NWL JANUARY 2015

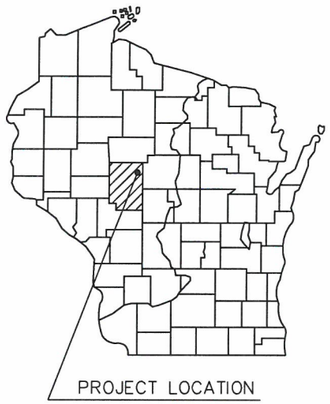
PROJECT ID: WITH: N/A 7837-00-70

COUNTY: CLARK

18

ORDER OF SHEETS

TOTAL SHEETS = 32



PROJECT LOCATION

DESIGN DESIGNATION

AADT (2014)	=	100
AADT (2034)	=	120
DHV (2034)	=	15
D (%)	=	50/50
T (% OF ADT)	=	10%
DESIGN SPEED	=	55 MPH
ESALS	=	NA

CONVENTIONAL SYMBOLS

PLAN

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

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)
- OVERHEAD LINES (OH)
- 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

T COLBY, COLBY FACTORY ROAD

KESLER CREEK BRIDGE B-10-0225

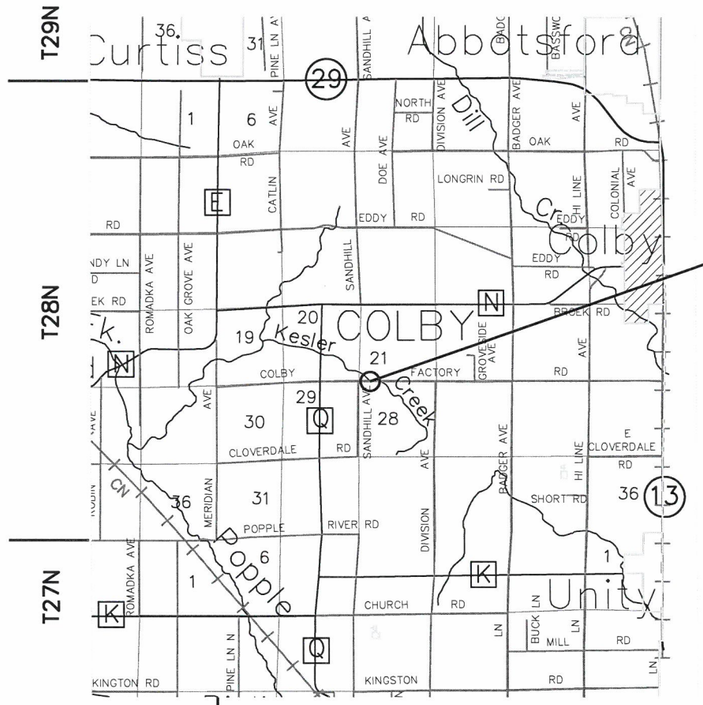
TOWN ROAD

CLARK COUNTY

STATE PROJECT NUMBER

7837-00-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7837-00-70	WISC 2015016	1



LAYOUT

SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.050 MI

END PROJECT
STA 12+00
Y - 469537.10
X - 737558.12

STRUCTURE B-10-0225

BEGIN PROJECT
STA 9+00
Y - 469531.83
X - 737258.17

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), CLARK COUNTY.

ACCEPTED FOR TOWN OF COLBY

7/18/14 Larry Oehmcke
DATE TOWN CHAIRMAN

ORIGINAL PLANS PREPARED BY

Cedar corporation

MENOMONIE - MADISON - GREEN BAY
www.cedarcorp.com
800-472-7372

WISCONSIN TROY L PETERSON E-31102 MENOMONIE WI PROFESSIONAL ENGINEER

7-16-14
DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor CEDAR CORPORATION
Designer CEDAR CORPORATION
Management Consultant KNIGHT E/A, INC.

APPROVED FOR THE DEPARTMENT

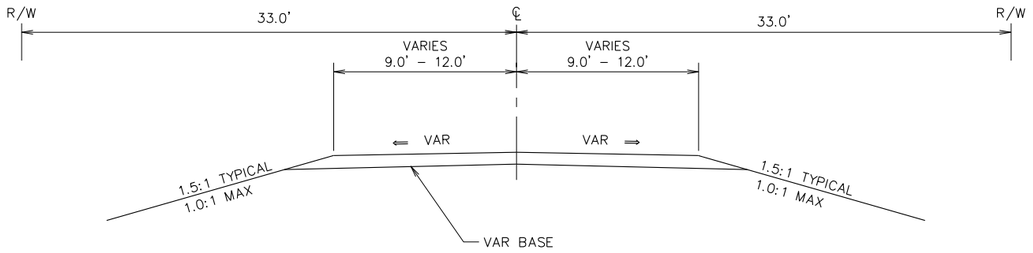
7/30/14 Ryan B McKamey
DATE (Management Consultant Signature)

E

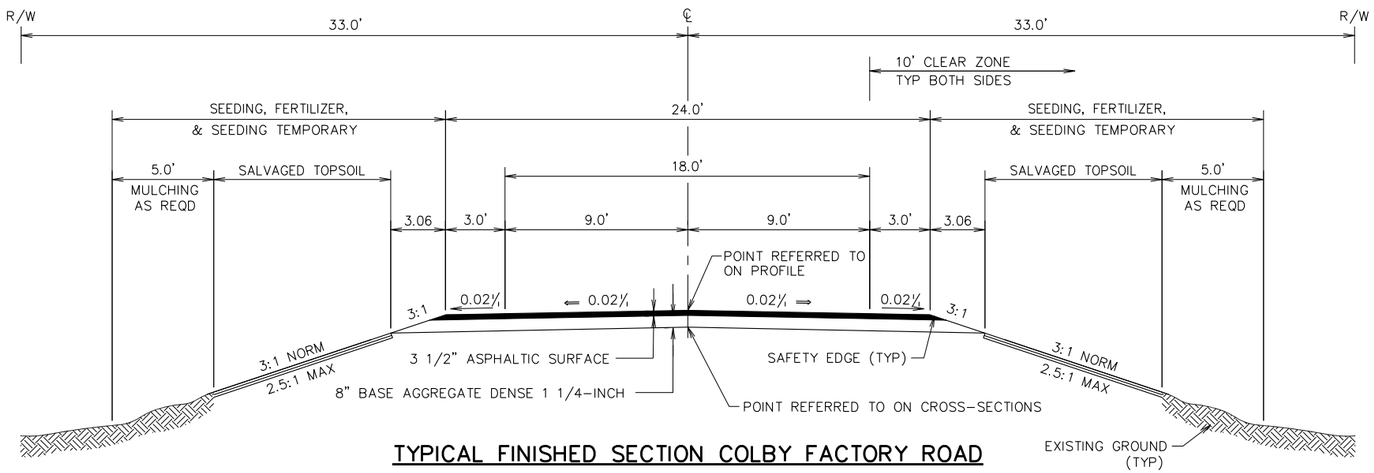
FILE NAME : I:\CLIENTS\W3916 WDOT NW REGION - KNIGHT\002 COLBY FACTORY RD KESLER CR BRIDGE\DWG\010101_TI_COLBYFACTORYRD.DWG PLOT DATE : 7/1/2014 12:54 PM PLOT BY : GUST JUNTTILA

	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
MEDIAN STRIP–TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE–TURF			.25			.27			.28			.30
			.32			.34			.36			.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 = 0.45 ACRE
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.31 ACRE



TYPICAL EXISTING SECTION COLBY FACTORY ROAD



TYPICAL FINISHED SECTION COLBY FACTORY ROAD

STA 9+00 – STA 9+81.75
STA 10+18.25 – STA 12+00

DNR LIAISON

DNR SERVICE CENTER
1300 W. CLAIREMONT STREET
EAU CLAIRE, WI 54702
(715) 839–1609
CHRIS WILLGER
christopherj.willger@wisconsin.gov

DESIGN CONSULTANT

CEDAR CORPORATION
604 WILSON AVENUE
MENOMONIE, WI 54751
(715) 235–9081
TROY PETERSON, PE
troy.peterson@cedarcorp.com

UTILITIES

CLARK ELECTRIC COOPERATIVE
124 NORTH MAIN STREET
P.O. BOX 190
GREENWOOD, WI 54337
(715) 267–6188 EXT 235
KEVIN STERLAND
ksterland@cecoop.com

FRONTIER COMMUNICATIONS
521 4th STREET
WAUSAU, WI 54401
PHONE (715) 847–1550
MOBILE (715) 216–3349
TOM LOCKE
tom.locke@ftr.com

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

** DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

GENERAL NOTES

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

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

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

THE WISCONSIN DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR A MONUMENT WHICH SHALL BE SET IN THE STRUCTURE AS DESIGNATED BY THE ENGINEER.

WisDOT STANDARD SPECIFICATION 107.8(6) AND 108.7.1 WILL APPLY FOR CONSTRUCTION NOISE.

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

SHRINKAGE IS ESTIMATED AT 25%.

THE 3½" ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 1¾" LOWER LAYER AND A 1¾" UPPER LAYER. USE 12.5 mm NOMINAL AGGREGATE FOR ASPHALT SURFACE.

BEARINGS REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), CLARK COUNTY.

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE FERTILIZED AND SEEDED AS DIRECTED BY THE ENGINEER. USE SEED MIX NO. 10.

WHEN THE QUANTITY OF THE ITEM OF BASE LAYER OR SURFACE LAYER IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OF 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 BENCHMARK IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD88).

WETLANDS ARE PRESENT WITHIN THE PROJECT LIMITS. DO NOT OPERATE EQUIPMENT OUTSIDE THE SLOPE INTERCEPTS.

STANDARD ABBREVIATIONS

ABUT	ABUTMENT
AGG	AGGREGATE
ET AL	AND OTHERS
AADT	ANNUAL AVERAGE DAILY TRAFFIC
BF	BACK FACE
BM	BENCHMARK
C/L OR ℄	CENTERLINE
△	CENTRAL ANGLE OR DELTA
CLR	CLEAR
CONC	CONCRETE
CONST	CONSTRUCTION
COR	CORNER
CMP	CORRUGATED METAL PIPE
CTH	COUNTY TRUNK HIGHWAY
CR	CREEK
CFS	CUBIC FEET/SECOND
CULV	CULVERT
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
E	EAST
EL	ELEVATION
EST	ESTIMATED
FPS	FEET PER SECOND
FE	FIELD ENTRANCE
FT	FOOT (FEET)
FTG	FOOTING
FDN	FOUNDATION
FF	FRONT FACE
IP	IRON PIN
LT	LEFT
LHF	LEFT–HAND FORWARD
L	LENGTH OF CURVE
LF	LINEAR FOOT
MAX	MAXIMUM
MI	MILE
MIN	MINIMUM
NC	NORMAL CROWN
N	NORTH
NE	NORTHEAST
NW	NORTHWEST
NO	NUMBER
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
POL	POINT ON LINE
PE	PRIVATE ENTRANCE
PL	PROPERTY LINE
PSI	POUNDS/SQUARE INCH
PROP	PROPOSED
R	RADIUS
RR	RAILROAD
REBAR	REINFORCEMENT BAR
REQD	REQUIRED
RT	RIGHT
RHF	RIGHT–HAND FORWARD
R/W	RIGHT–OF–WAY
RD	ROAD
SEC	SECTION
S	SOUTH
SE	SOUTHEAST
SW	SOUTHWEST
STH	STATE TRUNK HIGHWAY
STA	STATION
SE	SUPER ELEVATION
T	TANGENT
TEL	TELEPHONE
TEMP	TEMPORARY
TI	TEMPORARY INTEREST
TLE	TEMPORARY LIMITED EASEMENT
TL OR T/L	TRANSIT LINE
T	TRUCKS
TYP	TYPICAL
U/G	UNDERGROUND
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
V	VELOCITY
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WEST
YD	YARD

2

2

LEGEND

TEMPORARY SEED, FERTILIZER AND EROSION MAT CLASS I TYPE B

SILT FENCE

TURBIDITY BARRIER

BEGIN PROJECT
STATION 9+00

END PROJECT
STATION 12+00

KESLER CREEK

R/W

R/W

R/W

R/W

9+00

10+00

11+00

12+00

PI: 11+52.66

COLBY FACTORY ROAD

GRAVEL

PROPOSED STRUCTURE
B-10-0225

EXISTING STRUCTURE
P-10-0117
TO BE REMOVED

PROJECT NO: 7837-00-70	HWY: COLBY FACTORY ROAD	COUNTY: CLARK	EROSION CONTROL	SHEET 3 E

FILE NAME : I:\CLIENTS\W3916 WDOT NW REGION - KNIGHT\002 COLBY FACTORY RD KESLER CR BRIDGE\DWG\022001_EC2_39160002.DWG PLOT DATE : 7/22/2014 5:14 PM PLOT BY : PAULETTE FENSKE

BENCHMARKS			
NO	STA	DESCRIPTION	ELEV
1	10+14±	11.9' LT SET COTTON SPINDLE ON NE ABUTMENT	1313.74
2	11+00±	33' LT SET COTTON SPINDLE IN POWER POLE	1312.52
3	7+76±	32.5' LT SET COTTON SPINDLE IN POWER POLE	1312.75

COORDINATES				
DESCRIPTION	STATION	LOCATION	NORTHING	EASTING
CP100	7+95.15	11.6' RT OF C/L	469518.237	737153.560
PI	8+47.33	C/L	469530.833	737205.506
BEGIN PROJECT	9+00	C/L	469531.831	737258.167
PI	11+52.66	C/L	469536.619	737510.784
END PROJECT	12+00	C/L	469537.103	737558.118
CP101	12+09.17	12.8' RT OF C/L	469524.407	737567.414

BEGIN PROJECT
STATION 9+00

END PROJECT
STATION 12+00

BM3

BM2

BM1

KESLER CREEK

PI: 8+47.33

PI: 11+52.66

7+00

N88° 54' 06.81"E

8+00

9+00

10+00

N88° 54' 50.72"E

11+00

12+00

N89° 24' 51.92"E

13+00

23.95'

25.89'

COLBY FACTORY ROAD

GRAVEL

15.98'

16.16'

18.23'

18.34'

CP100
SET 3/4" REBAR

CP101
SET 3/4" REBAR

PROPOSED STRUCTURE
B-10-0225

EXISTING STRUCTURE
P-10-0117
TO BE REMOVED

NOTE: ALL TIES ARE 3/4" REBAR

PROJECT NO: 7837-00-70	HWY: COLBY FACTORY ROAD	COUNTY: CLARK	REFERENCE TIES	SHEET 4 E

DATE 15OCT14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	7837-00-70 QUANTITY
0010	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STATION) 01. 10+00	LS	1.000	1.000
0020	205.0100	EXCAVATION COMMON	CY	235.000	235.000
0030	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-10-0225	LS	1.000	1.000
0040	210.0100	BACKFILL STRUCTURE	CY	130.000	130.000
0050	213.0100	FINISHING ROADWAY (PROJECT) 01. 7837-00-70	EACH	1.000	1.000
0060	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	353.000	353.000
0070	465.0105	ASPHALTIC SURFACE	TON	144.000	144.000
0080	502.0100	CONCRETE MASONRY BRIDGES	CY	106.000	106.000
0090	502.3200	PROTECTIVE SURFACE TREATMENT	SY	126.000	126.000
0100	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	4,040.000	4,040.000
0110	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	14,760.000	14,760.000
0120	513.4060	RAILING TUBULAR TYPE M (STRUCTURE) 01. B-10-0225	LS	1.000	1.000
0130	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	12.000	12.000
0140	550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	300.000	300.000
0150	606.0300	RIPRAP HEAVY	CY	70.000	70.000
0160	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	140.000	140.000
0170	619.1000	MOBILIZATION	EACH	1.000	1.000
0180	625.0500	SALVAGED TOPSOIL	SY	780.000	780.000
0190	627.0200	MULCHING	SY	300.000	300.000
0200	628.1504	SILT FENCE	LF	565.000	565.000
0210	628.1520	SILT FENCE MAINTENANCE	LF	765.000	765.000
0220	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	3.000	3.000
0230	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	3.000	3.000
0240	628.2004	EROSION MAT CLASS I TYPE B	SY	780.000	780.000
0250	628.6005	TURBIDITY BARRIERS	SY	129.000	129.000
0260	629.0210	FERTILIZER TYPE B	CWT	0.600	0.600
0270	630.0110	SEEDING MIXTURE NO. 10	LB	22.000	22.000
0280	630.0200	SEEDING TEMPORARY	LB	22.000	22.000
0290	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	4.000	4.000
0300	637.2230	SIGNS TYPE II REFLECTIVE F	SF	12.000	12.000
0310	638.2602	REMOVING SIGNS TYPE II	EACH	4.000	4.000
0320	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	4.000	4.000
0330	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0340	643.0100	TRAFFIC CONTROL (PROJECT) 01. 7837-00-70	EACH	1.000	1.000
0350	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	1,062.000	1,062.000
0360	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	2,124.000	2,124.000
0370	643.0900	TRAFFIC CONTROL SIGNS	DAY	826.000	826.000
0380	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	150.000	150.000
0390	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	266.000	266.000
0400	650.5000	CONSTRUCTION STAKING BASE	LF	266.000	266.000
0410	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-10-0225	LS	1.000	1.000
0420	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 7837-00-70	LS	1.000	1.000
0430	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	266.000	266.000
0440	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	636.000	636.000
0450	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	1,200.000	1,200.000
0460	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	300.000	300.000

Division	From / To Station	Location	205.0100 Common Excavation (CY) **P** Cut (1)	Available Material (CY) (2)	Unexpanded Fill	Expanded Fill Factor 1.25	Mass Ordinate + / - (3)	208.0100 Borrow (CY)	Waste (CY)
1	9+00 - 9+81	MAINLINE WEST	79	79	34	43	37	0	37
Division 1 Subtotal			79	79	34	43	37	0	37
2	10+18 - 12+00	MAINLINE EAST	156	156	102	128	28	0	28
Division 2 Subtotal			156	156	102	128	28	0	28
Grand Total			235	235	137	171		0	64
		Total Common Ex	235					0	64

1) Cut includes Salvaged/Unusuable Pavement Material
2) Available Material = Cut - Salvaged/Unusuable Pavement Material
3) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division and is catagorized as waste.
Minus indicates a shortage of material within the Division and is catagorized as borrow Item Number 208.0100.

ASPHALTIC SURFACE

STATION - STATION	LOCATION	465.0105 TON
9+00 - 9+81	MAINLINE WEST	45
10+18 - 12+00	MAINLINE EAST	99
	TOTAL	144

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0120 1 1/4 - INCH TON
9+00 - 9+81	MAINLINE	109
10+18 - 12+00	MAINLINE	244
TOTAL		353

FINISHING ROADWAY

STATION - STATION	LOCATION	213.0100 EACH
9+00 - 12+00	MAINLINE	1

FIELD OFFICE TYPE B

PROJECT	LOCATION	642.5001 EACH
7837-00-70	MAINLINE	1

MOBILIZATION

PROJECT	LOCATION	619.1000 EACH
CATEGORY 0020	MAINLINE	0.77
7837-00-70	MAINLINE	0.23
TOTAL		1

ALL ITEMS ARE CATEGORY 0010
UNLESS OTHERWISE NOTED.

ALL ITEMS ARE CATEGORY 0010
UNLESS OTHERWISE NOTED.

3

EROSION CONTROL ITEMS

STATION - STATION	LOCATION	630.0200 SEEDING TEMPORARY LB	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS I TYPE B SY	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH
9+00 - 9+81	LT	3	--	--	94	--	--
9+00 - 9+81	RT	1	--	--	25	--	--
10+18 - 12+00	LT	9	--	--	324	--	--
10+18 - 12+00	RT	9	--	--	337	--	--
9+00 - 12+00	MAINLINE	--	565	565	--	3	3
UNDISTRIBUTED		--	--	200	--	--	--
TOTAL		22	565	765	780	3	3

RESTORATION ITEMS

STATION - STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0110 SEEDING MIXTURE NO. 10 LB
9+00 - 9+81	LT	94	--	0.1	3
9+00 - 9+81	RT	25	--	0.1	1
10+18 - 12+00	LT	324	--	0.2	9
10+18 - 12+00	RT	337	--	0.2	9
UNDISTRIBUTED		--	300	--	--
TOTAL		780	300	0.6	22

3

SIGNING QUANTITIES

LOCATION	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	DESCRIPTION
NW BRIDGE CORNER	3.00	1	1	1	W5-52 L
SW BRIDGE CORNER	3.00	1	1	1	W5-52 R
NE BRIDGE CORNER	3.00	1	1	1	W5-52 R
SE BRIDGE CORNER	3.00	1	1	1	W5-52 L
TOTAL	12.00	4	4	4	

TURBIDITY BARRIER

LOCATION	ABUTMENT	628.6005 SY
MAINLINE	WEST	62
MAINLINE	EAST	67
TOTAL		129

TRAFFIC CONTROL

LOCATION	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.0100 TRAFFIC CONTROL 7837-00-70 EACH
PROJECT 7837-00-70	1062	2124	826	1
TOTAL	1062	2124	826	1

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF	CATEGORY 0020 650.6500 STRUCTURE LAYOUT B-10-0225 LS
9+00 - 12+00	MAINLINE	266	266	1	266	1
TOTAL		266	266	1	266	1

WOODED

DUANE & JOANN RUNGE
W662 COUNTY ROAD N

DUANE & JOANN RUNGE
W662 COUNTY ROAD N

KESLER CREEK

CLARK ELECTRIC CO-OP

SLOPE INTERCEPT (TYP)

BM3

BM2

BM1

R/W

33'

33'

R/W

MATCH EXISTING GRADE

MATCH EXISTING GRADE

PI: 8+47.33

PI: 11+52.66

7+00

8+00

N88° 54' 06.81"E

N88° 54' 50.72"E

9+00

10+00

11+00

12+00

N89° 24' 51.92"E

13+00

12'

12'

12'

12'

GRAVEL

COLBY FACTORY ROAD

ASPHALT

ASPHALT

GRAVEL

FENCE

PROPOSED STRUCTURE
B-10-0225

EXISTING STRUCTURE
P-10-0117
TO BE REMOVED

FRONTIER COMMUNICATIONS

ION & IDA ZIMMERMAN
W1719 COLBY FACTORY ROAD

ION & IDA ZIMMERMAN
W1719 COLBY FACTORY ROAD

WOODED

BEGIN PROJECT

STA 9+00.00
Y = 469531.83
X = 737258.17

END PROJECT

STA 12+00.00
Y = 469537.10
X = 737558.12

SCALE:
0 10 20 40

NET CENTERLINE LENGTH STA 9+00 TO 12+00 = 266 LF

5

5

BENCHMARKS			
NO	STA	DESCRIPTION	ELEV
1	10+14±	11.9' LT SET COTTON SPINDLE ON NE ABUTMENT	1313.74
2	11+00±	33' LT SET COTTON SPINDLE IN POWER POLE	1312.52
3	7+76±	32.5' LT SET COTTON SPINDLE IN POWER POLE	1312.75

EARTHWORK SUMMARY

MAINLINE	STATION 9+00 – 9+81	STATION 10+18 – 12+00
COMMON	79 CY	156 CY
FILL	34 CY	102 CY
EXPANSION	25 %	25 %
FILL ADJUSTED	43 CY	128 CY
USEABLE MATERIAL	37 CY	28 CY
BORROW	0 CY	0 CY
WASTE	37 CY	28 CY

1335
1330
1325
1320
1315
1310
1305
1300

PVI STA = 9+00
PVI ELEV = 1316.05

PVC STA = 9+60.00
PVC EL = 1315.510

PVI STA = 10+50.00
PVI ELEV = 1314.70
A.D. = 1.48%
K = 121.22
180.00' VC
LP STA = 10+69.09
LP ELEV = 1315.02

PVT = 11+40.00
PVT EL = 1315.23

PVI STA = 12+00
PVI ELEV = 1315.58

HIGH WATER 100
EL 1316.20

-0.90%

0.58%

OBSERVED WATER
EL 1309.3
(10-1-13)

STA 10+00
REMOVE STRUCTURE P-10-0117
SINGLE SPAN STEEL DECK GIRDER BRIDGE
30.5' OVERALL LENGTH X 17.8' CLEAR WIDTH

STA 10+00
STRUCTURE B-10-0225 REQD
SINGLE SPAN CONCRETE FLAT SLAB BRIDGE
36.5' OVERALL LENGTH X 24.0' CLEAR WIDTH

PROPOSED ELEVATION @ CL
EXISTING ELEVATION @ CL

1317.2	1316.6	1316.3	1316.0	**1316.05**	1315.8	**1315.60**	1308.0	**1315.22**	1314.9	**1315.03**
1315.1	**1315.06**	1315.3	**1315.28**	1315.6	1315.8					

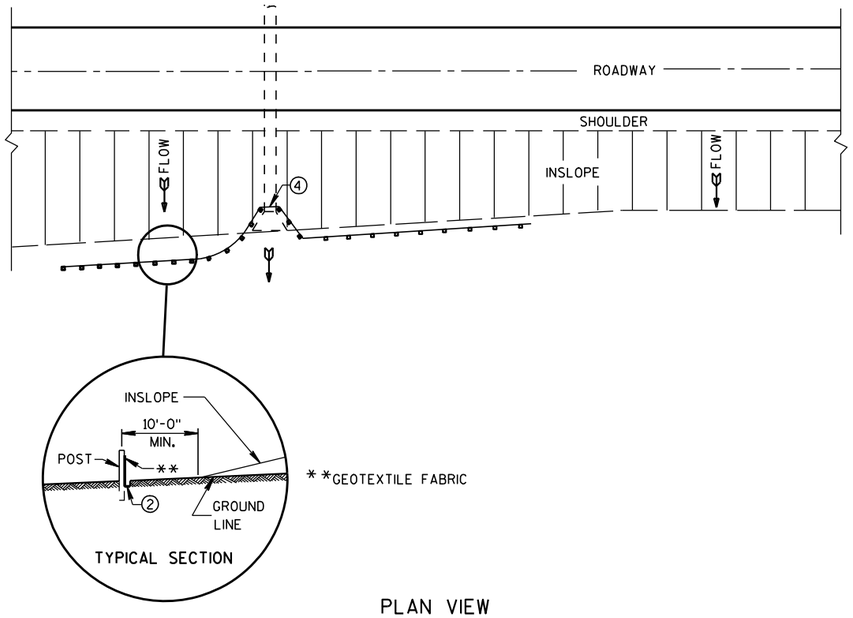
8+00 9+00 10+00 11+00 12+00

PROJECT NO: 7837-00-70	HWY: COLBY FACTORY ROAD	COUNTY: CLARK	PLAN AND PROFILE	SHEET 8	E

Standard Detail Drawing List

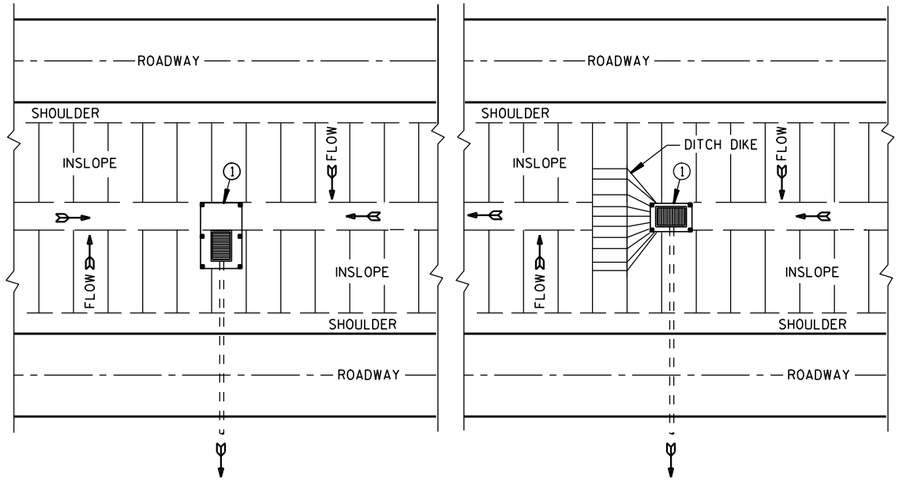
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
14B29-01	SAFETY EDGE
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C06-07	SIGNING & MARKING FOR TWO LANE BRIDGES

6



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



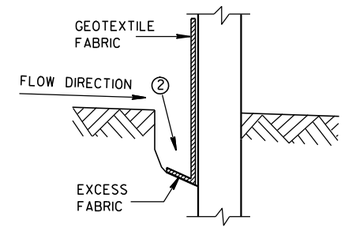
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

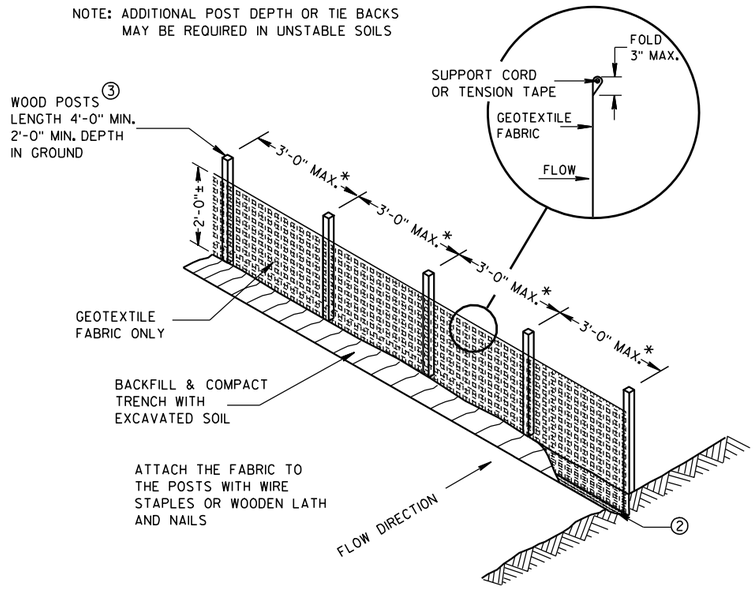
GENERAL NOTES

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

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

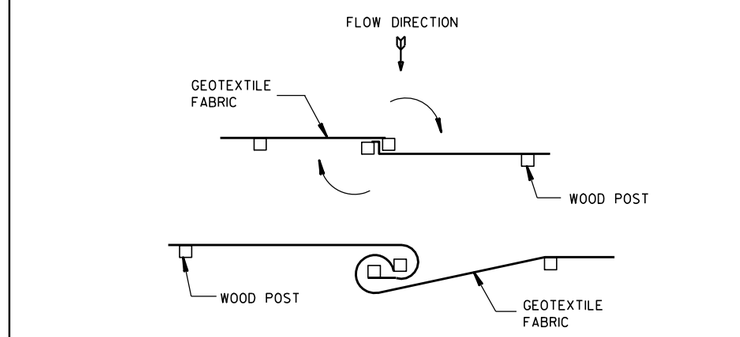


TRENCH DETAIL

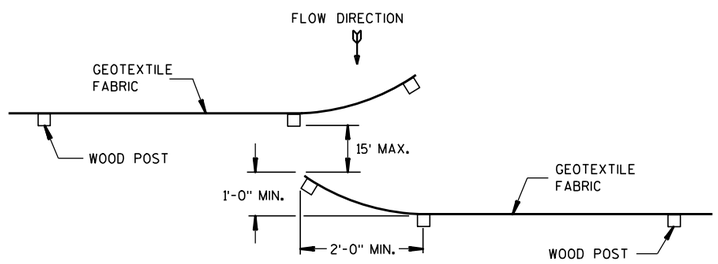


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

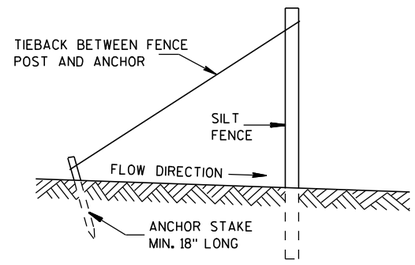


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

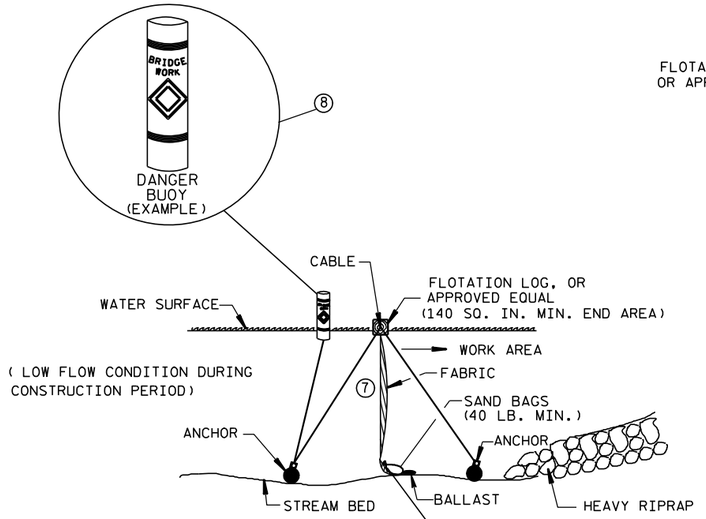
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

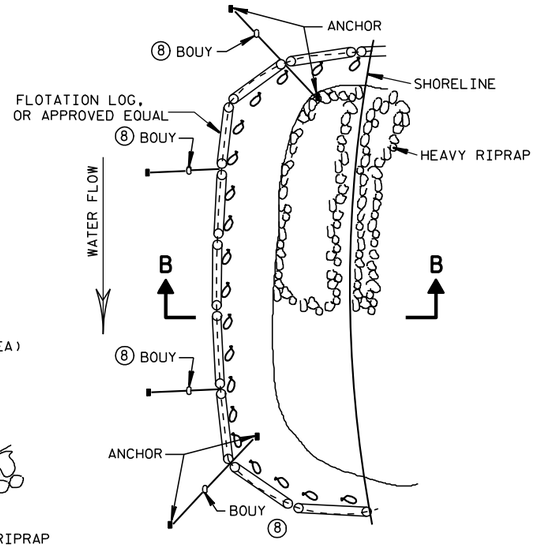
S.D.D. 8 E 9-6

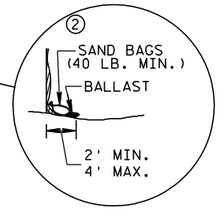
6

S.D.D. 8 E 9-6

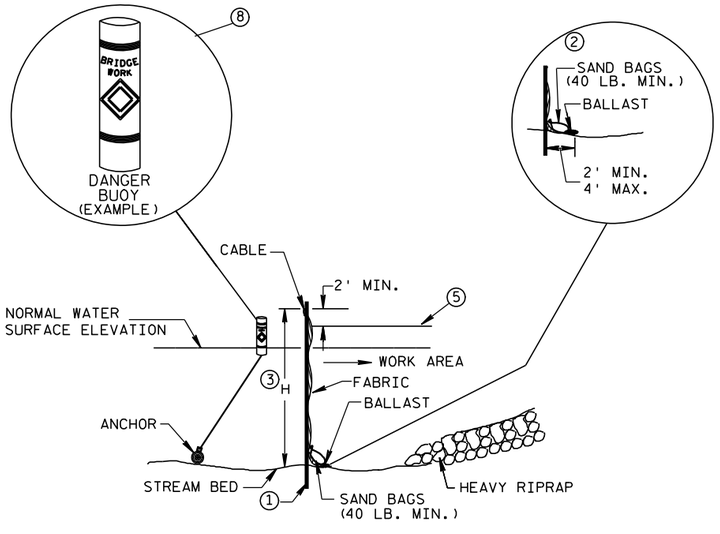


SECTION B-B

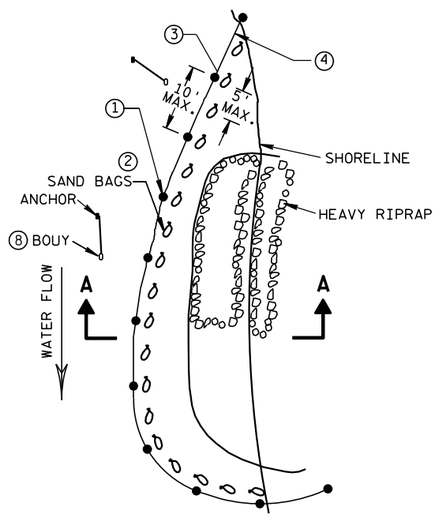




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



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.

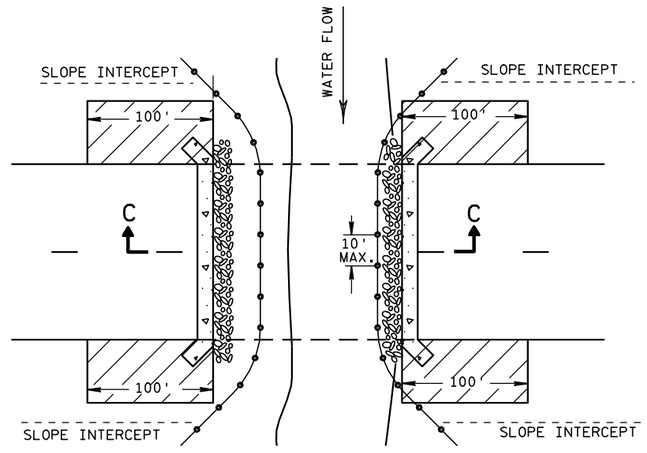
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

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.

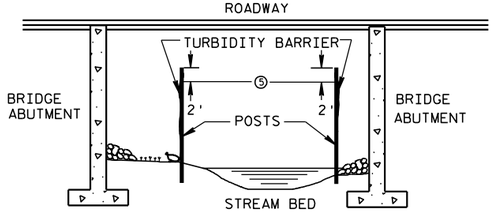
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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

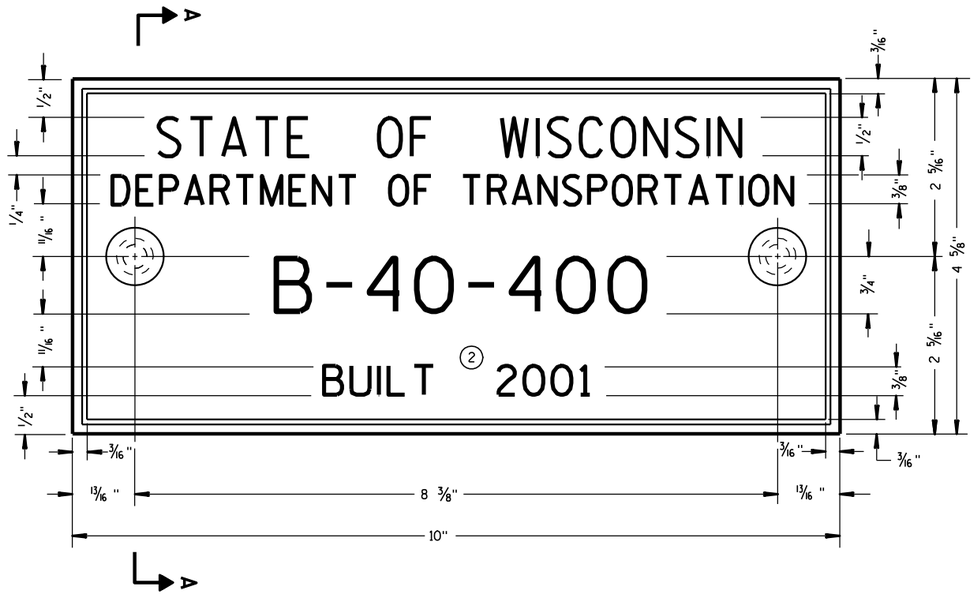
TURBIDITY BARRIER

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)

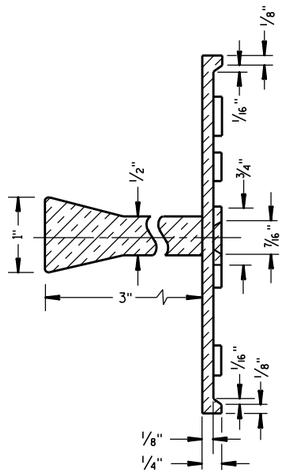
GENERAL NOTES

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.

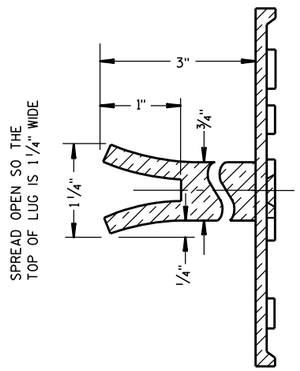
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(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

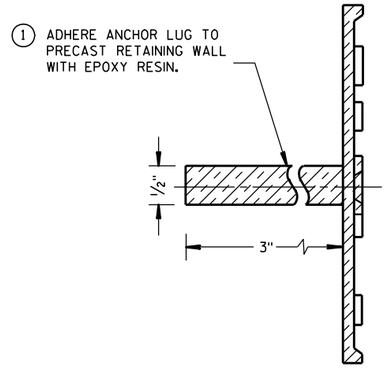
COUNTY NO.

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

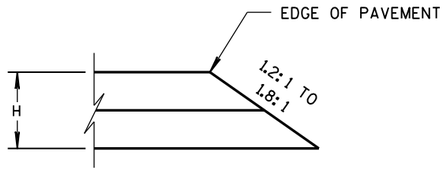
3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOPMENT ENGINEER

FHWA

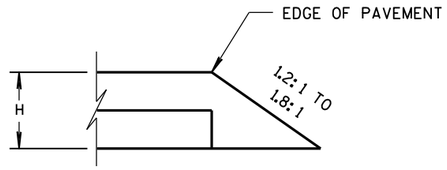
6

S.D.D. 12 A 3-10



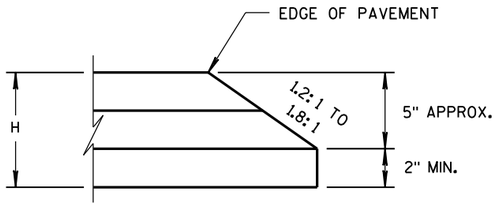
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



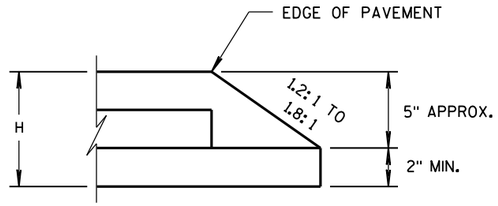
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

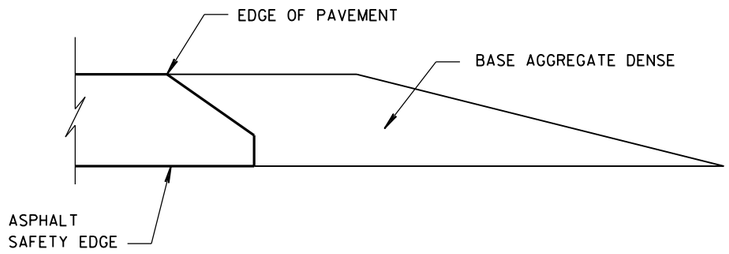
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

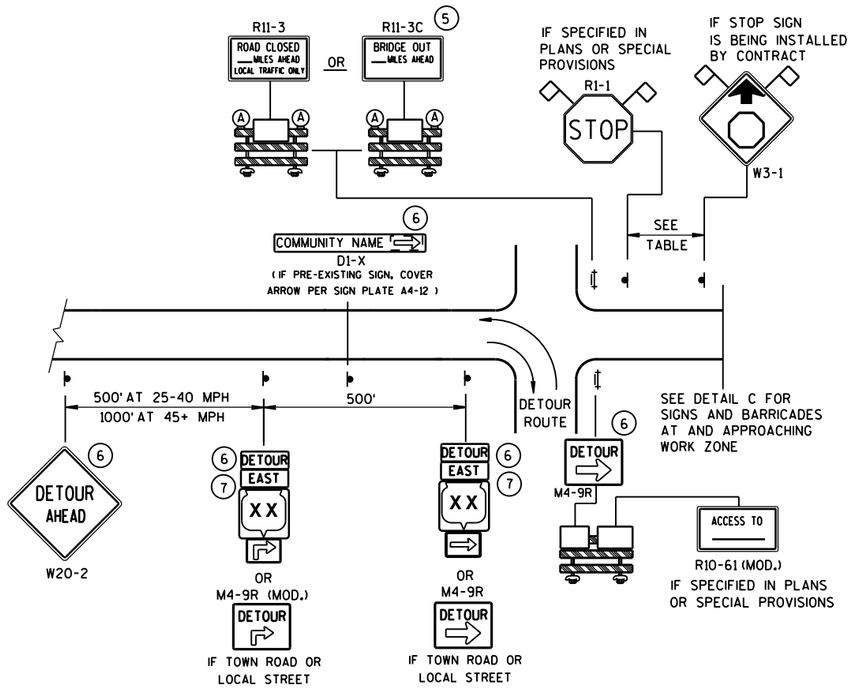
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

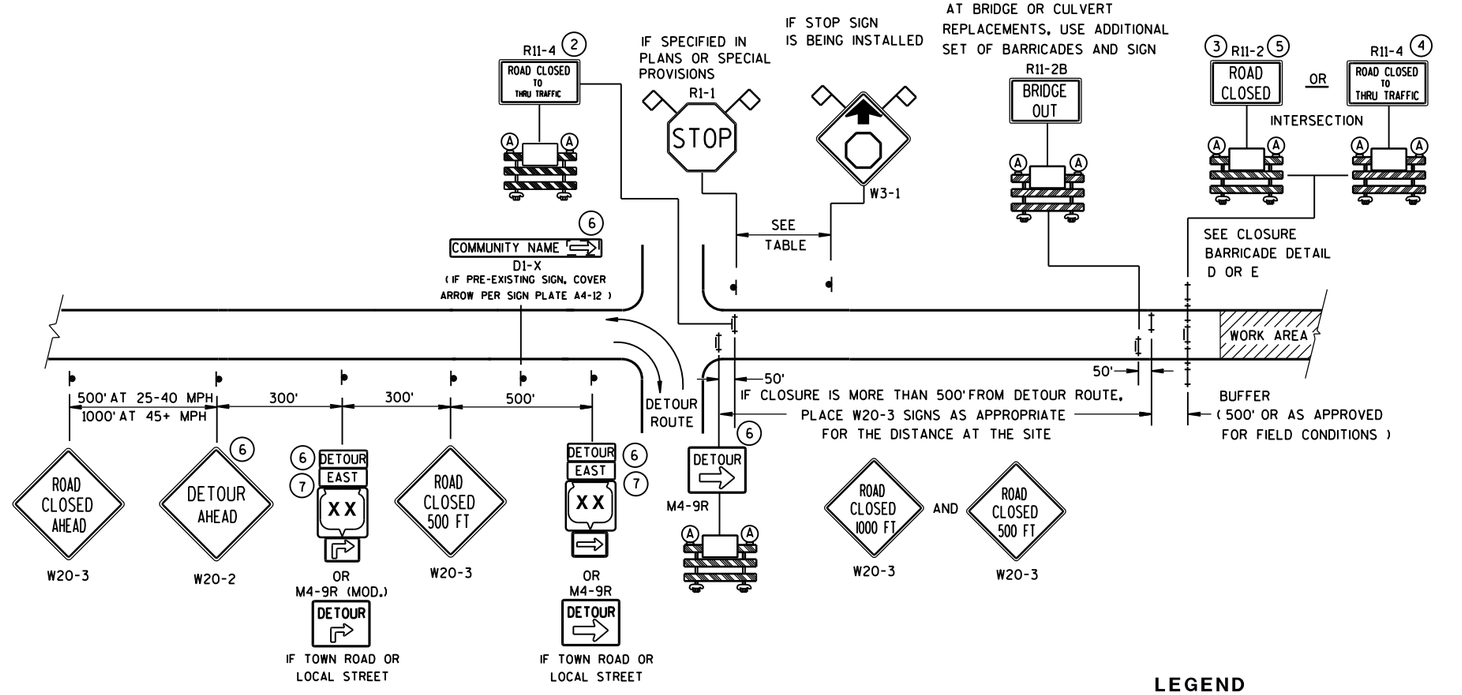
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



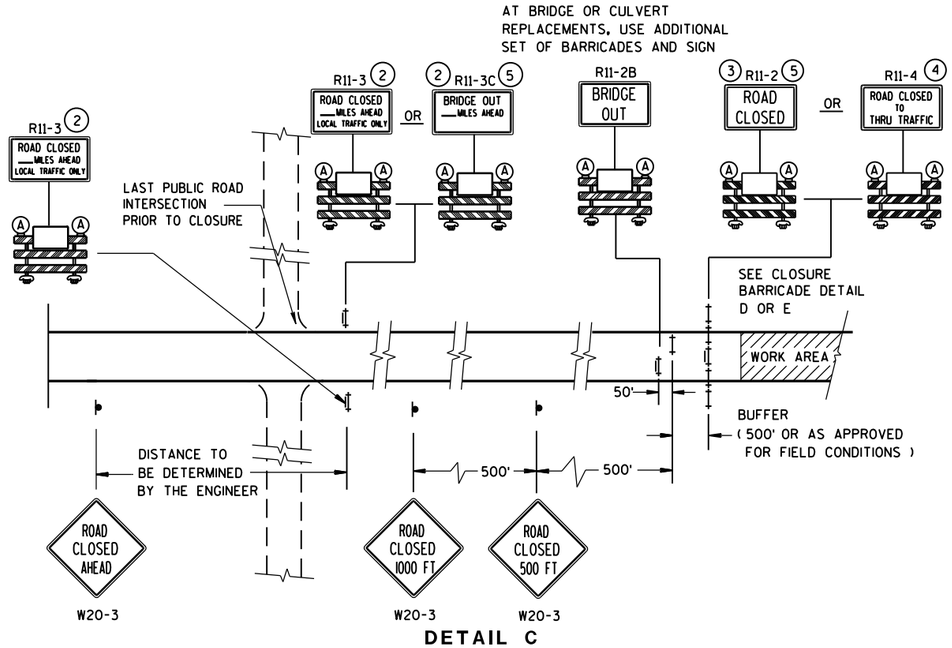
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN 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

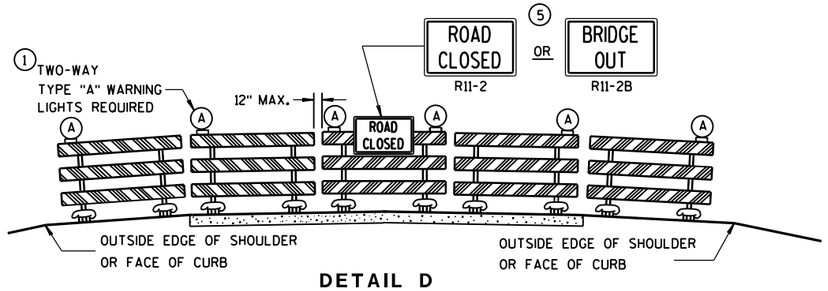
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 DATE — /S/ Travis Feltes STATE TRAFFIC ENGINEER — DESIGN

FHWA

6

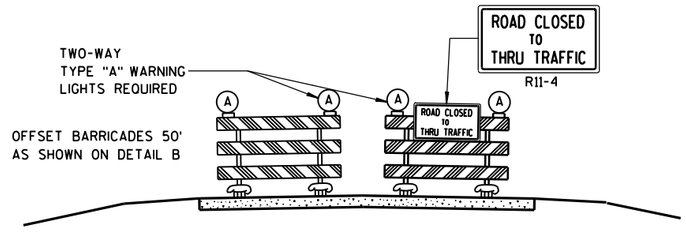
S.D.D. 15 C 2-5a



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.

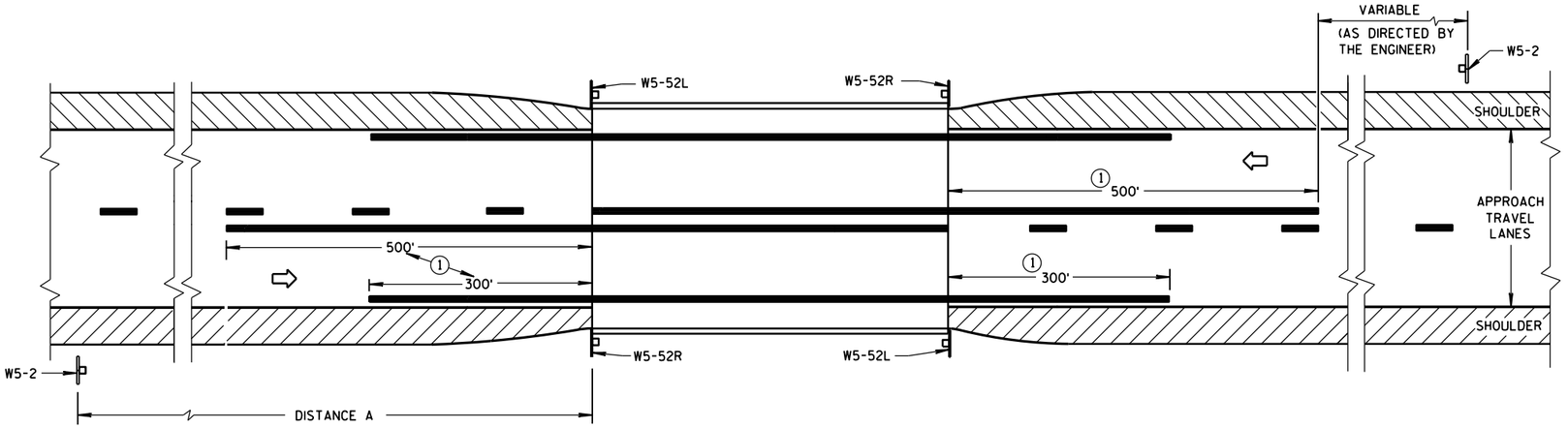
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 2-5b



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.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

(1) MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.

(2) FACE OF OBJECT MARKERS W5-52R, AND W5-52L SHALL BE COVERED WITH TYPE F REFLECTIVE SHEETING.

(3) LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.

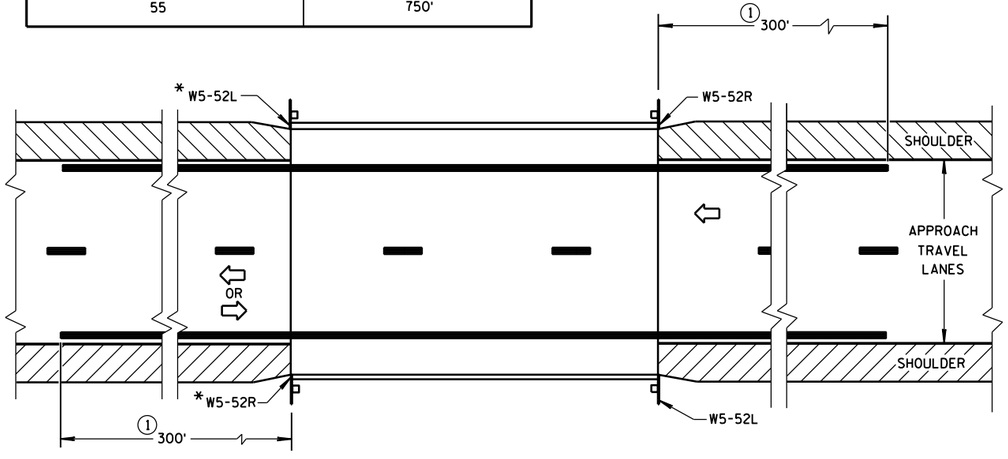
DISTANCE TABLE

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

SITUATION 1

WARRANTING CRITERIA:

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

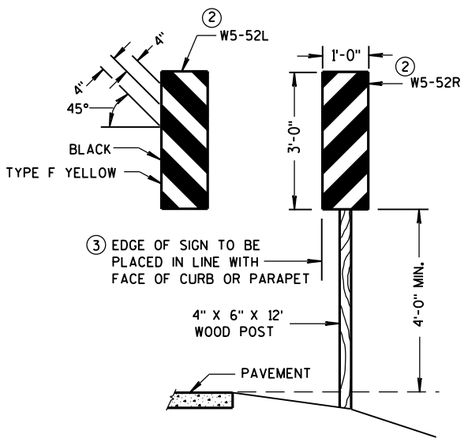


*OMIT ON ONE-WAY TRAVELLED WAYS

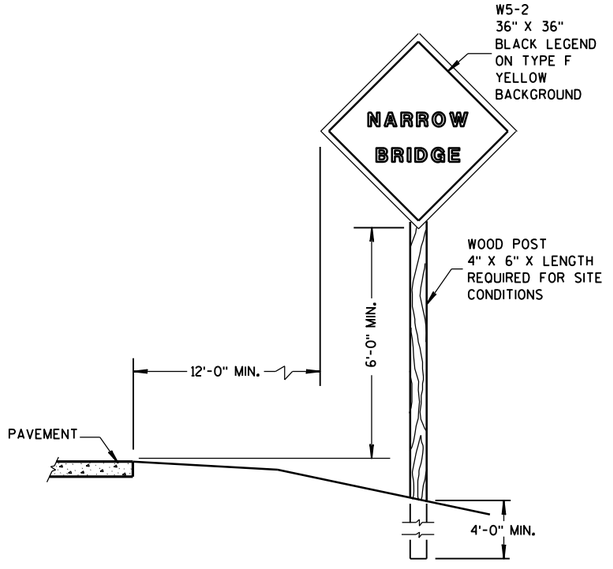
SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.



OBJECT MARKER PLACEMENT



SIGN PLACEMENT

SIGNING & MARKING
FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

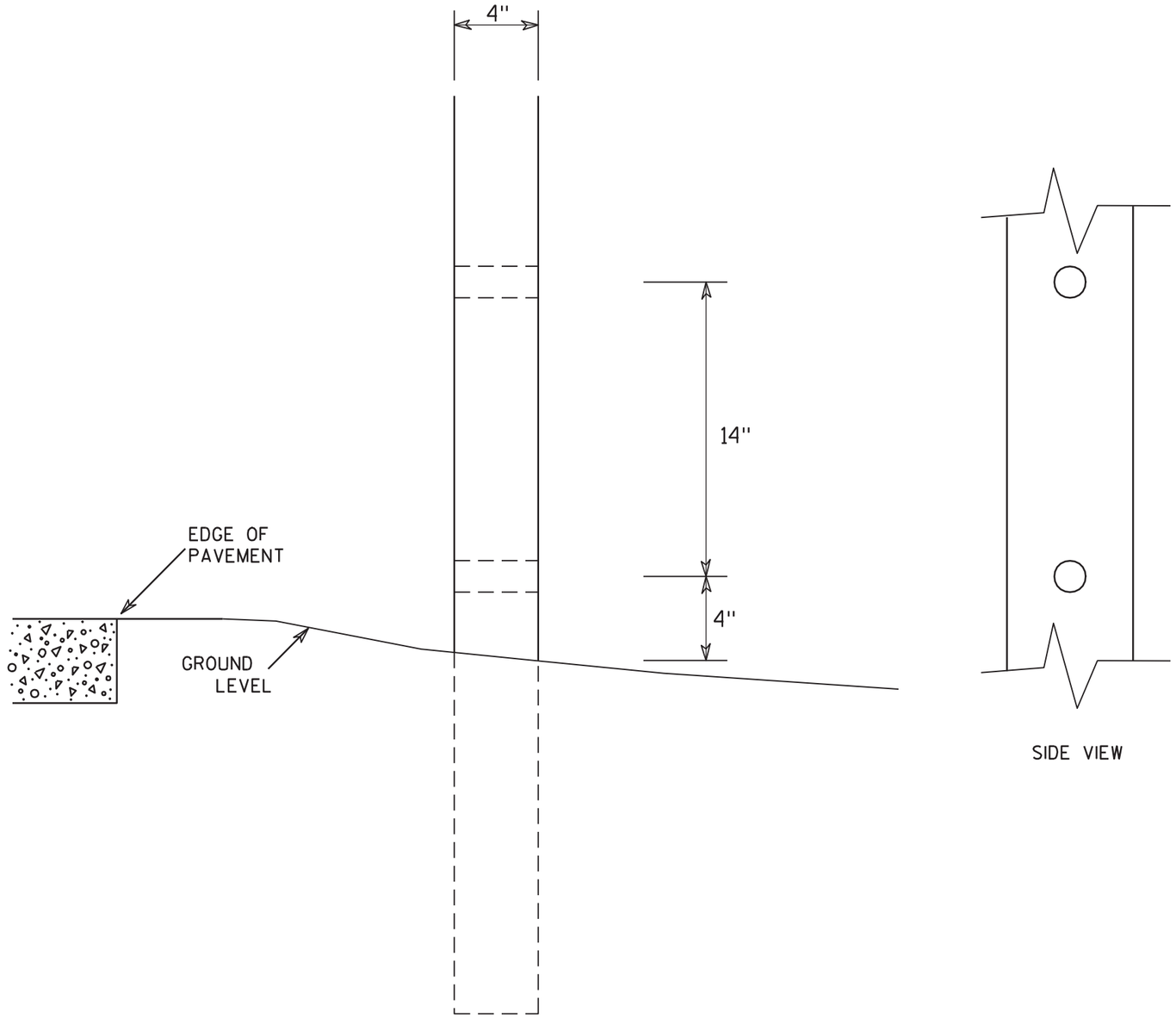
3-2014 DATE

/S/ Travis Feltes STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 6-7



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.

7

7

4 X 6 WOOD POST MODIFICATIONS

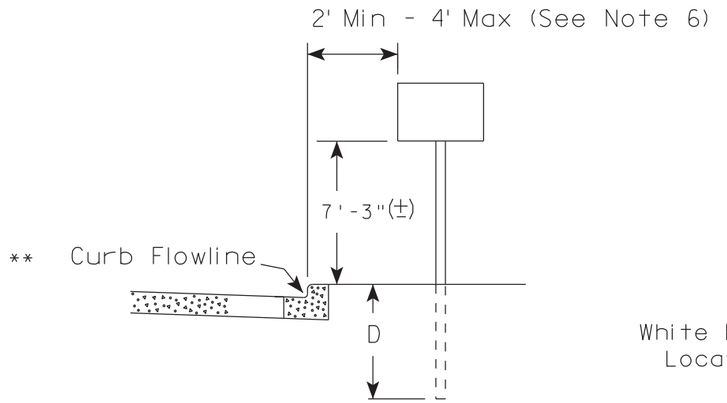
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

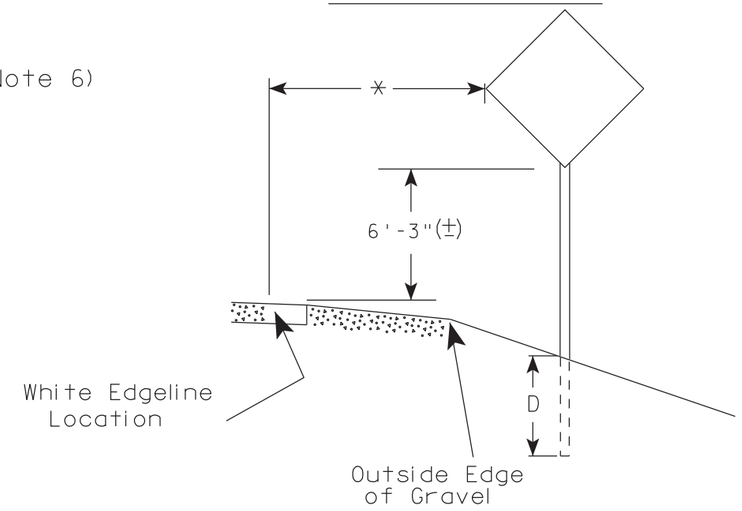
DATE 3/27/97 PLATE NO. A4-11.2

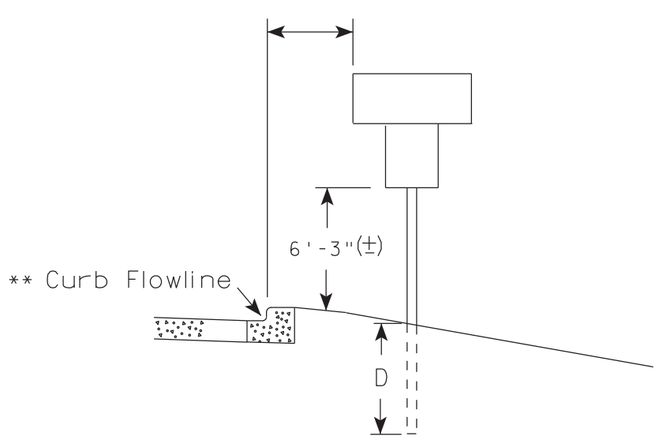
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 17	E

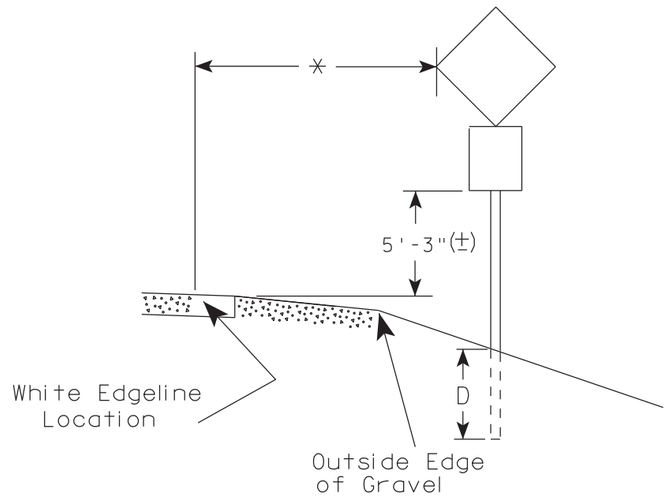
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

1. Signs wider than 4 feet, 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 (A4-5) 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 stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed 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) & End of Rod Markers (W5-56 & W5-56A) 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'

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

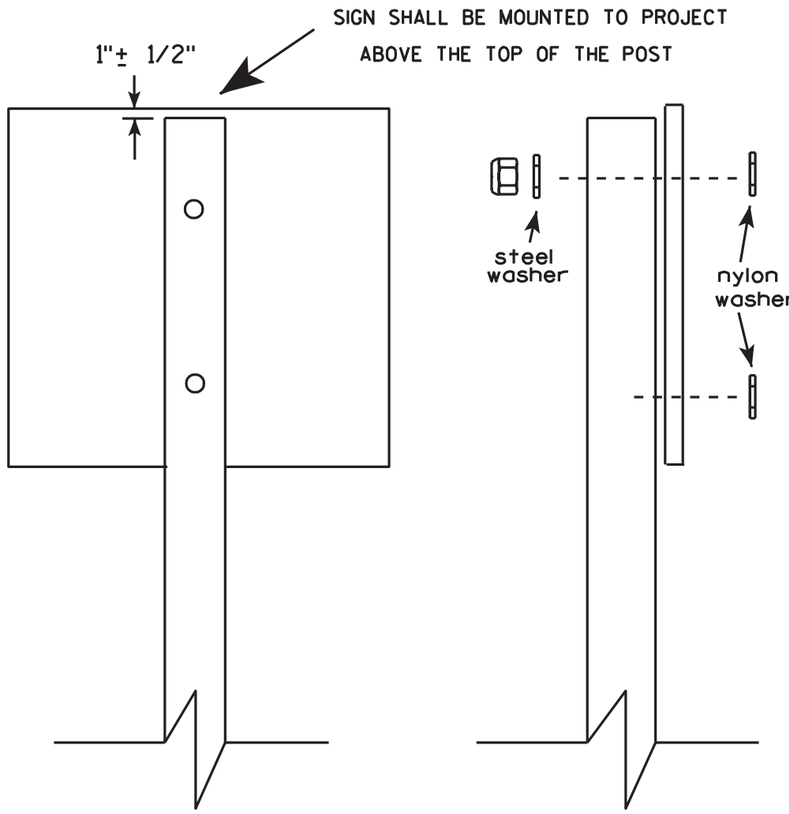
WISCONSIN DEPT OF TRANSPORTATION

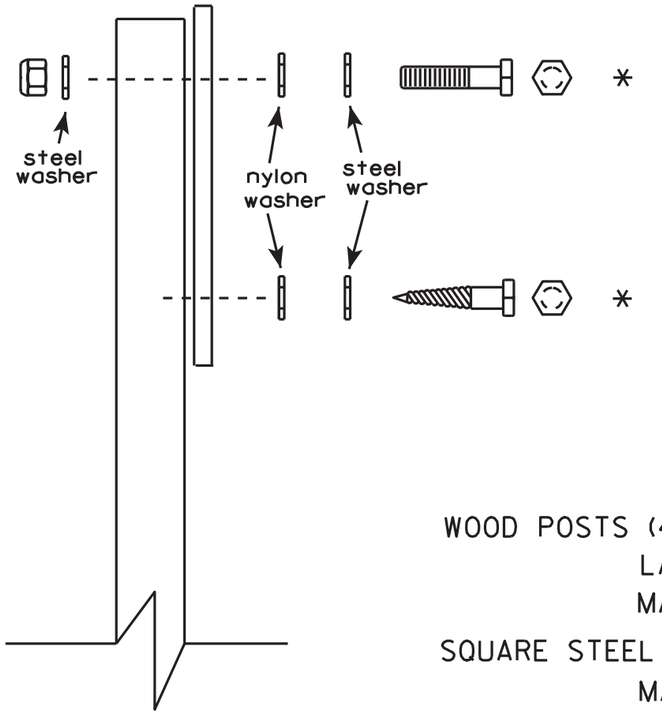
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-3.18

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A43.DGN PLOT DATE : 30-SEP-2013 13:25 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 99.237937:1.000000 WISDOT/CADDS SHEET 42





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

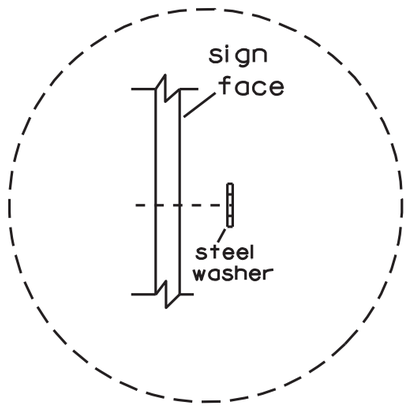
a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



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

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

ATTACHMENT OF SIGNS TO POSTS

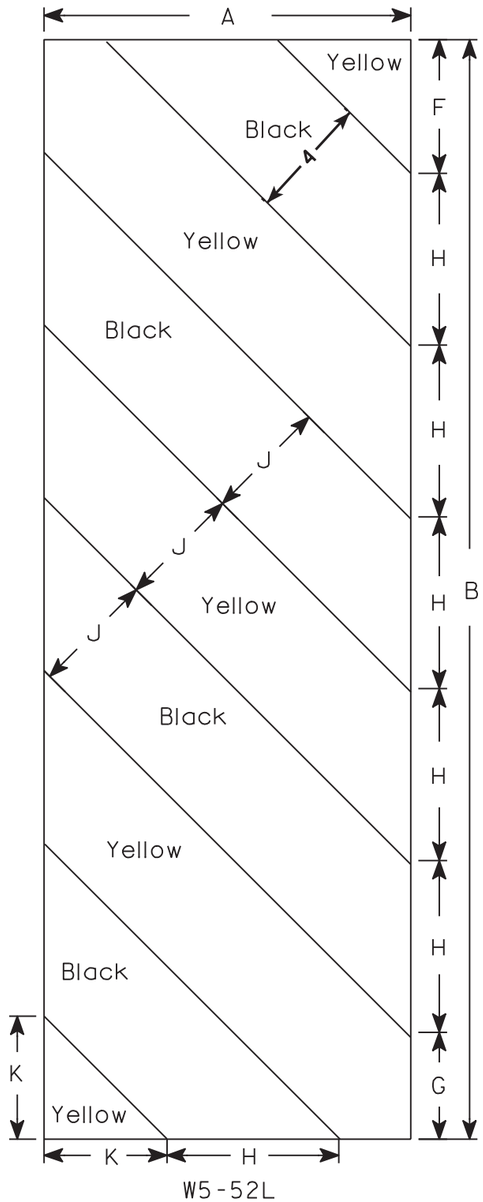
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

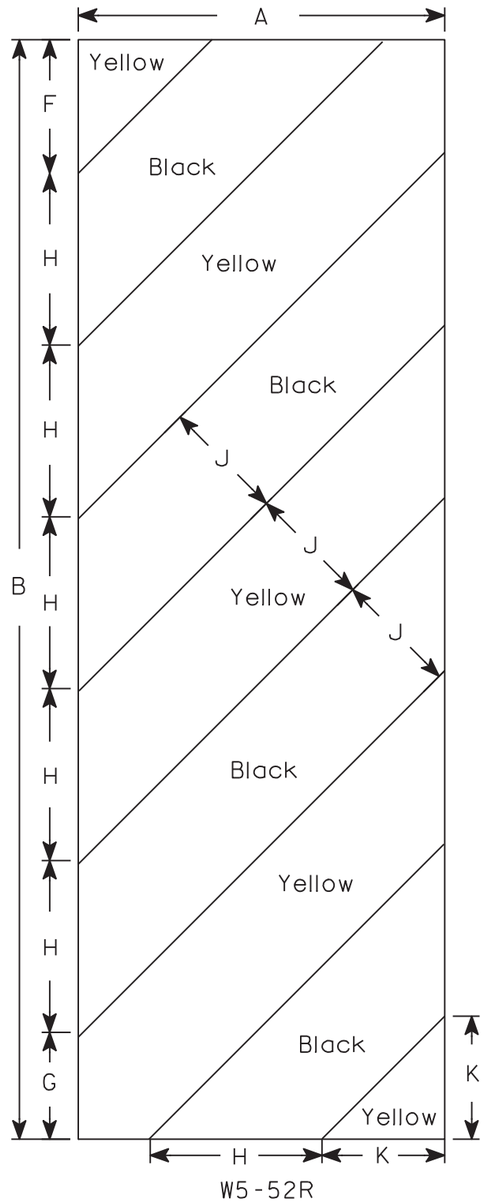
DATE 3/23/10 PLATE NO. A4-8.7

PROJECT NO:				SHEET NO: 19	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\A48.DGN PLOT DATE : 23-MAR-2010 10:15 PLOT BY : ditjph
WISDOT/CADDS SHEET 42



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

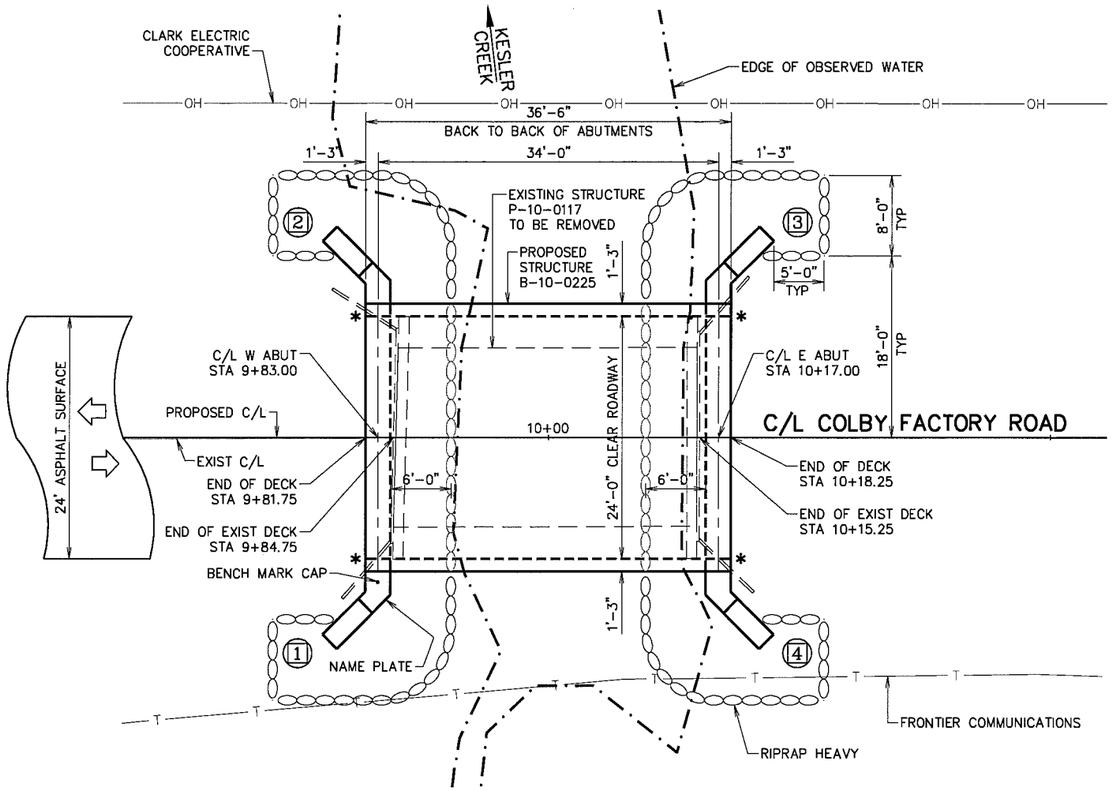
W5-52L & W5-52R

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: 20 | E

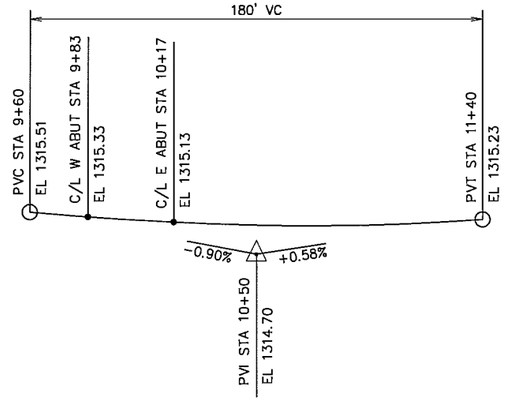


PLAN

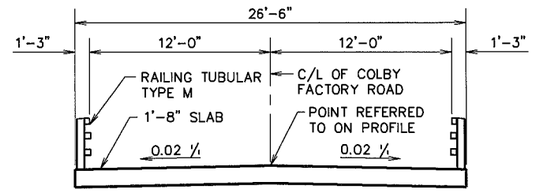
SINGLE SPAN CONCRETE FLAT SLAB BRIDGE

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

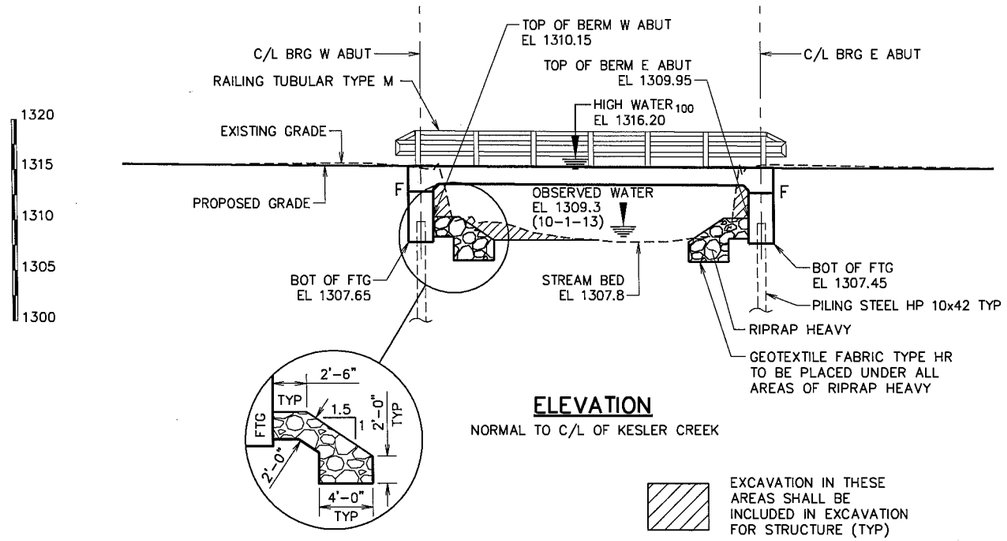
(n) INDICATES WING NUMBER



PROPOSED GRADE LINE



CROSS-SECTION THRU ROADWAY



ELEVATION

NORMAL TO C/L OF KESLER CREEK

EXCAVATION IN THESE AREAS SHALL BE INCLUDED IN EXCAVATION FOR STRUCTURE (TYP)

DESIGN DATA

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

LIVE LOAD:

DESIGN LOADING	HL-93
INVENTORY RATING FACTOR	RF = 1.11
OPERATING RATING FACTOR	RF = 1.44
WISCONSIN STANDARD PERMIT VEHICLE (Wis-SPV)	250 KIPS

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY	
SLAB	f'c = 4,000 PSI
ALL OTHER	f'c = 3,500 PSI
BAR STEEL REINFORCEMENT, GRADE 60	fy = 60,000 PSI

HYDRAULIC DATA

100 YEAR FREQUENCY	
DRAINAGE AREA	4.0 SQ MILES
Q_{100} TOTAL	850 CFS
THRU STRUCTURE	699 CFS
OVERFLOW	151 CFS
VELOCITY - THRU STRUCTURE	5.14 FPS
WATERWAY AREA THRU STRUCTURE	136 SQ FT
HIGH WATER $_{100}$ ELEVATION	1316.20 FT
SCOUR CRITICAL CODE = 5	
2 YEAR FREQUENCY	
Q_2 TOTAL	240 CFS
HIGH WATER $_2$ ELEVATION	1312.85 FT
FREQUENCY OF ROADWAY OVERTOPPING	
Q_{67} TOTAL	825 CFS
HIGH WATER $_{67}$ ELEVATION	1315.02 FT

TRAFFIC DATA

AADT (2014)	100
AADT (2034)	120
DESIGN SPEED	55 MPH

WISCONSIN PROFESSIONAL ENGINEER
TROY L PETERSON
E-31102
MENOMONIE
WI
7-15-14

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10x42, WITH A REQUIRED DRIVING RESISTANCE OF 120 TONS ‡ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION.
ESTIMATED LENGTH 25' W ABUTMENT
ESTIMATED LENGTH 25' E ABUTMENT

‡ 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.

BENCHMARK

COTTON SPINDLE ON NE ABUTMENT
STA 10+14±, 11.9' LT
EL 1313.74

LIST OF DRAWINGS

DESIGN CONTACT:
TROY PETERSON
(715) 235-9081

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

STATE PROJECT NUMBER
7837-00-70

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
Cedar corporation
MENOMONIE - MADISON - GREEN BAY
www.cedarcorp.com 800-472-7372

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher KAR 08/26/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-10-0225

COLBY FACTORY ROAD OVER KESLER CREEK

COUNTY	TOWN
CLARK	COLBY

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
GBJ	TLP	PKF	TLP

GENERAL PLAN

SHEET 1 OF 8

I:\Clients\W3916 WDOT NW Region - Knight\002 Colby Factory Rd Kesler Cr Bridge\dwg\080101_gp_ColbyFactory.dwg 07/15/14 2:43:21 PM

STATE PROJECT NUMBER
7837-00-70

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEMS	UNIT	W ABUT	E ABUT	SUPER	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA 10+00	LS	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-10-0225	LS	———	———	———	1
210.0100	BACKFILL STRUCTURE	CY	65	65	———	130
502.0100	CONCRETE MASONRY BRIDGES	CY	21.1	21.1	63.8	106
502.3200	PROTECTIVE SURFACE TREATMENT	SY	———	———	126	126
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	2020	2020	———	4040
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	1210	1210	12340	14760
550.1100	PILING STEEL HP 10-INCH x 42 LB	LF	150	150	———	300
513.4060	RAILING TUBULAR TYPE M STRUCTURE B-10-0225	LS	———	———	———	1
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	6	———	12
606.0300	RIPRAP HEAVY	CY	35	35	———	70
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	70	70	———	140
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	75	75	———	150
	NON-BID ITEMS					
	FILLER	SIZE	———	———	———	1/2 & 3/4

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

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

ALL REINFORCING BARS ARE ENGLISH. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

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

STEEL 'HP' PILE MATERIAL SHALL BE A.S.T.M. DESIGNATION A36.

THE EXISTING STRUCTURE (P-10-0117) IS A 30.5' LONG BY 17.8' CLEAR WIDTH SINGLE SPAN STEEL DECK GIRDER BRIDGE.

THE PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP AND EDGES OF THE SLAB AND TO THE OUTSIDE 1'-0" OF THE UNDERSIDE OF THE SLAB.

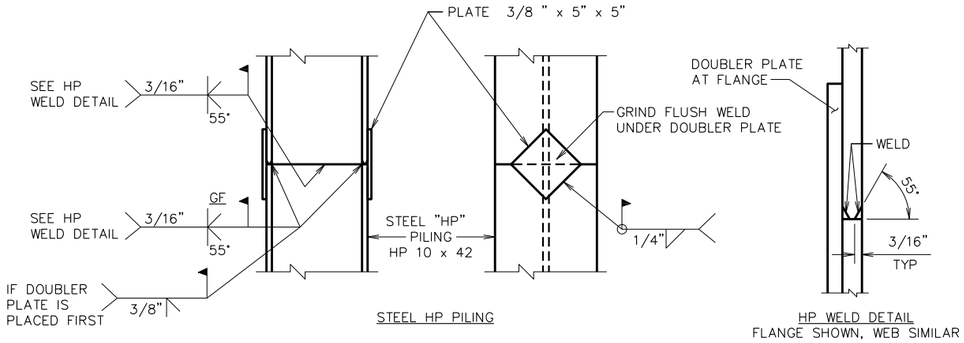
AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE IN PLACE BEFORE ABUTMENT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

THE GRADATION OF THE BACKFILL STRUCTURE SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

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



STEEL HP PILING

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE SPLICE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-10-0225

DRAWN BY PKF | PLANS CK'D TLP

QUANTITIES & NOTES

SHEET 2 OF 8

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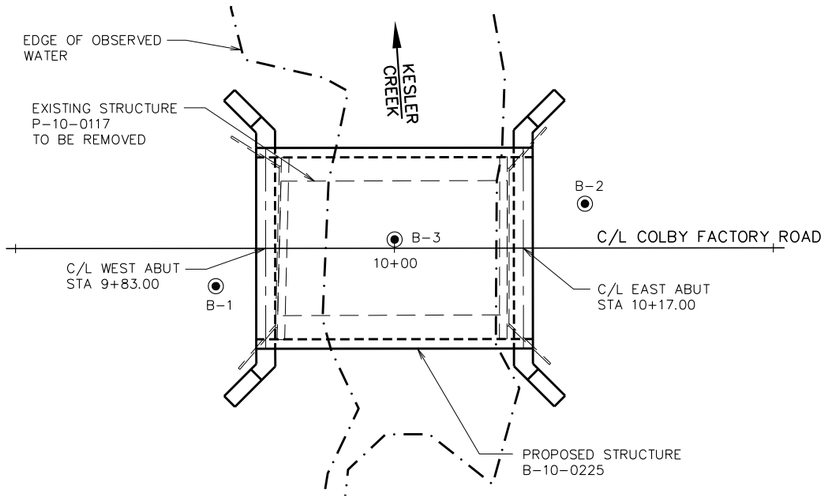
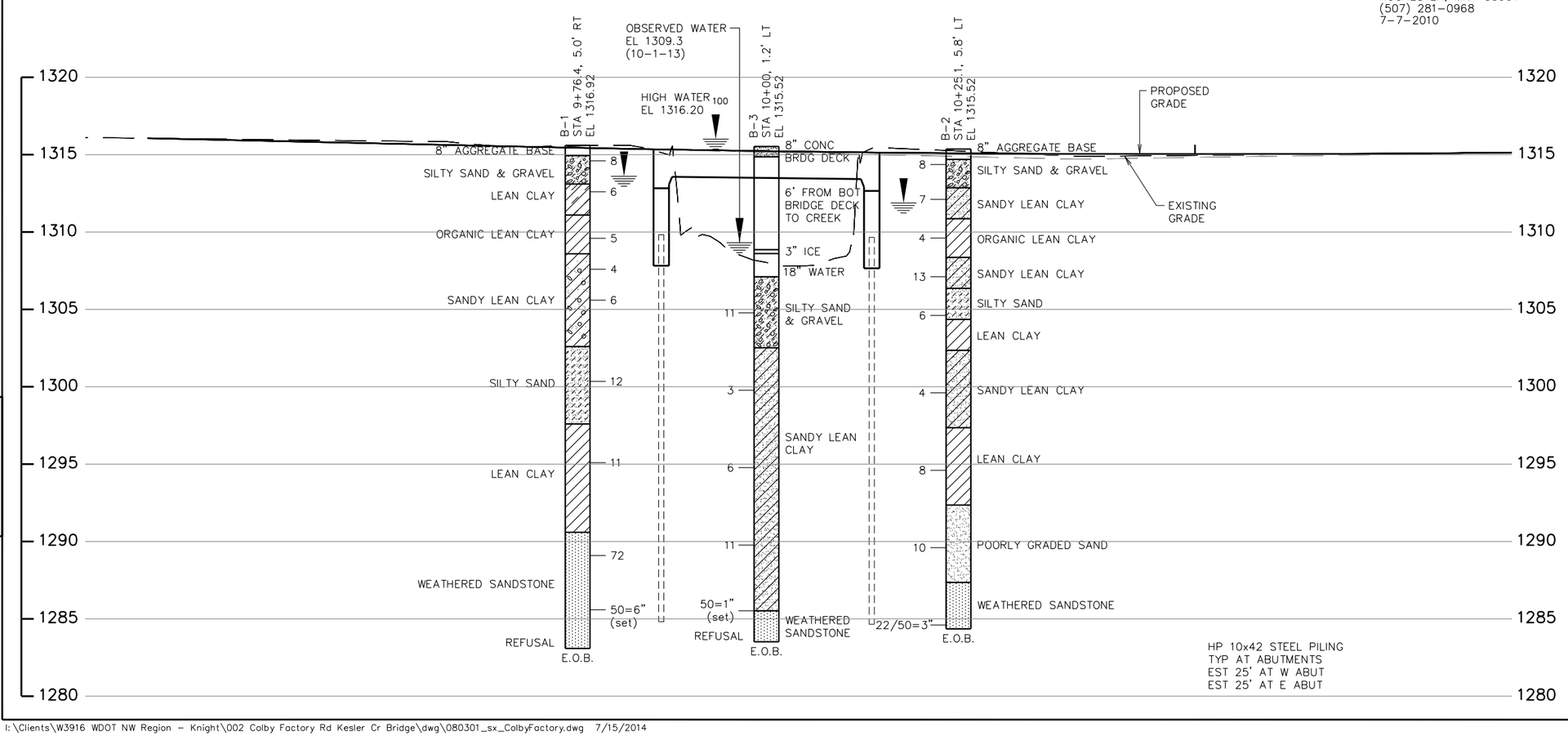




BORINGS TAKEN BY:

CHOSEN VALLEY TESTING, INC

WISCONSIN OFFICE
135 BUCKNER PLACE
LA CROSSE, WI 54603
(608) 782-5505

MINNESOTA OFFICE
1410 7TH STREET NW
ROCHESTER, MN 55901
(507) 281-0968
7-7-2010

STATE PROJECT NO.

7837-00-70

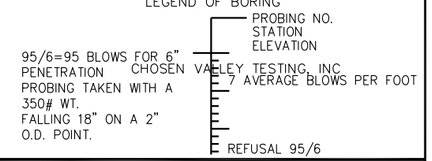
ABBREVIATIONS

F---FINE	VF---VERY FINE	M---MEDIUM
C---COARSE	WS---WEATHERED	SO---SOUND

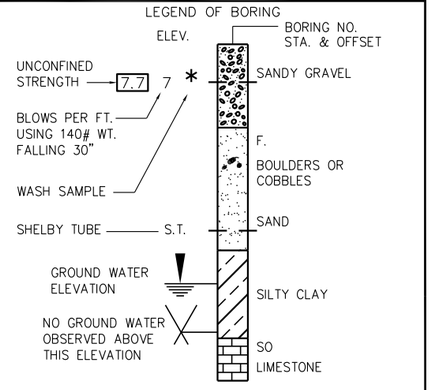
MATERIAL SYMBOLS

TOPSOIL	SILT	SANDSTONE
SAND	PEAT	LIMESTONE
GRAVEL	CLAY	IGNEOUS ROCK

LEGEND OF BORING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROX. AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

Cedar corporation

MENOMONIE - MADISON - GREEN BAY
www.cedarcorp.com 800-472-7372

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-10-0225

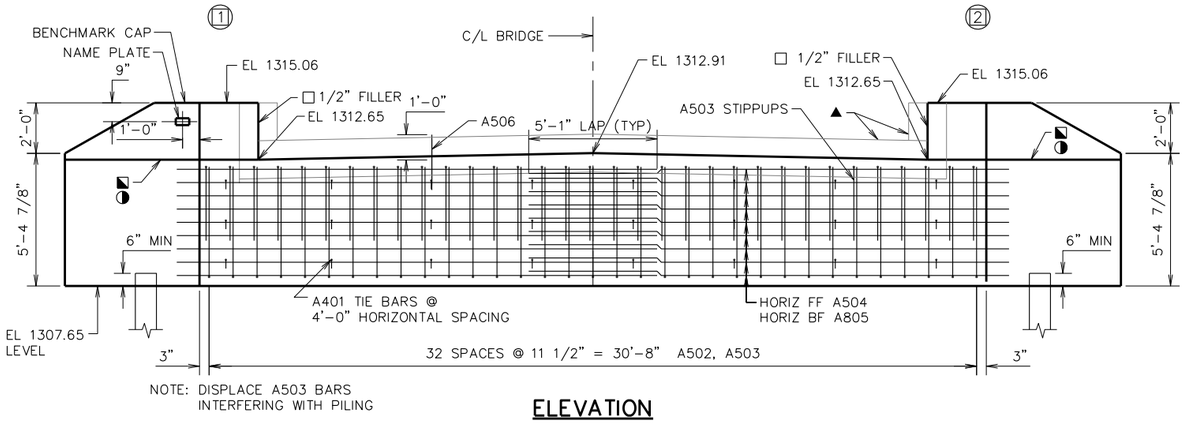
DRAWN BY PKF | PLANS CHECKED TLP

SUBSURFACE EXPLORATION

SHEET 3 OF 8

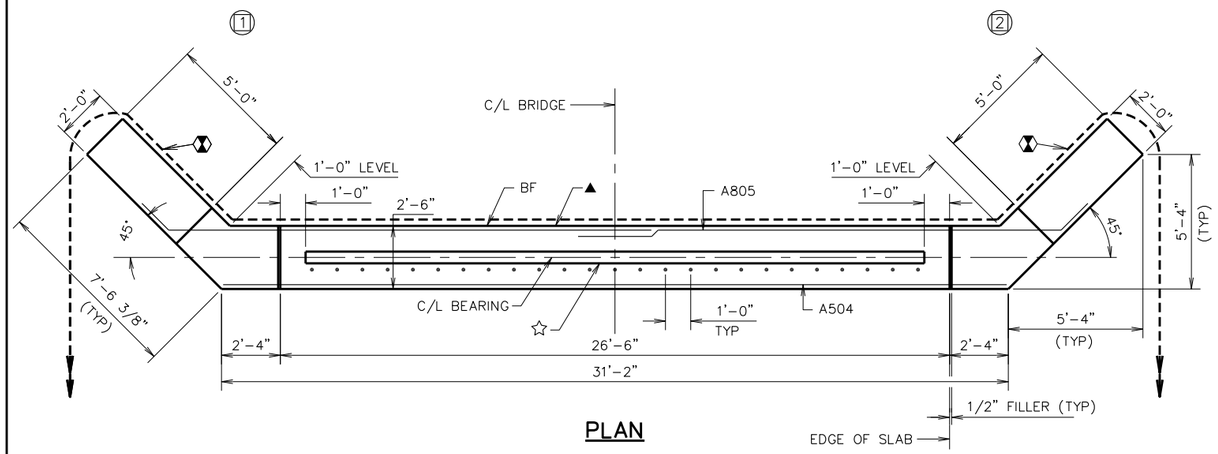
I:\Clients\W3916 WDOT NW Region - Knight\002 Colby Factory Rd Kesler Cr Bridge\dwg\080301_sx_ColbyFactory.dwg 7/15/2014

STATE PROJECT NUMBER
7837-00-70

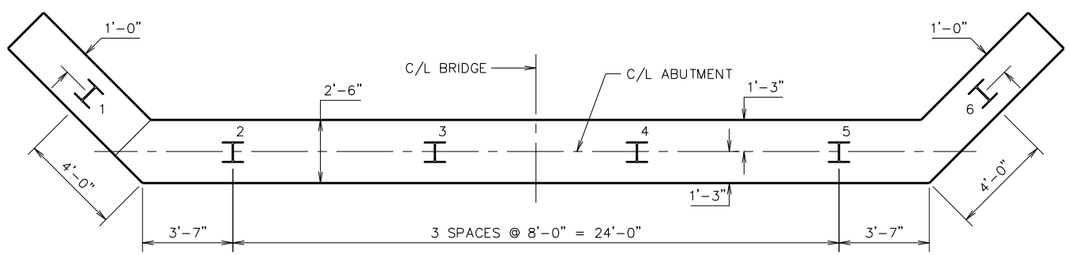


NOTE: DISPLACE A503 BARS INTERFERING WITH PILING

ELEVATION
(LOOKING WEST)



PLAN



PILE PLAN

▲ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ & VERT JOINTS ON BACKFACE

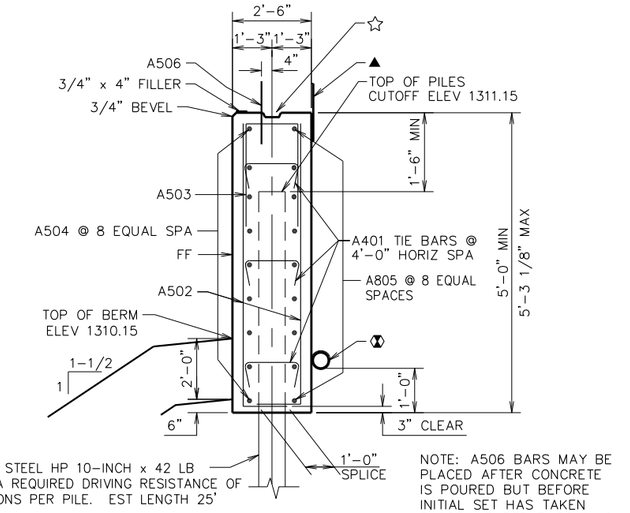
◪ 3/4" 'V' GROOVE ON FF OF WING WALL – NOT REQUIRED IF CONSTRUCTION JOINT IS NOT USED

◑ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6"

☆ KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 2" x 6"

□ SEAL ALL EXPOSED HORIZ & VERT SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE)

◈ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN (SEE DETAIL). RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".



NOTE: A506 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. EMBED BARS 1'-0".

SECTION THRU BODY

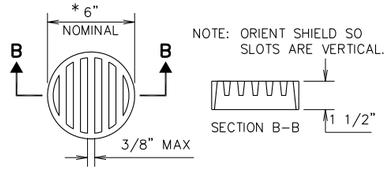
NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

BILL OF BARS

2020 # UNCOATED 1210 # COATED

BAR MARK	COAT	NO. REQUIRED	LENGTH	BENT	BAR SERIES	LOCATION
A401		24	2-9	X		TIE BARS
A502		66	6-0	X		BODY - VERT
A503		33	6-11	X		BODY - STIRRUPS
A504		9	30-10			BODY - HORIZ FF
A805		18	21-7	X		BODY - HORIZ BF
A506	X	25	2-0			BODY DOWELS
A407	X	28	8-4	X	◙	WING 1 & 2 - VERT
A408	X	10	9-5	X		WING 1 & 2 - VERT
A409	X	12	5-2	X		WING 1 & 2 VERT
A510	X	18	8-8	X		WING 1 & 2 - HORIZ FF
A811	X	18	10-3	X		WING 1 & 2 - HORIZ BF
A412	X	4	5-10			WING 1 & 2 - HORIZ
A413	X	4	4-2			WING 1 & 2 - HORIZ
A414	X	4	2-9			WING 1 & 2 - HORIZ
A415	X	4	6-1	X		WING 1 & 2 - HORIZ
A416	X	8	8-7	X		WING 1 & 2 - HORIZ

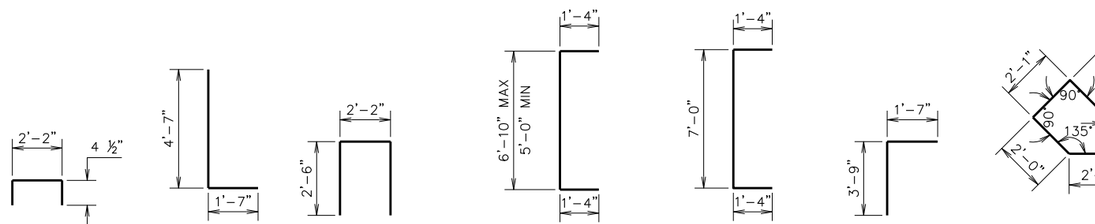
◙ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



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

RODENT SHIELD

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



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-10-0225

DRAWN BY PKF | PLANS CK'D TLP

WEST ABUTMENT

SHEET 4 OF 8

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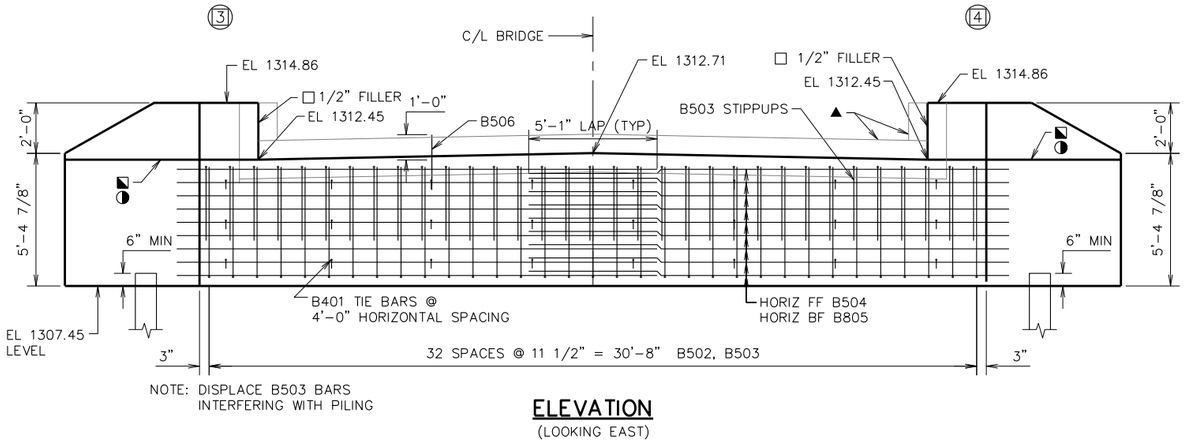
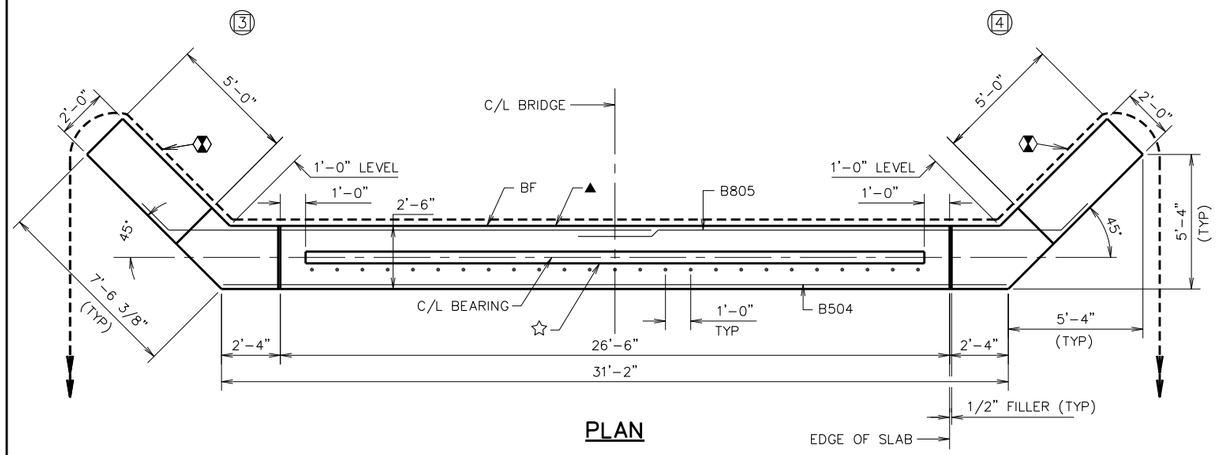
STATE PROJECT NUMBER
7837-00-70

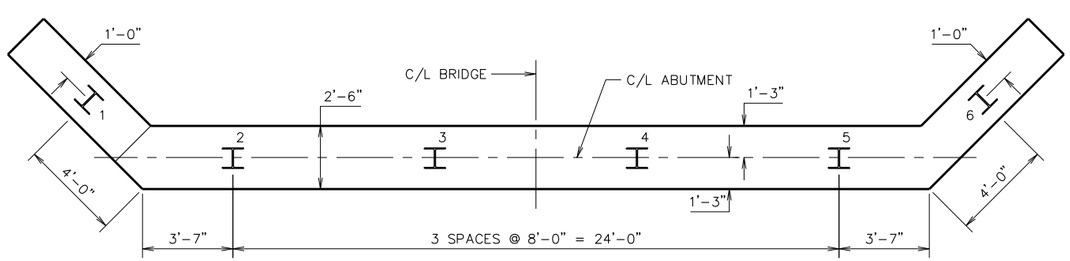


NOTE: DISPLACE B503 BARS INTERFERING WITH PILING

ELEVATION
(LOOKING EAST)



PLAN



PILE PLAN

▲ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ & VERT JOINTS ON BACKFACE

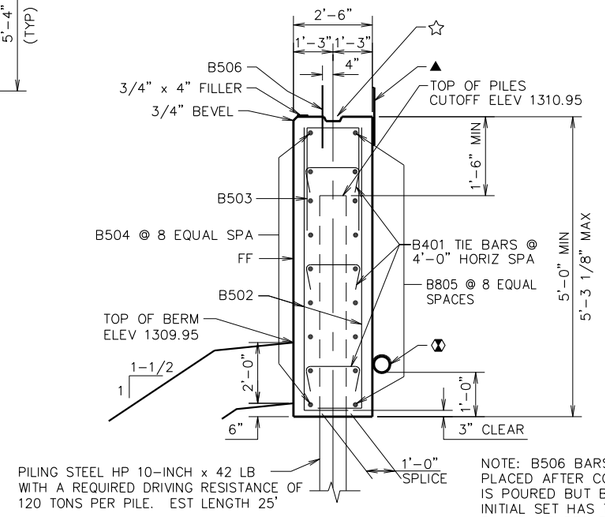
◪ 3/4" 'V' GROOVE ON FF OF WING WALL – NOT REQUIRED IF CONSTRUCTION JOINT IS NOT USED

◑ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6"

☆ KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 2" x 6"

☐ SEAL ALL EXPOSED HORIZ & VERT SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE)

⧓ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN (SEE DETAIL). RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".



NOTE: B506 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. EMBED BARS 1'-0".

SECTION THRU BODY

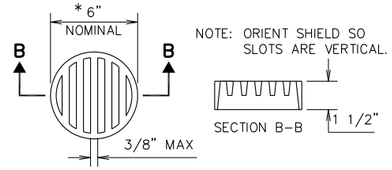
NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

BILL OF BARS

2020 # UNCOATED 1210 # COATED

BAR MARK	COAT	NO. REQUIRED	LENGTH	BENT	BAR SERIES	LOCATION
B401		24	2-9	X		TIE BARS
B502		66	6-0	X		BODY - VERT
B503		33	6-11	X		BODY - STIRRUPS
B504		9	30-10			BODY - HORIZ FF
B805		18	21-7	X		BODY - HORIZ BF
B506	X	25	2-0			BODY DOWELS
B407	X	28	8-4	X	⧓	WING 3 & 4 - VERT
B408	X	10	9-5	X		WING 3 & 4 - VERT
B409	X	12	5-2	X		WING 3 & 4 - VERT
B510	X	18	8-8	X		WING 3 & 4 - HORIZ FF
B811	X	18	10-3	X		WING 3 & 4 - HORIZ BF
B412	X	4	5-10			WING 3 & 4 - HORIZ
B413	X	4	4-2			WING 3 & 4 - HORIZ
B414	X	4	2-9			WING 3 & 4 - HORIZ
B415	X	4	6-1	X		WING 3 & 4 - HORIZ
B416	X	8	8-7	X		WING 3 & 4 - HORIZ

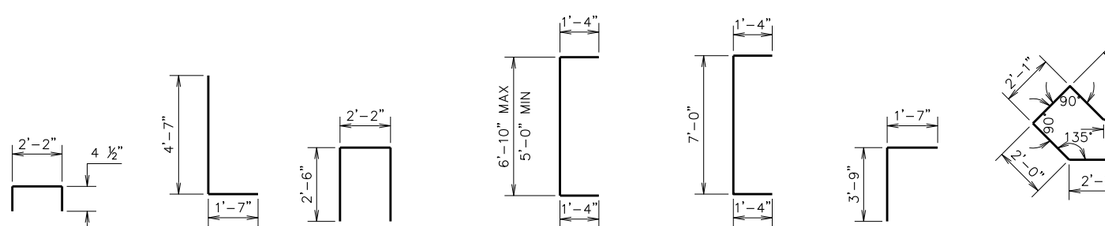
⧓ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



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

RODENT SHIELD

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



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-10-0225

DRAWN BY PKF | PLANS CK'D TLP

EAST ABUTMENT

SHEET 5 OF 8

8

8

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STATE PROJECT NUMBER
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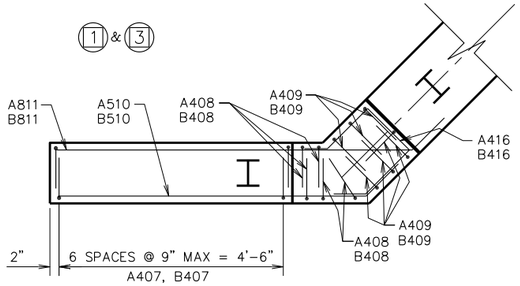
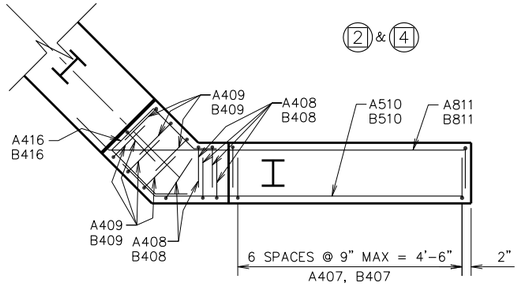
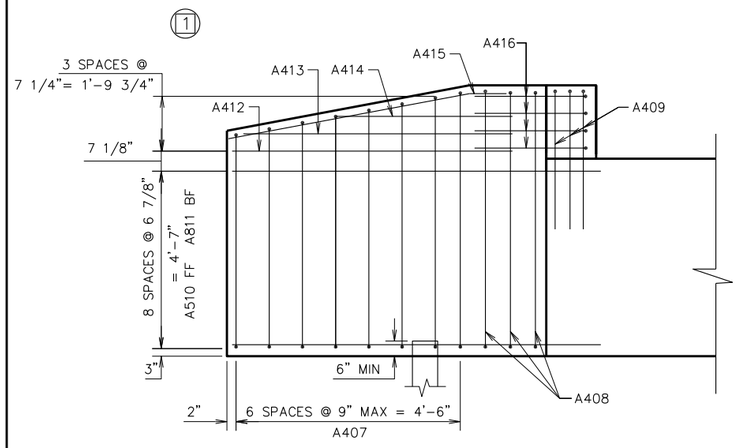
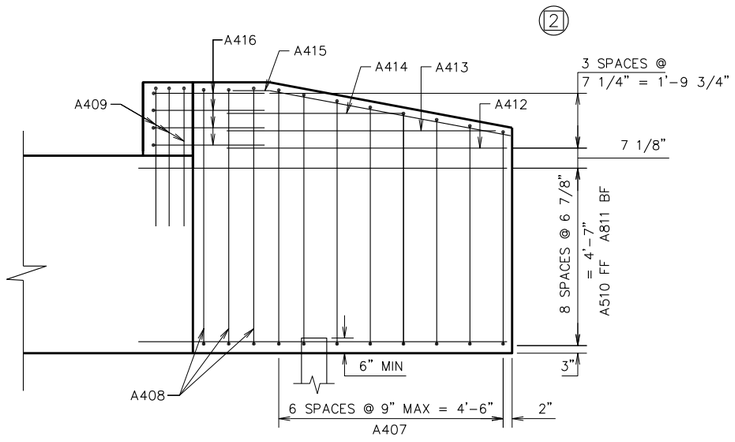


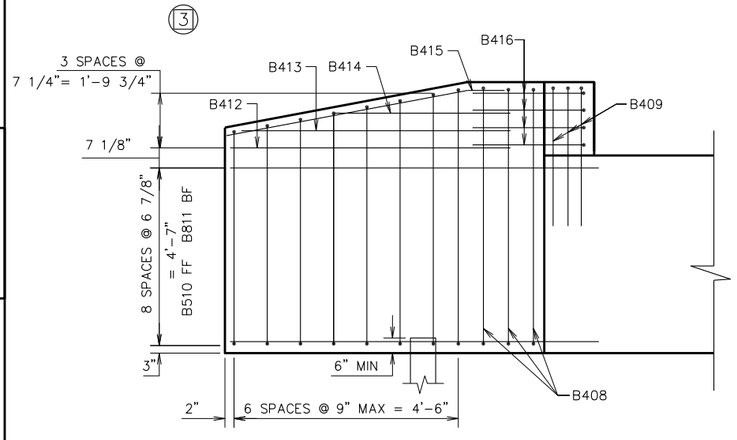


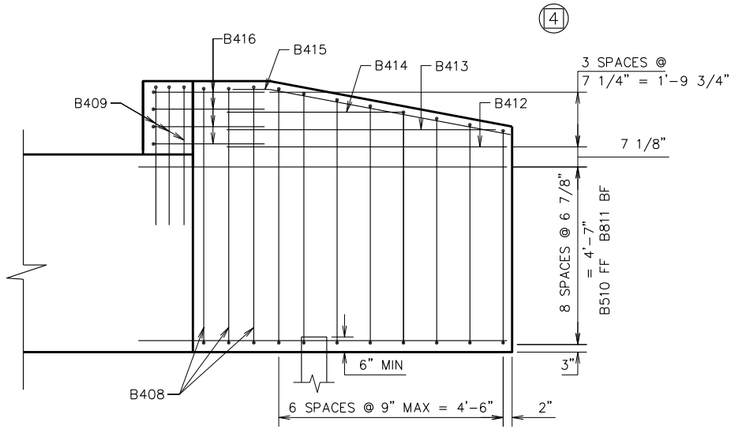
PLAN



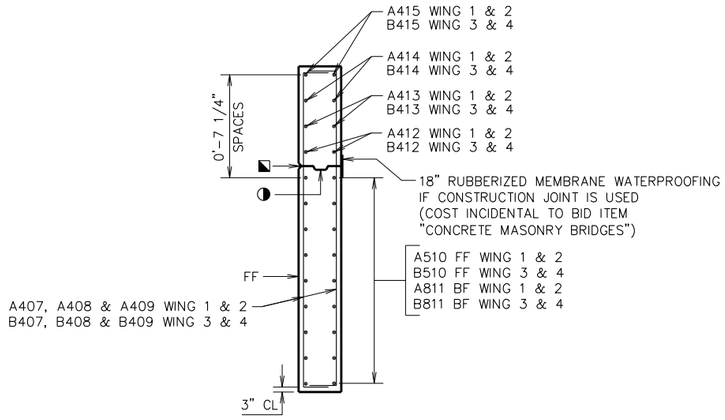


WEST ABUTMENT WINGS





EAST ABUTMENT WINGS



BF = BACK FACE
FF = FRONT FACE

TYPICAL SECTION THRU WING

◥ 3/4" 'V' GROOVE ON FF OF WING WALL – NOT REQUIRED IF CONSTRUCTION JOINT IS NOT USED

◑ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6"

BAR SERIES TABLE

MARK	NO. REQUIRED	LENGTH
A407	4 SERIES OF 7	7'-5" TO 9'-3"
B407	4 SERIES OF 7	7'-5" TO 9'-3"

BUNDLE AND TAG EACH SERIES SEPARATELY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-10-0225

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ABUTMENT DETAILS

SHEET 6 OF 8

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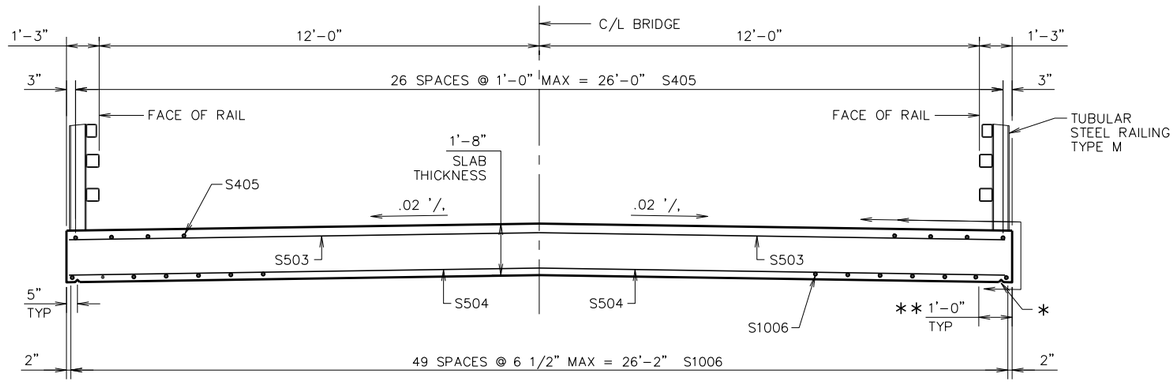
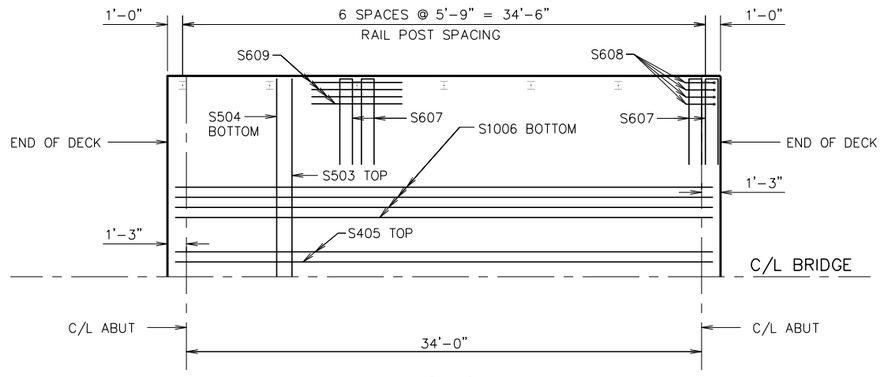
PROJECT NUMBER
7837-00-70



CROSS SECTION THRU RDWY

(LOOKING EAST)



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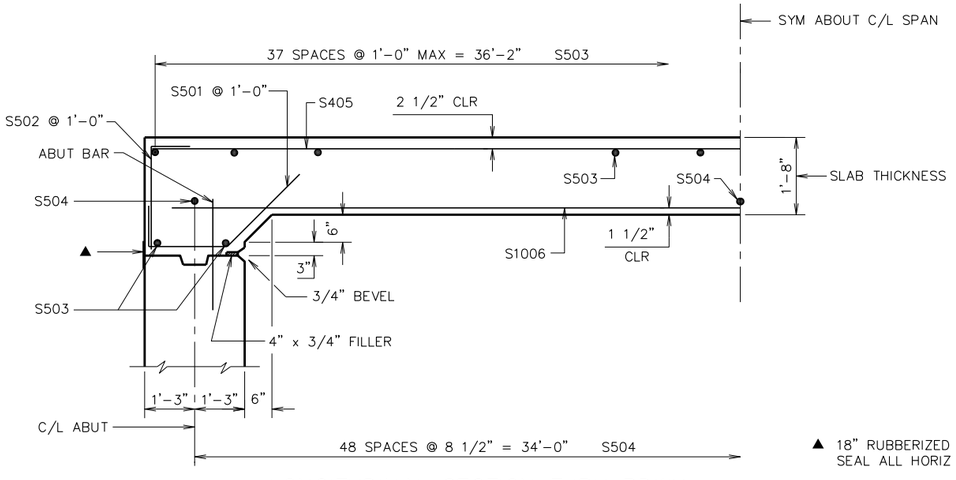
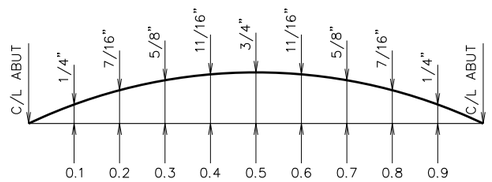


LONGITUDINAL SECTION THRU RDWY

▲ 18" RUBBERIZED MEMBRANE WATERPROOFING
SEAL ALL HORIZ & VERT JOINTS ON BACKFACE

** APPLY PROTECTIVE SURFACE TREATMENT

* 3/4" V-GROOVE
EXTEND V-GROOVE TO 3" FROM FRONT FACE OF ABUTMENT DIAPHRAGM



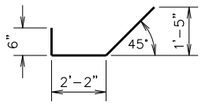
CAMBER DIAGRAM

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

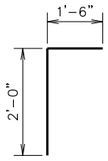
BILL OF BARS

12340 # COATED

BAR MARK	COAT	NO. REQD	LENGTH	BENT	BUN-DLE	LOCATION
S501	X	54	4-5	X		AT END OF DECK
S502	X	54	3-4	X		AT END OF DECK
S503	X	42	26-2			SLAB, TOP, TRANSVERSE
S504	X	49	26-2			SLAB, BOTTOM, TRANSVERSE
S405	X	27	36-2			SLAB, TOP, LONGITUDINAL
S1006	X	50	36-2			SLAB, BOTTOM, LONGITUDINAL
S607	X	28	12-0	X		AT RAIL POSTS
S608	X	16	5-0	X		AT END RAIL POSTS
S609	X	40	6-0			AT RAIL POSTS

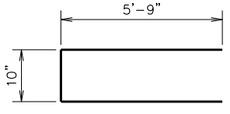


S501



S502

S608



S607

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

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

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

CAMBER SPAN AS SHOWN TO PROVIDE FOR DEADLOAD DEFLECTION & FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

TOP OF DECK ELEVATIONS

	C/L BRG EAST ABUT	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	C/L BRG WEST ABUT
NORTH EDGE DECK	1315.06	1315.04	1315.02	1315.00	1314.98	1314.96	1314.94	1314.92	1314.90	1314.88	1314.86
C/L BRIDGE	1315.33	1315.30	1315.28	1315.26	1315.24	1315.22	1315.20	1315.18	1315.16	1315.15	1315.13
SOUTH EDGE DECK	1315.06	1315.04	1315.02	1315.00	1314.98	1314.96	1314.94	1314.92	1314.90	1314.88	1314.86

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-10-0225

DRAWN BY PKF | PLANS CK'D TLP

SUPERSTRUCTURE

SHEET 7 OF 8

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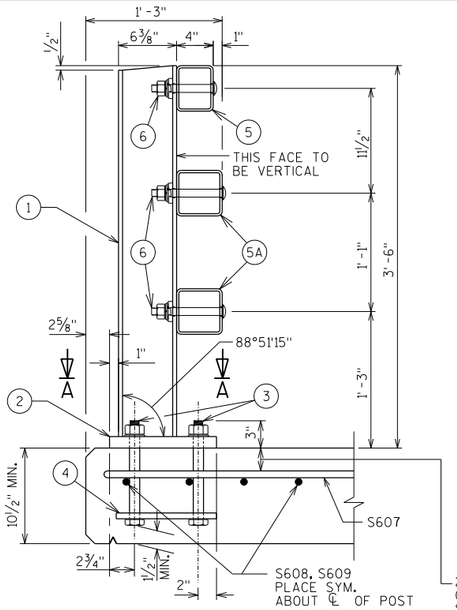
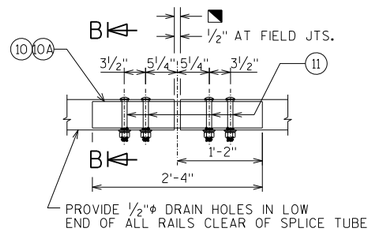
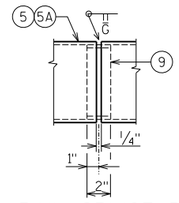
STATE PROJECT NUMBER
7837-00-70



SECTION THRU RAILING ON DECK

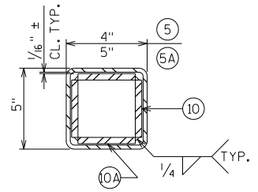


FIELD ERECTION JOINT DETAIL

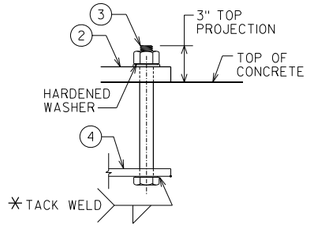


SHOP RAIL SPLICE DETAIL

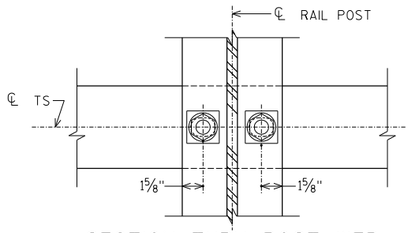
LOCATION MUST BE SHOWN ON SHOP DRAWINGS



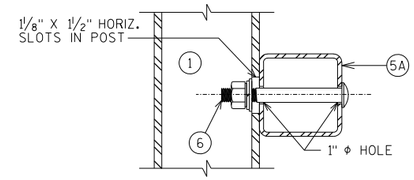
SECTION B-B



ANCHOR BOLTS



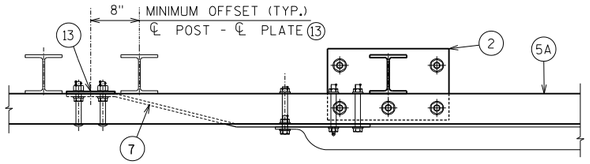
SECTION THRU POST WEB



SECTION THRU RAIL

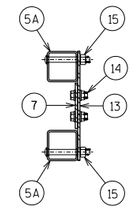
NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

TYPICAL RAIL TO POST CONNECTIONS



TOP VIEW AT END POST

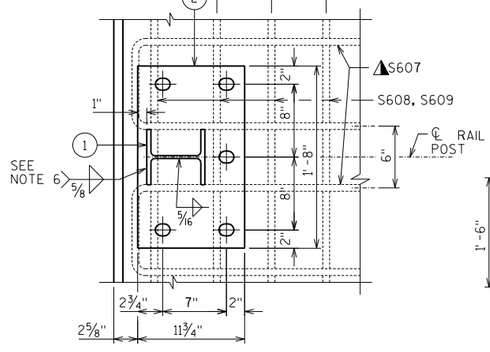
THRIE BEAM RAIL ATTACHMENT



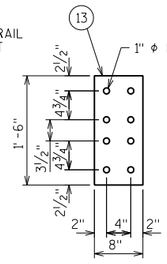
SECTION C-C

LEGEND

1. W6 x 25 WITH 1⅛" X 1½" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
2. PLATE 1¼" × 11¾" × 1'-8" WITH 1⅝" X 1⅝" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.
3. ASTM A449 - 1⅛" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 1'-9" LONG IN ABUTMENT WINGS. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG. USE 10¾" 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. ⅝" × 11" × 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1⅜" DIA. HOLES FOR ANCHOR BOLTS NO. 3
5. TS 5 × 4 × 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
5A. TS 5 × 5 × 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
6. ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/16" X 1⅝" X 1⅝" WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)
7. ½" THK. BACK-UP PLATE WITH 2 - ⅞" X 1½" THREADED SHOP WELDED STUDS (NO. 12). BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY ABOUT TUBES NO. 5A.
8. 1" DIA. HOLES IN PLATE NO. 7 & TUBES NO. 5A FOR ⅞" DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. 6 HOLES IN TUBES AND PLATE NO. 7.
9. SPLICE SLEEVE FABRICATED FROM ¼" PLATE. PROVIDE "SLIDING FIT".
10. ⅜" X 3⅝" X 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
10A. ⅜" X 2⅝" X 2'-4" PLATE USED IN NO. 5, ⅜" X 3⅝" X 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
11. ⅞" φ A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 15/16" X 1¼" LONGIT. SLOTTED HOLES AT FIELD JOINTS AND 15/16" X 2¼" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A.
12. ⅞" DIA. X 1½" LONG THREADED SHOP WELDED STUDS (2 REQ'D).
13. ⅜" 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. ⅞" DIA. X 2" LONG A325 HEX BOLT WITH NUT AND WASHER (5 REQ'D.).
15. 1" φ HOLES IN TUBES NO. 5A FOR ⅞" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER (4 REQ'D.). 4 HOLES IN TUBES.

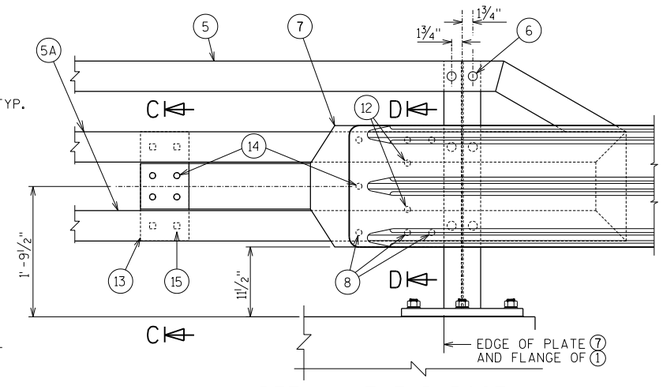


SECTION A-A



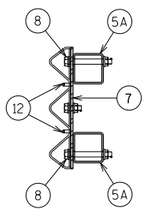
ANCHOR PLATE

AT BEAM GUARD ATTACHMENT



DETAIL AT END POST

THRIE BEAM RAIL ATTACHMENT



SECTION D-D

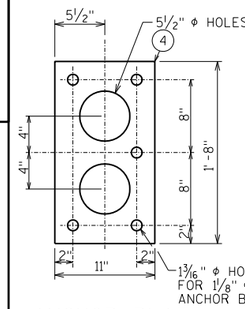
GENERAL NOTES

1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M B-10-0225" WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ⅛ TURN.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE. RAILS SHALL BE SPLICED IN A PANEL OVER EXPANSION JOINTS.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
7. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
8. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
9. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY SSPC SPECIFICATIONS.
10. ~~WHEN PAINTING IS REQUIRED, ALL MATERIAL EXCEPT ANCHORAGE DETAIL (NO. 3 & 4) SHALL BE PAINTED OVER GALVANIZING WITH APPROVED TIE COAT AND TOP COAT.~~
11. THIS RAILING MEETS NCHRP REPORT 350 EVALUATION CRITERIA FOR TEST LEVEL 4 (TL-4).
12. PLACE FIRST BOTTOM LONGITUDINAL BAR CLEAR OF DRIP GROOVE.

◭ TIE TO TOP MAT OF STEEL.

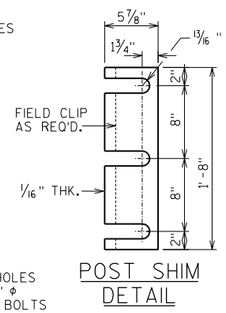
✳ FOR ANCHOR BOLTS IN WINGS, TACK WELD MAY BE USED IN FIELD AFTER ANCHOR PLATE IS IN POSITION IF REQ'D. FOR CONSTRUCTIBILITY.

◥ RDWY. OPENING OR 2½" MIN. FOR STRIP SEAL EXP. JOINT & ½" OPENING FOR A1 ABUTMENT.

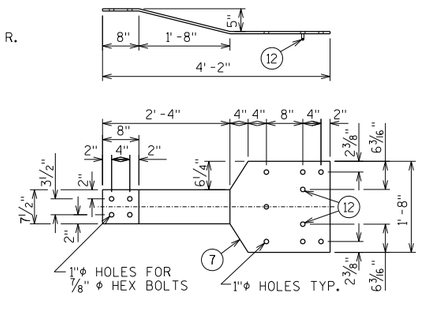


ANCHOR PLATE

AT RAIL TO DECK CONNECTION

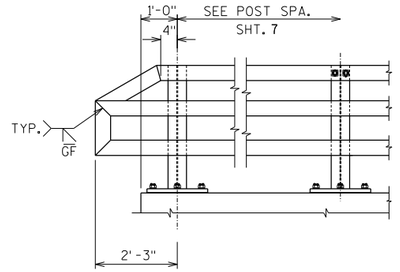


POST SHIM DETAIL



BACK-UP PLATE DETAIL

AT BEAM GUARD ATTACHMENT



PART ELEVATION OF RAILING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-10-0225

DRAWN BY PKF | PLANS CK'D. TLP

TUBULAR STEEL RAILING TYPE M

SHEET 8 OF 8

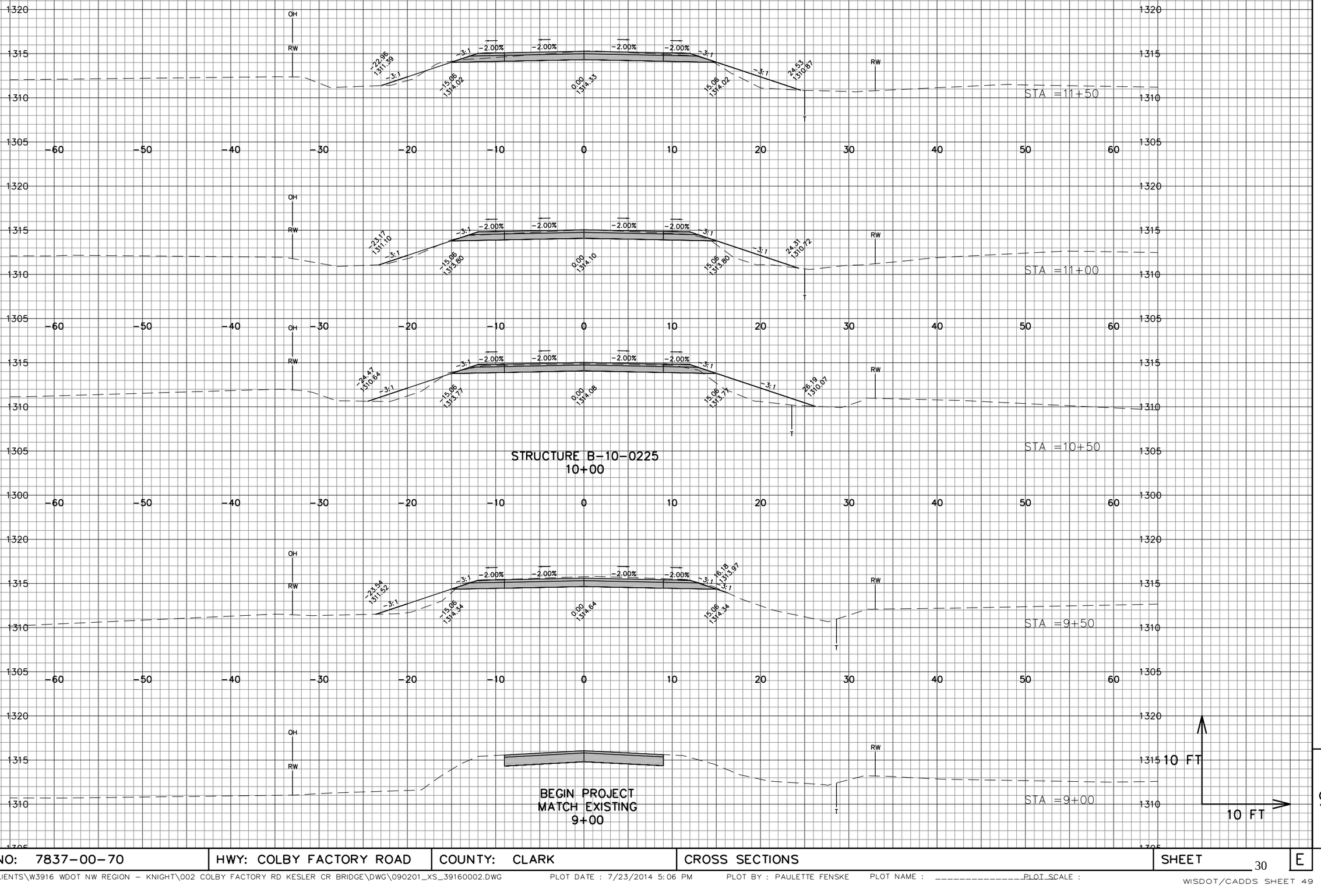
SCALE =

STATION	Real Station	Distance	AREA (SF) Cut Note 1	AREA (SF) Fill	Incremental Vol (CY) (Una Cut	Incremental Vol (CY) (Una Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 2
9+00	900		17	0	0	0	0	0	0
9+50	950	50	31	8	45	8	45	9	35
9+82	982	32	28	37	35	27	79	43	37
					79	34			

STATION	Real Station	Distance	AREA (SF) Cut Note 1	AREA (SF) Fill	Incremental Vol (CY) (Una Cut	Incremental Vol (CY) (Una Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 2
10+18	1018		31	60	0	0	0	0	0
10+50	1050	32	21	19	31	47	31	59	-28
11+00	1100	50	22	9	40	26	71	91	-20
11+50	1150	50	21	8	40	16	111	111	0
12+00	1200	50	27	7	45	14	156	128	28
					156	102			

Notes

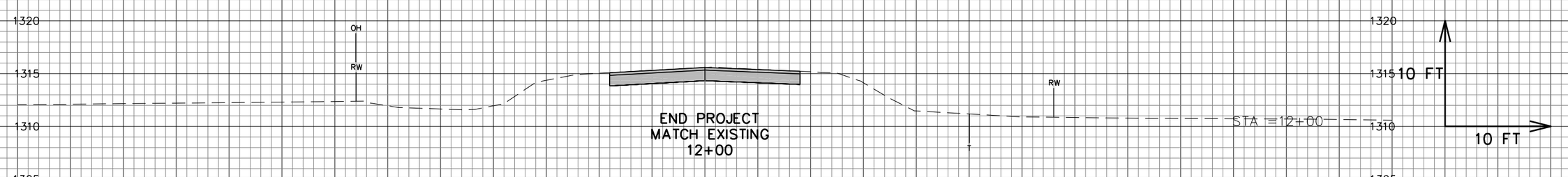
1) Cut includes Salvaged/Unusuable Pavement Material
2) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division and is catagorized as waste. Minus indicates a shortage of material within the Division and is catagorized as borrow Item Number 208.0100.



PROJECT NO: 7837-00-70	HWY: COLBY FACTORY ROAD	COUNTY: CLARK	CROSS SECTIONS	SHEET 30	E

FILE NAME : I:\CLIENTS\W3916 WDOT NW REGION - KNIGHT\002 COLBY FACTORY RD KESLER CR BRIDGE\DWG\090201_XS_39160002.DWG PLOT DATE : 7/23/2014 5:06 PM PLOT BY : PAULETTE FENSKE PLOT NAME : _____ PLOT SCALE :

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 7837-00-70	HWY: COLBY FACTORY ROAD	COUNTY: CLARK	CROSS SECTIONS	SHEET 31	E

Wisconsin Department of Transportation

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