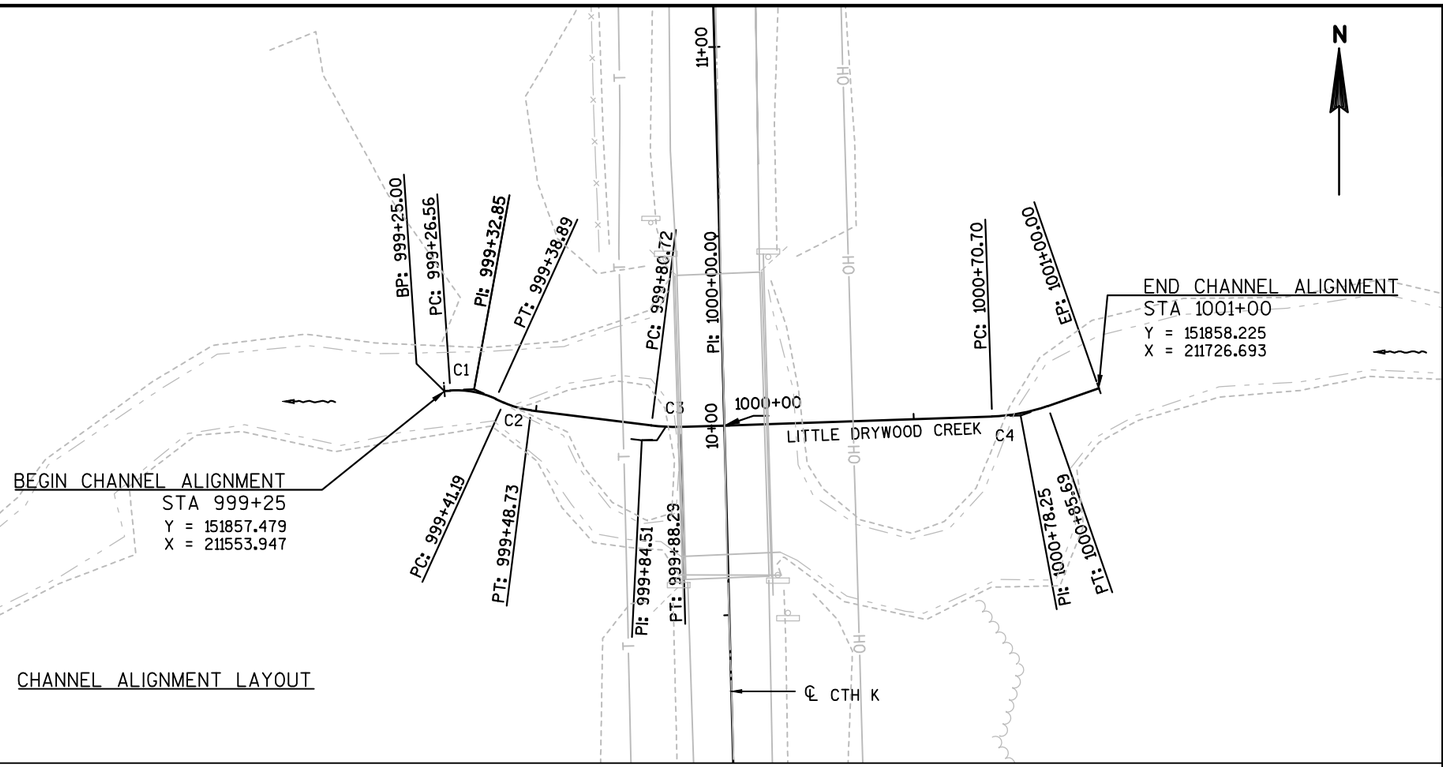
FILE NAME : P:\AE\C\CHIPH\134766\CIVIL 3D\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020301-TS - 020301-TS
PLOT DATE : 7/9/2017 5:12 PM PLOT BY : JUSTIN SHAVLIK PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

C1
PI STA = 999+32.85
Y = 151858.004
X = 211561.784
DELTA = 28°15'49"
D = 229°10'59"
T = 6.29'
L = 12.33'
R = 25.00'
PC STA = 999+26.56
PT STA = 999+38.89

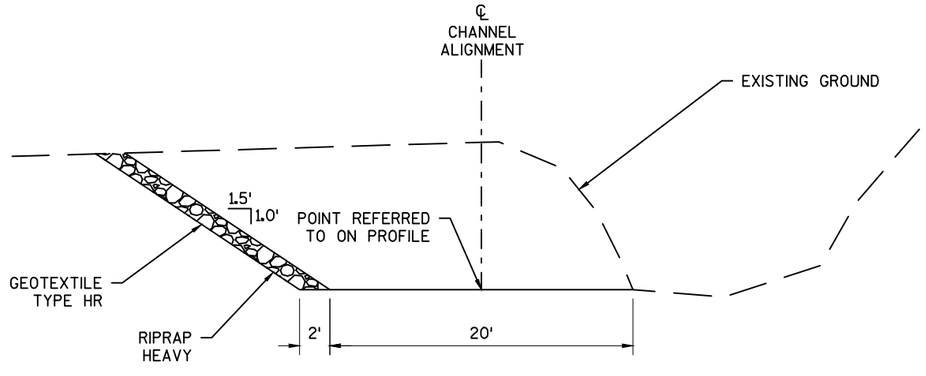
C2
PI STA = 999+44.99
Y = 151852.880
X = 211573.063
DELTA = 17°16'32"
D = 229°10'59"
T = 3.80'
L = 7.54'
R = 25.00'
PC STA = 999+41.19
PT STA = 999+48.73

C3
PI STA = 999+84.51
Y = 151847.949
X = 211612.341
DELTA = 8°40'18"
D = 114°35'30"
T = 3.79'
L = 7.57'
R = 50.00'
PC STA = 999+80.72
PT STA = 999+88.29

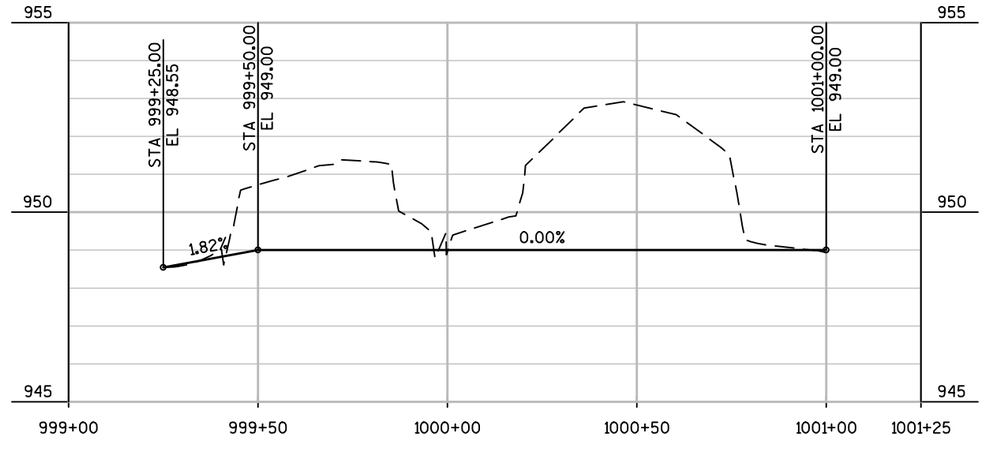
C4
PI STA = 1000+78.25
Y = 151851.053
X = 211706.037
DELTA = 17°10'26"
D = 114°35'30"
T = 7.55'
L = 14.99'
R = 50.00'
PC STA = 1000+70.70
PT STA = 1000+85.69



CHANNEL ALIGNMENT LAYOUT



TYPICAL SECTION
999+25 - 1001+00



PROJECT NO: 8914-00-70	HWY: CTH K	COUNTY: CHIPPEWA	CHANNEL DETAIL	SHEET 4	E

8914-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 10+00	LS	1.000	1.000
0008	205.0100	Excavation Common	CY	698.000	698.000
0010	206.1000	Excavation for Structures Bridges (structure) 01. B-09-0306	LS	1.000	1.000
0012	210.1500	Backfill Structure Type A	TON	312.000	312.000
0014	213.0100	Finishing Roadway (project) 01. 8914-00-70	EACH	1.000	1.000
0016	305.0110	Base Aggregate Dense 3/4-Inch	TON	47.000	47.000
0018	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	395.000	395.000
0020	455.0605	Tack Coat	GAL	46.000	46.000
0022	465.0105	Asphaltic Surface	TON	150.000	150.000
0024	502.0100	Concrete Masonry Bridges	CY	283.000	283.000
0026	502.3200	Protective Surface Treatment	SY	408.000	408.000
0028	505.0400	Bar Steel Reinforcement HS Structures	LB	5,530.000	5,530.000
0030	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	50,750.000	50,750.000
0032	506.0105	Structural Steel Carbon	LB	590.000	590.000
0034	513.4061	Railing Tubular Type M (structure) 01. B-09-0306	LF	230.000	230.000
0036	516.0500	Rubberized Membrane Waterproofing	SY	20.000	20.000
0038	550.2104	Piling CIP Concrete 10 3/4 X 0.25-Inch	LF	1,800.000	1,800.000
0040	606.0300	Riprap Heavy	CY	274.000	274.000
0042	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	202.000	202.000
0044	619.1000	Mobilization	EACH	1.000	1.000
0046	624.0100	Water	MGAL	4.000	4.000
0048	625.0500	Salvaged Topsoil	SY	935.000	935.000
0050	627.0200	Mulching	SY	1,105.000	1,105.000
0052	628.1504	Silt Fence	LF	835.000	835.000
0054	628.1520	Silt Fence Maintenance	LF	835.000	835.000
0056	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0058	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0060	628.2008	Erosion Mat Urban Class I Type B	SY	765.000	765.000
0062	628.6005	Turbidity Barriers	SY	295.000	295.000
0064	629.0210	Fertilizer Type B	CWT	0.700	0.700
0066	630.0120	Seeding Mixture No. 20	LB	30.000	30.000
0068	630.0200	Seeding Temporary	LB	30.000	30.000
0070	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0072	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	1.000	1.000
0074	637.2230	Signs Type II Reflective F	SF	18.250	18.250
0076	638.2602	Removing Signs Type II	EACH	6.000	6.000

8914-00-70

Line	Item	Item Description	Unit	Total	Qty
0078	638.3000	Removing Small Sign Supports	EACH	6.000	6.000
0080	642.5001	Field Office Type B	EACH	1.000	1.000
0082	643.0100	Traffic Control (project) 01. 8914-00-70	EACH	1.000	1.000
0084	643.0420	Traffic Control Barricades Type III	DAY	1,566.000	1,566.000
0086	643.0705	Traffic Control Warning Lights Type A	DAY	3,132.000	3,132.000
0088	643.0900	Traffic Control Signs	DAY	1,392.000	1,392.000
0090	645.0111	Geotextile Type DF Schedule A	SY	80.000	80.000
0092	645.0120	Geotextile Type HR	SY	473.000	473.000
0094	646.0106	Pavement Marking Epoxy 4-Inch	LF	844.000	844.000
0096	650.4500	Construction Staking Subgrade	LF	283.000	283.000
0098	650.5000	Construction Staking Base	LF	283.000	283.000
0100	650.6500	Construction Staking Structure Layout (structure) 01. B-09-0306	LS	1.000	1.000
0102	650.9910	Construction Staking Supplemental Control (project) 01. 8914-00-70	LS	1.000	1.000
0104	650.9920	Construction Staking Slope Stakes	LF	458.000	458.000
0106	690.0150	Sawing Asphalt	LF	44.000	44.000
0108	715.0502	Incentive Strength Concrete Structures	DOL	1,698.000	1,698.000
0110	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000
0112	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000

3

CLEARING & GRUBBING

STATION - STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
CTH K			
9+00 - 11+00	LT & RT	2	2
ITEM TOTALS		2	2

EXCAVATION

STATION - STATION	LOCATION	205.0100 COMMON CY	AIR FILL CY	EXPAND. FILL CY	WASTE CY
CTH K					
8+00 - 9+53.75	LT & RT	133	128	167	-34
10+46.25 - 11+75	LT & RT	113	119	154	-41
LITTLE DRYWOOD CREEK					
999+25 - 1001+00	LT & RT	452	-	-	452
ITEM TOTALS		698	247	321	377

NOTES:
1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN COMMON
2) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
3) FILL WILL BE BACKFILLED WITH CUT OR BORROW.
4) POSITIVE BORROW INDICATES A SHORTAGE OF MATERIAL.
5) EXPANSION FACTOR = 1.3

FINISHING ROADWAY (8914-00-70)

STATION - STATION	213.0100 EACH
CTH K	
8+75 - 11+50	1
ITEM TOTAL	1

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	624.0100 WATER MGAL
CTH K				
8+75 - 9+78.67	LT & RT	26	215	2
10+21.33 - 11+50	LT & RT	21	180	2
ITEM TOTALS		47	395	4

ASPHALTIC PAVEMENT ITEMS

STATION - STATION	LT & RT	455.0605 TACK COAT GAL	465.0105 ASHALTIC SURFACE TON
CTH K			
8+75 - 9+78.67	LT & RT	25	80
10+21.33 - 11+50	LT & RT	21	70
ITEM TOTALS		46	150

MOBILIZATION

STATION - STATION	619.1000 EACH
CTH K	
CATEGORY 0010	0.25
CATEGORY 0020	0.75
ITEM TOTAL	1

SALVAGED TOPSOIL, MULCHING AND SEEDING

STATION - STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB
CTH K						
8+00 - 9+53.75	LT & RT	475	560	0.4	15	15
10+46.25 - 11+75	LT & RT	460	545	0.3	15	15
ITEM TOTALS		935	1105	0.7	30	30

EROSION CONTROL ITEMS

STATION - STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.6005 TURBIDITY BARRIER SY	606.0300 RIPRAP HEAVY CY	645.0120 GEOTEXTILE TYPE HR SY
CTH K							
8+00 - 9+53.75	LT & RT	430	430	390	95	60	85
10+00	LT & RT	-	-	-	55	-	-
10+46.25 - 11+75	LT & RT	405	405	375	145	90	130
ITEM TOTALS		835	835	765	295	150	215

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

3

MOBILIZATIONS EROSION CONTROL

STATION - STATION	628.1905 EROSION CONTROL EACH	628.1910 EMERGENCY EROSION CONTROL EACH
CTH K		
8+75 - 11+50	3	3
ITEM TOTALS	3	3

PAVEMENT MARKING

STATION	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH LF	REMARKS
CTH K			
8+00 - 11+75	~	94	YELLOW SKIP
8+00 - 11+75	LT & RT	750	WHITE EDGE
ITEM TOTAL		844	

3

PERMANENT SIGNING

SIGN GROUP CODE	SIGN CODE		TYPE II SIZE	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0612 POSTS WOOD 4X6-INCH 12-FT EACH	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
CTH K									
1-1	W5-52L	CLEARANCE STRIPER	12" X 36"	3	1	-	1	1	REPLACE
1-2		WEIGHT LIMIT 40 TONS		-	-	-	1	1	REMOVE
1-3	W5-52R	CLEARANCE STRIPER	12" X 36"	3	1	-	1	1	REPLACE
1-4	W11-50	ATV SYMBOL	30" X 30"	6.25	-	1	1	1	REPLACE
1-5	W5-52R	CLEARANCE STRIPER	12" X 36"	3	1	-	1	1	REPLACE
1-6	W5-52L	CLEARANCE STRIPER	12" X 36"	3	1	-	1	1	REPLACE
ITEM TOTALS				18.25	4	1	6	6	

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	*650.6500 STRUCTURE LAYOUT (B-09-0306) LS	650.9910 SUPPLEMENTAL CONTROL (8914-00-70) LS	650.9920 SLOPE STAKES LF
CTH K					1	
8+00 - 9+53.75	LT & RT	154	154	-	-	154
10+00	LT & RT	-	-	1	-	-
10+46.25 - 11+75	LT & RT	129	129	-	-	129
LITTLE DRYWOOD CREEK						
999+25 - 1001+00	LT & RT	-	-	-	-	175
ITEM TOTALS		283	283	1	1	458

*CATEGORY 0020

FIELD OFFICE TYPE B

STATION - STATION	642.5001 EACH
CTH K	
8+75 - 11+50	1
ITEM TOTAL	1

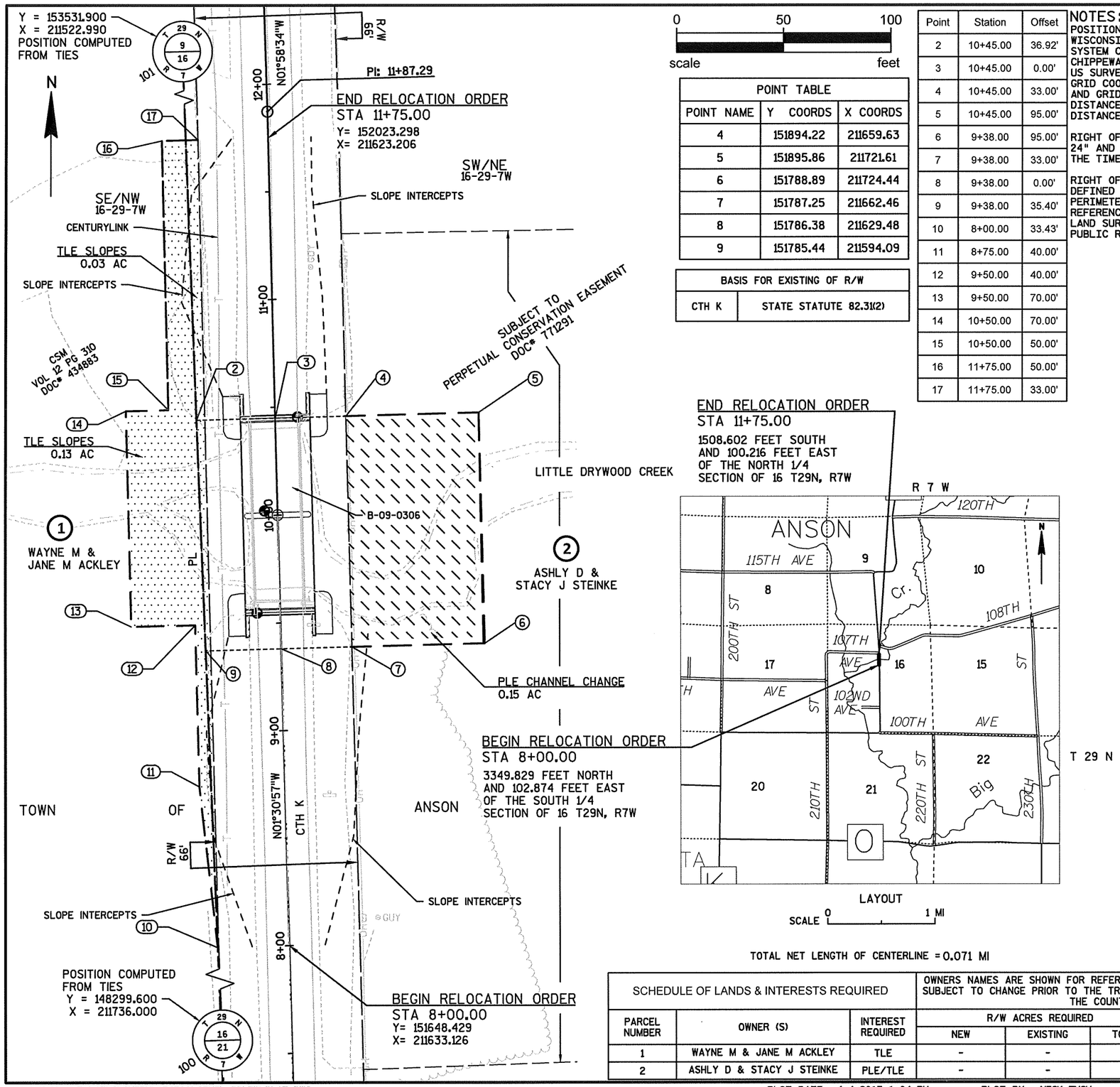
SAWING ASPHALT

STATION - STATION	LOCATION	690.0150 LF
CTH K		
8+00	LT & RT	21
11+75	LT & RT	23
ITEM TOTAL		44

TRAFFIC CONTROL

STATION - STATION	643.0100 TRAFFIC CONTROL (8914-00-70) EACH	643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A DAY	643.0900 SIGNS DAY
CTH K				
8+75 - 11+50	1	1566	3132	1392
ITEM TOTAL	1	1566	3132	1392

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



0 50 100
scale feet

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
4	151894.22	211659.63
5	151895.86	211721.61
6	151788.89	211724.44
7	151787.25	211662.46
8	151786.38	211629.48
9	151785.44	211594.09

BASIS FOR EXISTING OF R/W	
CTH K	STATE STATUTE 82.31(2)

Point	Station	Offset
2	10+45.00	36.92'
3	10+45.00	0.00'
4	10+45.00	33.00'
5	10+45.00	95.00'
6	9+38.00	95.00'
7	9+38.00	33.00'
8	9+38.00	0.00'
9	9+38.00	35.40'
10	8+00.00	33.43'
11	8+75.00	40.00'
12	9+50.00	40.00'
13	9+50.00	70.00'
14	10+50.00	70.00'
15	10+50.00	50.00'
16	11+75.00	50.00'
17	11+75.00	33.00'

TOTAL NET LENGTH OF CENTERLINE = 0.071 MI

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), CHIPPEWA 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 3/4" X 24" AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

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.

R/W PROJECT NUMBER 8914-00-00	SHEET NUMBER	TOTAL SHEETS
R/W PROJECT NUMBER 8914-00-00	4.01	1

PLAT OF RIGHT OF WAY REQUIRED FOR

CTH 0 - CTH S

LITTLE DRYWOOD CREEK BRIDGE B-09-0306

CTH K — CHIPPEWA COUNTY

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) (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
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

	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

FROM	TO	BEARING	DISTANCE
2	3	N88° 29' 03"E	36.92'
3	4	N88° 29' 03"E	33.00'
4	5	N88° 29' 03"E	62.00'
5	6	S01° 30' 57"E	107.00'
6	7	S88° 29' 03"W	62.00'
7	8	S88° 29' 03"W	33.00'
8	9	S88° 29' 03"W	35.40'
9	2	N02° 19' 53"W	107.01'
7	4	N01° 30' 57"E	107.00'
100	101	N02° 19' 53"W	5236.63'
101	2	S02° 19' 53"E	1640.89'

SCHEDULE OF LANDS & INTERESTS REQUIRED			OWNERS 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	TLE ACRES	PLE ACRES
1	WAYNE M & JANE M ACKLEY	TLE	-	-	-	0.13	--
2	ASHLY D & STACY J STEINKE	PLE/TLE	-	-	-	0.03	0.15

ORIGINAL PLAT PREPARED BY:

SEH

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

2-10-2017 (DATE) (SIGNATURE)

REVISION DATE 4-4-2017

CHIPPEWA COUNTY

APPROVED FOR THE COUNTY

DATE: 4-5-17 (Signature)

FILE NAME : P:\AE\C\CHIPH\134766\CIVIL 3D\RW\PLAT.DWG
LAYOUT NAME - ****

PLOT DATE : 4/4/2017 1:04 PM PLOT BY : NICK ENGH PLOT NAME :

WISDOT/CADDS SHEET 50

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
1	8+11.90 34.42' RT	3/8" SPK IN PP	955.40
2	11+14.87 25.68' RT	3/8" SPK IN PP	957.55
3	≈ 410' NE OF BRIDGE	3/8" SPK IN PP	968.51

scale 20 — 40 — 0 — 40 — 80 feet

UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED.

LEGEND
- SILT FENCE
- RIPRAP HEAVY
- EMAT URBAN CLASS 1 TYPE B
- TURBIDITY BARRIER

TOWN OF ANSON

1 WAYNE M & JANE M ACKLEY

2 ASHLY D & STACY J STEINKE

N = 148299.60
E = 211736.00

R/W 66.0'

BEGIN PROJECT
STA 8+00
MATCH EXISTING SAWCUT REQ'D
Y= 151648.429
X= 211633.126

END PROJECT
STA 11+75
MATCH EXISTING SAWCUT REQ'D
Y= 152023.298
X= 211623.206

N01°30'57"W CTH K

N01°58'34"W

BP: 7+00.00

PI: 11+87.29

EP: 13+00.00

N = 153531.90
E = 211522.99

CENTURYLINK

CHIPPEWA VALLEY ELECTRIC COOPERATIVE

SLOPE INTERCEPTS (TYP)

R/W (TYP)

CP1

CP2

QUARTER LINE

PL

BM1

BM2

LITTLE DRYWOOD CREEK

TLE SLOPES 0.13 AC

TLE SLOPES 0.03 AC

0.001 ACRES TYPE RPE WETLAND IMPACT

0.022 ACRES TYPE RPE WETLAND IMPACT

0.016 ACRES TYPE RPE WETLAND IMPACT

WORK OUTSIDE EXISTING R/W WILL TAKE PLACE UNDER EXISTING COUNTY CONSERVATION EASEMENT. SEE PLAT. (TYP)

PLE CHANNEL CHANGE 0.15 AC

EXCAVATION COMMON REQ'D

REMOVE EXISTING STRUCTURE P-9-062

B-9-306 PROPOSED STRUCTURE

℄ PROPOSED CHANNEL

EXCAVATION COMMON REQ'D

REMOVE WEIGHT LIMIT 40 TONS

REPLACE W5-52L 12"X36"

REPLACE W5-52R 12"X36"

REPLACE W11-50 30"X30"

REPLACE W5-52R 12"X36"

REPLACE W5-52L 12"X36"

SE/NW 16-9-7W

SW/NE 16-9-7W

EARTHWORK SUMMARY
STA 8+00 TO STA 9+53.75

CUT	133	CY
FILL	128	CY
FILL AT 1.3% EXP	167	CY
BORROW	34	CY

(UTILIZE WASTE FROM CHANNEL EXCAVATION)

EARTHWORK SUMMARY
STA 999+25 TO STA 1001+00

CUT	452	CY
FILL	-	CY
FILL AT 1.3% EXP	-	CY
WASTE	452	CY

EARTHWORK SUMMARY
STA 10+46.25 TO STA 11+75

CUT	113	CY
FILL	119	CY
FILL AT 1.3% EXP	154	CY
BORROW	41	CY

(UTILIZE WASTE FROM CHANNEL EXCAVATION)

VCL = 300.00
K = 280.35

VPI STA 10+00.00
VPI EL 960.60

FINISHED ℄ PROFILE

EXISTING ℄ PROFILE

0.65%

-0.42%

STA 8+00.00 EL 959.30

VPC STA 8+50.00 VPC EL 959.62

VPT STA 11+50.00 VPT EL 959.97

STA 11+75.00 EL 959.87

HIGH WATER 100 YR EL 956.98

HIGH WATER 2 YR EL 954.83

OBSERVED WATER EL 950.2 (12-3-15)

EXISTING ℄ ELEVATION

FINISHED ℄ ELEVATION

REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00
P-09-0062, FOUR-SPAN STEEL DECK GIRDER BRIDGE
80.4' OVERALL LENGTH
24' OVERALL WIDTH

STATION 10+00
STRUCTURE B-09-0306 REQ'D
92.5' OVERALL LENGTH TWO-SPAN REINFORCED CONCRETE CONTINUOUS HAUNCHED SLAB BRIDGE
30.0' CLEAR ROADWAY WIDTH

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W AC REQUIRED NEW	R/W AC REQUIRED EXISTING	R/W AC REQUIRED TOTAL	TLE AC	PLE AC
1	WAYNE M & JANE M ACKLEY	TLE	-	-	-	.13	-
2	ASHLY D & STACY J STEINKE	PLE/TLE	-	-	-	.03	.15

960 / 955 / 950 / 948

958.81 959.04 959.30 959.30 959.48 959.62 959.81 959.90 960.28 960.10 948.96 960.20 960.29 960.21 960.07 960.14 959.91 959.97 959.89 960.13 960.48

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

PROJECT NO: 8914-00-70	HWY: CTH K	COUNTY: CHIPPEWA	PLAN AND PROFILE: CTH K	SHEET 10	E

FILE NAME : P:\AE\C\CHIPH\134766\CIVIL 3D\SHEETSPLAN\050101 PP.DWG
LAYOUT NAME - 050101 PP - 050101 PP

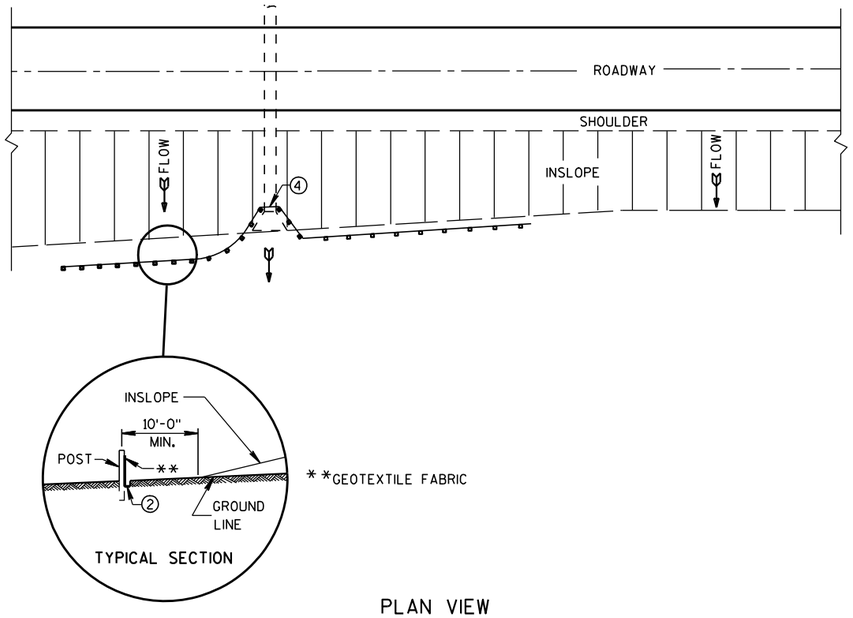
PLOT DATE : 8/2/2017 4:07 PM PLOT BY : JUSTIN SHAVLIK PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

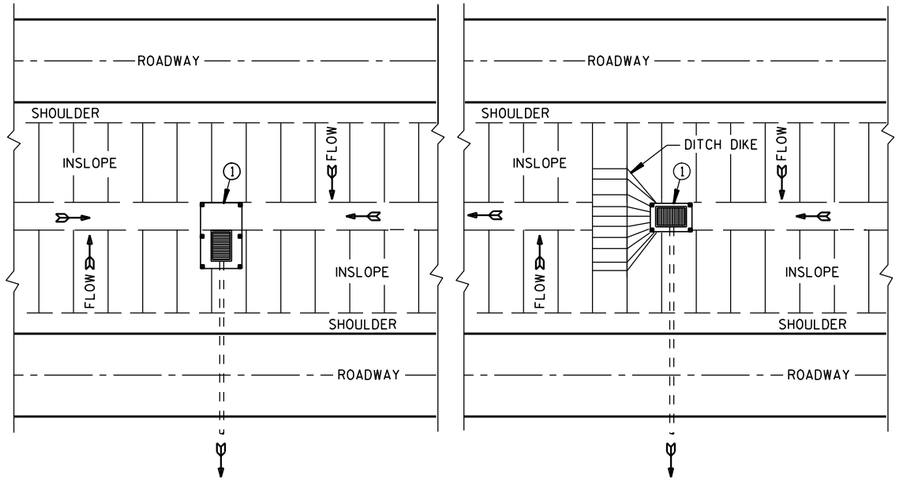
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-17A	LONGITUDINAL MARKING (MAINLINE)

6



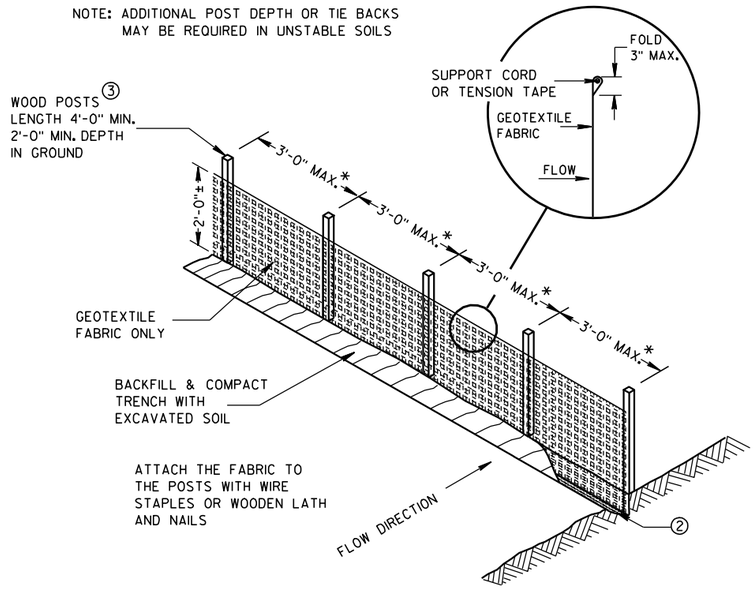
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



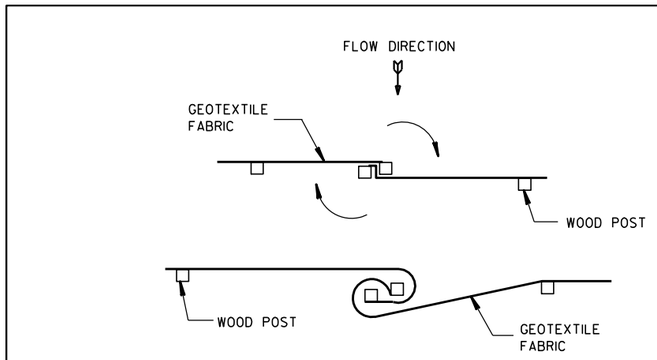
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



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

SILT FENCE

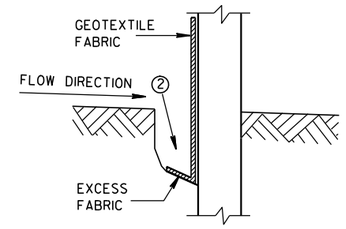


JOINING TWO LENGTHS OF SILT FENCE 5

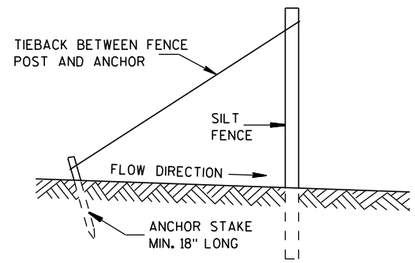
GENERAL NOTES

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

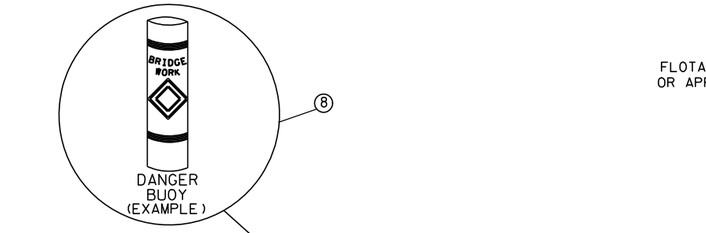
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

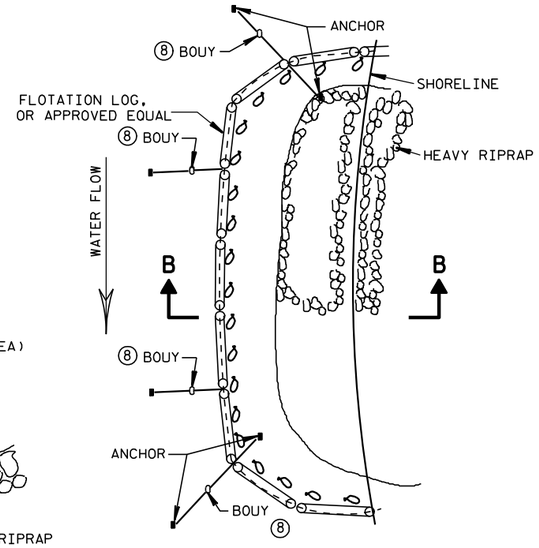
S.D.D. 8 E 9-6

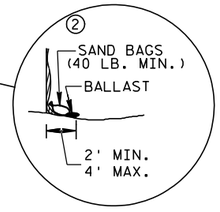
6

S.D.D. 8 E 9-6

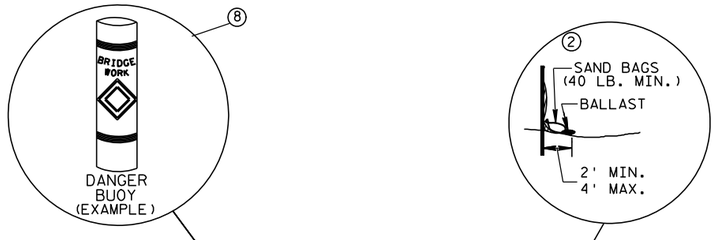


SECTION B-B

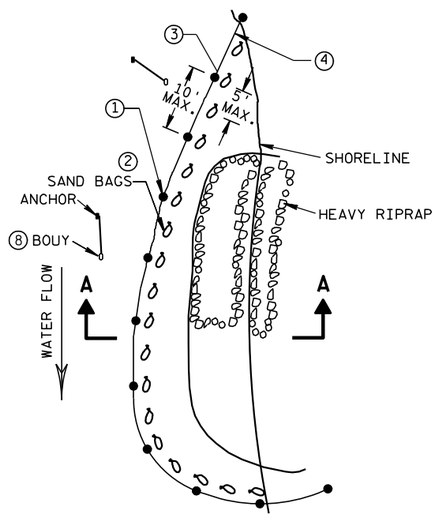




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



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.

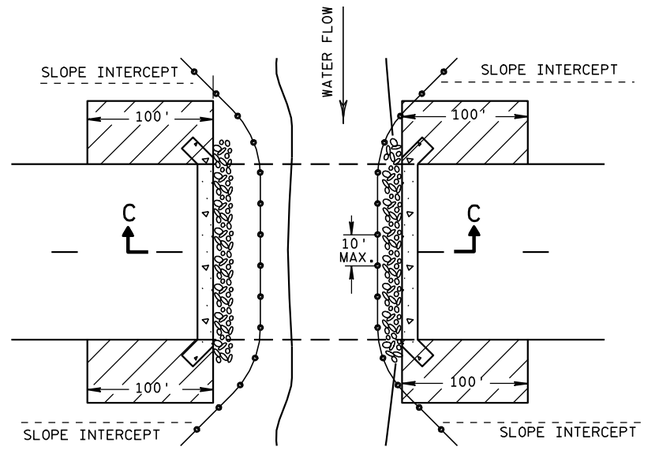
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

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.

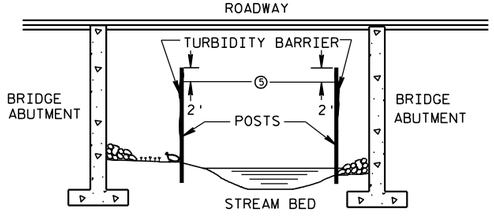
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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

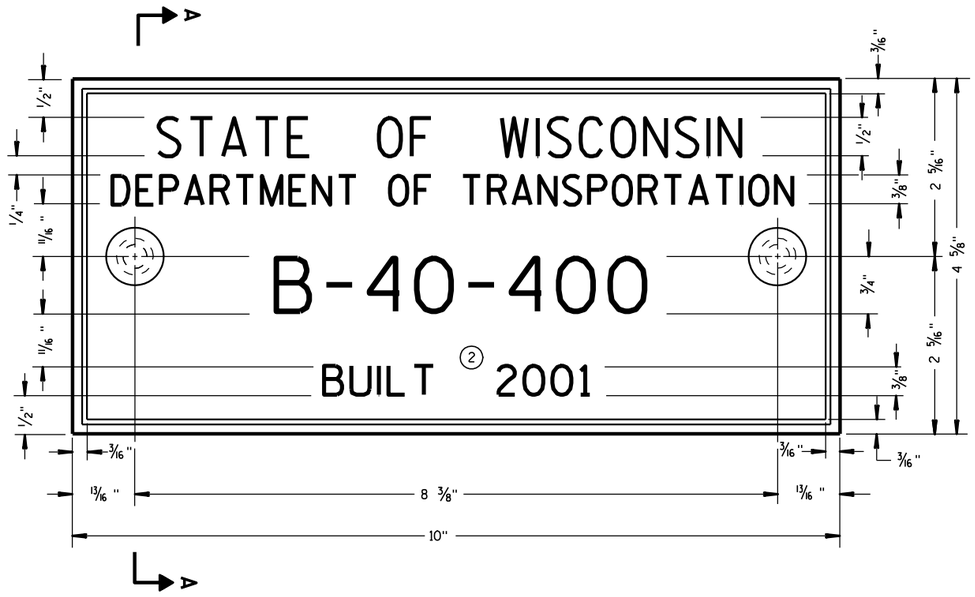
TURBIDITY BARRIER

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



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

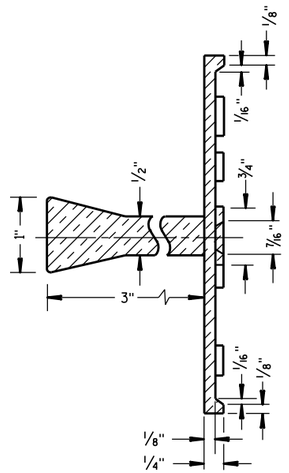
GENERAL NOTES

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.

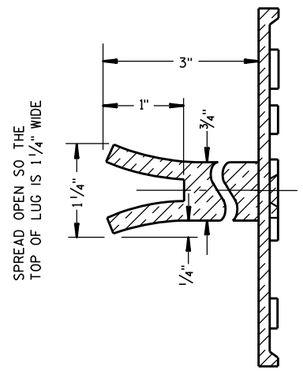
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(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

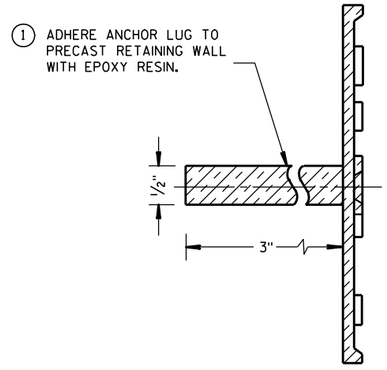
COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION MULTI-UNIT STRUCTURES



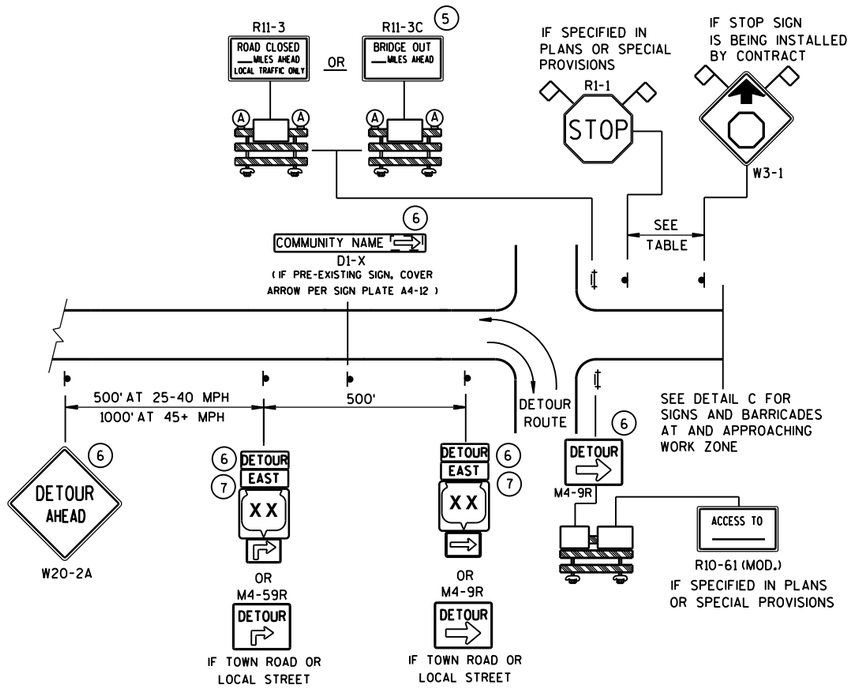
ALTERNATE LUG

(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

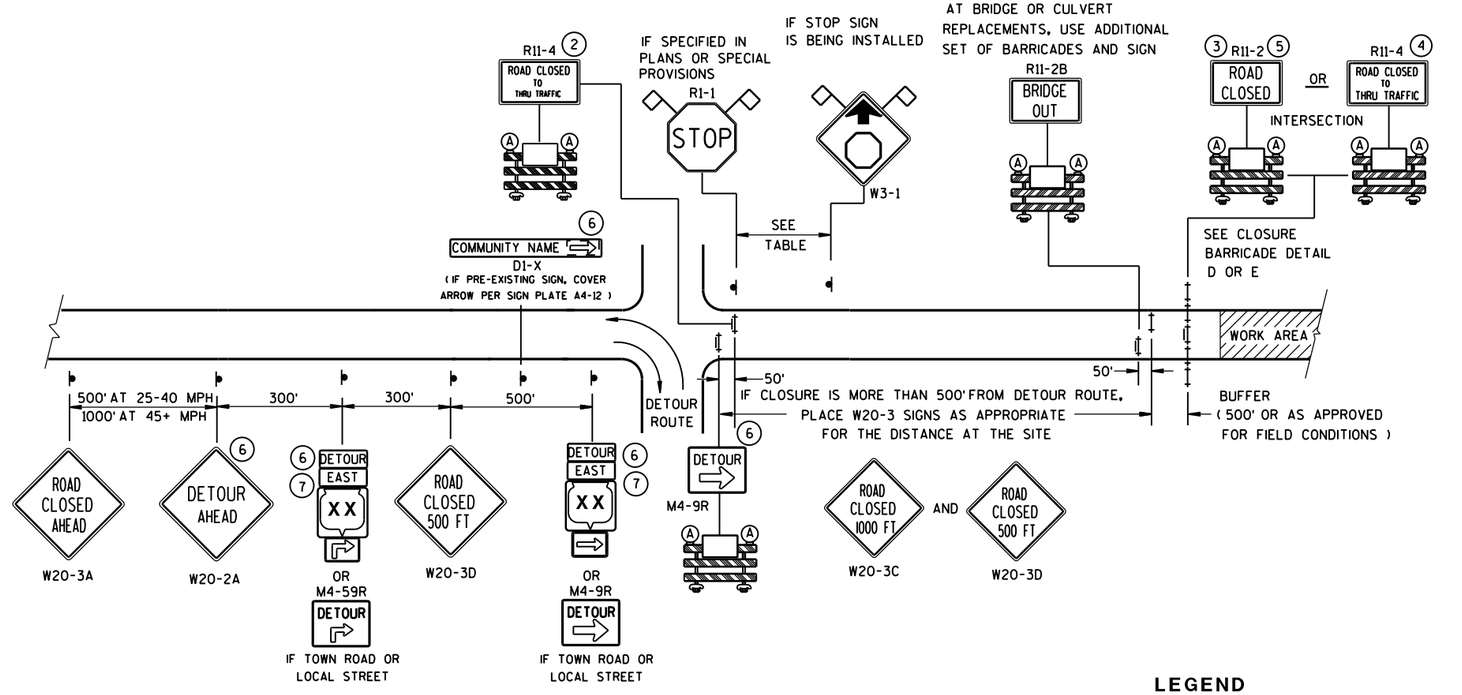
S.D.D. 12 A 3-10



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

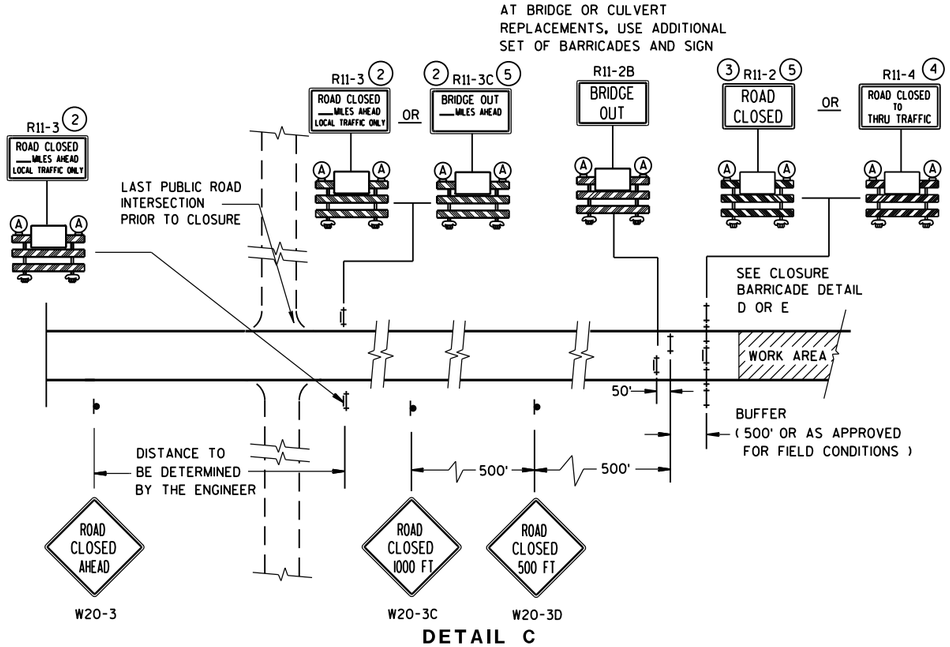
WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



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

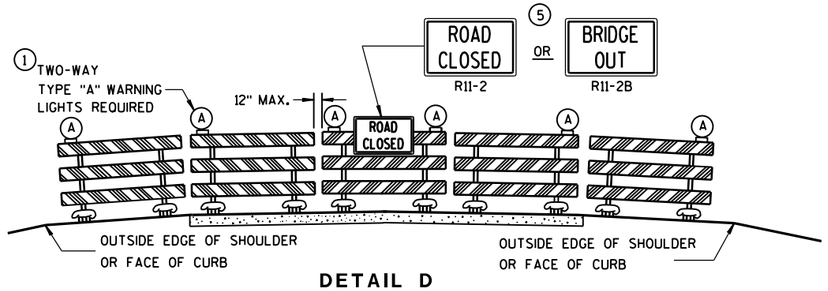
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

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

6

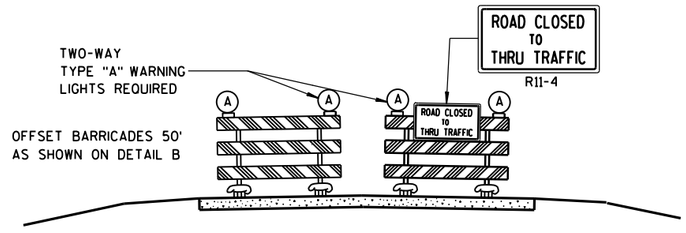
S.D.D. 15 C 2-6a



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

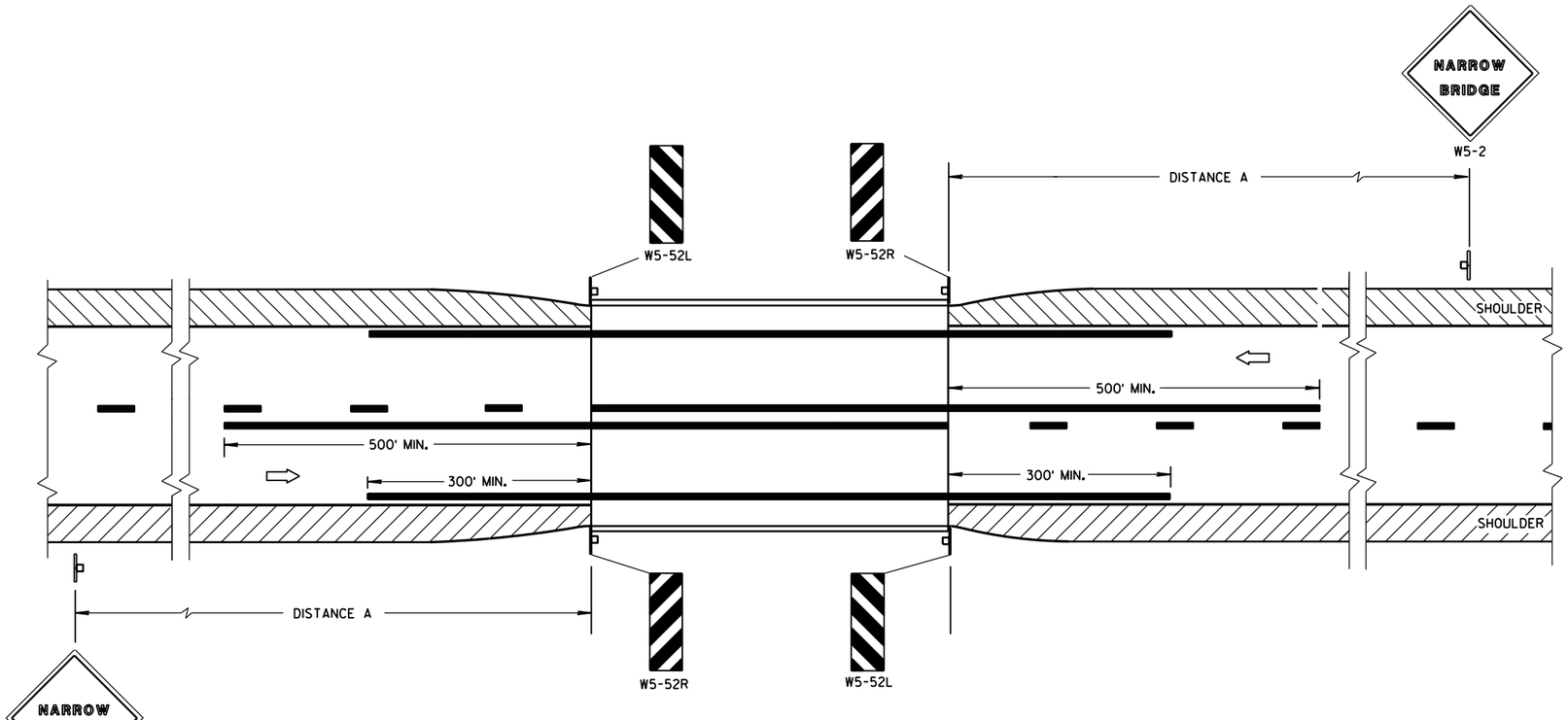
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible] — 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'

GENERAL NOTES

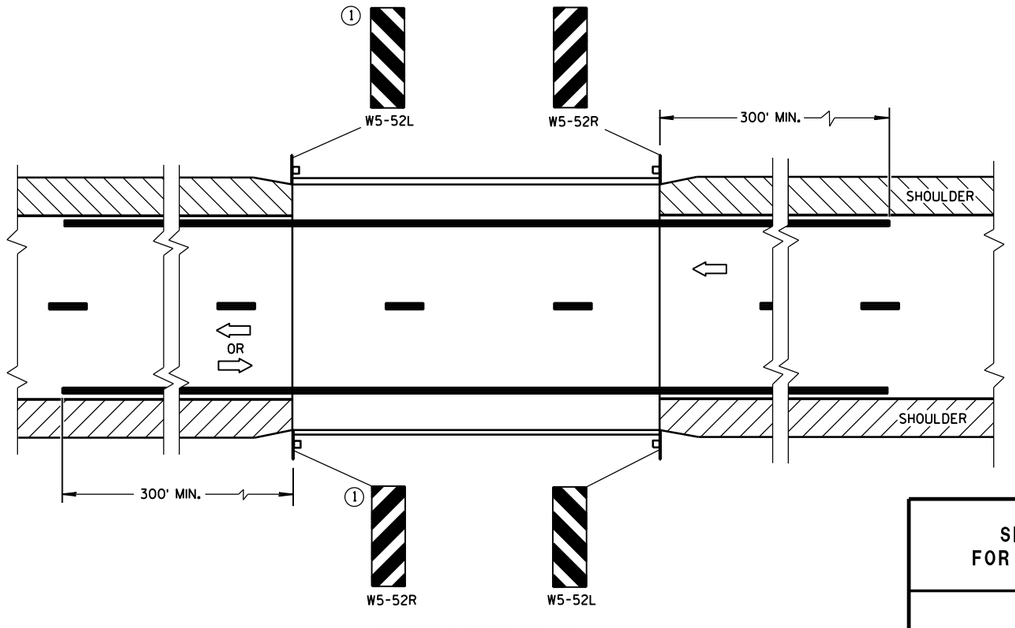
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

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

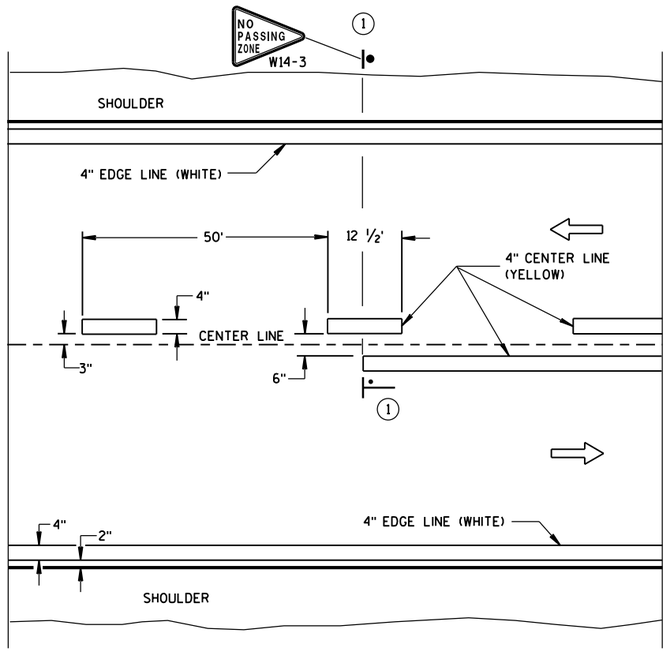
SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

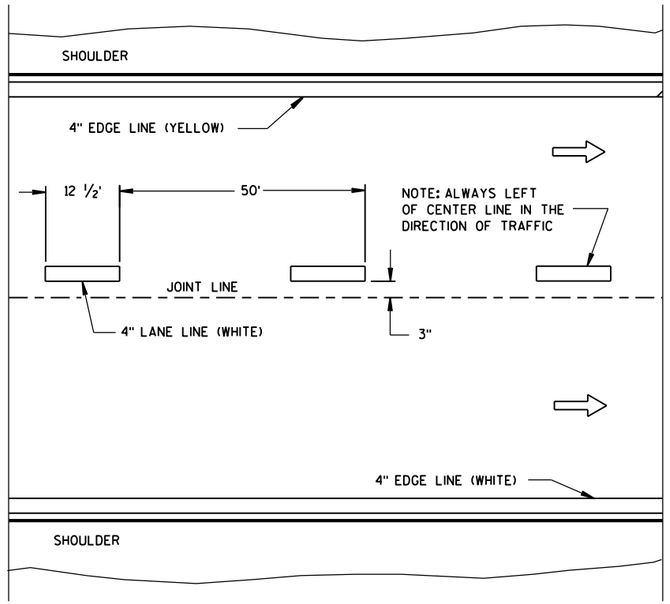
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]EER
FHWA

6

S.D.D. 15 C 6-9



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

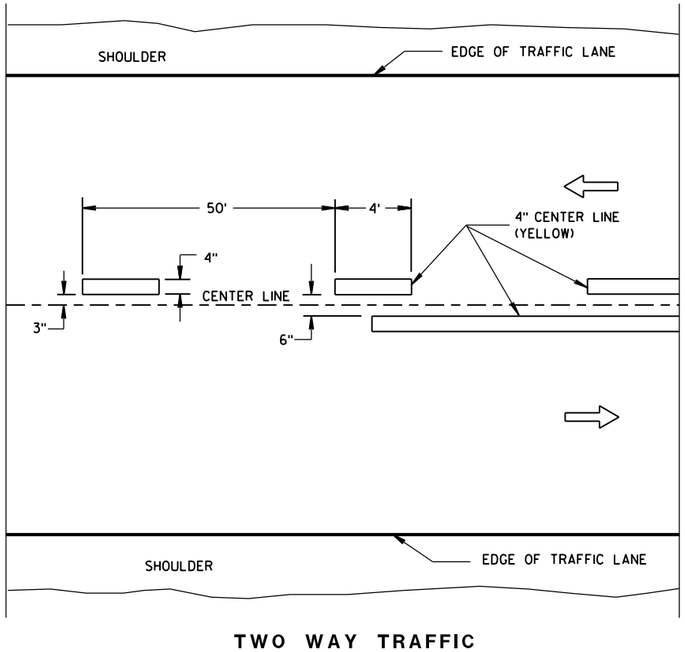
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

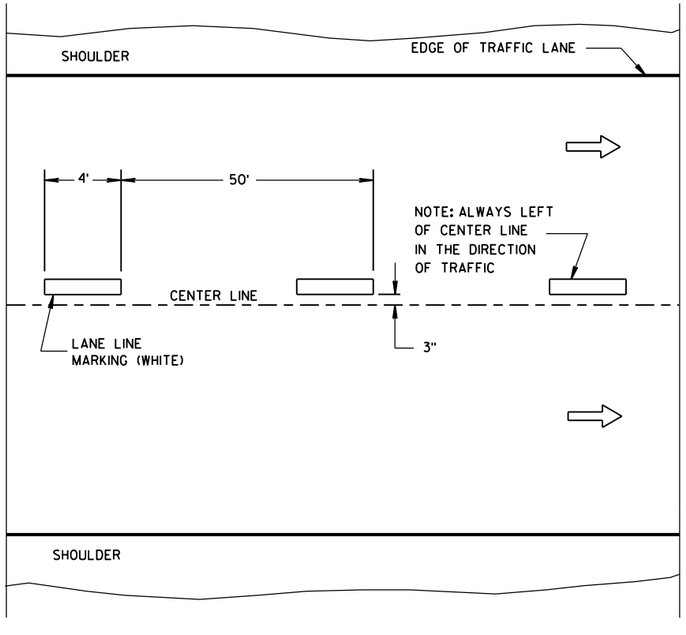
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept., 2016	/S/ Matthew R. Rauch
DATE	STATE SIGNING AND MAR[illegible] INEER
FHWA	

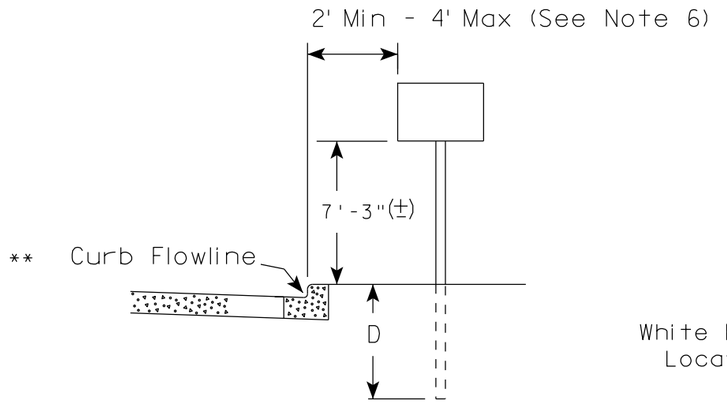
6

S.D.D. 15 C 8-17a

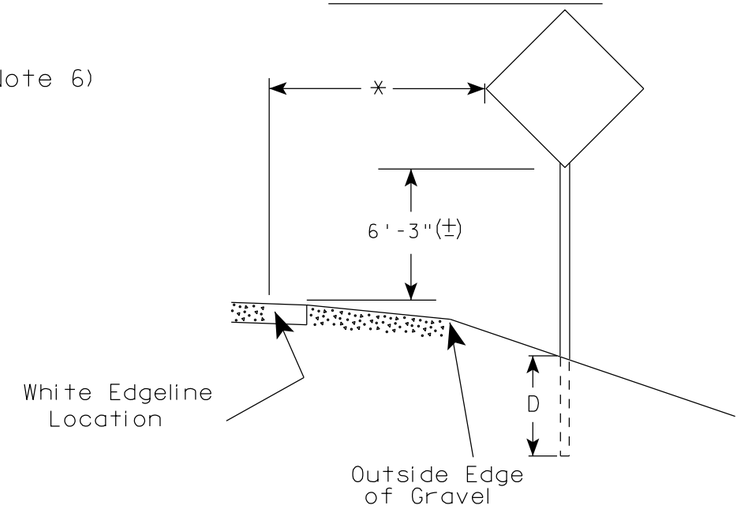
6

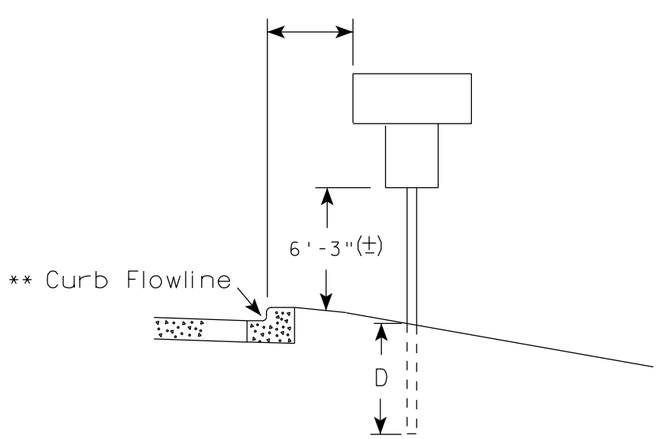
S.D.D. 15 C 8-17a

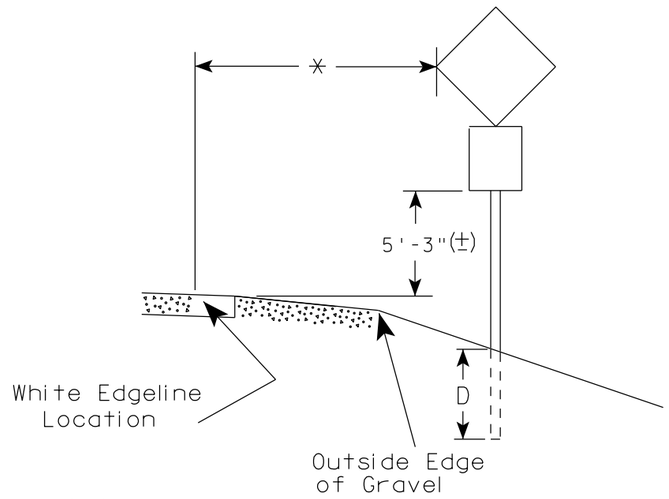
URBAN AREA



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.

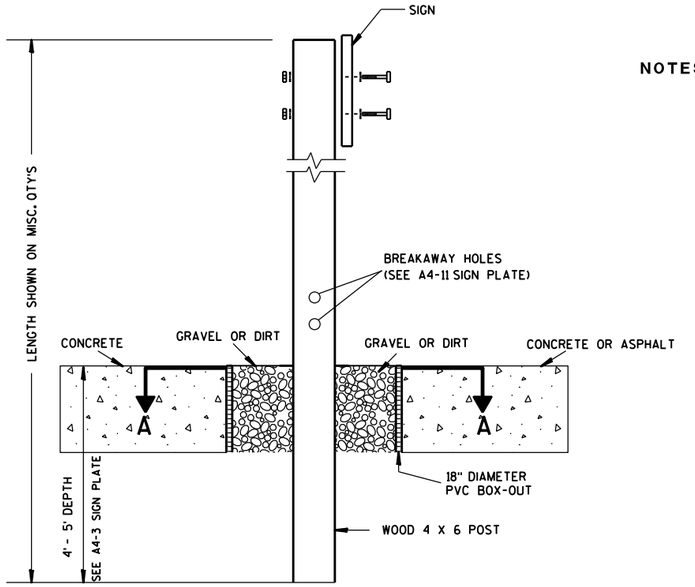
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

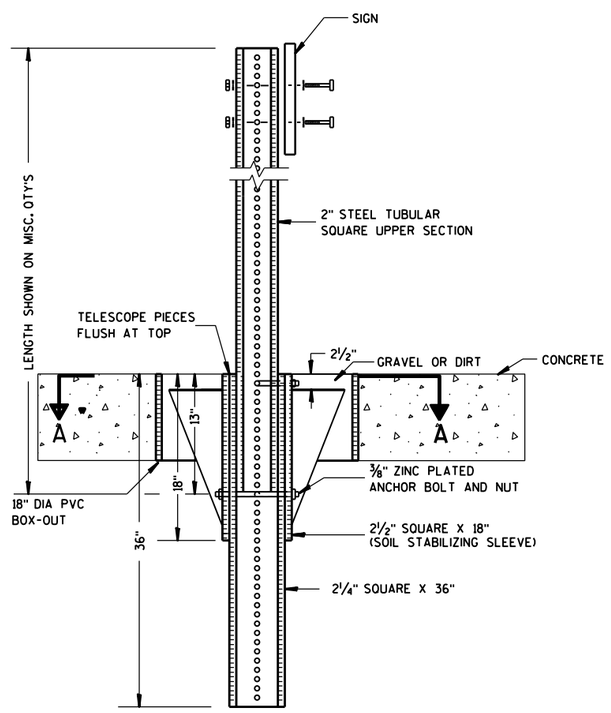
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

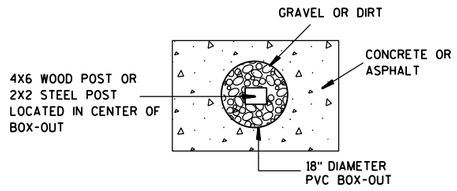
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

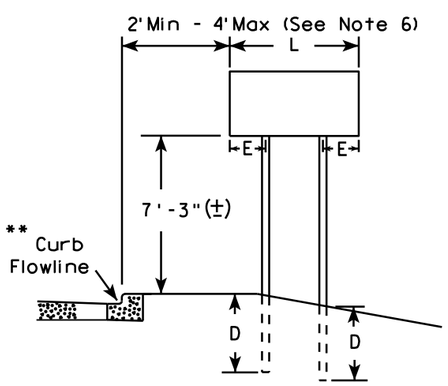
APPROVED Matthew R Rauch
for State Traffic Engineer

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

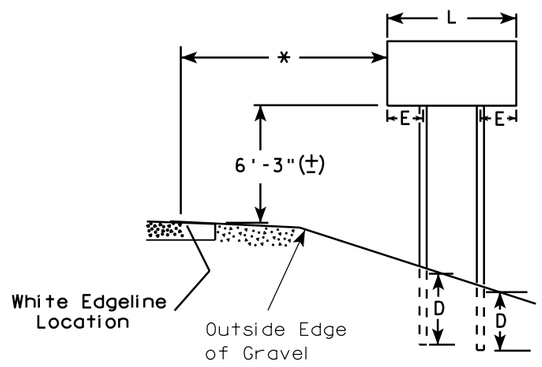
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

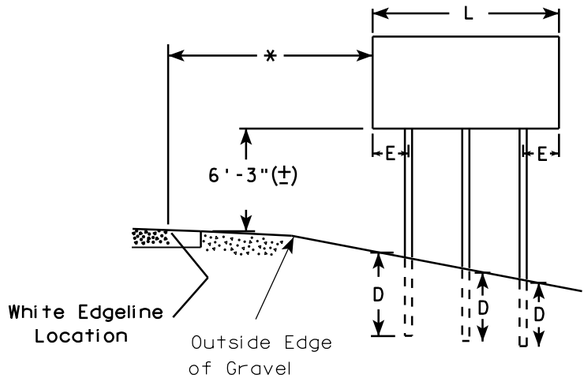
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

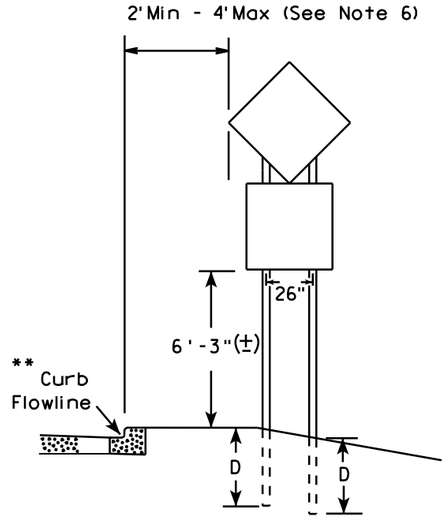
URBAN AREA



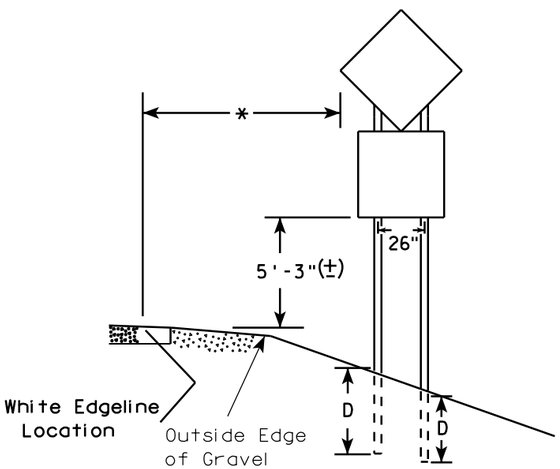
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

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

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

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

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

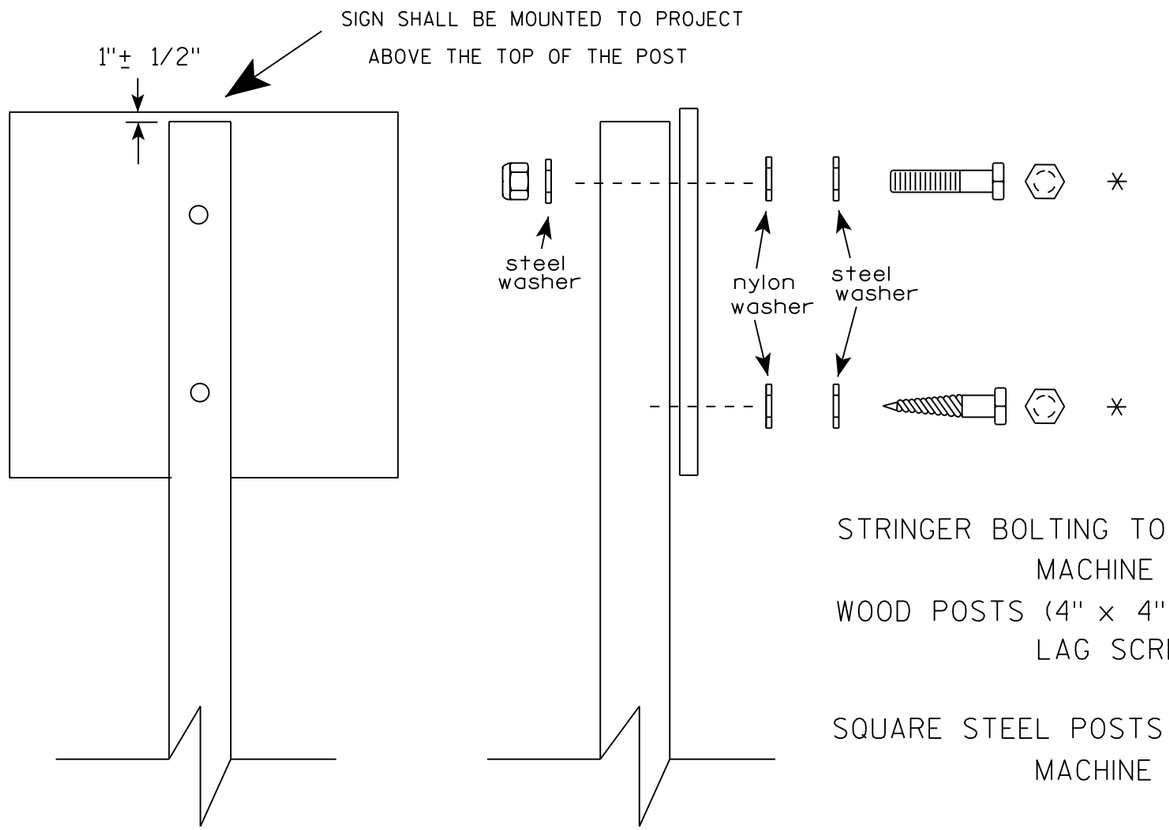
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 23-JUL-2015 15:23 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000 WISDOT/CADDS SHEET 42



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

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

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)
SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

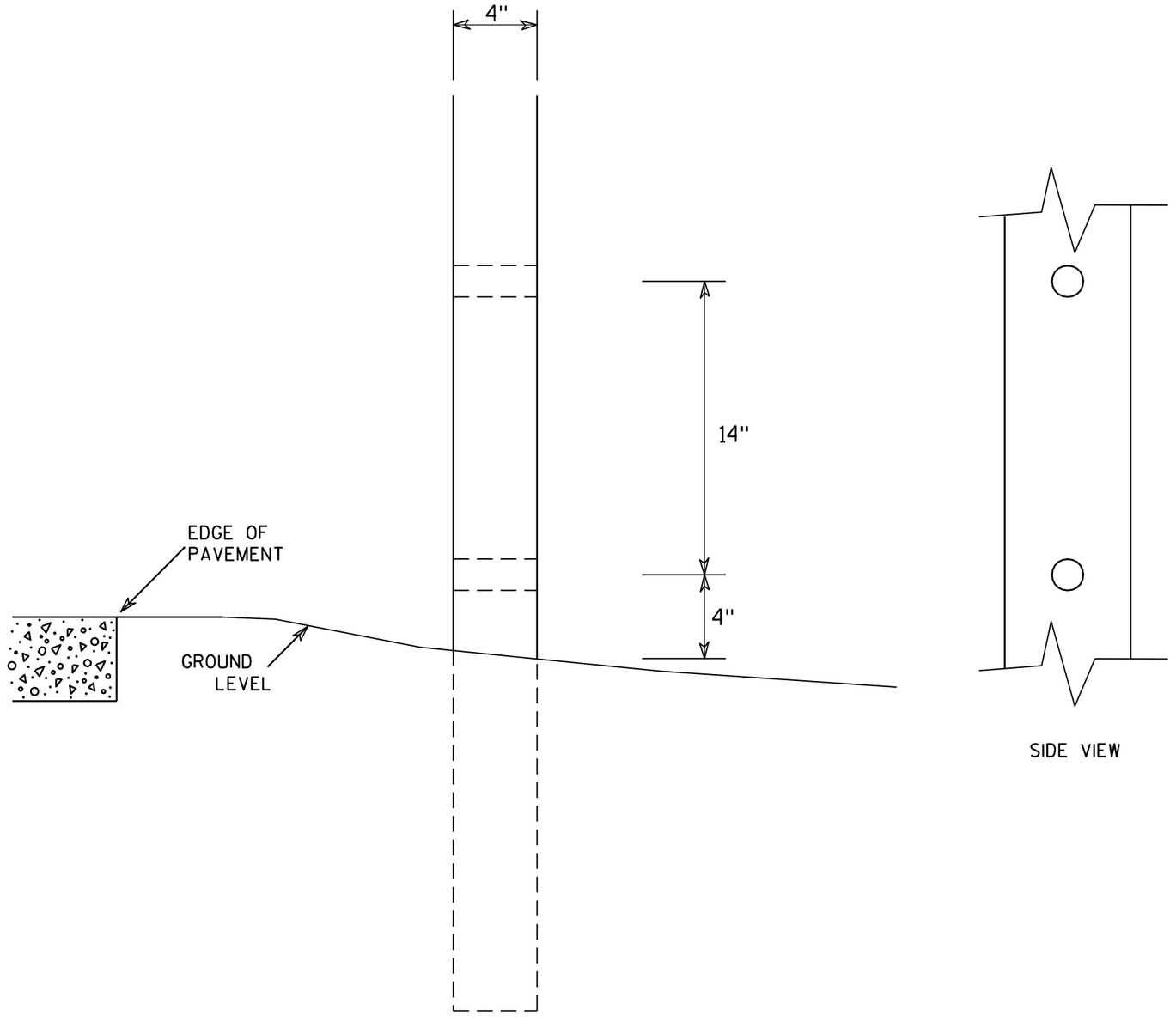
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO: SHEET NO: E



SIDE VIEW

GENERAL NOTES

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

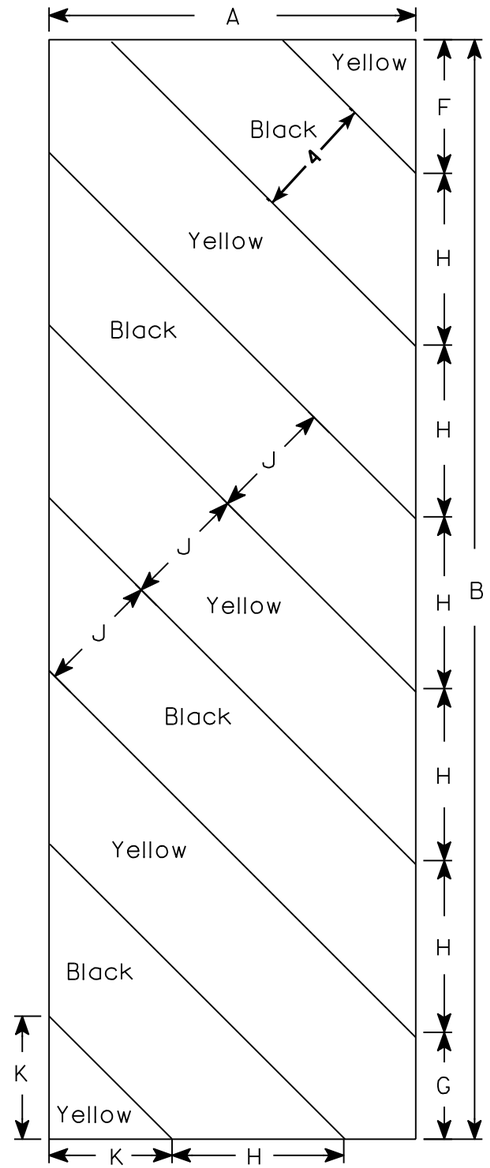
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

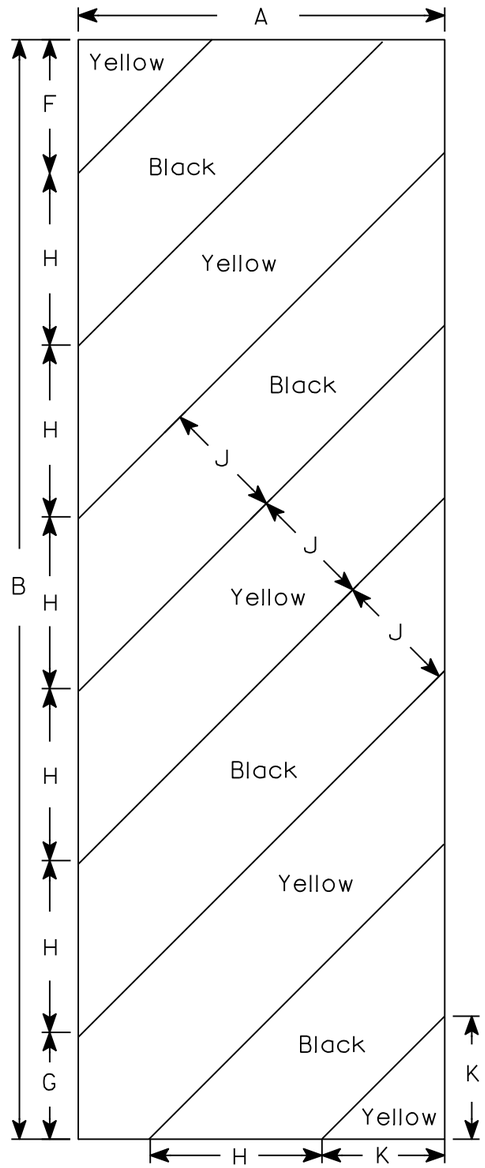
APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 23	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

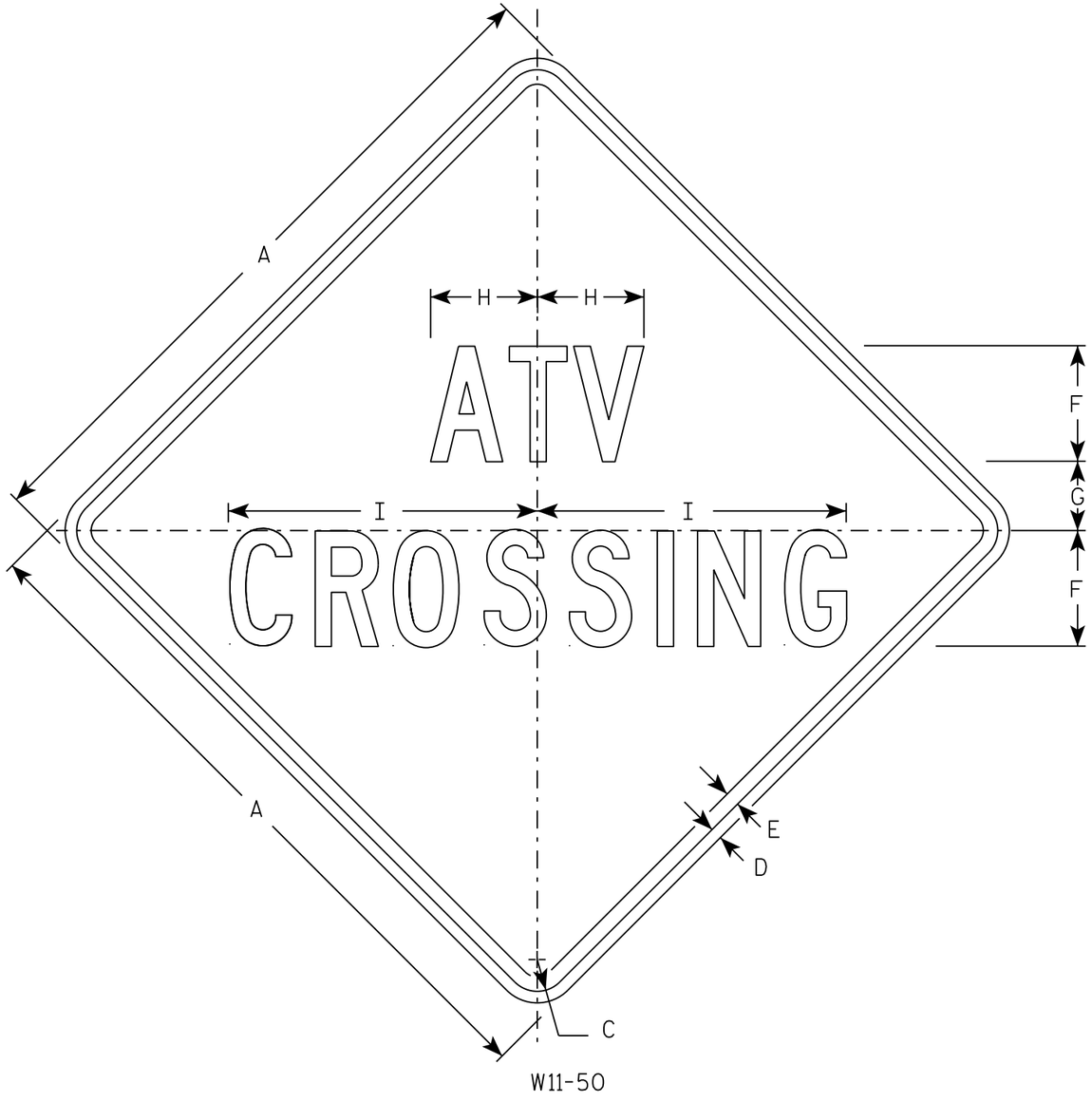
W5-52L & W5-52R

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: 24 | E



W11-50

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C

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	24		1 1/8	3/8	1/2	4	2 3/8	3 3/4	10 3/4																		4.0
2S	30		1 3/8	1/2	5/8	5	3	4 5/8	13 3/8																		6.25
2M	36		1 5/8	5/8	3/4	6	3 1/2	5 5/8	16																		9.0
3	36		1 5/8	5/8	3/4	6	3 1/2	5 5/8	16																		9.0
4	48		2 1/4	3/4	1	8	5	7 3/8	21 1/4																		16.0
5																											

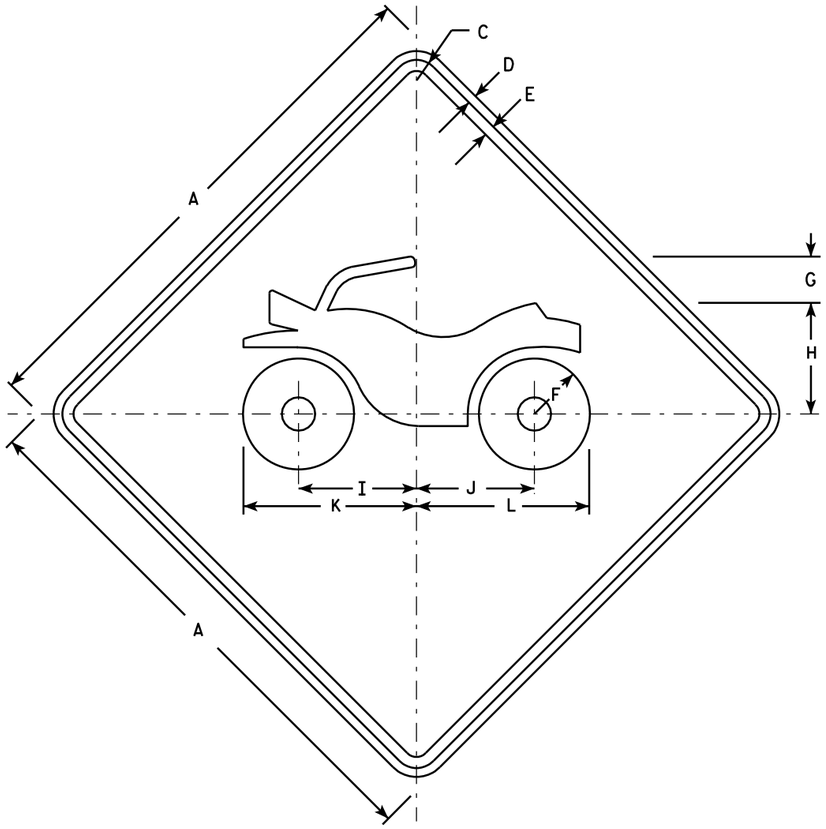
STANDARD SIGN
W11-50

WISCONSIN DEPT OF TRANSPORTATION

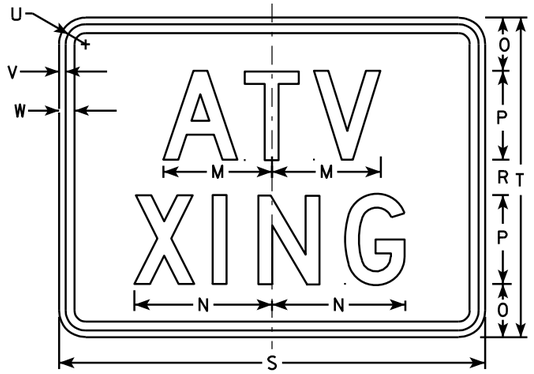
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/1/16 PLATE NO. W11-50.4

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



W11-50



W11-50P

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. Message Series - D
4. 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.

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	W11-50 Area sq. ft.	W11-50P Area sq. ft.
1	24		1 1/8	3/8	3/8	2 1/2	2 1/8	5	5 1/8	5 1/2	7 5/8	7 1/8	3 3/4	4 3/4	2 1/4	3		1 1/2	18	12	1 1/8	3/8	3/8				4.0	1.5
2S	30		1 1/8	3/8	1/2	3 1/8	2 5/8	6 1/4	6 7/16	6 7/8	9 1/2	8 7/8	6 1/8	7 3/4	3	5		2	24	18	1 1/8	3/8	3/8				6.25	3.0
2M	36		1 5/8	5/8	3/4	3 3/4	3 3/16	7 1/2	7 3/4	8 1/4	11 3/8	10 5/8	7 3/8	9 1/2	4 1/2	6		3	30	24	1 1/8	3/8	1/2				9.0	5.0
3	36		1 5/8	5/8	3/4	3 3/4	3 3/16	7 1/2	7 3/4	8 1/4	11 3/8	10 5/8	7 3/8	9 1/2	4 1/2	6		3	30	24	1 1/8	3/8	1/2				9.0	5.0
4	48		2 1/4	3/4	1	5	4 1/8	10	10 5/8	10 5/8	15 5/8	15 1/2	9 7/8	12	5	8		4	36	30	1 3/8	1/2	5/8				16.0	7.5
5																												

STANDARD SIGN
W11-50 & W11-50P

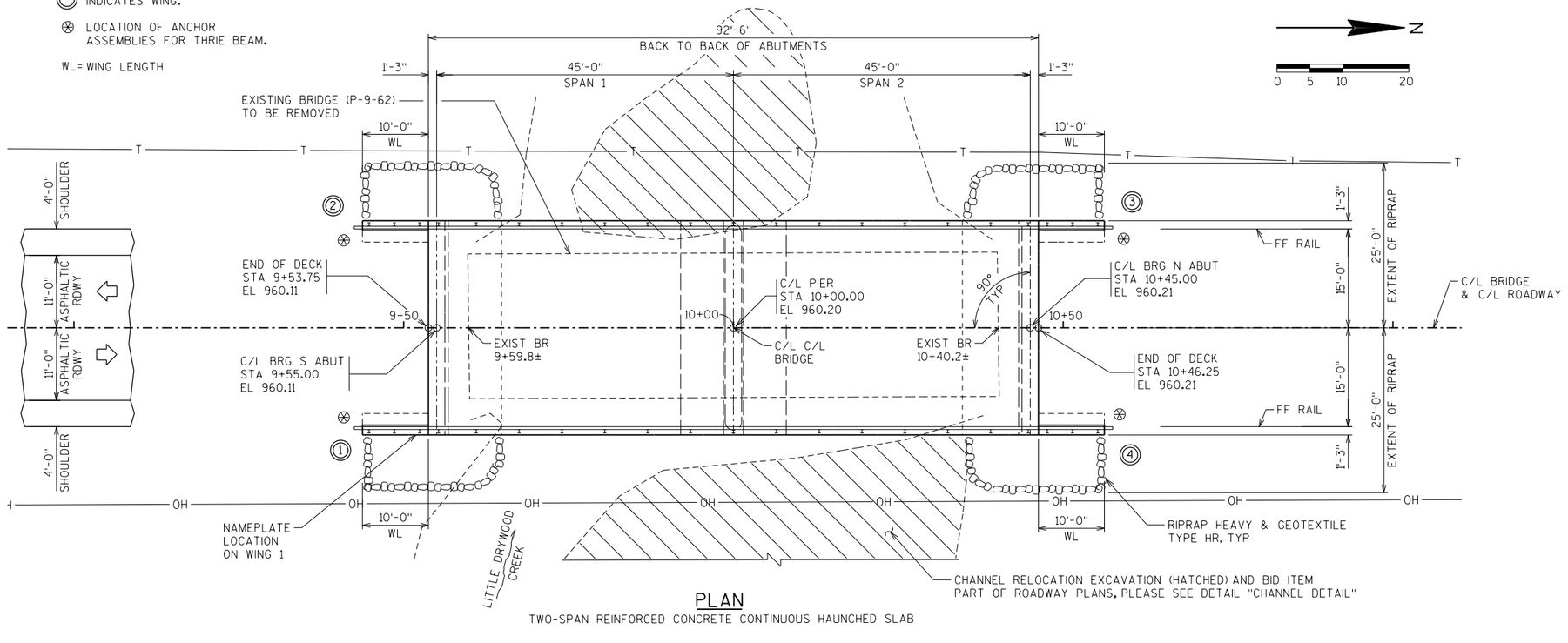
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-50.3

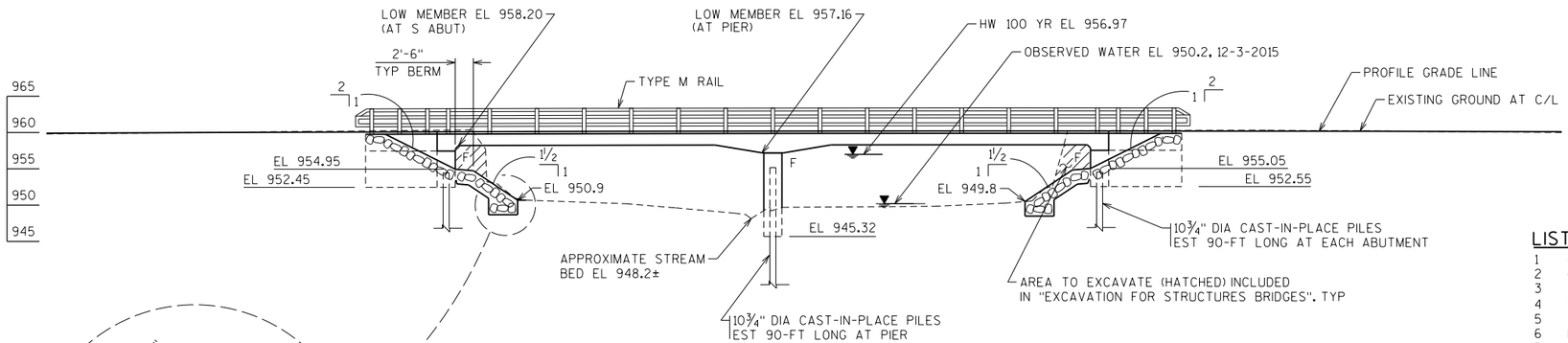
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 26 | E

STATE PROJECT NUMBER
8914-00-70



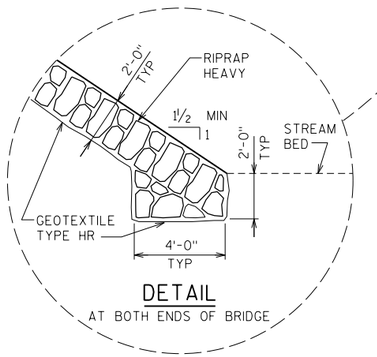
PLAN

TWO-SPAN REINFORCED CONCRETE CONTINUOUS HAUNCHED SLAB



ELEVATION

LOOKING WEST



DETAIL

AT BOTH ENDS OF BRIDGE

BENCHMARK (DATUM = NAVD88)

NO	STATION	DESCRIPTION	ELEV
1	440'± SE OF BRIDGE	⅜" SPK IN PP	956.70
2	11+14.87, 25.68' RT	⅜" SPK IN PP	957.55
3	410'± NE OF BRIDGE	⅜" SPK IN PP	968.51

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.09
OPERATING RATING FACTOR: RF = 1.41
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF

INVENTORY AND OPERATING RATINGS DO NOT INCLUDE FUTURE WEARING SURFACE.

MATERIAL PROPERTIES:

CONCRETE MASONRY - SUPERSTRUCTURE f'c = 4,000 psi
- ALL OTHER f'c = 3,500 psi

HIGH STRENGTH BAR STEEL REINFORCEMENT
AASHTO GRADE 60 fy = 60,000 psi

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON 10 3/4" DIA CIP PILES (0.25" SHELL THICKNESS) WITH A REQUIRED DRIVING RESISTANCE OF 130 TONS* PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 90-LONG AT BOTH ABUTMENTS.

PIER TO BE SUPPORTED ON 10 3/4" DIA CIP PILES (0.25" SHELL THICKNESS) WITH A REQUIRED DRIVING RESISTANCE OF 130 TONS* PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 90-LONG.

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

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100}	2600	CFS
Q_{100} THRU STRUCTURE	2600	CFS
VELOCITY	4.85	FPS
HIGH WATER EL	956.97	FT
WATERWAY AREA	536	SQ FT
DRAINAGE AREA	26.1	SQ MI

2 YEAR FREQUENCY

Q_2	787	CFS
HIGH WATER EL	954.83	FT

SCOUR CODE 5

TRAFFIC DATA

ADT (2018)	=	120
ADT (2038)	=	170
DHV	=	17
DD	=	50%
T	=	10%
DESIGN SPEED	=	40 MPH

LIST OF DRAWINGS

WISCONSIN PROFESSIONAL ENGINEER
NATHAN C. KLOPP
E-39850
ST PAUL
MN

8/18/2017

SEH CONTACT: CHRIS BLUM, PE, 608.620.6192
WISDOT BRIDGE OFFICE CONTACT: BILL DREHER, PE, 608.266.8489

NO.	DATE	REVISION	BY

SEH
SHORT ELLIOTT HENDRICKSON INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 08/21/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-9-306

CTH K OVER LITTLE DRYWOOD CREEK

COUNTY	TOWN ~~/CITY/VILLAGE~~
CHIPPEWA	ANSON

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
NCK	CJB	DLF	NCK

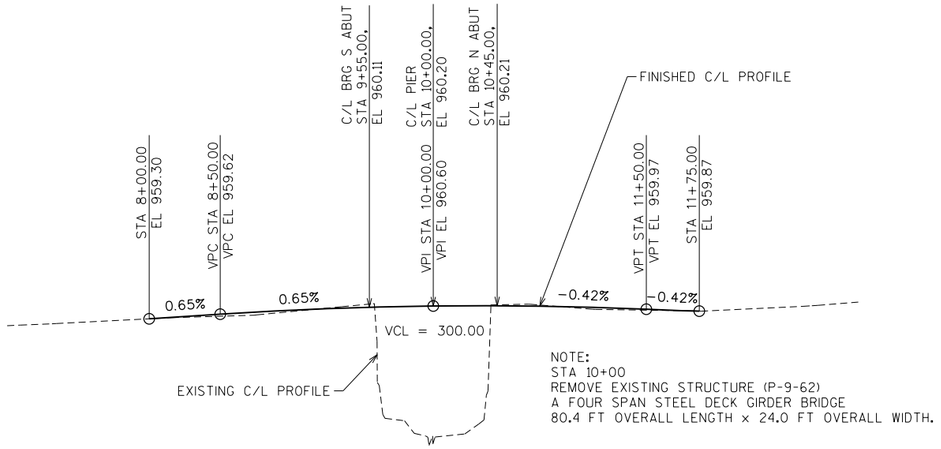
GENERAL PLAN

SHEET 1 OF 9
27

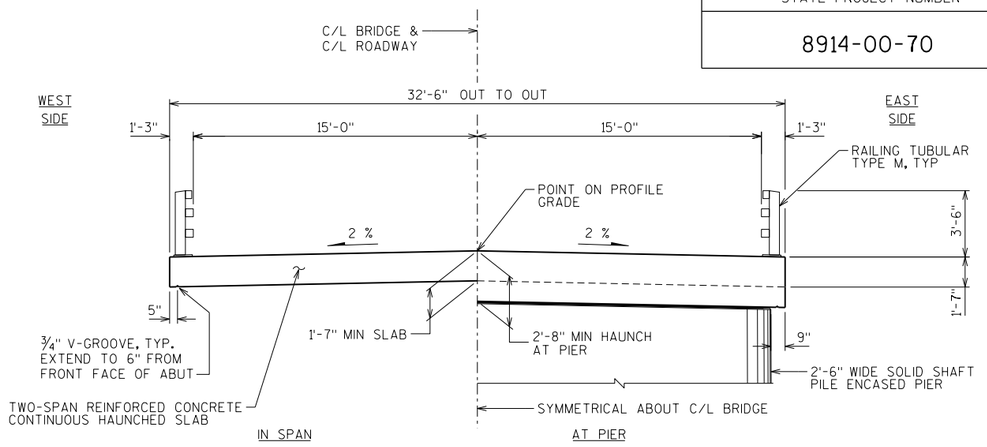
PLOT DATE: 8/8/2017 PLOT TIME: 10:08:29 AM
FILE NAME : S:\AE\C\Chiph\134766\5-final-dsgn\5i-drawings\20-Struct\bridge\b09306gl.dgn

8 8

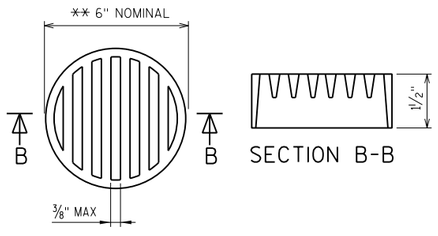
STATE PROJECT NUMBER
8914-00-70



PROFILE GRADE LINE



CROSS SECTION THRU BRIDGE
(LOOKING NORTH)



RODENT SHEILD

**NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

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

THE RODENT SHIELD SHALL BE A PVC GRATE SIMLAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT 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.

TOTAL ESTIMATED QUANTITIES - B-9-306

	BID ITEM NUMBER	BID ITEMS	UNIT	SOUTH ABUT	NORTH ABUT	PIER	SUPER	TOTALS
	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STATION) 10+00	LS	-	-	-	-	1
	206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-9-306	LS	-	-	-	-	1
(1)	210.1500	BACKFILL STRUCTURE TYPE A	TON	156	156	-	-	312
	502.0100	CONCRETE MASONRY BRIDGES	CY	29.5	29.5	30.0	194	283
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	-	-	408	408
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1940	1940	1650	-	5530
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1480	1480	60	47,730	50,750
	506.0105	STRUCTURAL STEEL CARBON	LB	-	-	-	590	590
	513.4061	RAILING TUBULAR TYPE M B-9-306	LF	-	-	-	230	230
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	10	10	-	-	20
	550.2104	PILING CIP CONCRETE 10 3/4 X 0.25-INCH	LF	450	450	900	-	1800
	606.0300	RIPRAP HEAVY	CY	62	62	-	-	124
(2)	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	101	101	-	-	202
	645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	40	40	-	-	80
	645.0120	GEOTEXTILE TYPE HR	SY	129	129	-	-	258
		NON-BID ITEMS						
		FILLER	SIZE	———	———	———	———	½ & ¾

(1) A FACTOR OF 2.0 WAS USED TO CONVERT CU YDS TO TONS.

(2) INCLUDES RODENT SHEILD FOR PIPE UNDERDRAIN PER SDD 8F6-4.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

FOR EXISTING STRUCTURE SEE PROFILE GRADE LINE THIS SHEET.

REFER TO ROADWAY DRAWINGS FOR EXISTING UTILITY LOCATIONS.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

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

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET AND IN THE ABUTMENTS DETAILS.

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-ASPHALTIC JOINT SEALER (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).

THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES BRIDGES B-9-306 SHALL BE THE EXISTING GROUNDLINE.

EXCAVATION BELOW THE ABUTMENTS AND ABUTMENTS BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

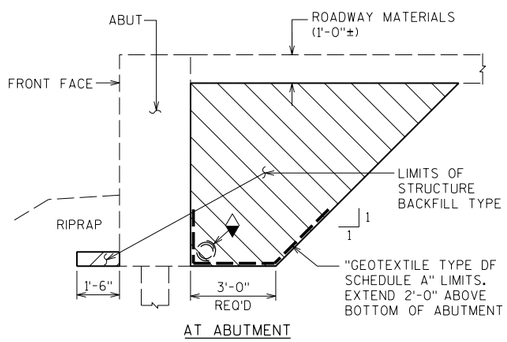
THE QUANTITY FOR BACKFILL STRUCTURE TYPE A IS CALCULATED BASED ON THE BACKFILL STRUCTURE LIMITS DETAILS SHOWN ON THIS SHEET.

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

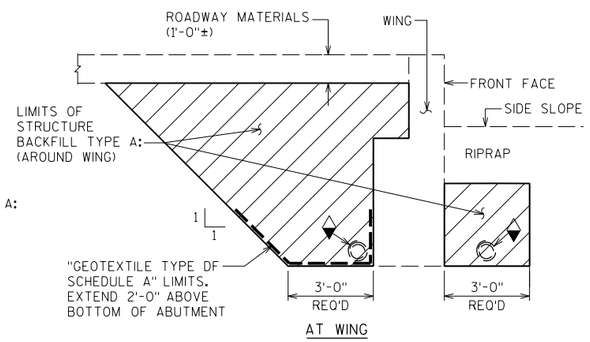
AT THE BACKFACE OF ABUTMENTS ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M153 TYPE 1, 2, OR 3 OR AASHTO DESIGNATION M213.

APPLY A PROTECTIVE SURFACE TREATMENT PER THE STANDARD SPECIFICATIONS AND THE SUPERSTRUCTURE DETAILS SHEET.



AT ABUTMENT

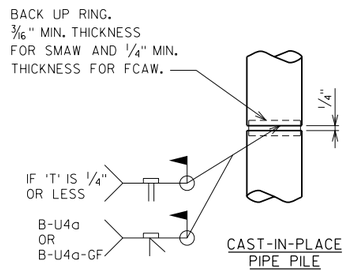


AT WING

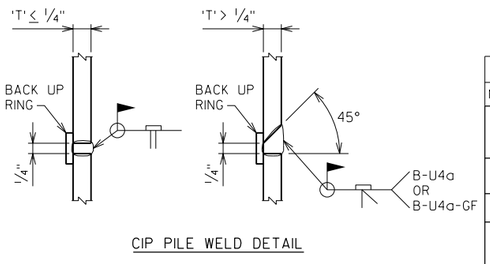
BACKFILL STRUCTURE LIMITS

A FACTOR OF 2.0 WAS USED TO CONVERT CU YDS TO TONS

◆ PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE.



CAST-IN-PLACE
PIPE PILE



CIP PILE WELD DETAIL

PILE SPLICE DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-306

DRAWN BY DLF | PLANS CK'D. NCK

CROSS SECTION AND QUANTITIES

SHEET 2 OF 9
28

PLOT TIME: 10:08:29 AM
PLOT DATE: 8/18/2017
FILE NAME : S:\AE\C\Chiph\134766\5-final-dsgn\5i-drawings\20-Struct\bridge\b09306g2.dgn

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	3/31/2016	-	-
B-2	4/7/2016	-	-
B-3	3/31/2016		
BORINGS COMPLETED BY:		PROFESSIONAL SERVICE INDUSTRIES, INC	
REPORT COMPLETED BY:		PROFESSIONAL SERVICE INDUSTRIES, INC	

SOIL BORINGS PERFORMED BY:

PROFESSIONAL SERVICE INDUSTRIES, INC
12839 30th AVENUE, SUITE A
CHIPPEWA FALLS, WISCONSIN 54729
PH: (715) 738-2770
FAX: (715) 738-2771

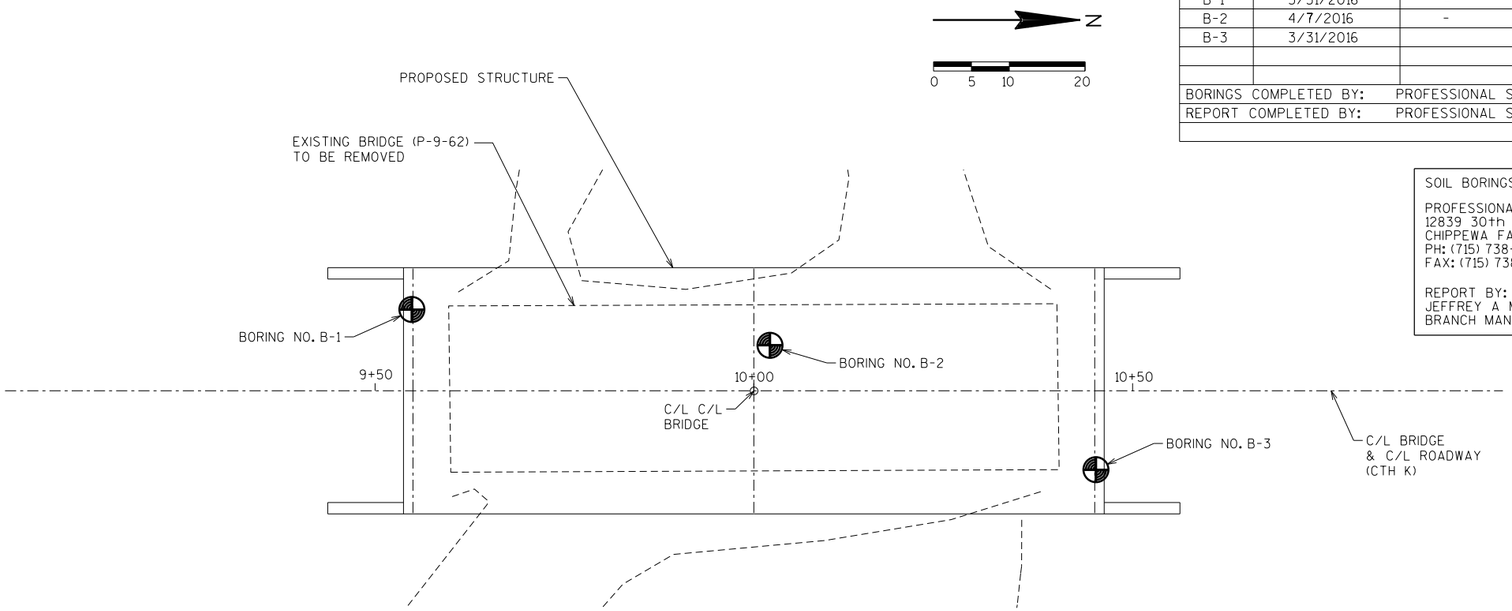
REPORT BY:
JEFFREY A MANNINEN
BRANCH MANAGER

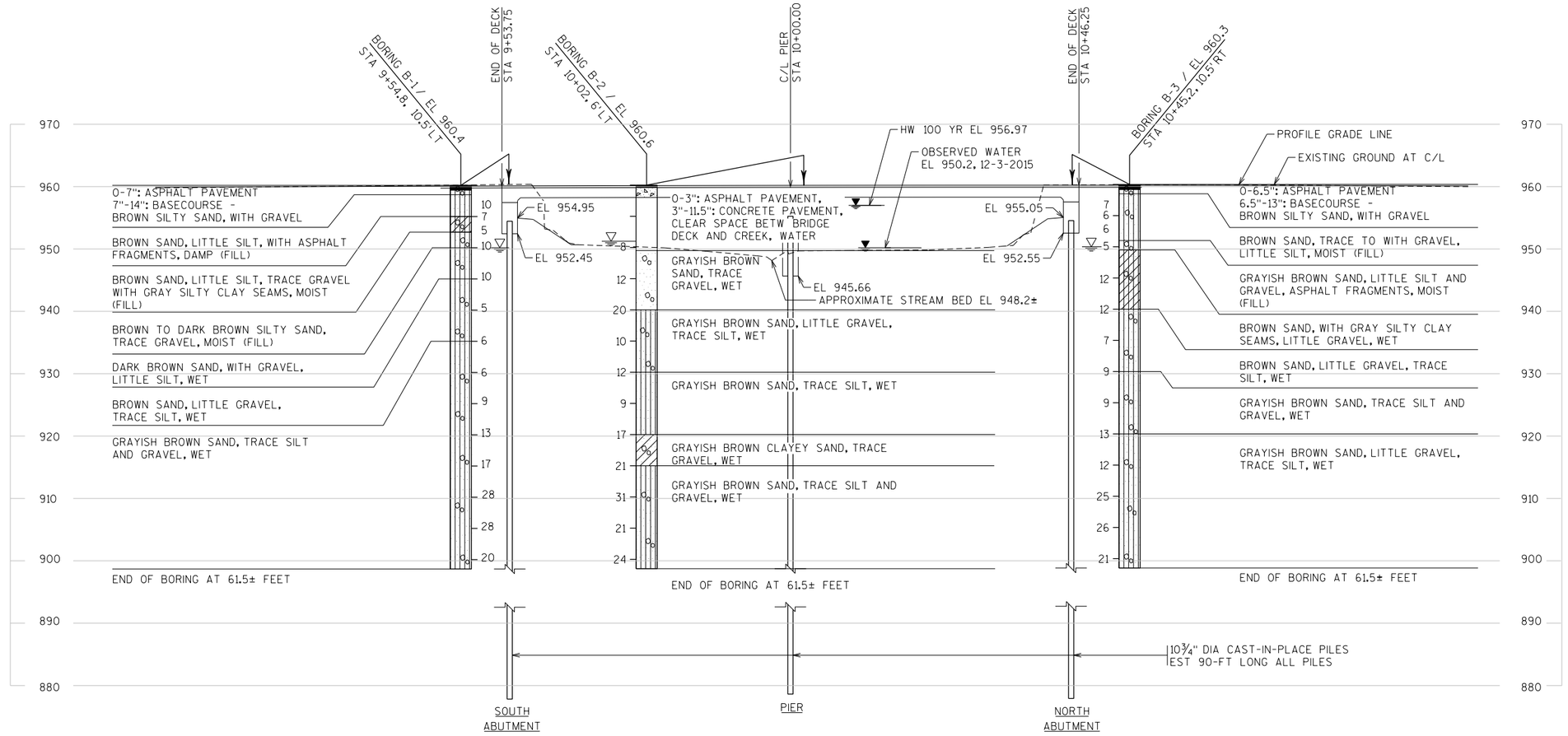
STATE PROJECT NUMBER

8914-00-70

MATERIAL SYMBOLS

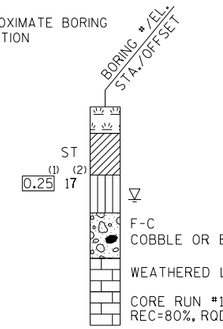
ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META





LEGEND OF BORING

= APPROXIMATE BORING LOCATION



(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-9-306

DRAWN BY DLF | PLANS CK'D. NCK

SUBSURFACE EXPLORATION

SHEET 3 OF 9

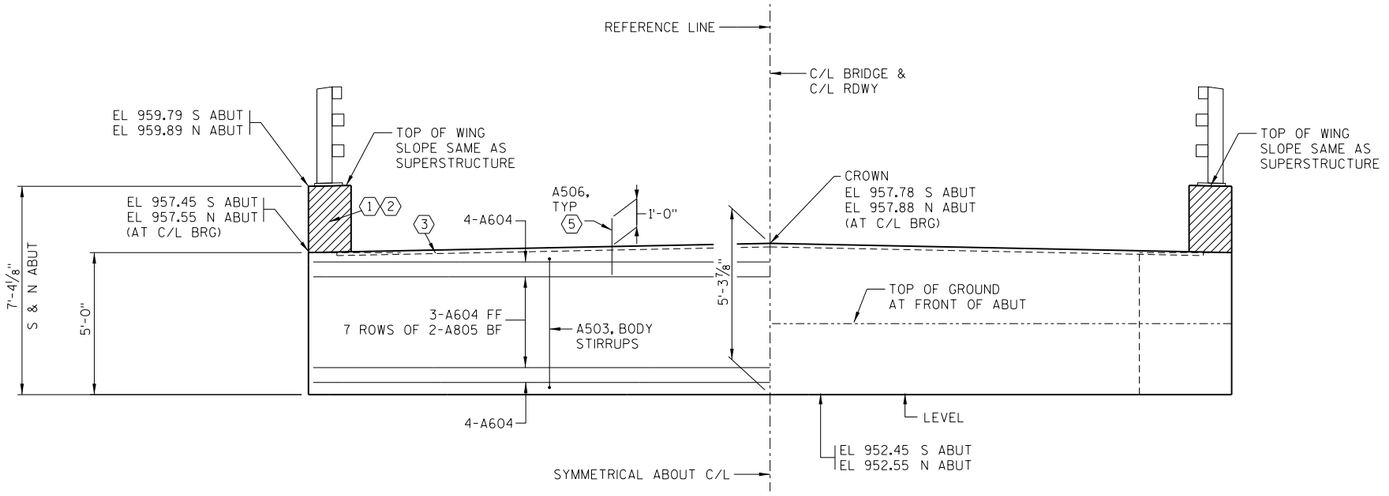
29

PLOT DATE: 8/8/2017 PLOT TIME: 10:08:30 AM

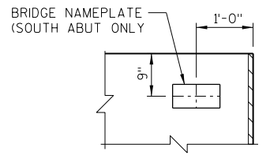
FILE NAME : S:\AE\C\Chiphn\347665\5-final-dsgn\5i-drawings\20-Struct\bridge\b09306bi.dgn

8

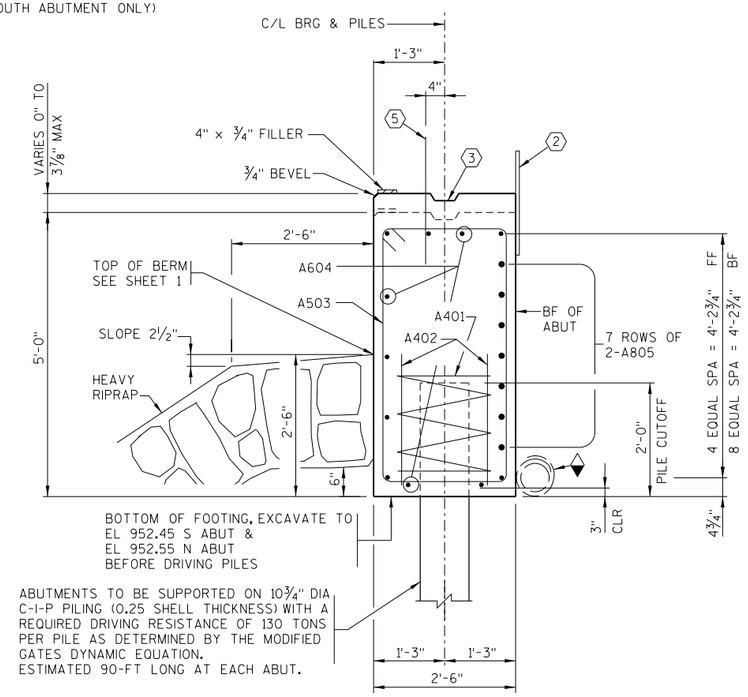
8



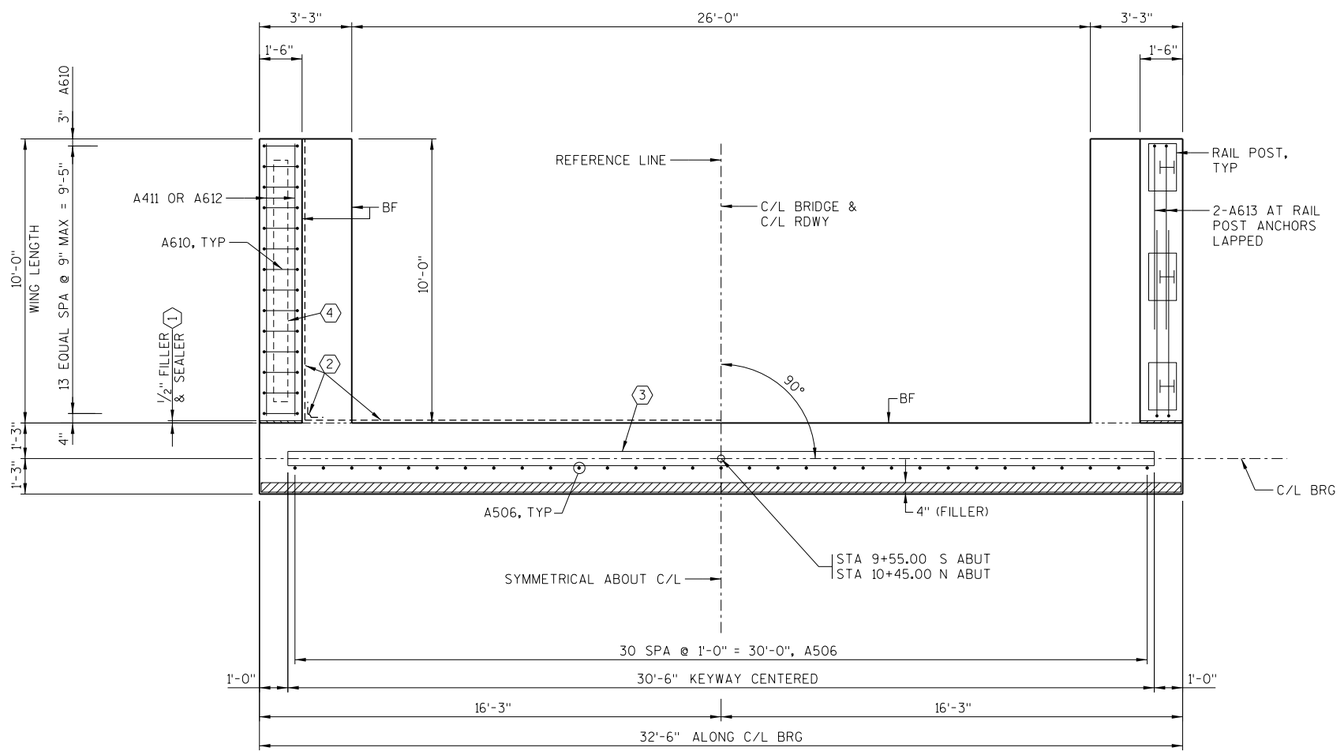
FRONT ELEVATION
(PILES NOT SHOWN FOR CLARITY)



NAMEPLATE LOCATION DETAIL
(ON WING 1 SOUTH ABUTMENT ONLY)



TYPICAL SECTION THRU BODY
ALL HORIZ BARS TO BE A604 UNLESS OTHERWISE SHOWN OF NOTED



PLAN

ABUTMENT NOTES

1. SEAL ALL EXPOSED HORIZ. AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-ASPHALTIC JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE). FILLER INCLUDED IN WING LENGTH.
2. 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ & VERT JOINTS ON BACKFACE. VERTICAL WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.
3. KEYED CONSTRUCTION JOINT FORMED BY A BEVELED 2" X 6".
4. OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY A BEVELED 2" X 6" WITH MEMBRANE ON BACKFACE.
5. A506 BARS MAY BE PLACED AFTER CONC HAS BEEN POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

◆ PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END OF PIPE.

Ⓡ ATTACH RODENT SHIELD AT END OF PIPE UNDERDRAIN, FOR RODENT SHIELD DETAIL SEE SHEET 2.

S ABUT = SOUTH ABUTMENT
N ABUT = NORTH ABUTMENT

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-306

DRAWN BY DLF | PLANS CK'D. NCK

SOUTH AND NORTH ABUTMENT DETAILS

SHEET 4 OF 9
30

8

PLOT DATE: 8/8/2017 PLOT TIME: 10:08:30 AM
FILE NAME : S:\AE\C\Chiph\134166\5-final-dsgn\5i-drawings\20-Struct\bridge\b09306al.dgn

STATE PROJECT NUMBER
8914-00-70

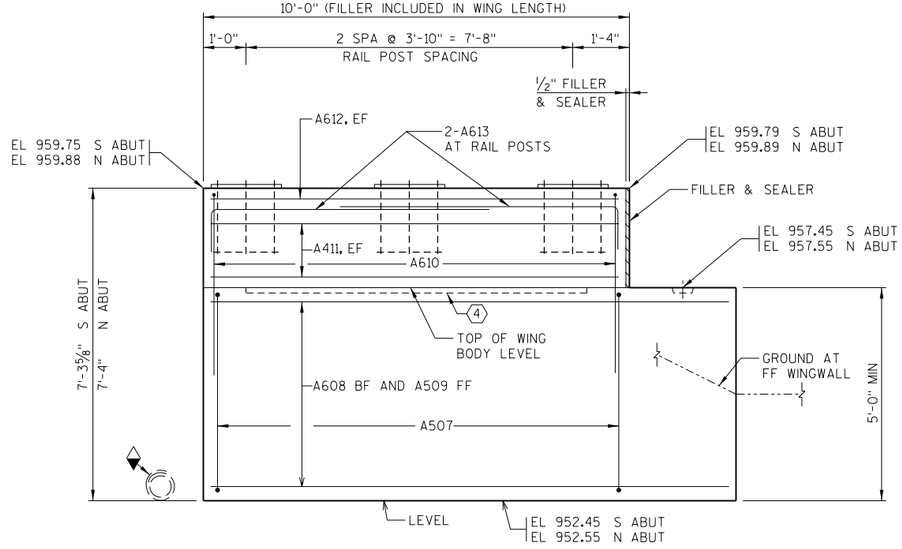
NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE ENGLISH BAR DIAMETER SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

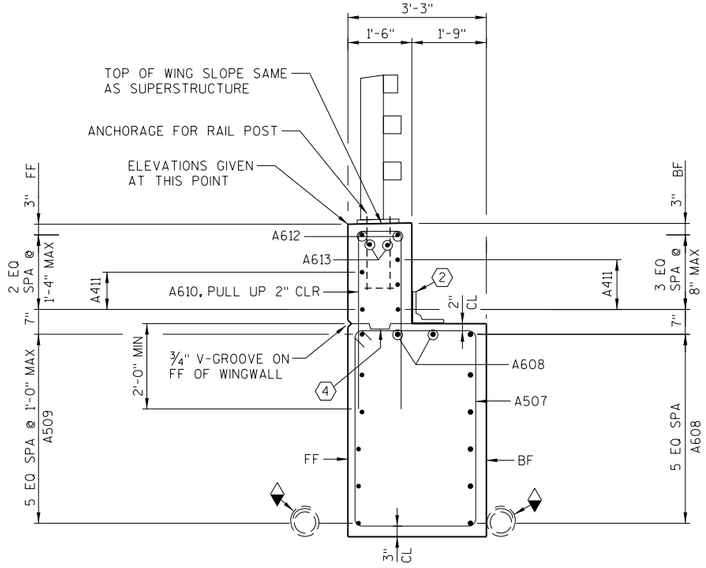
* NO. REQ'D. IS FOR 2 ABUTMENTS. DIVIDE BY 2 FOR EACH ABUTMENT.

BILL OF BARS — BOTH ABUTMENTS

BAR MARK	COAT	NO. * REQ'D.	LENGTH (FT-IN)	BAR SERIES	BENT	LOCATION
A401		10	28 - 0		X	BODY AT PILES
A402		20	2 - 3			BODY AT PILES
A503		80	13 - 8		X	BODY STIRRUPS
A604		22	32 - 1			BODY HORIZ
A805		28	19 - 6		X	BODY HORIZ BF
A506	X	62	2 - 0			BODY DOWELS
A507	X	40	15 - 2		X	WING STIRRUPS
A608	X	32	12 - 11		X	WING HORIZ BF
A509	X	24	12 - 2			WING HORIZ FF
A610	X	56	10 - 2		X	WING VERT
A411	X	20	9 - 7			WING HORIZ EF
A612	X	8	9 - 7			WING HORIZ EF TOP
A613	X	16	7 - 4		X	WING AT RAIL POST

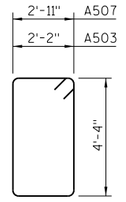


TYP WING ELEVATION

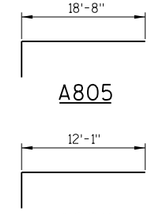


TYP SECTION THRU WINGWALLS

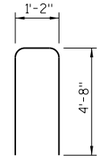
A401



A503, A507



A608



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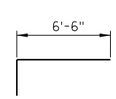

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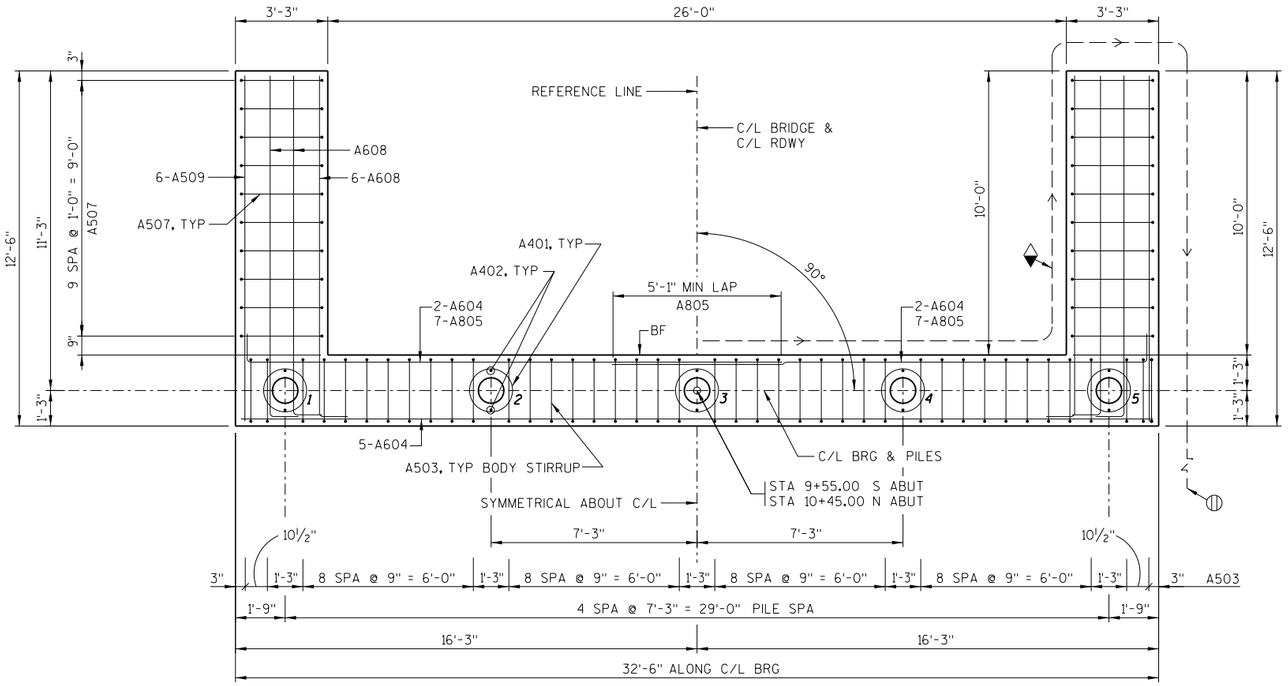

FOOTING LAYOUT

NOTE

SEE ABUTMENT NOTES ON SHEET 4 (2 4 ◆ ◍).

S ABUT = SOUTH ABUTMENT
N ABUT = NORTH ABUTMENT

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-306

DRAWN BY DLF | PLANS CK'D. NCK

SOUTH AND NORTH ABUTMENT DETAILS

SHEET 5 OF 9
31

PLOT DATE: 8/8/2017 PLOT TIME: 10:08:30 AM

FILE NAME : S:\AE\C\Chiphn\134766\5-final-dsgn\5i-drawings\20-Struct\bridge\b093006a2.dgn

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PLOT TIME: 10:08:30 AM
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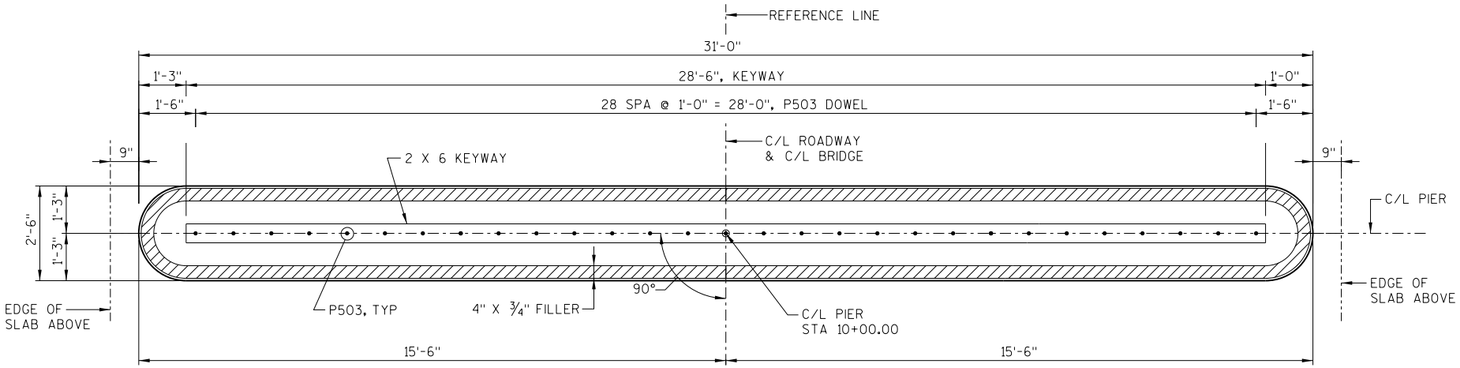
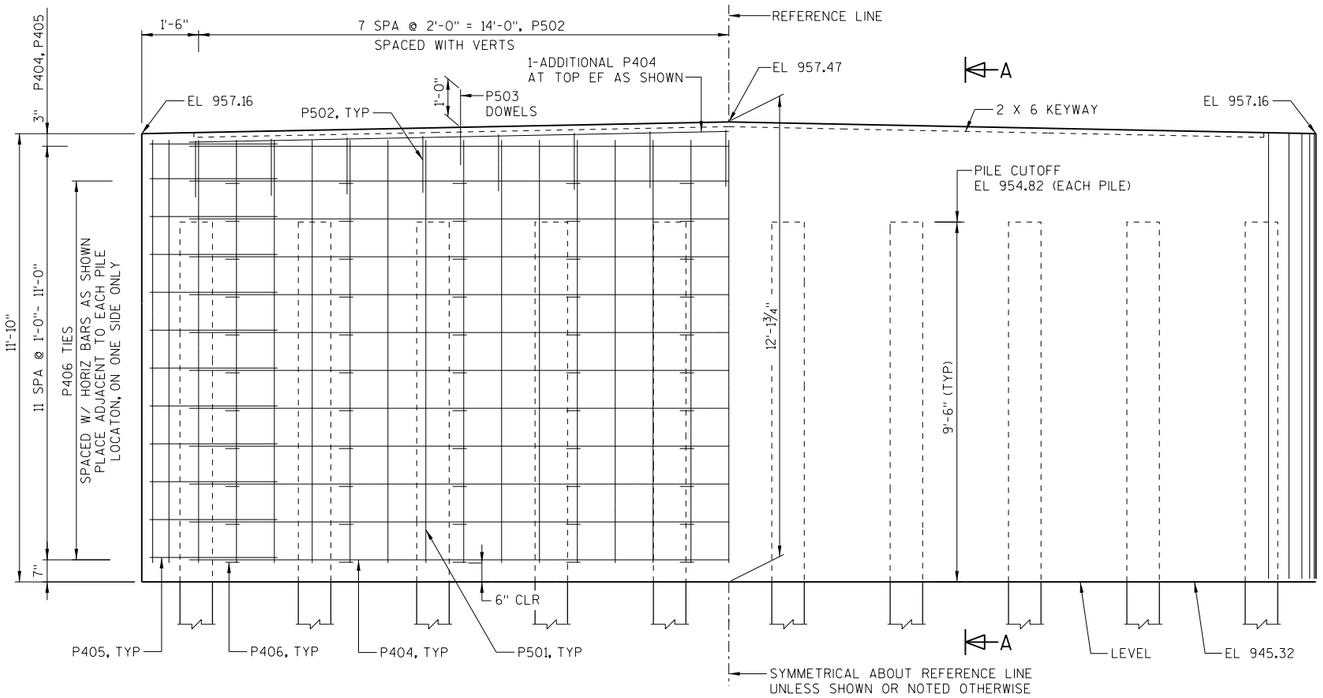
STATE PROJECT NUMBER
8914-00-70



PLAN



ELEVATION

N

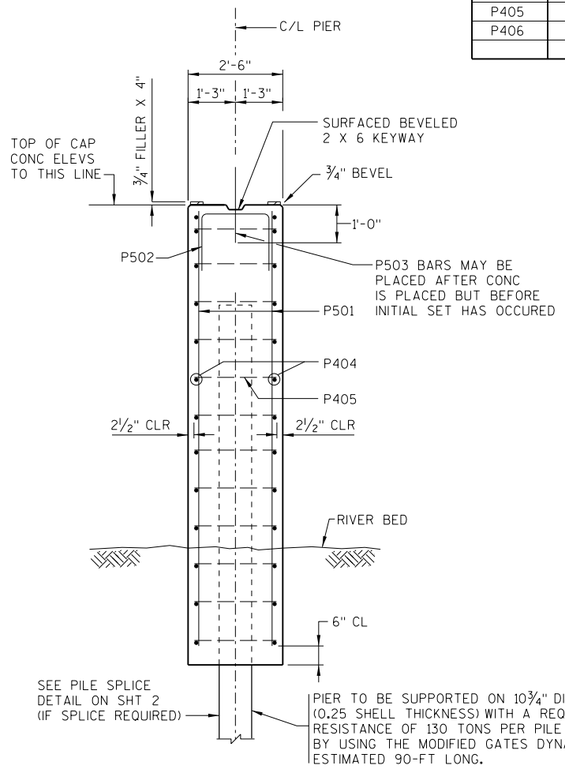
FF = FRONT FACE
BF = BACK FACE
EF = EACH FACE

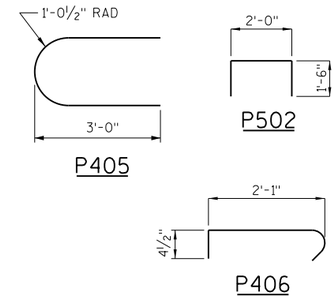
NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE ENGLISH BAR DIAMETER SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

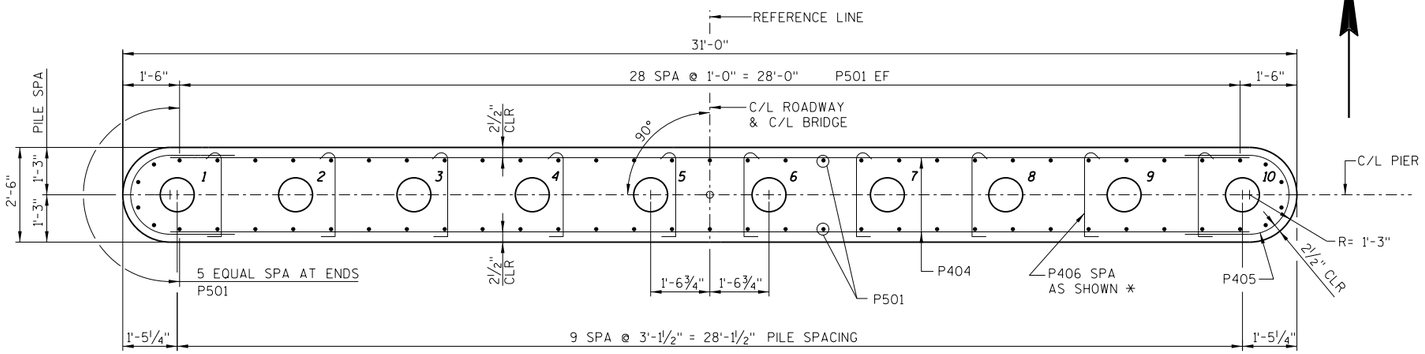
BILL OF BARS — PIER

BAR MARK	COAT	NO. REQ'D.	LENGTH (FT - IN)	BAR SERIES	BENT	LOCATION
P501		66	11 - 2			SHAFT VERT
P502		15	4 - 9		X	CAP TIE
P503	X	29	2 - 0			DOWEL
P404		26	28 - 6			SHAFT HORIZ
P405		24	7 - 2		X	SHAFT TIE
P406		110	2 - 9		X	SHAFT TIE





TYPICAL SECTION THRU PIER
SECTION A-A



FOOTING LAYOUT

N

*PLACE ADJACENT TO
EACH PILE ONLY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-306

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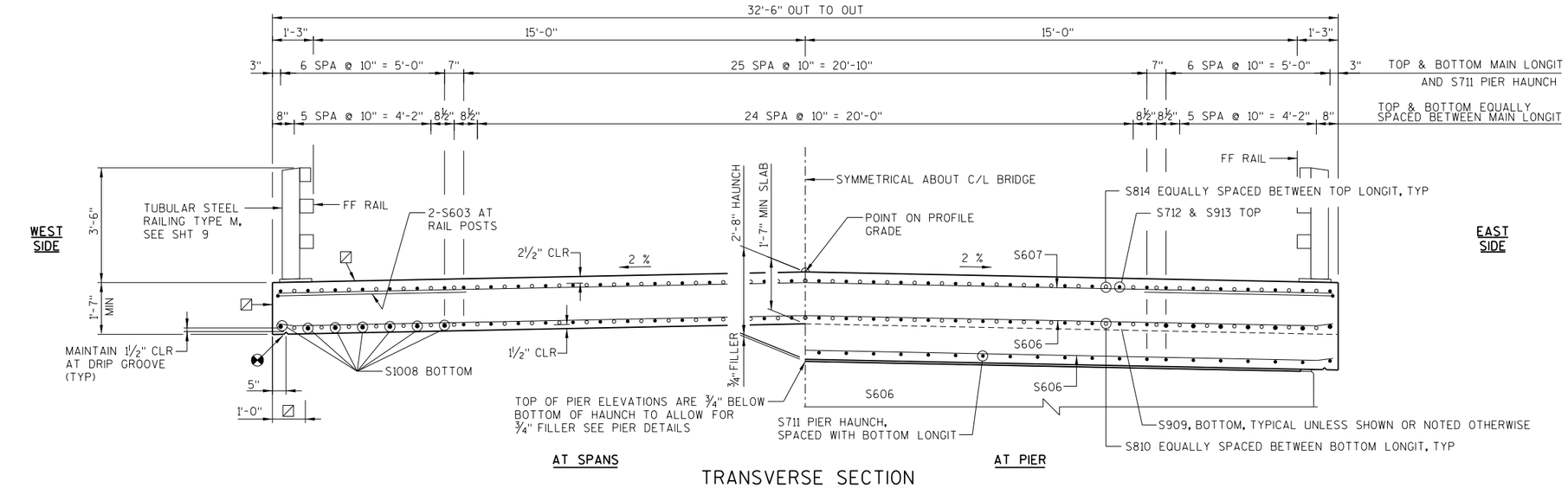
PIER DETAILS

SHEET 6 OF 9
32

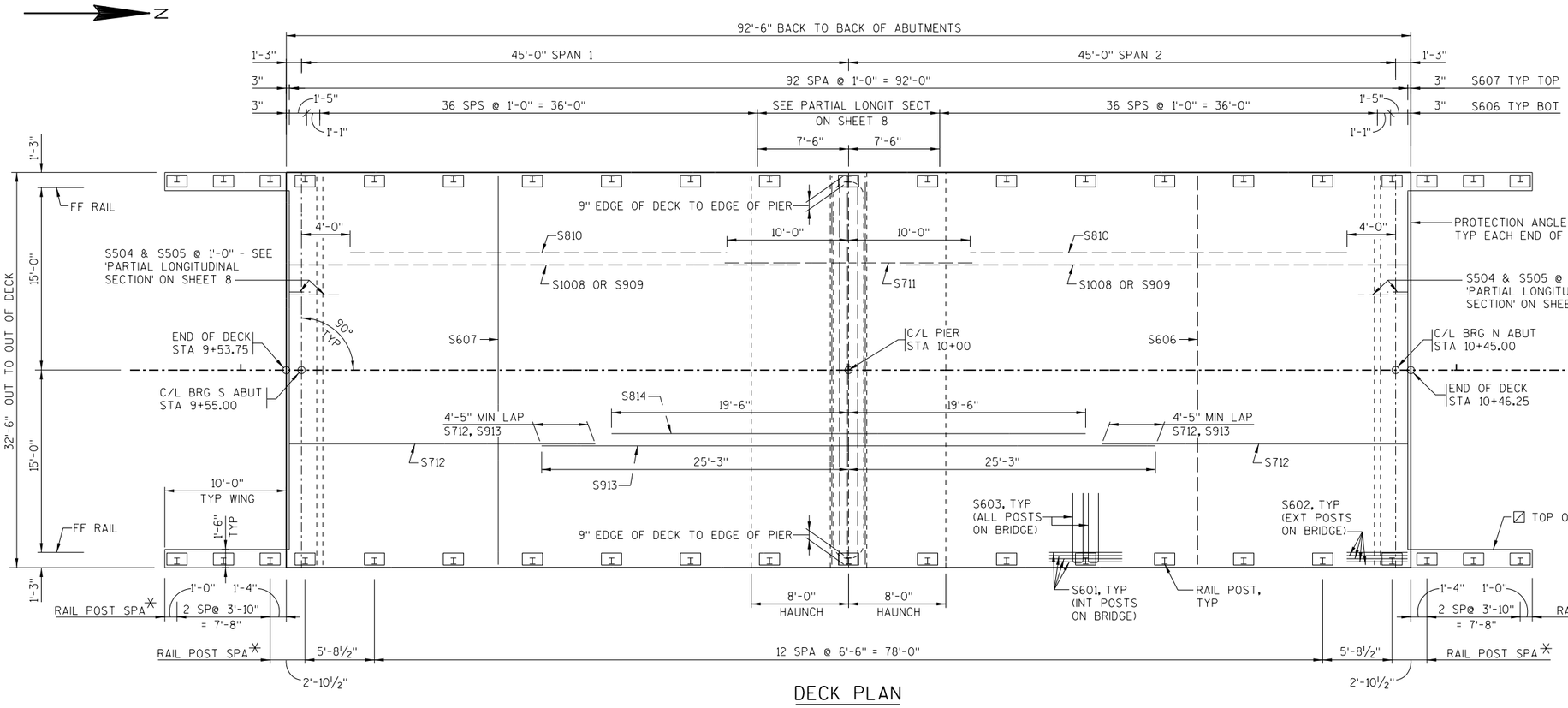
8

8

STATE PROJECT NUMBER
8914-00-70



TRANSVERSE SECTION



DECK PLAN

FINAL TOP OF DECK ELEVATIONS

	SPAN 1											SPAN 2										
	S ABUT	.1	.2	.3	.4	.5	.6	.7	.8	.9	PIER	.1	.2	.3	.4	.5	.6	.7	.8	.9	N ABUT
WEST EDGE OF DECK	959.79	959.80	959.81	959.82	959.83	959.84	959.85	959.85	959.86	959.87	959.87	959.88	959.88	959.89	959.89	959.89	959.89	959.89	959.89	959.89	959.89
C/L	960.11	960.12	960.13	960.14	960.15	960.16	960.17	960.18	960.19	960.19	960.20	960.20	960.21	960.21	960.21	960.22	960.22	960.22	960.22	960.22	960.21
EAST EDGE OF DECK	959.79	959.80	959.81	959.82	959.83	959.84	959.85	959.85	959.86	959.87	959.87	959.88	959.88	959.89	959.89	959.89	959.89	959.89	959.89	959.89	959.89

SUPERSTRUCTURE NOTES:

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

PRIOR TO RELEASING SLAB FLASEWORK, TAKE TOP OF SLAB ELEVATIONS AT C/L ABUTMENTS AND 5/10 POINTS TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE LINE AND CROWN OR C/L.

TRANSVERSE BARS SHALL BE PLACED PARALLEL TO THE C/L OF SUBSTRUCTURE UNITS.

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 ON CONTINUOUS BAR CHAIRS APPROXIMATELY 4'-0" CENTERS.

⊕ ¾" V-GROOVE, EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT.

☐ COAT WITH PROTECTIVE SURFACE TREATMENT PER THE STANDARD SPECIFICATIONS. PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE TOP AND EXTERIOR EXPOSED FACE OF WINGS, AND THE END 1'-0" OF THE FRONT FACE OF ABUTMENT.

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

——— INDICATES TOP BAR STEEL REINFORCEMENT
— — — — INDICATES BOTTOM BAR STEEL REINFORCEMENT
✳ TYPICAL EACH SIDE OF DECK. MEASURED ALONG EDGE OF DECK

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-306

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SUPERSTRUCTURE DETAILS

SHEET 7 OF 9
33

PLOT TIME: 10:08:31AM
PLOT DATE: 8/18/2017
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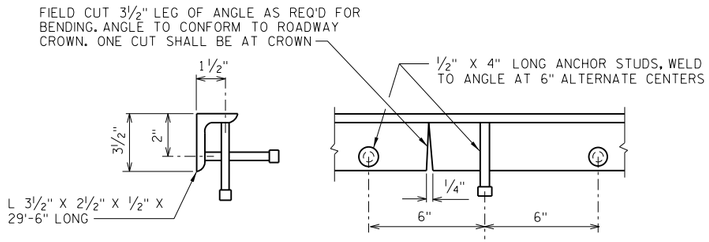
STATE PROJECT NUMBER
8914-00-70



PROTECTION ANGLE ARMOR

(PAYMENT BASED ON 9.9 LBS/FT)

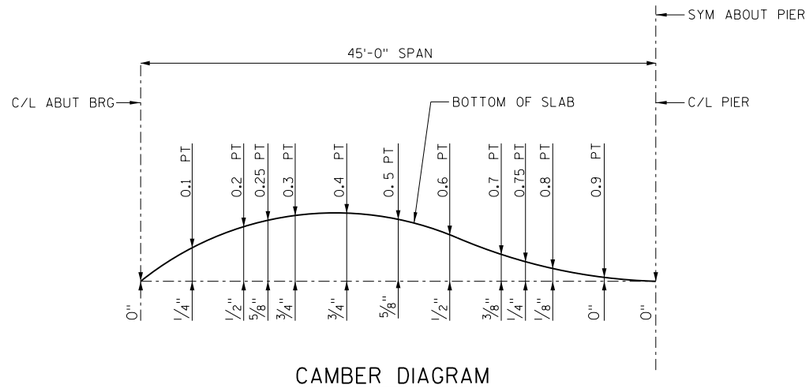
PROTECTION ANGLE ARMOR NOTES:

ONE FIELD SPLICE SHALL BE PERMITTED IN ANGLES OVER 34'-0" IN LENGTH.

ANGLE AND STUDS TO BE PAID FOR AT THE UNIT PRICE BID FOR "STRUCTURAL CARBON STEEL". NO PAINTING REQUIRED.

SANDBLAST PROTECTION ANGLE AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PROTECTION ANGLE SHALL BE HOT DIPPED GALVANIZED.

ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO ASTM DESIGNATION A709 GRADE 36.



CAMBER DIAGRAM

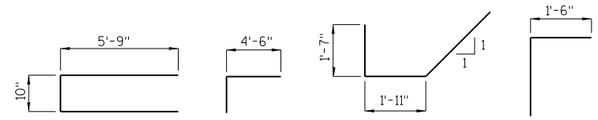
CAMBER SPAN AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION & FUTURE CREEP. CAMBER DOES NOT INCLUDE VERTICAL ROADWAY PROFILE OR ALLOWANCE FOR FORM SETTLEMENT. DEAD LOAD DEFLECTION ONLY EQUALS APPROXIMATELY 1/3 OF CAMBER VALUES SHOWN.

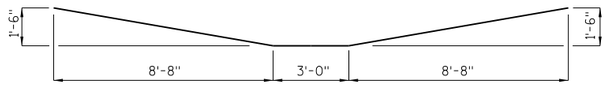
NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE ENGLISH BAR DIAMETER SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

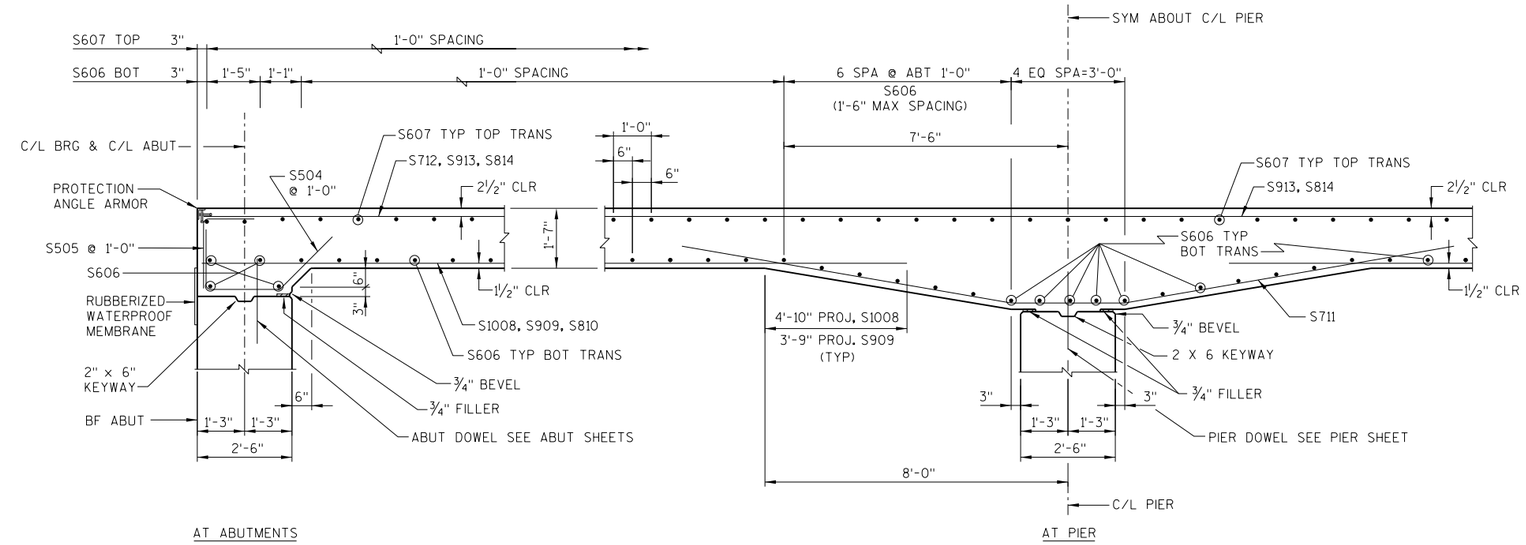
BILL OF BARS — SUPERSTRUCTURE

BAR MARK	COAT	NO. REQ'D.	LENGTH (FT-IN)	BAR SERIES	BENT	LOCATION
S601	X	104	6 - 0			RAIL POST
S602	X	16	6 - 0		X	RAIL POST
S603	X	60	12 - 0		X	RAIL POST
S504	X	66	5 - 8		X	END OF DECK
S505	X	66	3 - 3		X	END OF DECK
S606	X	97	32 - 2			BOT TRANS
S607	X	93	32 - 2			TOP TRANS
S1008	X	28	42 - 11			BOT LONG
S909	X	52	41 - 10			BOT LONG
S810	X	78	31 - 0			BOT LONG
S711	X	40	20 - 8		X	BOT LONG HAUNCH
S712	X	80	25 - 3			TOP LONG
S913	X	40	50 - 6			TOP LONG
S814	X	39	39 - 0			TOP LONG OVER PIER





S711



PARTIAL LONGITUDINAL SECTION

NOTES:

SEE SHEET 7 FOR SUPERSTRUCTURE NOTES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-306

DRAWN BY DLF | PLANS CK'D. NCK

SUPERSTRUCTURE DETAILS

SHEET 8 OF 9

34

8

8

PLOT TIME: 10:08:31 AM

PLOT DATE: 8/8/2017

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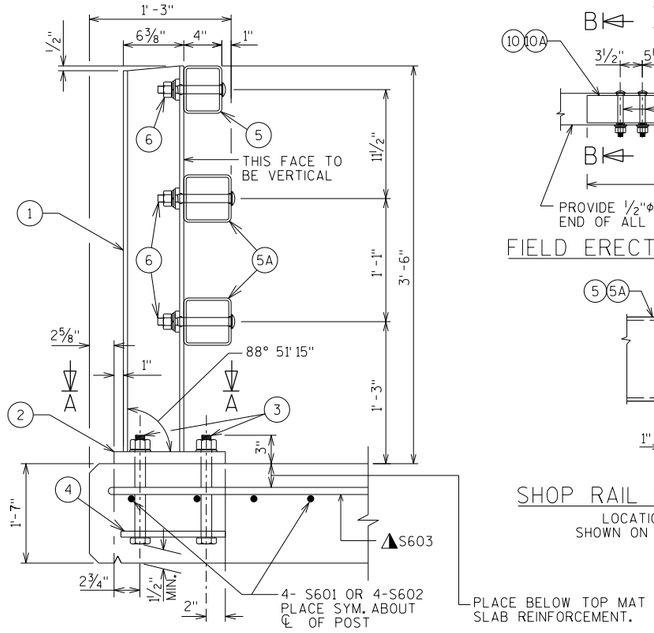
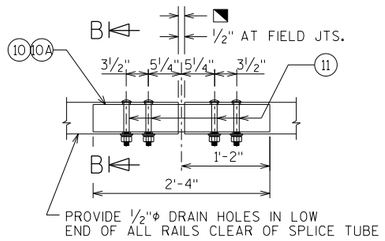
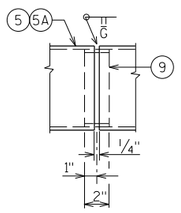
8914-00-70



SECTION THRU RAILING ON SLAB

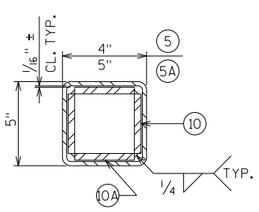


FIELD ERECTION JOINT DETAIL

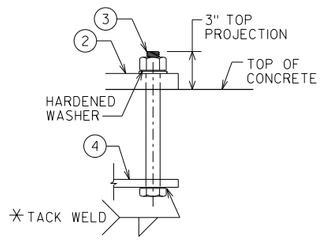


SHOP RAIL SPLICE DETAIL

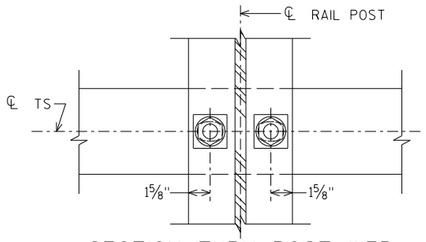
LOCATION MUST BE SHOWN ON SHOP DRAWINGS



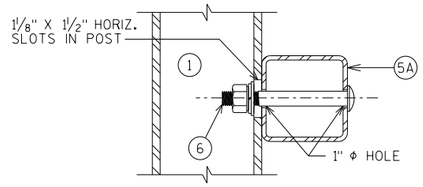
SECTION B-B



ANCHOR BOLTS



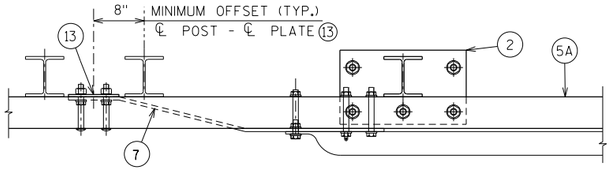
SECTION THRU POST WEB



SECTION THRU RAIL

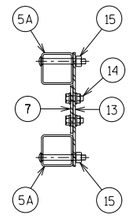
NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

TYPICAL RAIL TO POST CONNECTIONS



TOP VIEW AT END POST

THRIE BEAM RAIL ATTACHMENT



SECTION C-C

LEGEND

(1) W6 x 25 WITH 1 1/8" X 1 1/2" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.

(2) PLATE 1 1/4" x 11 3/4" x 1'-8" WITH 1 5/16" X 1 5/8" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.

(3) ASTM A449 - 1 1/8" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 1'-9" LONG IN ABUTMENT WINGS. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG. USE 10 3/4" LONG AT ALL OTHER LOCATIONS. (AN EQUIVALENT THREADED ROD WITH NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQ'D. FOR CONSTRUCTIBILITY.)

(4) 5/8" x 11" x 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1 3/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3

(5) TS 5 x 4 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.

(5A) TS 5 x 5 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.

(6) 7/8" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/16" X 1 5/8" X 15/8" WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)

(7) 1/2" THK. BACK-UP PLATE WITH 2 - 7/8" X 1 1/2" THREADED SHOP WELDED STUDS (NO. 12). BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY ABOUT TUBES NO. 5A.

(8) 1" DIA. HOLES IN PLATE NO. 7 & TUBES NO. 5A FOR 7/8" DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. 6 HOLES IN TUBES AND PLATE NO. 7.

(9) SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".

(10) 3/8" X 3 5/8" X 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.

(10A) 3/8" X 2 5/8" X 2'-4" PLATE USED IN NO. 5, 3/8" X 3 5/8" X 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.

(11) 7/8" Φ A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 15/16" X 1 1/4" LONGIT. SLOTTED HOLES AT FIELD JOINTS AND 15/16" X 2 1/4" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A.

(12) 7/8" DIA. X 1 1/2" LONG THREADED SHOP WELDED STUDS (2 REQ'D).

(13) 3/8" X 8" X 1'-6" PLATE. BOLT TO RAIL AS SHOWN IN DETAIL. REQ'D. AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYM. ABOUT TUBES NO. 5A.

(14) 7/8" DIA. X 2" LONG A325 HEX BOLT WITH NUT AND WASHER (5 REQ'D.).

(15) 1" Φ HOLES IN TUBES NO. 5A FOR 7/8" DIA. A325, ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER (4 REQ'D.). 4 HOLES IN TUBES.

GENERAL NOTES

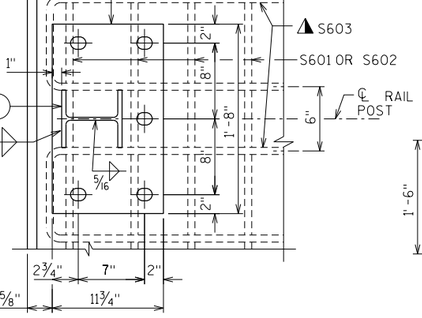
1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M B-9-306" WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE. RAILS SHALL BE SPLICED IN A PANEL OVER EXPANSION JOINTS.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
7. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
8. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
9. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY SSPC SPECIFICATIONS.
10. THIS RAILING MEETS NCHRP REPORT 350 EVALUATION CRITERIA FOR TEST LEVEL 4 (TL-4).

▲ TIE TO TOP MAT OF STEEL.

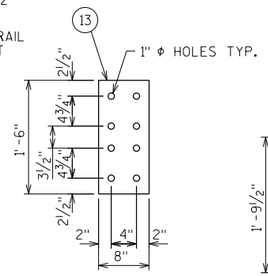
✳ FOR ANCHOR BOLTS IN WINGS, TACK WELD MAY BE USED IN FIELD AFTER ANCHOR PLATE IS IN POSITION IF REQ'D. FOR CONSTRUCTIBILITY.

◥ RDWY. OPENING OR 1/2" OPENING FOR A1 ABUTMENT.

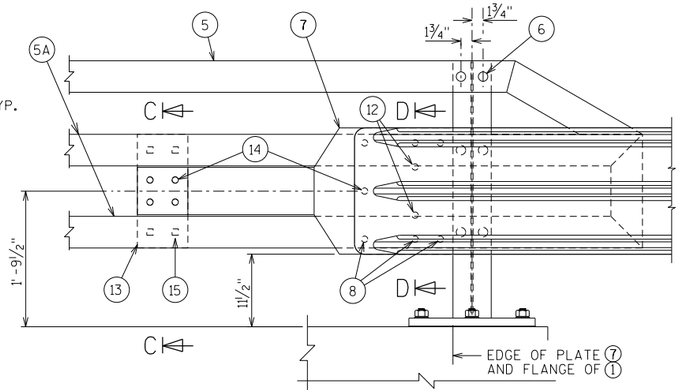
SEE SHEET 5 AND 7 FOR RAIL POST SPACING.



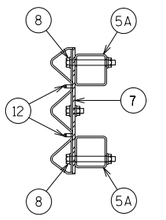
SECTION A-A



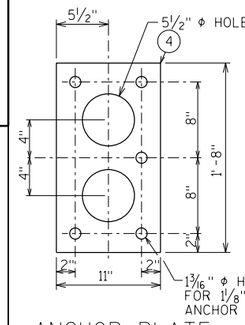
ANCHOR PLATE
AT BEAM GUARD ATTACHMENT



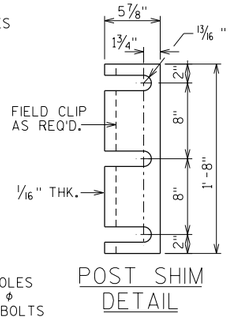
DETAIL AT END POST
THRIE BEAM RAIL ATTACHMENT



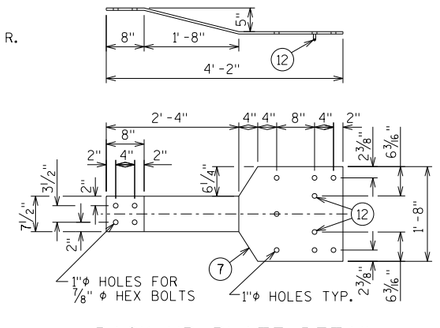
SECTION D-D



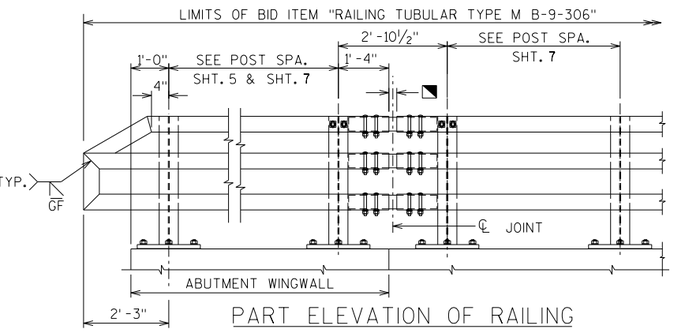
ANCHOR PLATE
AT RAIL TO SLAB CONNECTION



POST SHIM DETAIL



BACK-UP PLATE DETAIL
AT BEAM GUARD ATTACHMENT



PART ELEVATION OF RAILING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-306

DRAWN BY	PLANS CK'D.
DLF	NCK

TUBULAR STEEL RAILING TYPE M

SHEET 9 OF 9

35

RAILM
7-16

8

8

CTH K								
		AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
Station	Distance	Cut Note 1	Fill	Cut Note 2	Fill Note 3	Cut 1.00 Note 2	Expanded Fill 1.30 Note 4	Mass Ordinate Note 5
8+00	0.00	24.86	0	0.0	0.0	0	0	0
8+50	50.00	19.62	20.39	41.2	18.9	41	25	16
9+00	50.00	22.65	33.38	39.1	49.8	80	90	-10
9+44	43.75	42.43	39.64	52.7	59.2	133	167	-34
10+56	1.25	28.99	22.45	0.7	0.5	134	168	-34
11+00	43.75	23.63	34.47	42.6	46.1	177	228	-51
11+50	50.00	25.01	28.74	45.0	58.5	222	304	-82
11+75	25.00	27	0	24.1	13.3	246	321	-75

Little Drywood Creek								
		AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
Station	Distance	Cut Note 1	Fill	Cut Note 2	Fill Note 3	Cut 1.00 Note 2	Expanded Fill 1.30 Note 4	Mass Ordinate Note 5
999+25	0.00	0.00	0	0.0	0.0	0	0	0
999+50	25.00	16.69	0	7.7	0.0	8	0	8
999+75	25.00	85.5	0	47.3	0.0	55	0	55
1000+00	25.00	1.63	0	40.3	0.0	95	0	95
1000+25	25.00	128	0	60.0	0.0	155	0	155
1000+50	25.00	187.3	0	146.0	0.0	301	0	301
1000+75	25.00	69.29	0	118.8	0.0	420	0	420
1001+00	25.00	0	0	32.1	0.0	452	0	452

Notes:
1) Salvaged/Unusable Pavement Material is included in Cut.
2) Excavation Common is the sum of the Cut column. Item number 205.0100
3) Does not include Unusable Pavement Excavation volume.
4) Will be backfilled with Excavation Common or Borrow.
5) Plus quantity indicates an excess of material. Minus indicates a shortage of material. Borrow item number 208.0100

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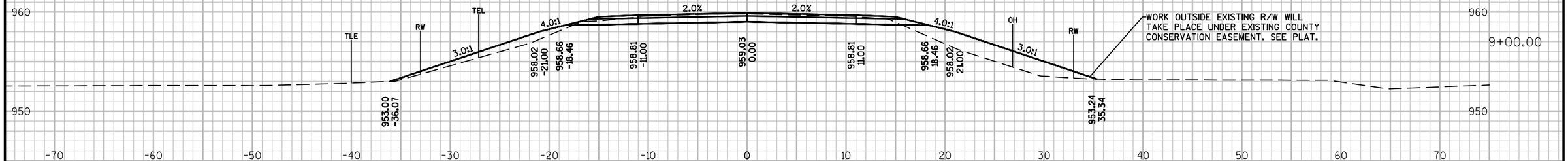
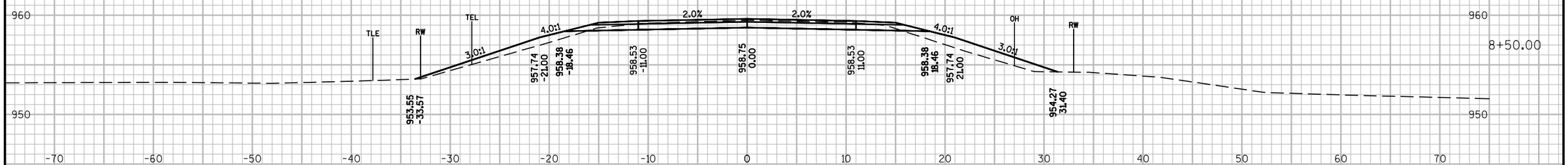
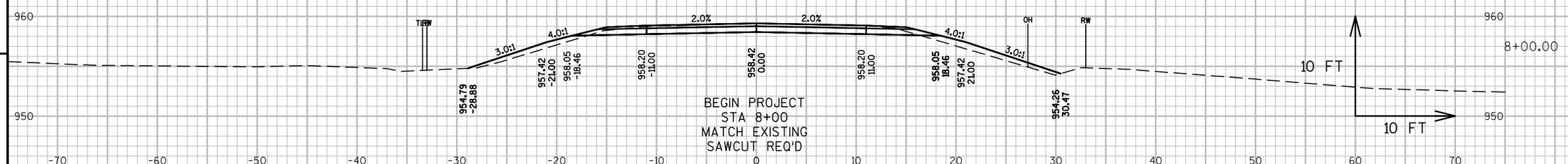
UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED.







9

9

PROJECT NO: 8914-00-70	HWY: CTH K	COUNTY: CHIPPEWA	CROSS SECTIONS: CTH K	SHEET 37	E

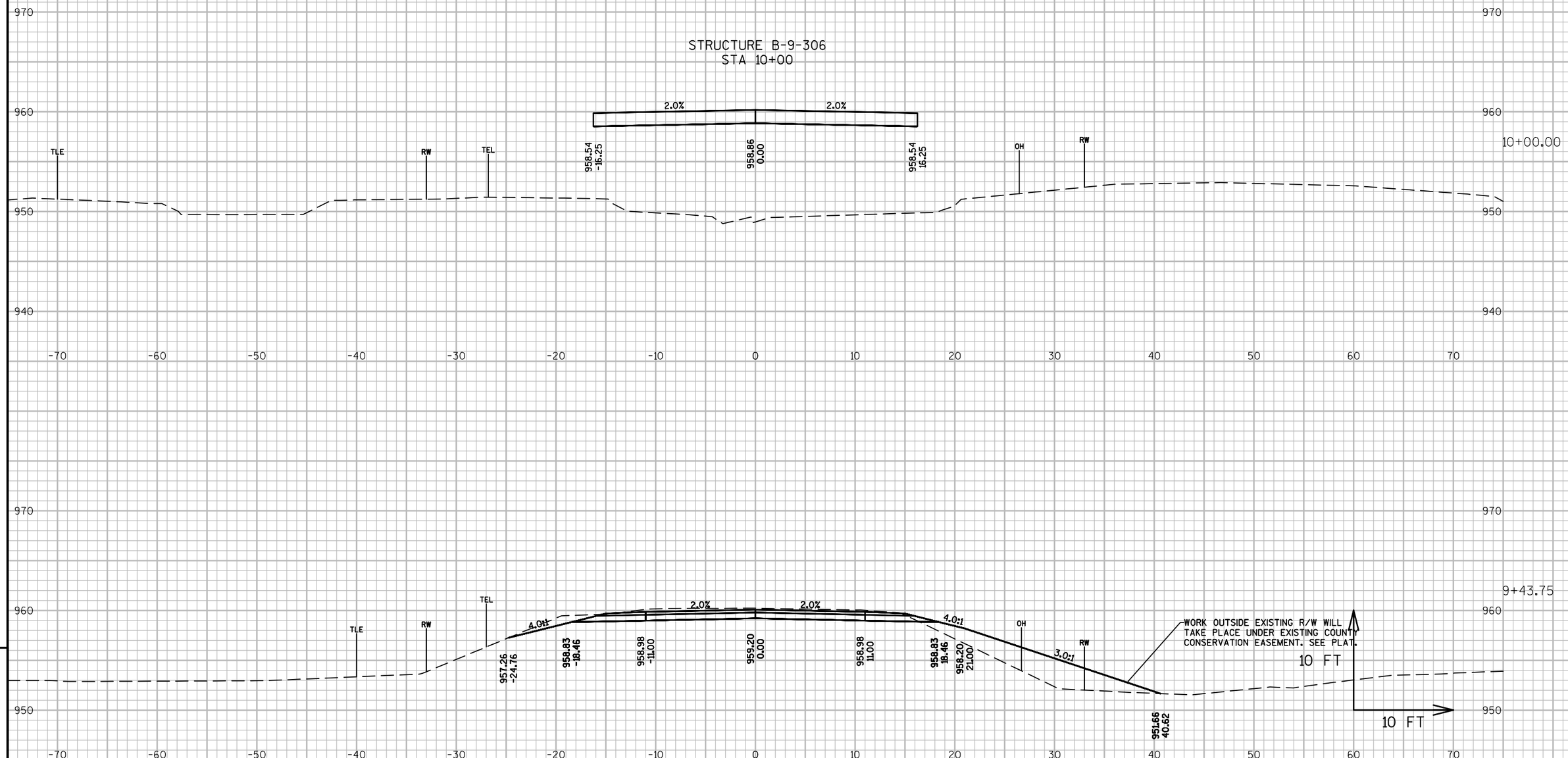
FILE NAME : P:\AE\C\CHIPH\134766\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-XS - XS1

PLOT DATE : 7/9/2017 5:19 PM PLOT BY : JUSTIN SHAVLIK PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED.

STRUCTURE B-9-306
STA 10+00



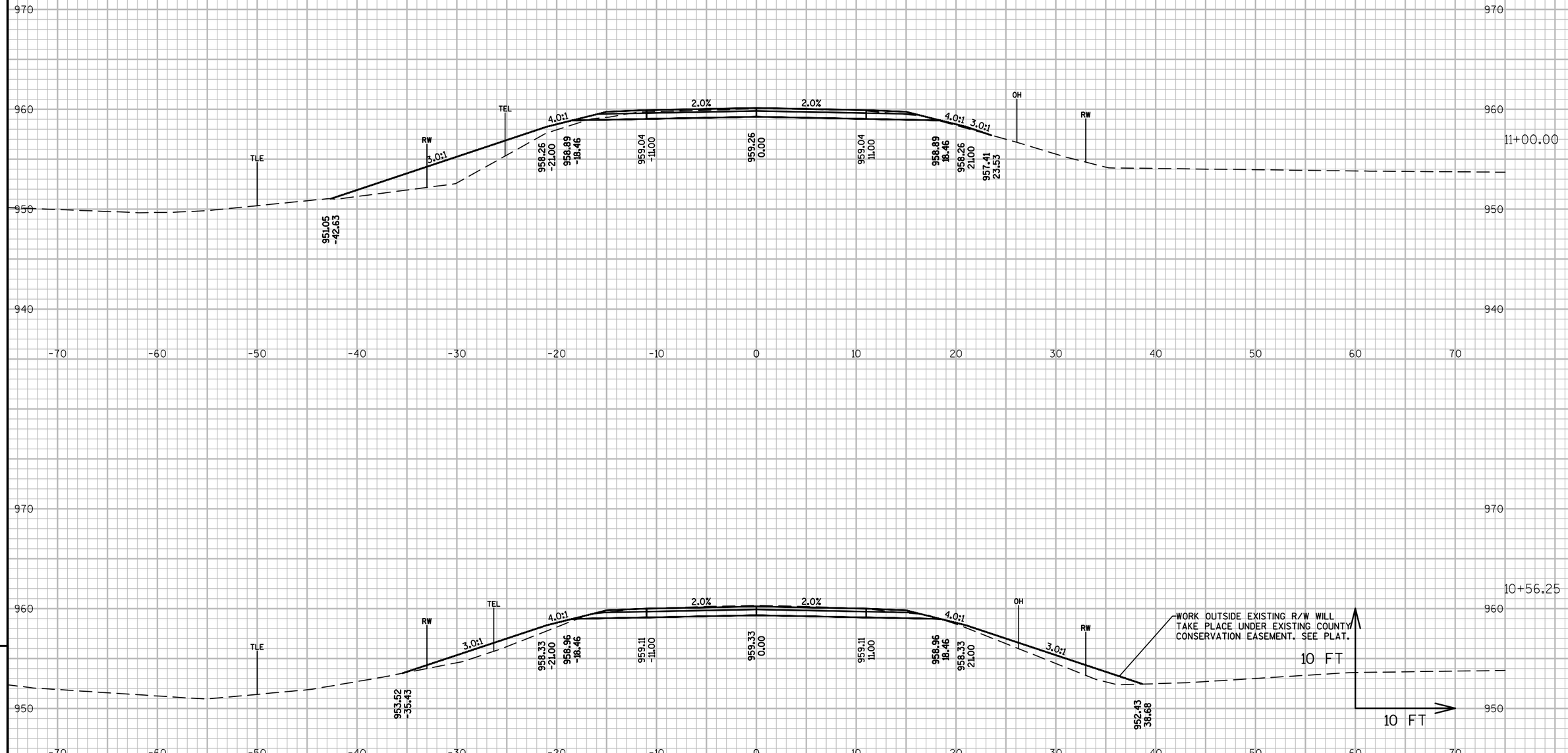
PROJECT NO: 8914-00-70	HWY: CTH K	COUNTY: CHIPPEWA	CROSS SECTIONS: CTH K	SHEET 38	E

FILE NAME : P:\AE\C\CHIPH\134766\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-XS - XS2

PLOT DATE : 7/9/2017 5:19 PM PLOT BY : JUSTIN SHAVLIK PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED.



9 9

PROJECT NO: 8914-00-70	HWY: CTH K	COUNTY: CHIPPEWA	CROSS SECTIONS: CTH K	SHEET 39	E

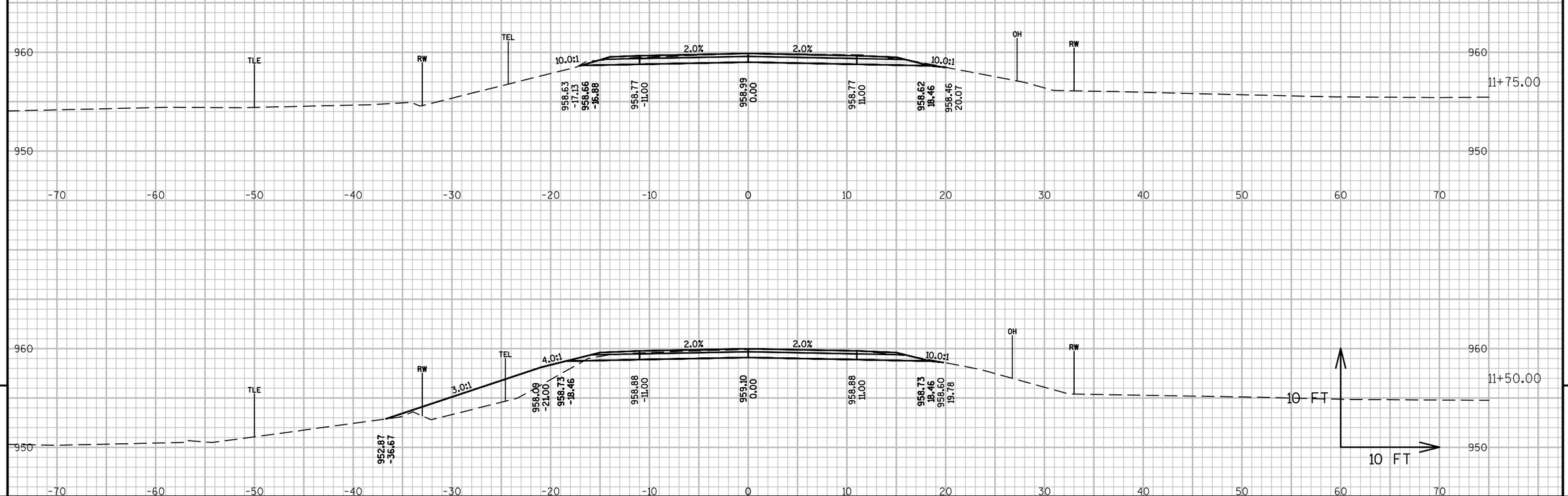
FILE NAME : P:\AE\C\CHIPH\134766\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-XS - XS3

PLOT DATE : 7/9/2017 5:19 PM PLOT BY : JUSTIN SHAVLIK PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED.

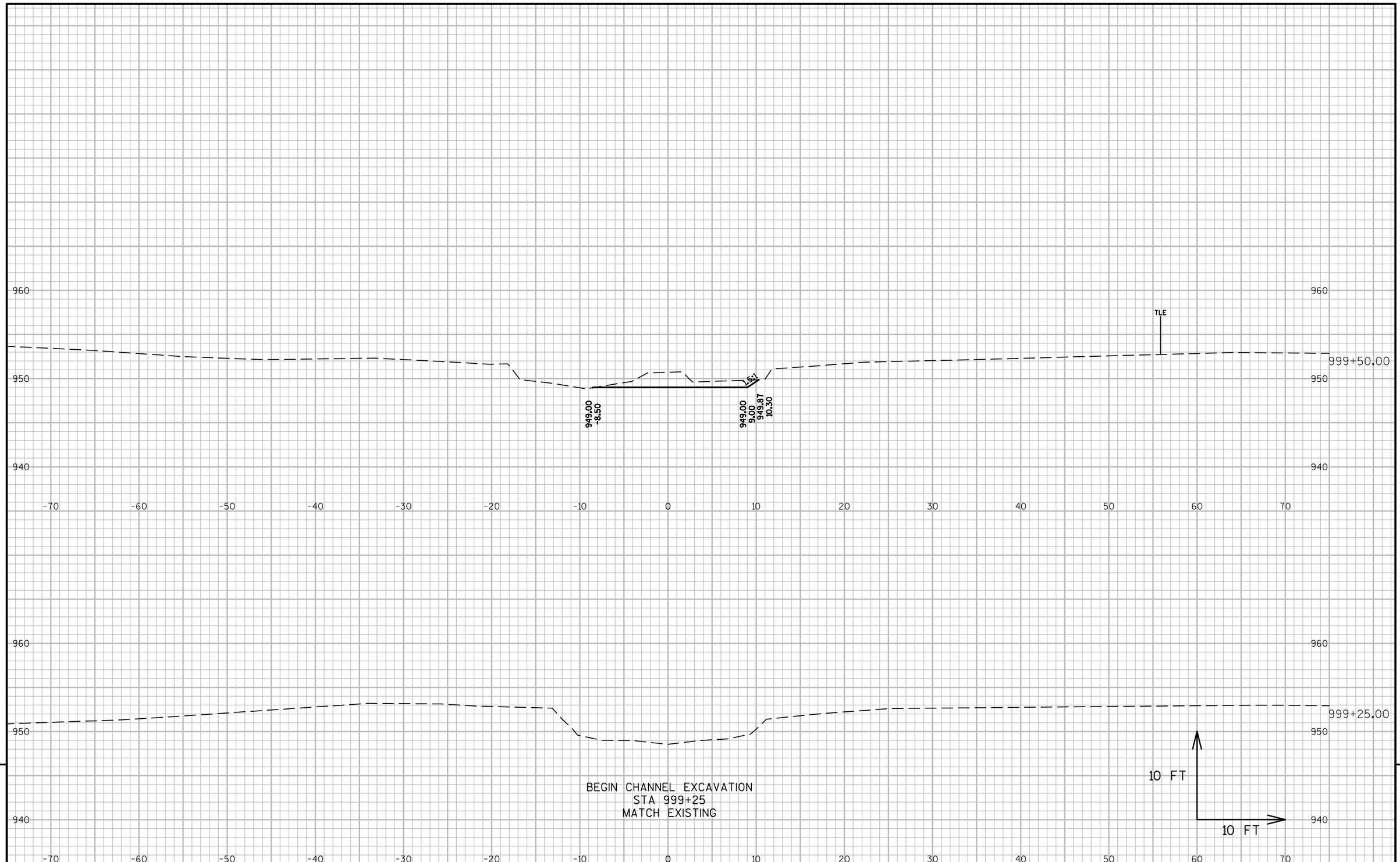
END PROJECT
STA 11+75
MATCH EXISTING
SAWCUT REQ'D



9

9

PROJECT NO: 8914-00-70	HWY: CTH K	COUNTY: CHIPPEWA	CROSS SECTIONS: CTH K	SHEET 40	E



9

9

PROJECT NO: 8914-00-70	HWY: CTH K	COUNTY: CHIPPEWA	CROSS SECTIONS: LITTLE DRYWOOD CREEK	SHEET 41	E

FILE NAME : P:\AE\C\CHIPH\134766\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-XS - CHANNEL CHANGE 1

PLOT DATE : 7/9/2017 5:19 PM PLOT BY : JUSTIN SHAVLIK PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

970
960
950
940
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70
1000+00.00
1.5:1
4.5:1
949.40
-4.09
949.00
-3.50
949.00
3.50
949.36
4.05
970
960
950
940
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70
999+75.00
TEL
RW
949.00
-16.00
949.00
26.00
10 FT
10 FT

9

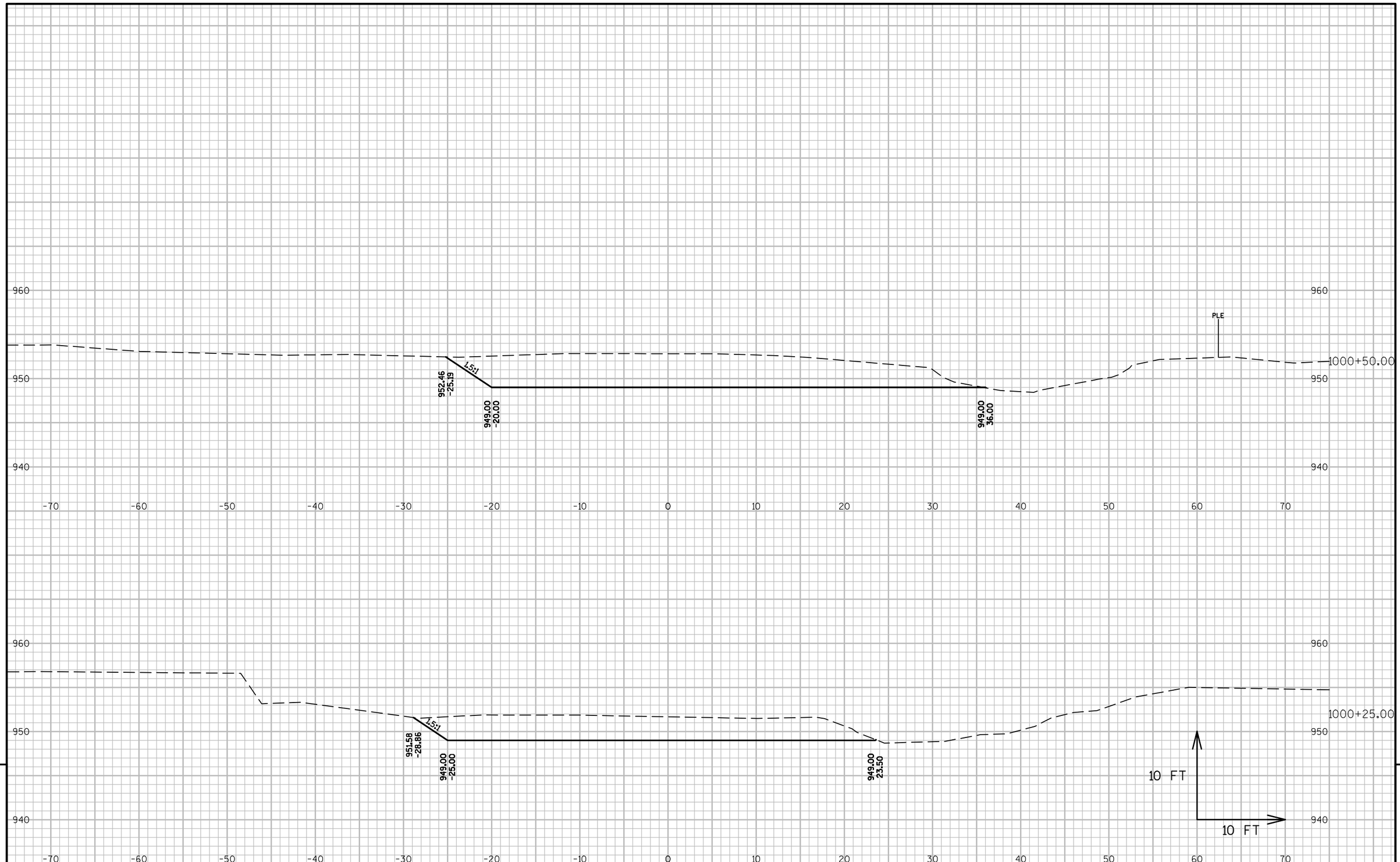
9

PROJECT NO: 8914-00-70	HWY: CTH K	COUNTY: CHIPPEWA	CROSS SECTIONS: LITTLE DRYWOOD CREEK	SHEET 42	E

FILE NAME : P:\AE\C\CHIPH\134766\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-XS - CHANNEL CHANGE 2

PLOT DATE : 7/9/2017 5:19 PM PLOT BY : JUSTIN SHAVLIK PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 8914-00-70	HWY: CTH K	COUNTY: CHIPPEWA	CROSS SECTIONS: LITTLE DRYWOOD CREEK	SHEET 43	E

FILE NAME : P:\AE\C\CHIPH\134766\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-XS - CHANNEL CHANGE 3

PLOT DATE : 7/9/2017 5:19 PM PLOT BY : JUSTIN SHAVLIK PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

END CHANNEL EXCAVATION
STA 1001+00
MATCH EXISTING

9

9

PROJECT NO: 8914-00-70	HWY: CTH K	COUNTY: CHIPPEWA	CROSS SECTIONS: LITTLE DRYWOOD CREEK	SHEET 44	E

FILE NAME : P:\AE\C\CHIPH\134766\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-XS - CHANNEL CHANGE 4

PLOT DATE : 7/9/2017 5:19 PM PLOT BY : JUSTIN SHAVLIK PLOT NAME : PLOT SCALE : 1 IN:10 FT

Notes

Wisconsin Department of Transportation

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