WIS

MARCH 2023

PROJECT ID: 6744-02-70

WITH: N/A

COUNTY: MARQUETTE

ORDER OF SHEETS

TOTAL SHEETS = 74

DESIGN DESIGNATION

A.A.D.T.	2023	=	2930
A.A.D.T.	2043	=	3510
D.H.V.		=	407
D.D.		=	60/40
T.		=	14.8%
DESIGN SPEED		=	30 MPH
ESALS		=	840,000

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

V WESTFIELD, MAIN STREET

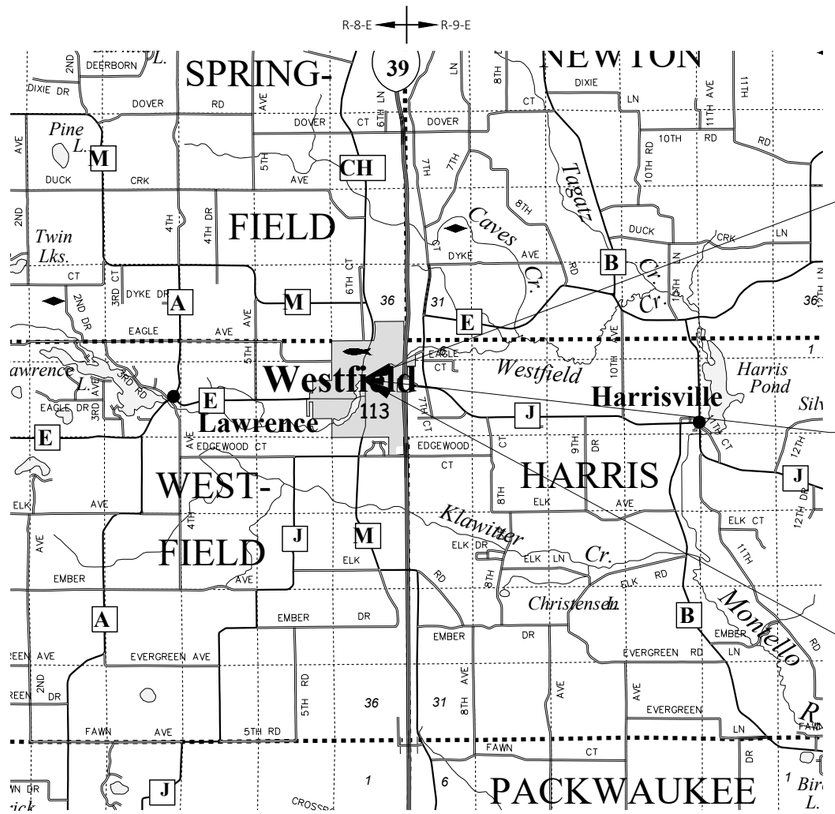
WESTFIELD CREEK BRIDGE B-39-0081

LOC STR

MARQUETTE COUNTY

STATE PROJECT NUMBER
6744-02-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6744-02-70	WISC 2023291	1



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.028 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MARQUETTE NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18

ACCEPTED FOR

VILLAGE OF WESTFIELD

Date 10-6-22

VILLAGE PRESIDENT

ORIGINAL PLANS PREPARED BY

MSA

1230 South Blvd, Baraboo, WI 53913

608-356-2771 1-800-362-4505 Fax: 608-356-2770

WISCONSIN QUIRIN R. KLINK E-30535 BARABOO WI PROFESSIONAL ENGINEER

DATE: 9/27/22

(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	MSA PROFESSIONAL SERVICES, INC.
Designer	MSA PROFESSIONAL SERVICES, INC.
Project Manager	JASON SCHAEFFER
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	DAN ERVA, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 10/28/2022

(Signature)

E

DESIGN CONTACT

MSA PROFESSIONAL SERVICES, INC.
1230 SOUTH BOULEVARD
BARABOO, WI 53913
ATTN: QUIRIN KLINK, PE
PHONE: (608) 355-8890
EMAIL: QKLINK@MSA-PS.COM

DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
CASEY JONES
DNR WISCONSIN RAPIDS SERVICE CENTER
473 GRIFFITH DRIVE
WISCONSIN RAPIDS, WI 54494
PHONE: (715) 213-6571
EMAIL: CASEY.JANES@WISCONSIN.GOV

UTILITIES

OVERHEAD COMMUNICATIONS
FRONTIER COMMUNICATIONS
2222 WEST WISCONSIN STREET
PORTAGE, WI 53091
ATTN: DAVID KAMKE, JSI CONSULTING
PHONE: (715) 393-7028
EMAIL: DAVID.KAMKE@JSITEL.COM

ELECTRIC
WESTFIELD ELECTRIC
DENNIS DAHLKE
PO BOX 309
WESTFIELD, WI 53964
PHONE: (608) 296-2149
EMAIL: PIONEERPOWERQUOTE@GMAIL.COM

GAS
WE-ENERGIES
LARRY KOCH
1921 8TH STREET
WISCONSIN RAPIDS, WI 54494
PHONE: (715) 421-7249
EMAIL: LARRY.KOCH@WE-ENERGIES.COM

* - NOT A MEMBER OF DIGGERS HOTLINE

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

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 = 0.31 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.26 ACRES

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 AREA THAT ARE NOT SHOWN.

THE 4" ASPHALTIC SURFACE SHALL CONSIST OF A 1 $\frac{3}{4}$" UPPER LAYER WITH 12.5MM NOMINAL SIZE AGGREGATE AND A 2 $\frac{1}{4}$" LOWER LAYER WITH 19.0MM NOMINAL SIZE AGGREGATE.

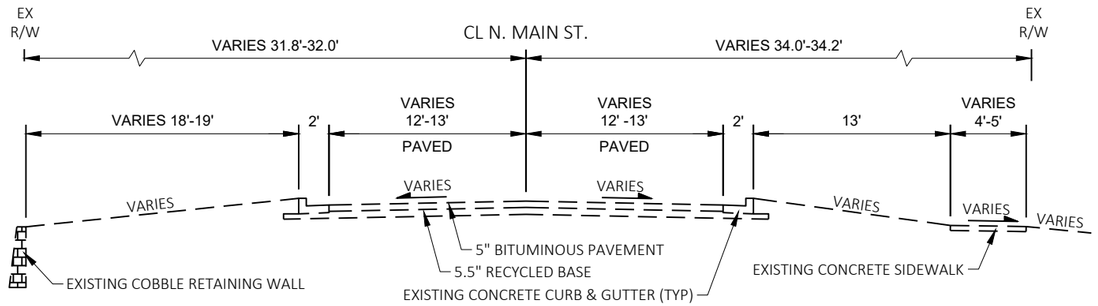
CURB & GUTTER PLAN GRADES ARE AT THE FLAG LINE UNLESS OTHERWISE NOTED.

EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL SHEET ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

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

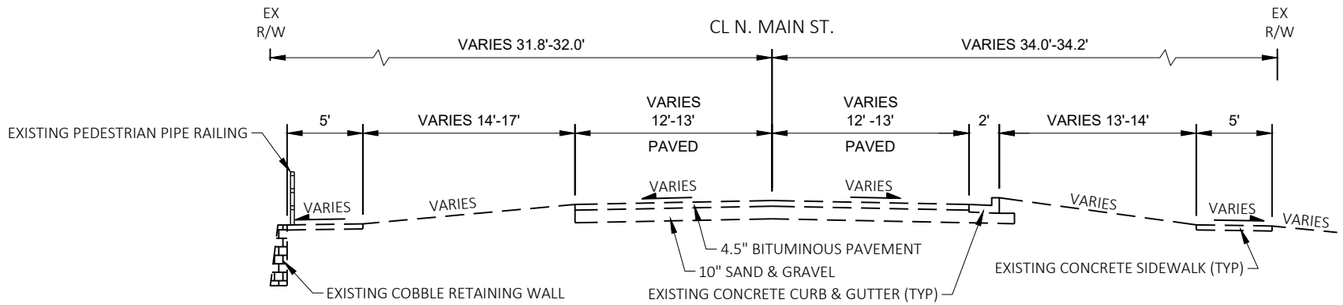
REPLACE DISTURBED AREAS WITHIN THE RIGHT-OF-WAY AND TLE WITH SALVAGED TOPSOIL, FERTILIZER, SEED, AND STABILIZE WITH EROSION MAT AS SHOWN ON THE EROSION CONTROL SHEET AND AS DIRECTED BY THE ENGINEER.

2



EXISTING TYPICAL SECTION

STA 9+25 - STA 9+88.21



EXISTING TYPICAL SECTION

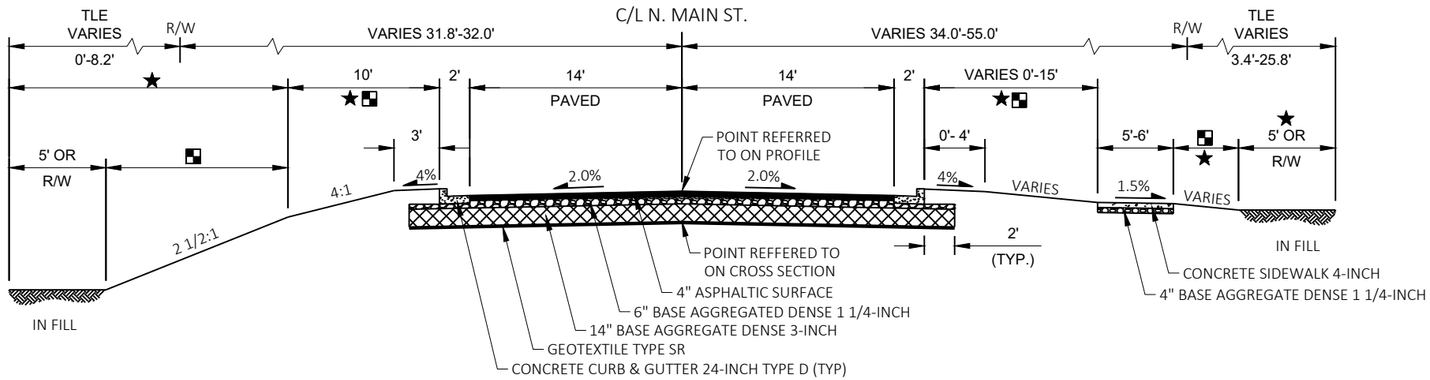
STA 10+13.18 - STA 10+75

PROJECT NO: 6744-02-70	HWY: LOC STR	COUNTY: MARQUETTE	TYPICAL SECTIONS	SHEET 3	E

FILE NAME : G:\00\00177\00177037\CADD\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020301-ts

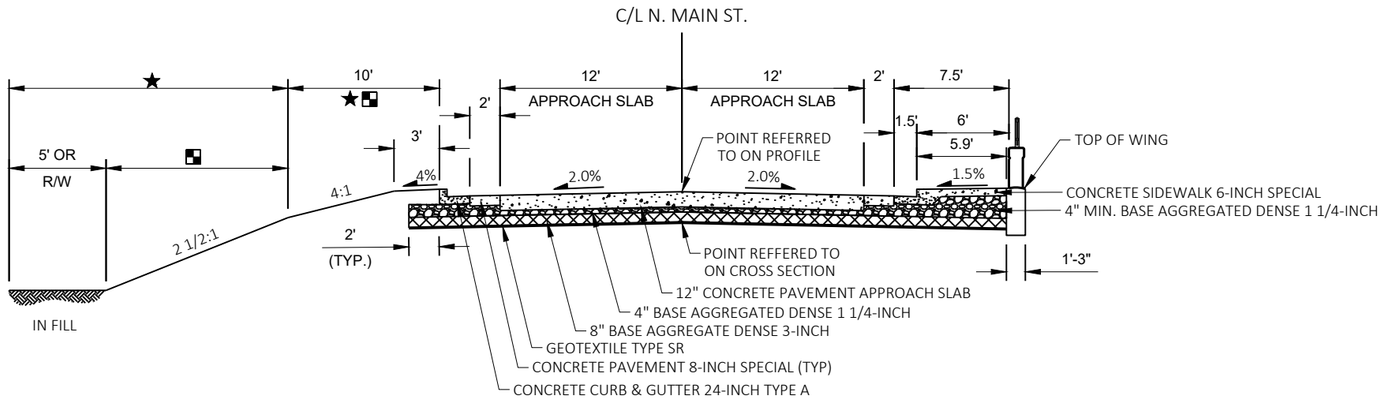
PLOT DATE : 10/14/2022 6:47 AM PLOT BY : BRAD LEE PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



FINISHED TYPICAL SECTION

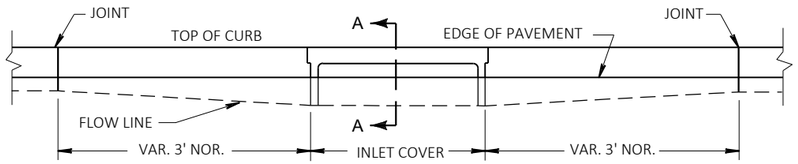
STA 9+25 - STA 9+64.62
STA 10+29.38 - STA 10+75



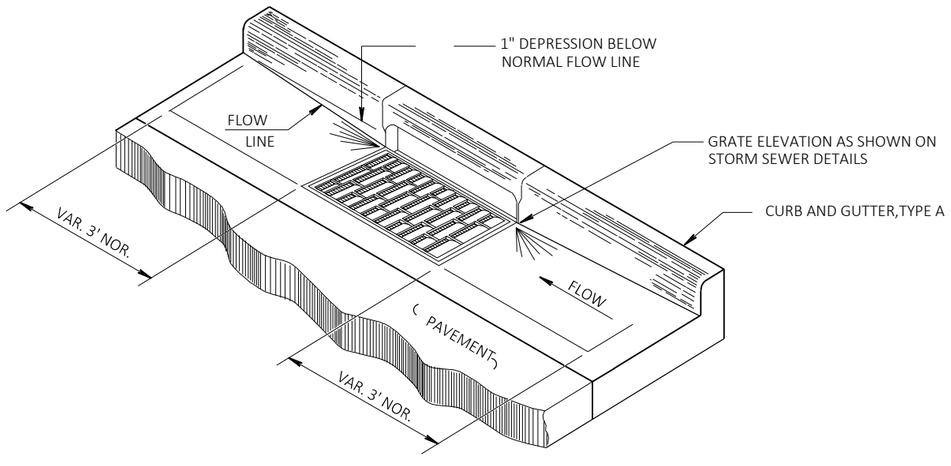
FINISHED TYPICAL SECTION

STA 9+64.62 - STA 9+82.71
STA 10+11.29 - STA 10+29.38

NOTES:
■ SALVAGED TOPSOIL & EROSION MAT URBAN CLASS I TYPE B
★ SEEDING TEMPORARY, SEEDING MIXTURE #40, & FERTILIZER TYPE B

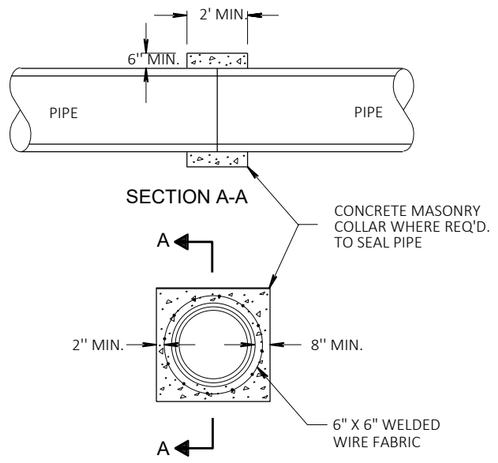


ELEVATION

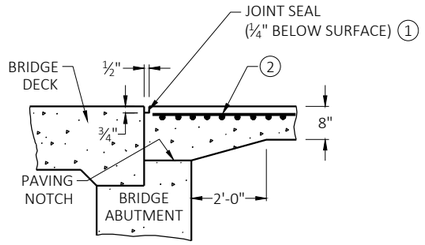


DETAIL OF CURB AND GUTTER AT INLETS

(TYPE 3-H INLET SHOWN)



CONCRETE COLLAR DETAIL



CONCRETE PAVEMENT 8-INCH SPECIAL

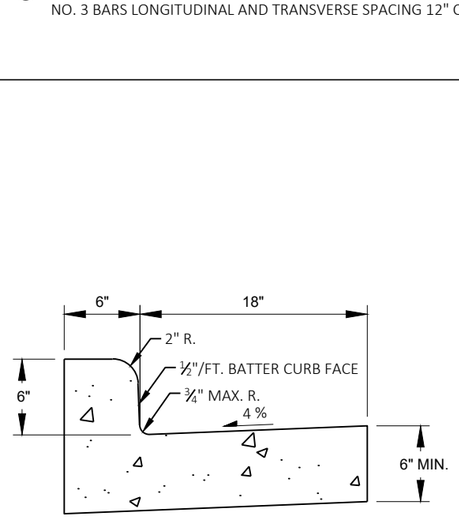
(ALL WINGS)

GENERAL NOTES

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

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

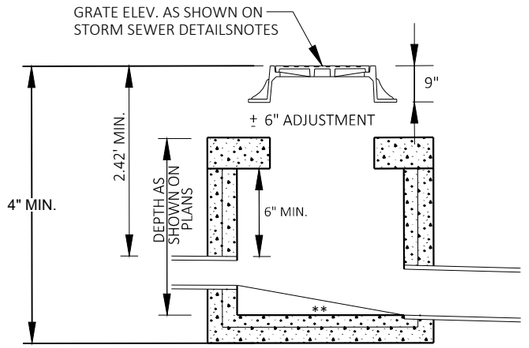
1. HOT POURED SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6
2. MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W 4.0 X W 4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.



TYPES A & D

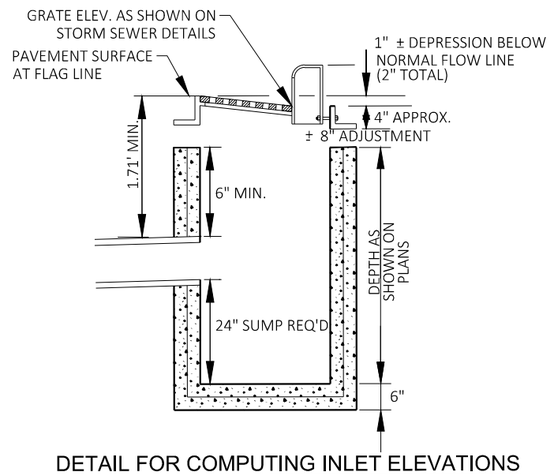
CONCRETE CURB AND GUTTER 24-INCH

TIE BARS REQUIRED FOR CURB AND GUTTER TYPE A



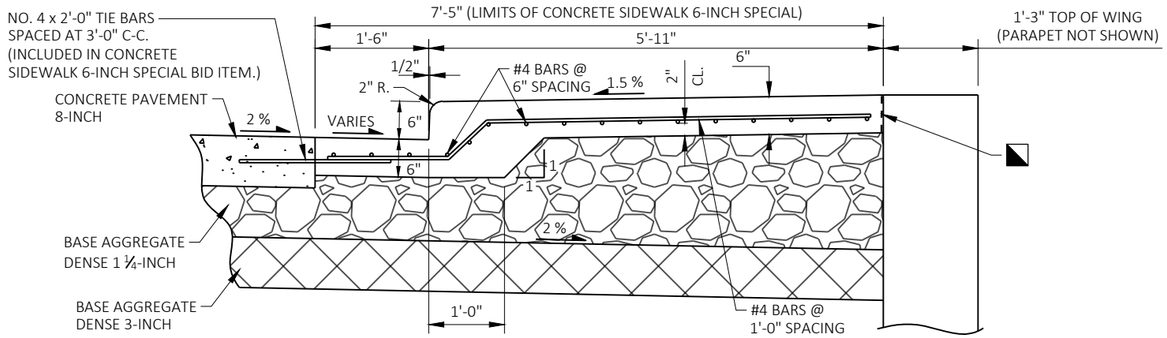
DETAIL FOR COMPUTING MANHOLE ELEVATIONS

** FILL WITH CONCRETE IF BOTTOM OF STRUCTURE IS BELOW LOWEST INVERT.

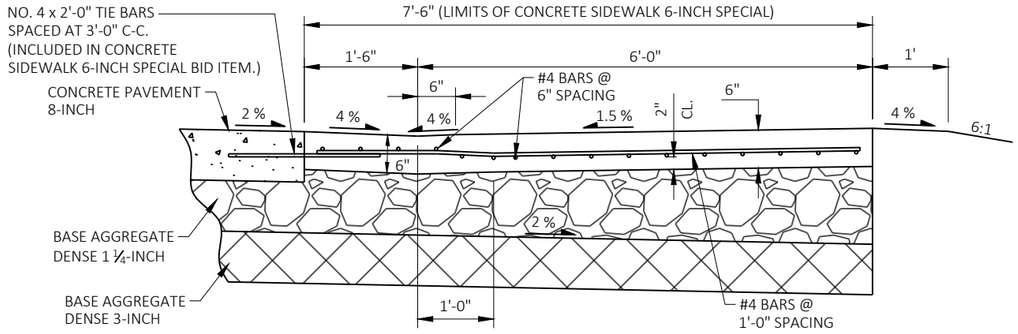


DETAIL FOR COMPUTING INLET ELEVATIONS

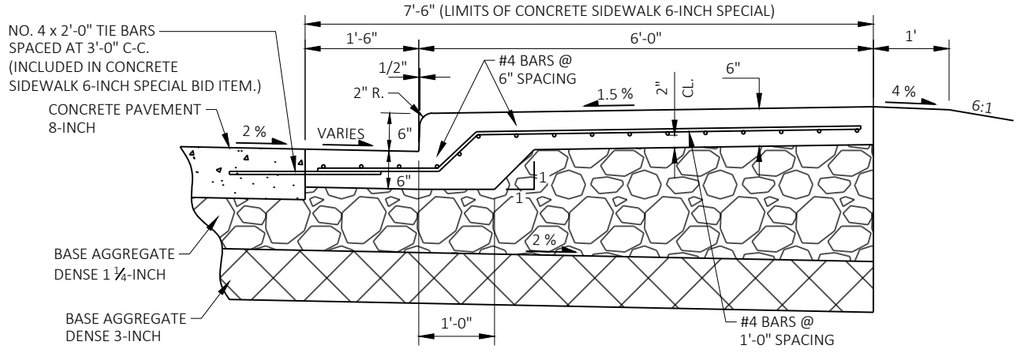
PROJECT NO: 6744-02-70	HWY: LOC STR	COUNTY: MARQUETTE	CONSTRUCTION DETAILS	SHEET 5	E



SECTION S1 THRU SIDEWALK



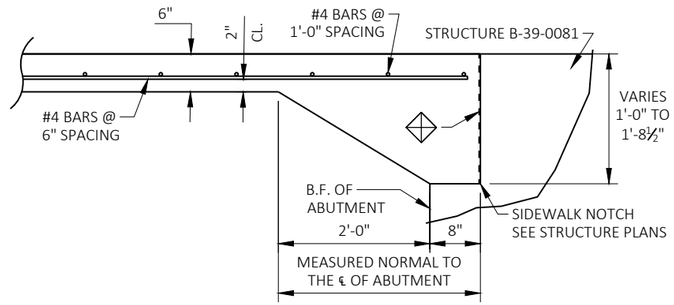
SECTION S3 THRU SIDEWALK



SECTION S2 THRU SIDEWALK

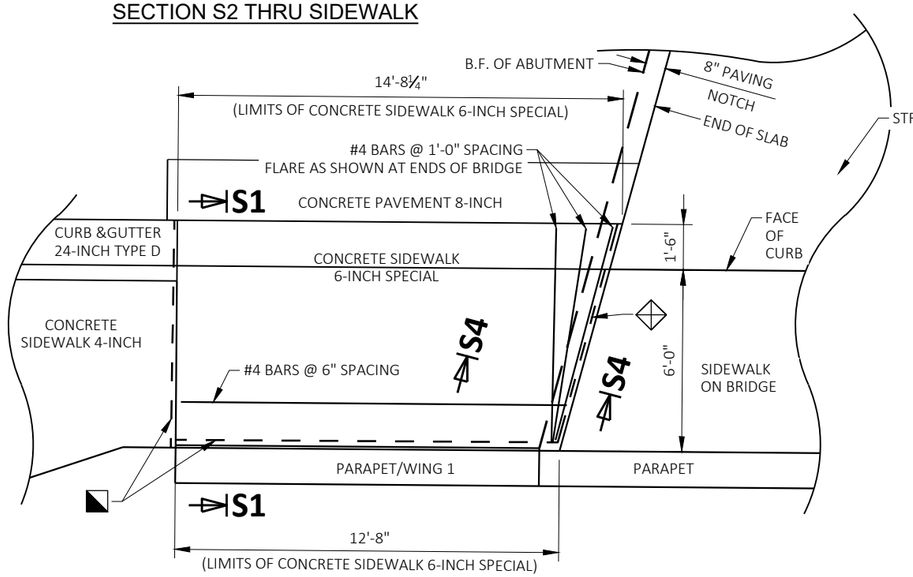
LEGEND

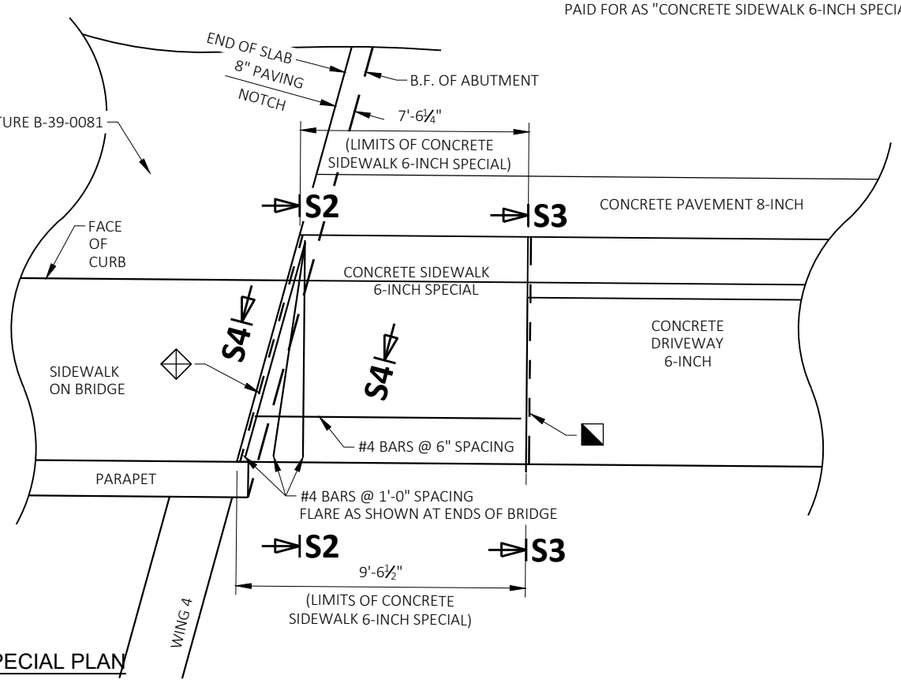
- ½" FILLER. EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER, (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE), INCLUDED IN BID ITEM "CONCRETE SIDEWALK 6-INCH SPECIAL".
- ¾" FILLER @ B.F. OF ABUTMENT. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER, (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE), INCLUDED IN BID ITEM "CONCRETE SIDEWALK 6-INCH SPECIAL".



SECTION S4 THRU SIDEWALK

PAID FOR AS "CONCRETE SIDEWALK 6-INCH SPECIAL"

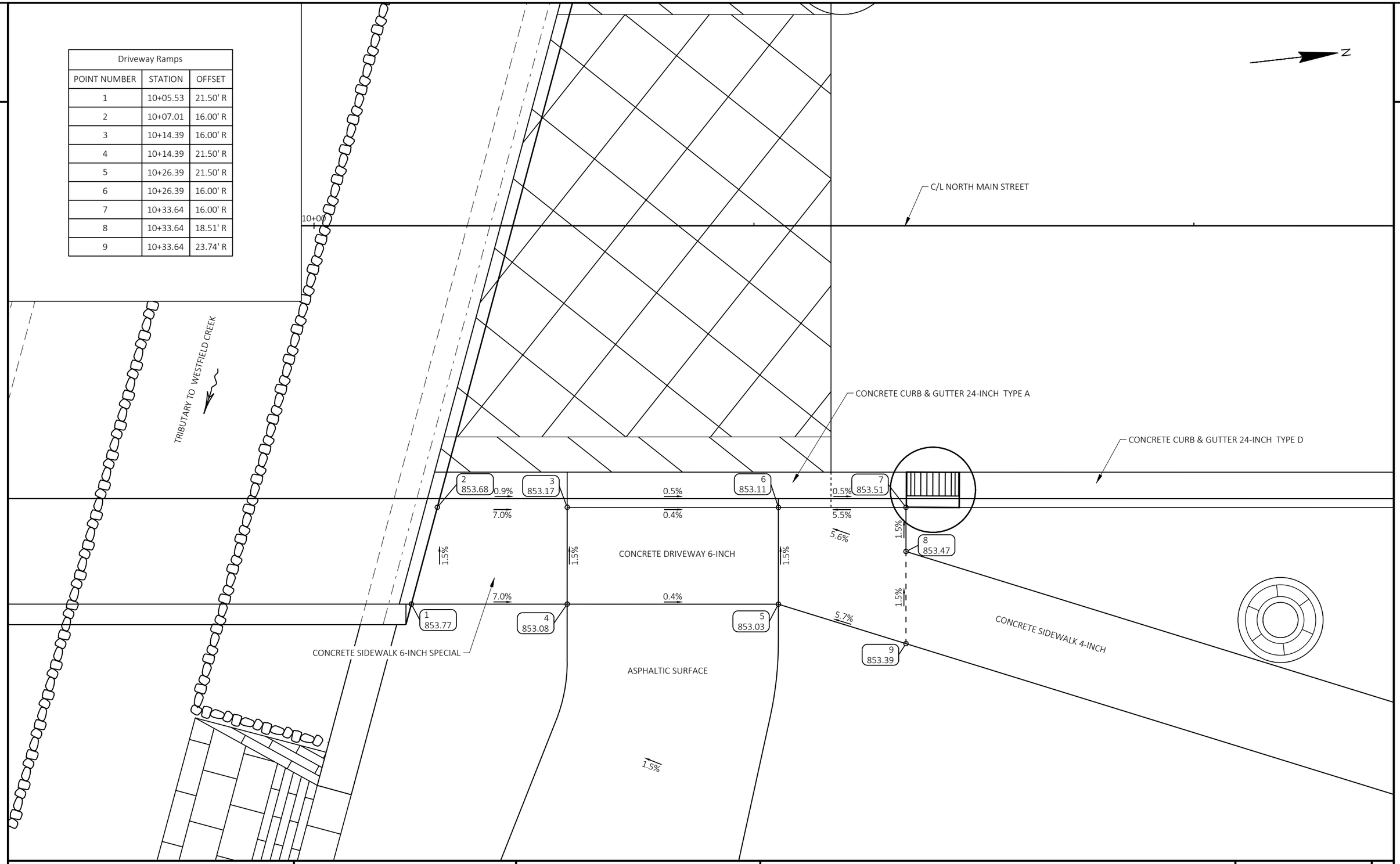




CONCRETE SIDEWALK 6-INCH SPECIAL PLAN

PROJECT NO: 6744-02-70	HWY: LOC STR	COUNTY: MARQUETTE	CONSTRUCTION DETAILS	SHEET 6	E

Driveway Ramps		
POINT NUMBER	STATION	OFFSET
1	10+05.53	21.50' R
2	10+07.01	16.00' R
3	10+14.39	16.00' R
4	10+14.39	21.50' R
5	10+26.39	21.50' R
6	10+26.39	16.00' R
7	10+33.64	16.00' R
8	10+33.64	18.51' R
9	10+33.64	23.74' R



PROJECT NO: 6744-02-70	HWY: LOC STR	COUNTY: MARQUETTE	SIDEWALK DRIVEWAY DETAIL	SHEET 7	E

FILE NAME : G:\00\00177\00177037\CADD\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021301-cr

PLOT DATE : 10/14/2022 6:55 AM PLOT BY : BRAD LEE PLOT NAME : PLOT SCALE : 1 IN:5 FT

2

N

SHEILA EMOND

JEFFREY MARLOW

TRIBUTARY TO WESTFIELD CREEK

TLE

EXISTING R/W

EXISTING R/W

N. MAIN ST.

9+00

10+00

11+00

EXISTING R/W

EXISTING R/W

R/W

TLE

JEFFREY & WANDA HEMBREE

JEFFREY & WANDA HEMBREE

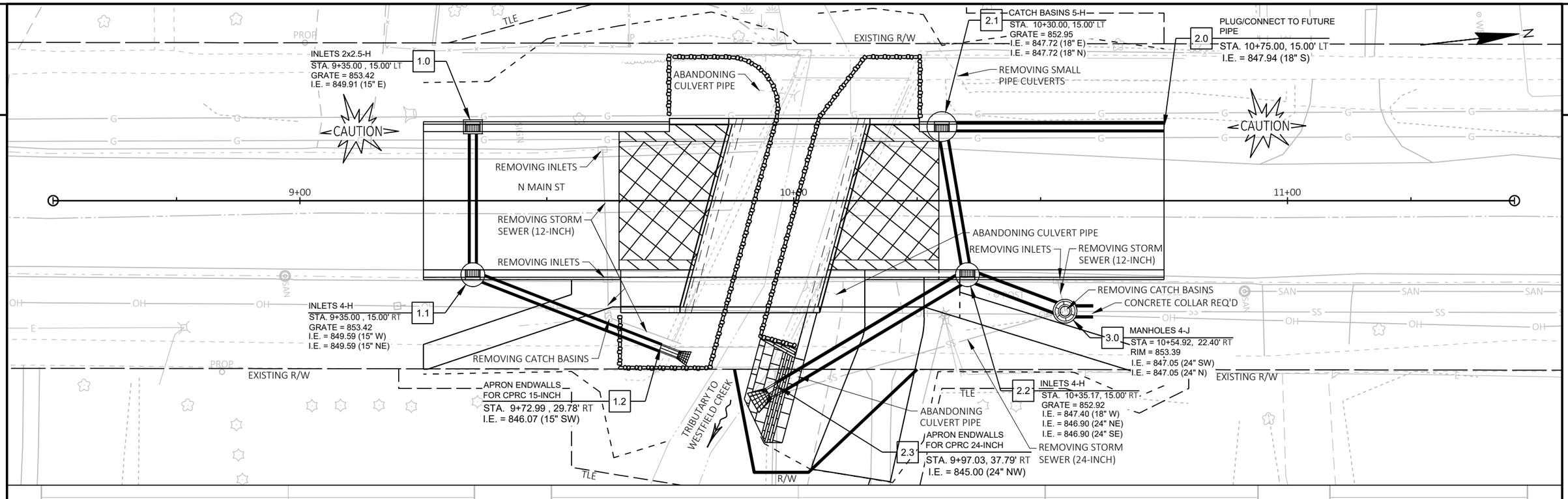
LEGEND

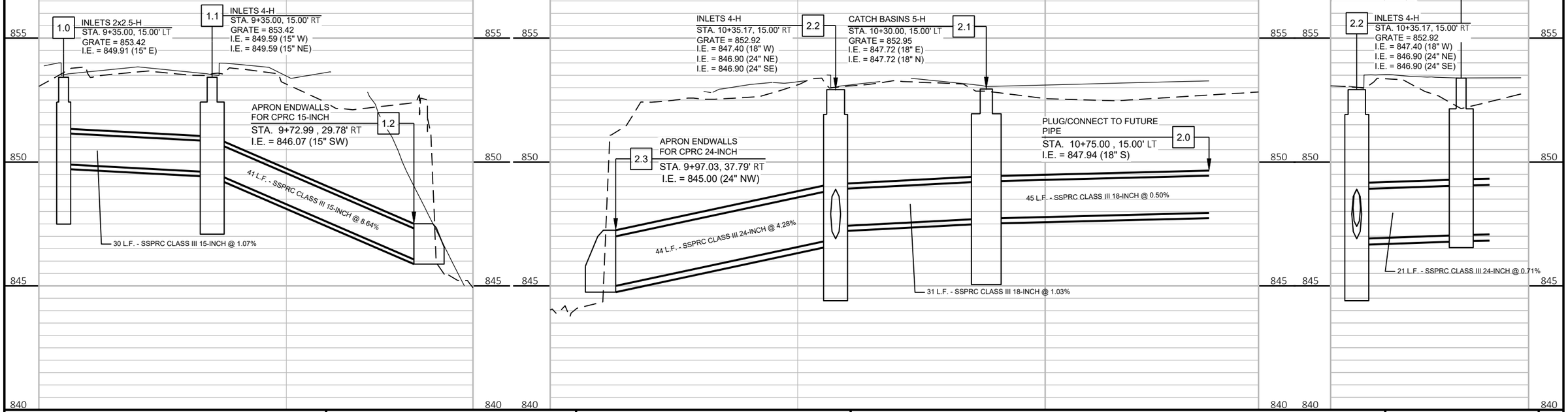
- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- RIPRAP HEAVY
- TURBIDITY BARRIER
- SURFACE WATER FLOW
- INLET PROTECTION

PROJECT NO: 6744-02-70	HWY: LOC STR	COUNTY: MARQUETTE	EROSION CONTROL DETAIL	SHEET 8	E

FILE NAME : G:\00\00177\00177037\CADD\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec

PLOT DATE : 10/14/2022 6:55 AM PLOT BY : BRAD LEE PLOT NAME : PLOT SCALE : 1 IN:20 FT





PROJECT NO: 6744-02-70	HWY: LOC STR	COUNTY: MARQUETTE	STORM SEWER	SHEET 9	E

6744-02-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	1.000	1.000
0004	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0006	203.0270	Removing Structure Over Waterway Debris Capture (structure) 01. B-39-0977	EACH	1.000	1.000
0008	204.0150	Removing Curb & Gutter	LF	195.000	195.000
0010	204.0155	Removing Concrete Sidewalk	SY	99.000	99.000
0012	204.0215	Removing Catch Basins	EACH	2.000	2.000
0014	204.0220	Removing Inlets	EACH	3.000	3.000
0016	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	57.000	57.000
0018	204.0245	Removing Storm Sewer (size) 02. 24-Inch	LF	69.000	69.000
0020	204.0270	Abandoning Culvert Pipes	EACH	3.000	3.000
0022	204.9090.S	Removing (item description) 01. Removing Stacked Stone Wall and Tubular Railing	LF	117.000	117.000
0024	205.0100	Excavation Common	CY	244.000	244.000
0026	206.1001	Excavation for Structures Bridges (structure) 01. B-39-81	EACH	1.000	1.000
0028	206.5001	Cofferdams (structure) 01. B-39-81	EACH	1.000	1.000
0030	210.1500	Backfill Structure Type A	TON	368.000	368.000
0032	213.0100	Finishing Roadway (project) 01. 6744-02-70	EACH	1.000	1.000
0034	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	191.000	191.000
0036	305.0130	Base Aggregate Dense 3-Inch	TON	390.000	390.000
0038	415.0410	Concrete Pavement Approach Slab	SY	100.000	100.000
0040	416.0160	Concrete Driveway 6-Inch	SY	8.000	8.000
0042	455.0605	Tack Coat	GAL	15.000	15.000
0044	465.0105	Asphaltic Surface	TON	66.000	66.000
0046	502.0100	Concrete Masonry Bridges	CY	152.000	152.000
0048	502.3200	Protective Surface Treatment	SY	137.000	137.000
0050	502.3210	Pigmented Surface Sealer	SY	39.000	39.000
0052	505.0400	Bar Steel Reinforcement HS Structures	LB	4,780.000	4,780.000
0054	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	16,890.000	16,890.000
0056	513.7031	Railing Steel Type C6	LF	91.000	91.000
0058	516.0500	Rubberized Membrane Waterproofing	SY	20.000	20.000
0060	520.1015	Apron Endwalls for Culvert Pipe 15-Inch	EACH	1.000	1.000
0062	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	1.000	1.000
0064	520.8000	Concrete Collars for Pipe	EACH	1.000	1.000
0066	550.2104	Piling CIP Concrete 10 3/4 X 0.25-Inch	LF	810.000	810.000
0068	602.0405	Concrete Sidewalk 4-Inch	SF	485.000	485.000
0070	606.0300	Riprap Heavy	CY	129.000	129.000
0072	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	71.000	71.000
0074	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	76.000	76.000
0076	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	73.000	73.000
0078	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0080	611.0624	Inlet Covers Type H	EACH	4.000	4.000
0082	611.1005	Catch Basins 5-FT Diameter	EACH	1.000	1.000
0084	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0086	611.3004	Inlets 4-FT Diameter	EACH	2.000	2.000
0088	611.3225	Inlets 2x2.5-FT	EACH	1.000	1.000
0090	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	205.000	205.000
0092	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6744-02-70	EACH	1.000	1.000
0094	619.1000	Mobilization	EACH	1.000	1.000
0096	624.0100	Water	MGAL	15.000	15.000
0098	625.0500	Salvaged Topsoil	SY	553.000	553.000

6744-02-70

Line	Item	Item Description	Unit	Total	Qty
0100	628.1504	Silt Fence	LF	354.000	354.000
0102	628.1520	Silt Fence Maintenance	LF	354.000	354.000
0104	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0106	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0108	628.2008	Erosion Mat Urban Class I Type B	SY	550.000	550.000
0110	628.6005	Turbidity Barriers	SY	174.000	174.000
0112	628.7015	Inlet Protection Type C	EACH	4.000	4.000
0114	629.0210	Fertilizer Type B	CWT	0.510	0.510
0116	630.0140	Seeding Mixture No. 40	LB	14.000	14.000
0118	630.0200	Seeding Temporary	LB	21.000	21.000
0120	630.0500	Seed Water	MGAL	18.000	18.000
0122	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	1.000	1.000
0124	637.2210	Signs Type II Reflective H	SF	1.500	1.500
0126	637.2230	Signs Type II Reflective F	SF	6.250	6.250
0128	638.2602	Removing Signs Type II	EACH	2.000	2.000
0130	638.3000	Removing Small Sign Supports	EACH	1.000	1.000
0132	642.5001	Field Office Type B	EACH	1.000	1.000
0134	643.0420	Traffic Control Barricades Type III	DAY	1,680.000	1,680.000
0136	643.0705	Traffic Control Warning Lights Type A	DAY	2,688.000	2,688.000
0138	643.0900	Traffic Control Signs	DAY	1,344.000	1,344.000
0140	643.5000	Traffic Control	EACH	1.000	1.000
0142	645.0111	Geotextile Type DF Schedule A	SY	148.000	148.000
0144	645.0120	Geotextile Type HR	SY	274.000	274.000
0146	645.0135	Geotextile Type SR	SY	535.000	535.000
0148	646.1020	Marking Line Epoxy 4-Inch	LF	300.000	300.000
0150	650.4000	Construction Staking Storm Sewer	EACH	8.000	8.000
0152	650.4500	Construction Staking Subgrade	LF	122.000	122.000
0154	650.5000	Construction Staking Base	LF	86.000	86.000
0156	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	172.000	172.000
0158	650.6501	Construction Staking Structure Layout (structure) 01. B-39-81	EACH	1.000	1.000
0160	650.7000	Construction Staking Concrete Pavement	LF	36.000	36.000
0162	650.9500	Construction Staking Sidewalk (project) 01. 6744-02-70	EACH	1.000	1.000
0164	650.9911	Construction Staking Supplemental Control (project) 01. 6744-02-70	EACH	1.000	1.000
0166	650.9920	Construction Staking Slope Stakes	LF	122.000	122.000
0168	690.0250	Sawing Concrete	LF	9.000	9.000
0170	715.0502	Incentive Strength Concrete Structures	DOL	906.000	906.000
0172	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0174	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	300.000	300.000
0176	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000
0178	SPV.0060	Special 01. Remove, Salvage, and Reinstall Stacked Stone Wall	EACH	1.000	1.000
0180	SPV.0060	Special 02. Storm Sewer Plug	EACH	1.000	1.000
0182	SPV.0090	Special 01. Concrete Curb & Gutter 24-Inch Type A	LF	29.000	29.000
0184	SPV.0090	Special 02. Concrete Curb & Gutter 24-Inch Type D	LF	172.000	172.000
0186	SPV.0165	Special 01. Concrete Sidewalk 6-Inch Special	SF	165.000	165.000
0188	SPV.0165	Special 02. Cut-Stone Boulders	SF	168.000	168.000
0190	SPV.0180	Special 01. Concrete Pavement 8-Inch Special	SY	20.000	20.000

3

GRUBBING

STATION	TO	STATION	LOCATION	201.0205 GRUBBING STA
9+55	-	10+55	LT	1
			TOTAL	1

EXCAVATION COMMON

STATION	TO	STATION	205.0100 EXCAVATION COMMON CY	FILL CY(1)	EXPANDED FILI CY(2)
9+25	-	9+83	106	11	14
10+11	-	10+75	138	26	34
		TOTAL	244	37	48

(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.
(2) - FILL EXPANSION 30%

REMOVALS

STATION	TO	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	204.0215 REMOVING CATCH BASINS EACH	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER (01. 12 INCH) LF	204.0245.02 REMOVING STORM SEWER (02. 24 INCH) LF	204.0270 ABANDONING CULVERT PIPES EACH	204.9090.S.01 REMOVING (ITEM DESCRIPTION) (01. STACKED STONE WALL AND TUBULAR RAILING) LF	REMARKS
9+25	-	9+81	RT	---	---	28	---	---	---	---	---	---	
9+25	-	9+81	RT	---	56	---	---	---	---	---	---	---	
9+25	-	9+94	LT	---	69	---	---	---	---	---	---	---	
9+61	-	9+77	LT & RT	---	---	---	---	---	50	---	---	---	
9+94	-	10+55	RT	---	---	---	---	---	7	69	---	---	
9+92	-	-	LT	---	---	---	---	---	---	---	1	---	
10+00	-	-	RT	---	---	---	---	---	---	---	1	---	
10+08	-	-	RT	---	---	---	---	---	---	---	1	---	
10+28	-	10+34	LT	1	---	---	---	---	---	---	---	---	12" CSCP
10+06	-	10+75	RT	---	70	43	---	---	---	---	---	---	
10+25	-	10+75	LT	---	---	28	---	---	---	---	---	---	
9+62	-	-	LT & RT	---	---	---	1	2	---	---	---	---	
10+54	-	-	RT	---	---	---	1	1	---	---	---	---	
9+33		10+01	LT	---	---	---	---	---	---	---	---	69	
10+27	-	10+75	LT	---	---	---	---	---	---	---	---	48	
			TOTAL	1	195	99	2	3	57	69	3	117	

BASE AGGREGATE DENSE

STATION	TO	STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0130 BASE AGGREGATE DENSE 3-INCH TON	624.0100 WATER MGAL	645.0135 GEOTEXTILE TYPE SR SY
9+25	-	9+83	MAINLINE	76	185	6	260
9+25	-	9+83	SIDEWALK RT	8	---	1	---
10+11	-	10+75	MAINLINE	81	205	6	275
10+11	-	9+65	SIDEWALK RT	9	---	1	---
10+20	-	---	DRIVEWAY RT	17	---	1	---
			TOTAL	191	390	15	535

ASPHALTIC SURFACE

STATION	TO	STATION	LOCATION	ASPHALT THICKNESS INCHES	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON
9+25	-	9+65	MAINLINE	4	7	28
10+29	-	10+75	MAINLINE	4	8	32
10+20	-	---	DRIVEWAY, RT	2	---	6
			TOTAL		15	66

CONCRETE PAVEMENT

STATION	TO	STATION	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	SPV.0180.01 SPECIAL (01. CONCRETE PAVEMENT 8-INCH SPECIAL) SY
9+65	-	9+83	50	10
10+11	-	10+29	50	10
		TOTAL	100	20

CONCRETE ITEMS

STATION	TO	STATION	LOCATION	416.0160 CONCRETE DRIVEWAY 6-INCH SY	602.0405 CONCRETE SIDEWALK 4-INCH SF	SPV.0165.01 SPECIAL (01. CONCRETE SIDEWALK 6-INCH SPECIAL) SF
9+25	-	9+65	RT	---	225	---
9+65	-	9+80	RT	---	---	101
10+06	-	10+14	RT	---	---	64
10+14	-	10+26	RT	8	---	---
10+26	-	10+75	RT	---	260	---
			TOTAL	8	485	165

3

CURB & GUTTER

STATION	TO	STATION	LOCATION	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	SPV.0090.01 SPECIAL (01. CONCRETE CURB & GUTTER 24-INCH TYPE A) LF	SPV.0090.02 SPECIAL (02. CONCRETE CURB & GUTTER 24-INCH TYPE D) LF
9+25	-	9+64.97	RT	40	---	40
9+25	-	9+74.68	LT	40	10	40
10+14.39	-	10+75	RT	46	15	46
10+25.44	-	10+75	LT	46	4	46
			TOTAL	172	29	172

STORM SEWER PIPE

STRUCTURE	TO	STRUCTURE	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF
1.0	-	1.1	30	---	---
1.1	-	1.2	41	---	---
2.0	-	2.1	---	45	---
2.1	-	2.2	---	31	---
2.2	-	2.3	---	---	44
3.0	-	2.2	---	---	21
EXIST	-	3.0	---	---	8
		TOTAL	71	76	73

STORM SEWER STRUCTURES

STRUCTURE NO.	STATION	LOCATION	GRATE/RIM ELEVATION	TOP OF STRUCTURE ELEVATION	INVERT ELEVATION	STRUCTURE DEPTH	520.1015 APRON ENDWALLS FOR CULVERT PIPE 15-INCH EACH	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	520.8000 CONCRETE COLLARS FOR PIPE EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0624 INLET COVERS TYPE H EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3225 INLETS 2X2.5-FT EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.02 SPECIAL (02. STORM SEWER PLUG) EACH
1.0	9+35.00	15.00' LT	853.42	852.42	849.91	4.51	---	---	---	---	1	---	---	---	1	1	---
1.1	9+35.00	15.00' RT	853.42	852.42	849.59	4.83	---	---	---	---	1	---	---	1	---	1	---
1.2	9+72.99	29.78' RT	-	-	846.07	-	1	---	---	---	---	---	---	---	---	1	---
2.0	10+75.00	15.00' LT	-	-	847.94	-	---	---	---	---	---	---	---	---	---	1	1
2.1	10+30.00	15.00' LT	852.95	851.95	847.72	6.23	---	---	---	---	1	1	---	---	---	1	---
2.2	10+35.17	15.00' RT	852.92	851.92	846.90	7.02	---	---	---	---	1	---	---	1	---	1	---
2.3	9+97.03	37.79' RT	-	-	845.00	-	---	1	---	---	---	---	---	---	---	1	---
3.0	10+54.92	22.40' RT	853.39	852.14	847.05	5.09	---	---	1	1	---	---	1	---	---	1	---
						TOTAL	1	1	1	1	4	1	1	2	1	8	1

EROSION CONTROL MOBILIZATION

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT 6744-02-70	3	3
TOTAL	3	3

RESTORATION ITEMS

STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
9+25	-	9+83	RT	93	0.09	2.3	3.5	2.9
9+25	-	10+00	LT	115	0.11	3.0	4.4	3.7
9+96	-	10+75	RT	126	0.11	3.1	4.6	3.9
10+07	-	10+75	LT	108	0.10	2.7	4.1	3.4
UNDISTRIBUTED			----	111	0.10	2.8	4.2	3.5
			TOTAL	553	0.51	14	21	18

EROSION CONTROL

STATION	TO	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 BARRIERS SY	628.7015 INLET PROTECTION TYPE C EACH
9+25	-	9+83	RT	60	60	92	---	---
9+25	-	10+04	LT	78	78	114	---	---
9+35	-	9+35	LT & RT	---	---	---	---	2
9+75	-	10+04	LT & RT	---	---	---	74	---
9+88	-	10+07	LT & RT	---	---	---	65	---
9+96	-	10+75	RT	72	72	126	---	---
10+07	-	10+75	LT	73	73	108	---	---
10+30	-	10+30	LT	---	---	---	---	1
10+35.17	-	---	RT	---	---	---	---	1
UNDISTRIBUTED			---	71	71	110	35	---
			TOTAL	354	354	550	174	4

3

SIGNING

STATION	LOCATION	SIGN CODE	SIZE	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
9+44	LT	---		---	---	---	2	1	STOP AHEAD/NO PARKING
9+44	LT	W3-1	30"X30"	1	---	6.25	---	---	STOP AHEAD
		R7-1	12"X18"	---	1.50	---	---	---	NO PARKING ANY TIME
			TOTAL	1	1.50	6.25	2	1	

PAVEMENT MARKING

STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	REMARKS
9+25	-	10+75	CENTERLINE	300	DOUBLE YELLOW
			TOTAL	300	

3

TRAFFIC CONTROL ITEMS

LOCATION	DAYS	TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	TRAFFIC CONTROL SIGNS EACH	643.0900 TRAFFIC CONTROL SIGNS DAY
N MAIN ST & SPRING ST	84	2	168	6	504	3	252
N MAIN ST & PIONEER PARK RD	84	2	168	6	504	3	252
SIDEWALK CLOSURE	84	2	168	---	---	2	168
BEGINNING OF PROJECT	84	7	588	10	840	4	336
END OF PROJECT	84	7	588	10	840	4	336
	TOTAL		1,680		2,688		1,344

NOTE: SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"; SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

CONSTRUCTION STAKING

STATION	TO	STATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.6501.01 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) (01. B-39-0081) EACH	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.9500.01 CONSTRUCTION STAKING SIDEWALK (PROJECT) (01. 6744-02-70) EACH	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 6744-02-70) EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
9+25	-	10+75	---	---	1	---	1	1	---
9+25	-	9+83	58	40	---	18	---	---	58
10+11	-	10+75	64	46	---	18	---	---	64
		TOTAL	122	86	1	36	1	1	122

SAWING CONCRETE

STATION	LOCATION	690.0250 SAWING CONCRETE LF
9+25	SIDEWALK RT	5
10+75	SIDEWALK RT	4
	TOTAL	9

CONVENTIONAL SYMBOLS

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

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 — SIGN
OFF-PREMISE SIGN — #1-25 — 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

CONVENTIONAL UTILITY SYMBOLS

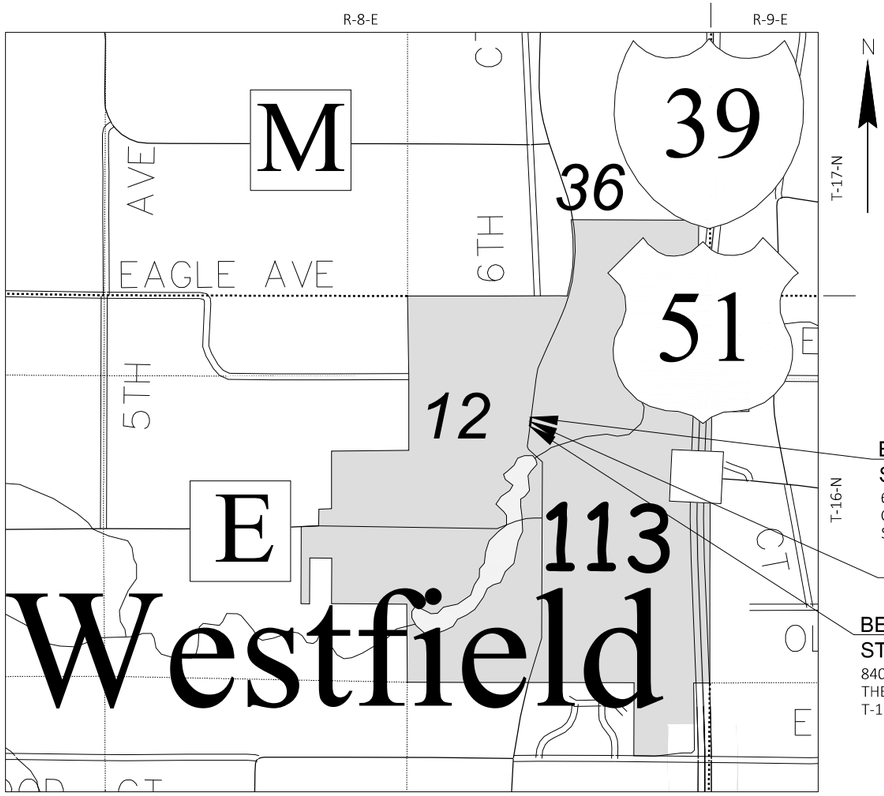
WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	☒

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA ABBREVIATIONS

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



LAYOUT
SCALE 0 — 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.030 MI

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
6744-02-00		
FEDERAL PROJECT NUMBER	4.01	2

PLAT OF RIGHT OF WAY REQUIRED FOR

V WESTFIELD, MAIN STREET
WESTFIELD CREEK BRIDGE B-39-0081

LOC STR	MARQUETTE COUNTY

CONSTRUCTION PROJECT NUMBER
6744-02-70

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), MARQUETTE COUNTY, NAD83 (2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE DETAIL PAGES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLES) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

END RELOCATION ORDER
STA 10+80.00
681.79' SOUTH OF AND 499.55' WEST OF THE NORTH QUARTER CORNER OF SEC. 12, T-16-N, R-8-E

STRUCTURE B-39-0081

BEGIN RELOCATION ORDER
STA 9+20.00
840.77' SOUTH OF AND 517.62' WEST OF THE NORTH QUARTER CORNER OF SEC. 12, T-16-N, R-8-E

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.

REVISION DATE

ACCEPTED FOR
THE VILLAGE OF WESTFIELD

DATE: _____ _____
(Signature)

ORIGINAL PLAT PREPARED BY

MSA
ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1230 SOUTH BOULEVARD, BARABOO, WI 53913
(608) 356-2771 www.msa-ps.com

WISCONSIN
BRADLEY L. TISDALE
S-2824
WAUNAKEE
WI
LAND SURVEYOR

DATE: 05/02/2022 _____
(Professional Land

FILE NAME : G:\00\00177\00177037\CADD\RW\040101-RP.DWG
PLOT DATE : 5/2/2022 2:32 PM
PLOT BY : BRAD TISDALE
PLOT NAME :

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNERS	INTERESTS REQUIRED	R/W ACRES OR SF REQUIRED			TLE SF
			NEW	EXISTING	TOTAL	
1	SHEILA J. KOCH	TLE	---	---	---	176 SF
2	JEFFREY T. MARLOW	TLE	---	---	---	801 SF
3	JEFFREY A. HEMBREE & WANDA K. HEMBREE	FEE & TLE	501 SF	---	501 SF	1,666 SF

ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

EXISTING MONUMENTS

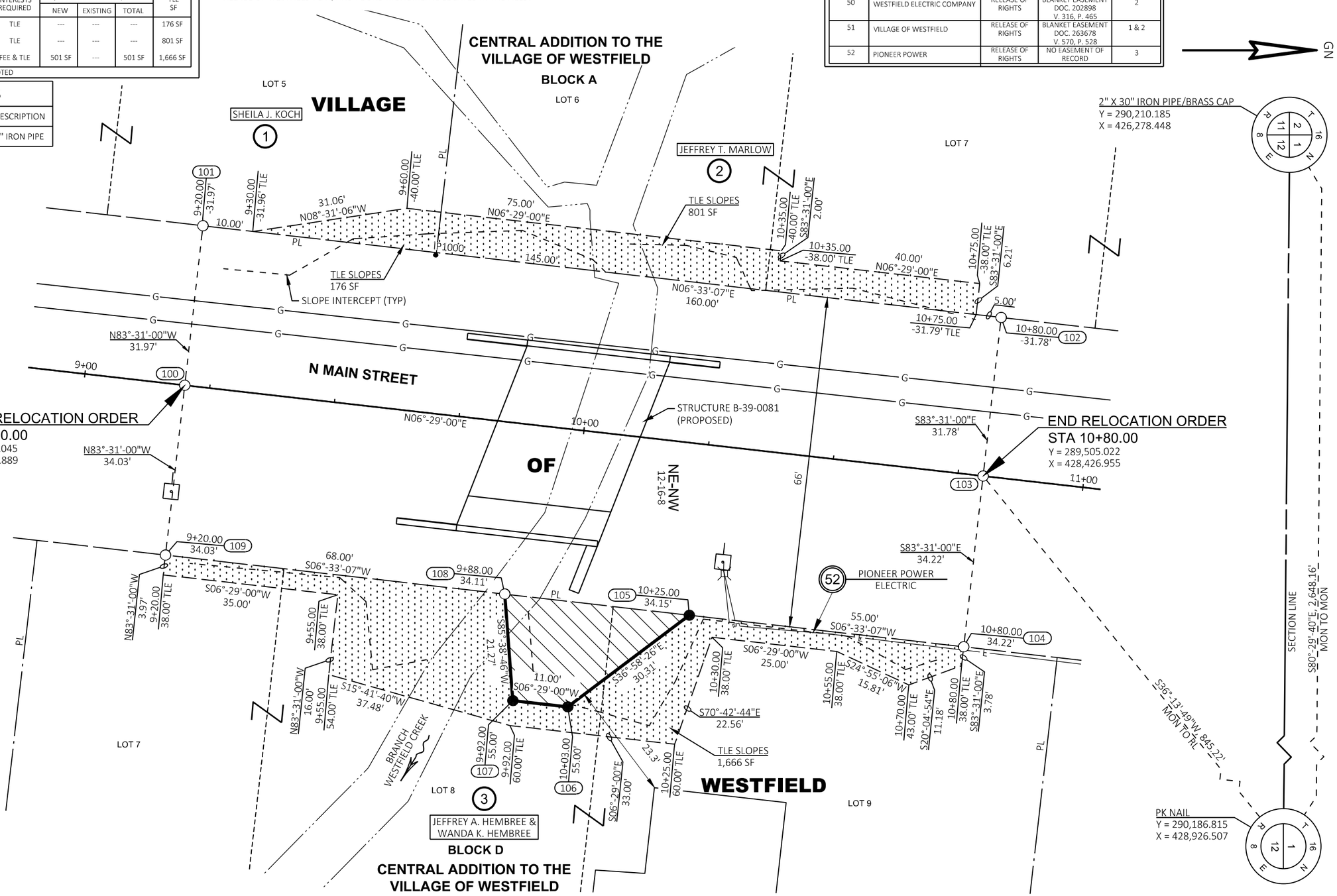
PT. NO.	STATION	OFFSET	DESCRIPTION
IP1000	9+66.72	31.40' LT	2" IRON PIPE

NOTES:

EXISTING HIGHWAY RIGHT OF WAY BASED ON THE CENTRAL ADDITION TO THE VILLAGE OF WESTFIELD PLAT, AND FOUND MONUMENTS LOCATED IN THE FIELD.

EASEMENT TABLE

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED	RECORDING INFORMATION	LOCATED IN R/W PARCEL
50	WESTFIELD ELECTRIC COMPANY	RELEASE OF RIGHTS	BLANKET EASEMENT DOC. 202898 V. 316, P. 465	2
51	VILLAGE OF WESTFIELD	RELEASE OF RIGHTS	BLANKET EASEMENT DOC. 263678 V. 570, P. 528	1 & 2
52	PIONEER POWER	RELEASE OF RIGHTS	NO EASEMENT OF RECORD	3



REVISION DATE	DATE MAY 02, 2022	SCALE, FEET 0 10 20	HWY: LOC STR	STATE R/W PROJECT NUMBER 6744-02-00	PLAT SHEET 4.02	
			COUNTY: MARQUETTE	CONSTRUCTION PROJECT NUMBER 6744-02-70	PS&E SHEET 16	E

FILE NAME : 040101-RP.DWG
LAYOUT NAME - 040102-rp

PLOT DATE : 5/2/2022 2:40 PM PLOT BY : BRAD TISDALE PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75

BENCH MARKS			
NO.	STATION, OFFSET	ELEV.	DESCRIPTION
1	9+99.54, 28.1' RT	854.21	CHISLED "X" ON BOLT
2	8+79.78, 41.4' LT	854.70	NE CORNER CONCRETE HOUSE PORCH
3	11+38.42, 38.3' LT	855.33	WELL SOUTH CAP BOLT

CONTROL POINTS				
NO.	STATION, OFFSET	DESCRIPTION	Y	X
1	7+93.82, 18.36' RT	3/4" IRON ROD	289,218.60	428,412.89
2	9+34.17, 13.41' LT	3/4" IRON ROD	289,361.64	428,397.16
3	10+06.28, 20.69' RT	3/4" IRON ROD	289,429.46	428,439.17
4	12+01.78, 13.66' LT	3/4" IRON ROD	289,627.57	428,427.14

LEGEND

RIPRAP HEAVY

CONCRETE PAVEMENT 8-INCH SPECIAL

CONCRETE PAVEMENT APPROACH SLAB

P/L

SHEILA EMOND

JEFFREY MARLOW

JEFFREY & WANDA HEMBREE

WETLAND BOUNDARY

TRIBUTARY TO WESTFIELD CREEK

REMOVING STACKED STONE WALL AND TUBULAR RAILING

WOODEN FENCE REMOVED BY OTHERS PRIOR TO CONSTRUCTION

REMOVE EXISTING STRUCTURE B-39-0977

STRUCTURE B-39-0081

SLOPE INTERCEPTS (TYP.)

ALL TREES GREATER THAN 3-INCHES IN DIAMETER REMOVED BY OTHER PRIOR TO CONSTRUCTION (TYP.)

REMOVING CONCRETE SIDEWALK

GAS (WE ENERGIES)

ELECTRIC (WESTFIELD ELECTRIC)

BM 1

BM 2

BM 3

CP 1

CP 2

CP 3

CP 4

EXISTING R/W

99'

N. MAIN ST.

9+00

10+00

11+00

TLE

CAUTION

OVERHEAD COMMUNICATION (FRONTIER COMMUNICATION)

REMOVING CONCRETE SIDEWALK

BEGIN PROJECT
STA 9+25
Y = 289,351.01
X = 428,409.45

PE, ASPH STA 10+20

EXISTING STONE RETAINING WALL (TO REMAIN)

END PROJECT
STA 10+75
Y = 289,500.05
X = 428,426.39

EXISTING C/L PROFILE

FINISHED C/L PROFILE

HIGH WATER 100
ELEV. 850.19

-0.50%

0.50%

STA 9+25.00
EL 853.89

STA 10+30.00
EL 853.37

STA 10+75.00
EL 853.59

OBSERVED WATER
ELEV. 844.82±
(12-07-2021)

EXISTING
FINISHED

854.40
853.90
853.50
853.77
844.32
853.52
853.24
853.47
853.39

855
850
845
843

STRUCTURE B-39-0081
STA 9+97
SINGLE SPAN CONCRETE FLAT SLAB BRIDGE
31.0 FT CLEAR ROADWAY WIDTH
28.6' OVERALL LENGTH
SKEW= 15 DEG LHF

REMOVE EXISTING STRUCTURE B-39-0977
STA 10+00
SINGLE SPAN CONCRETE SLAB BRIDGE AND
SEPARATE SLAB SIDEWALK SLABS ON BOTH SIDES
27.0 FT CLEAR ROADWAY WIDTH
22 FT CLEAR SPAN
SKEW= 23 DEG LHF

EARTHWORK SUMMARY	
STA 9+25 - STA 10+75	
EXC. COMMON	244 CY
FILL	37 CY
FILL EXPANSION	30%
WASTE	196 CY

6 7 8 9 10 11 12 12

PROJECT NO: 6744-02-70	HWY: LOC STR	COUNTY: MARQUETTE	PLAN AND PROFILE: NORTH MAIN STREET	SHEET 17	E

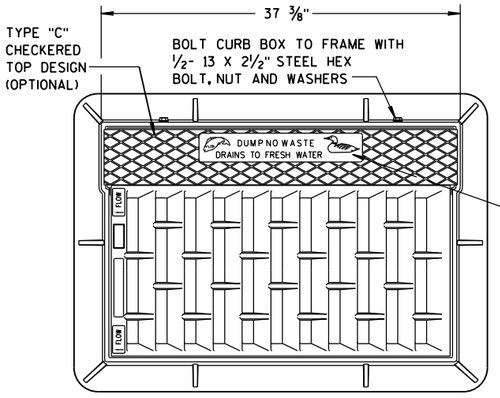
FILE NAME : G:\00\00177\00177037\CADD\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp

PLOT DATE : 10/14/2022 6:57 AM PLOT BY : BRAD LEE PLOT NAME : PLOT SCALE : 1 IN:40 FT

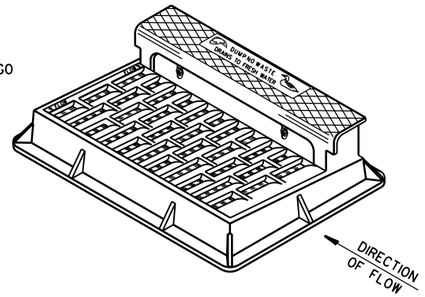
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

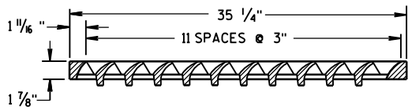
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08B09-03	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D18-03	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
12A03-10	NAME PLATE (STRUCTURES)
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C08-22A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D30-07A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-07C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

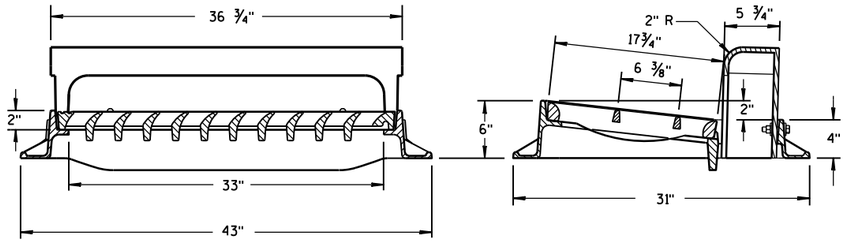


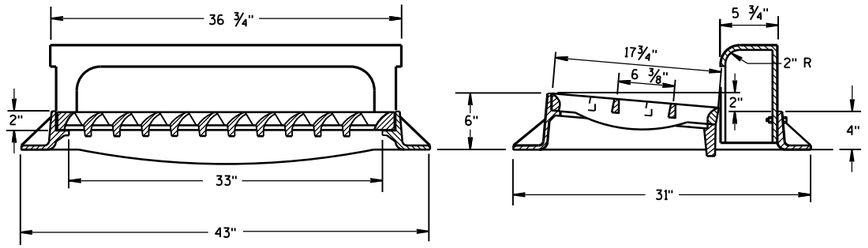
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

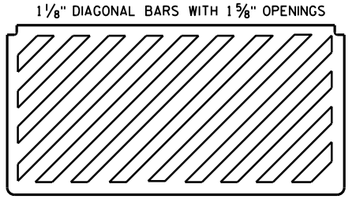






TYPE "H"

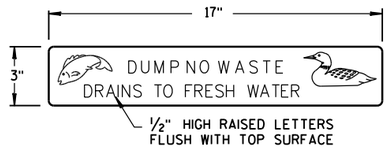
NOTE: EITHER CASTING IS ACCEPTABLE



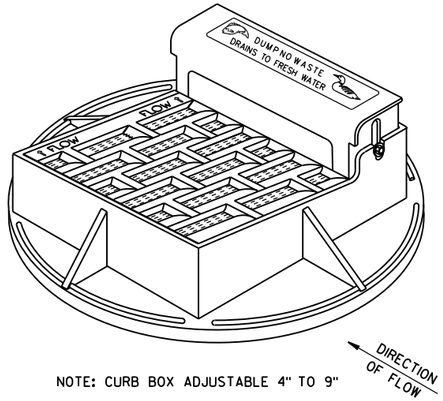
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

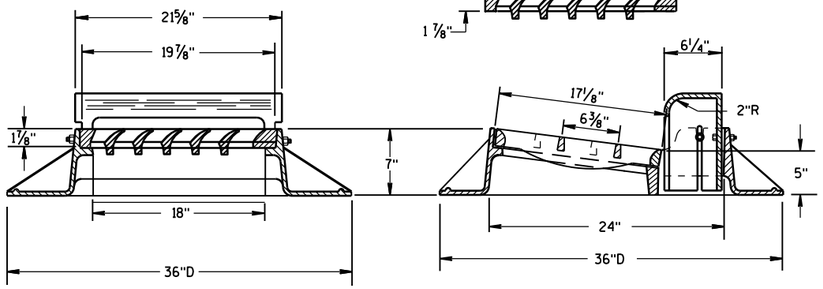


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



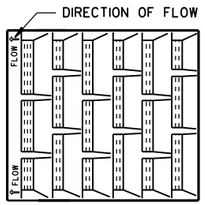
TYPE "A"

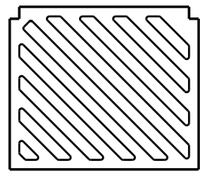
GENERAL NOTES

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.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

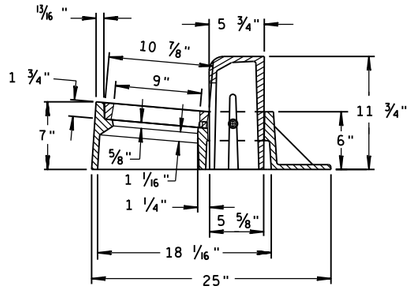


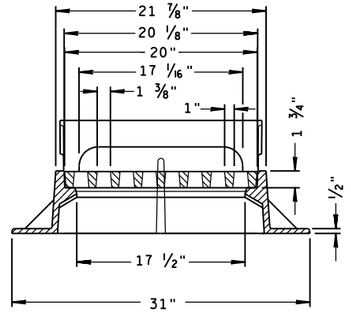


SPECIAL GRATE FOR TYPE "A" COVER

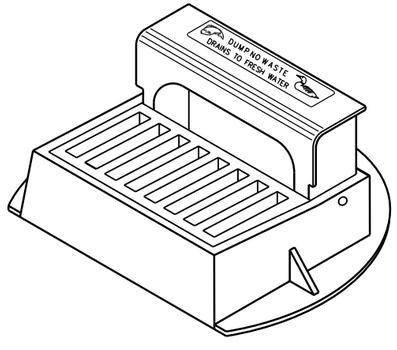
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



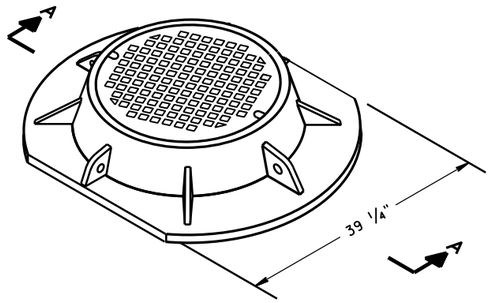
INLET COVERS
TYPE A, H, A-S, H-S & Z

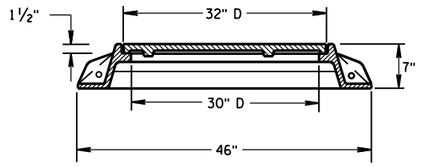
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

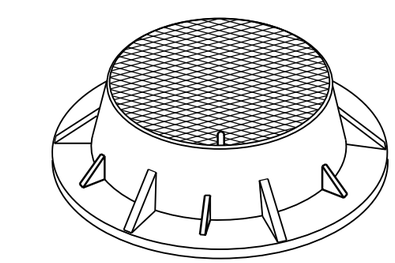
6

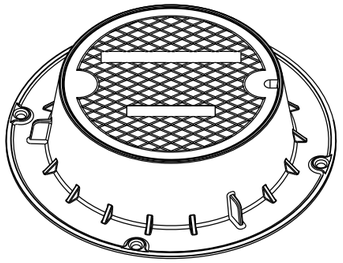
S.D.D. 8 A 5-19a

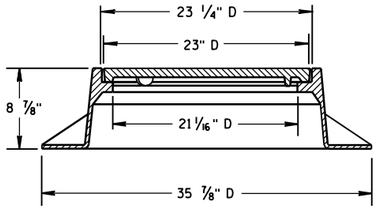


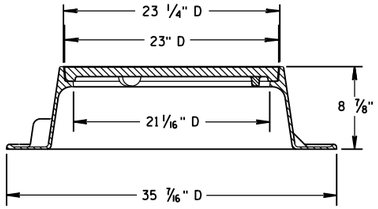


SECTION A-A
TYPE "K"









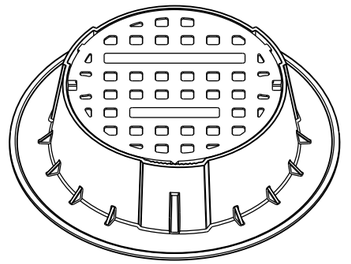
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

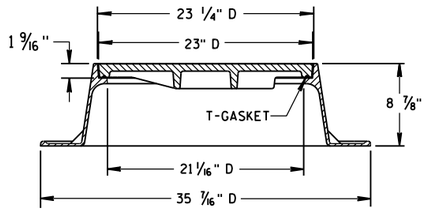
GENERAL NOTES

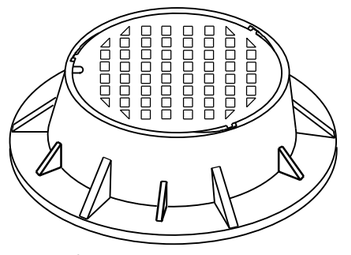
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

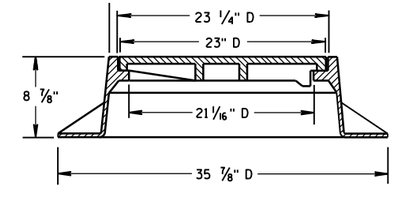
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

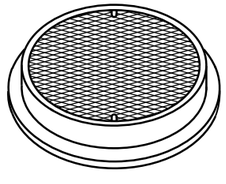


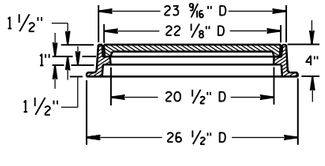




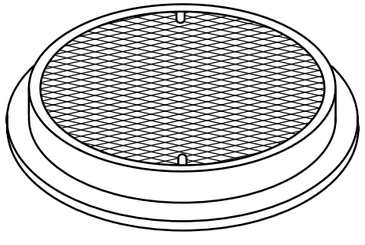


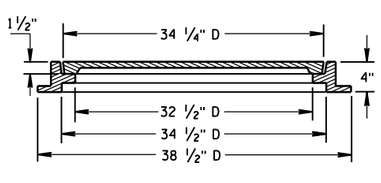
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



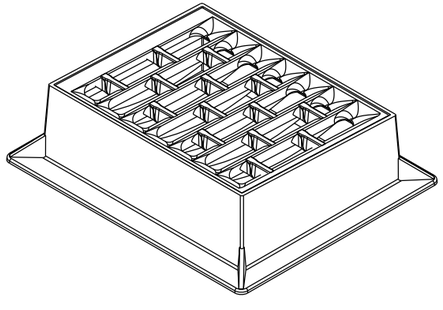


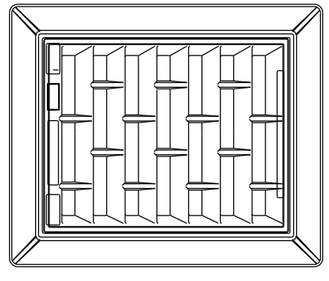
TYPE "L"

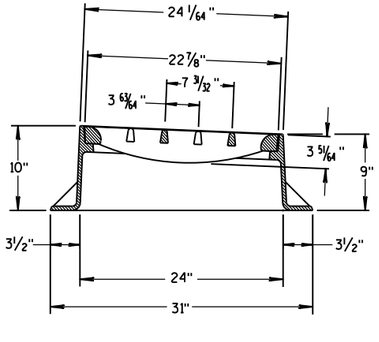


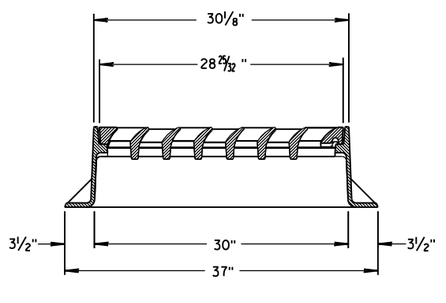


TYPE "M"









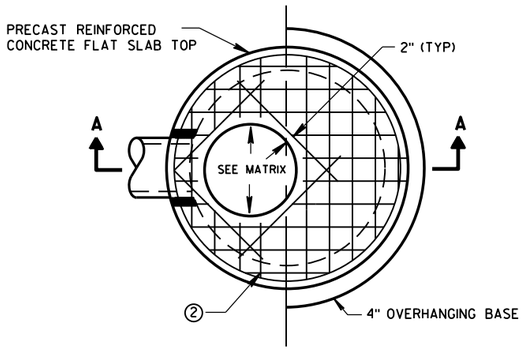
INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

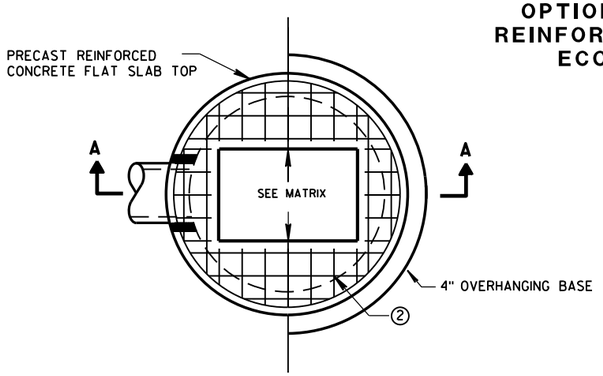
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

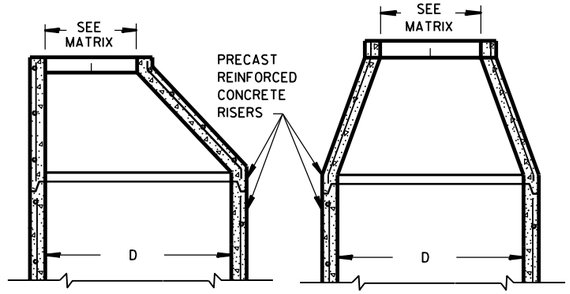
6
S.D.D. 8 A 5-19d



PLAN VIEW CIRCULAR OPENING

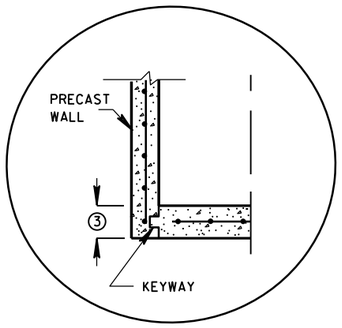


PLAN VIEW RECTANGULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

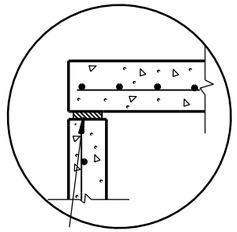
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

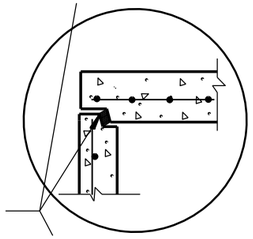
SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

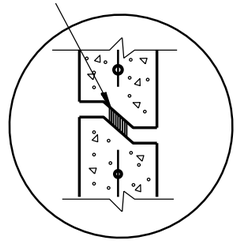


TOP WITH PLAIN END JOINT

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

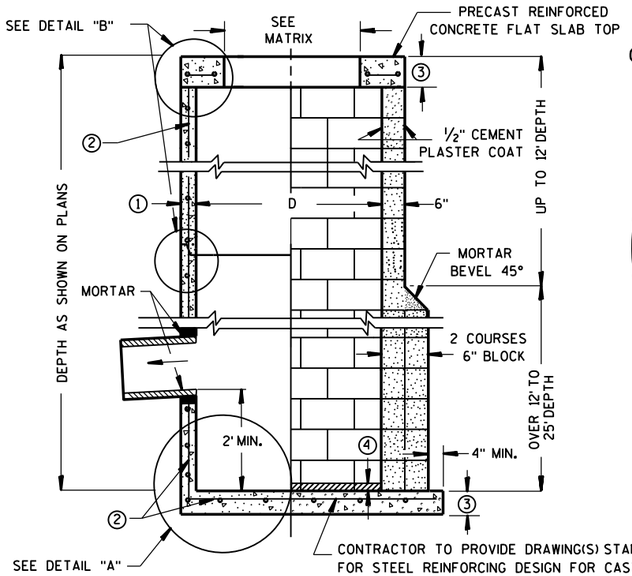


TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

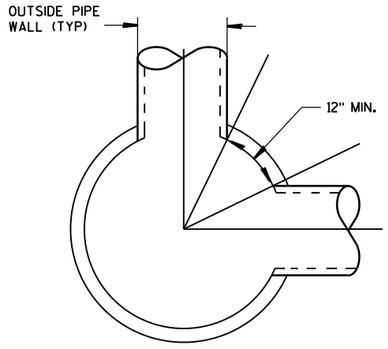
DETAIL "B"



SECTION A-A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



DETAIL "C"

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

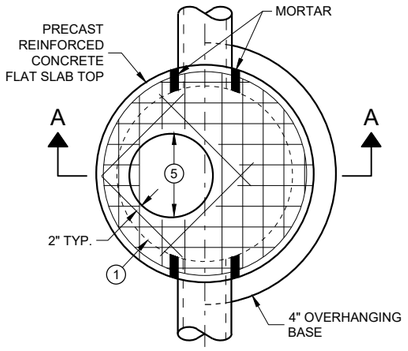
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

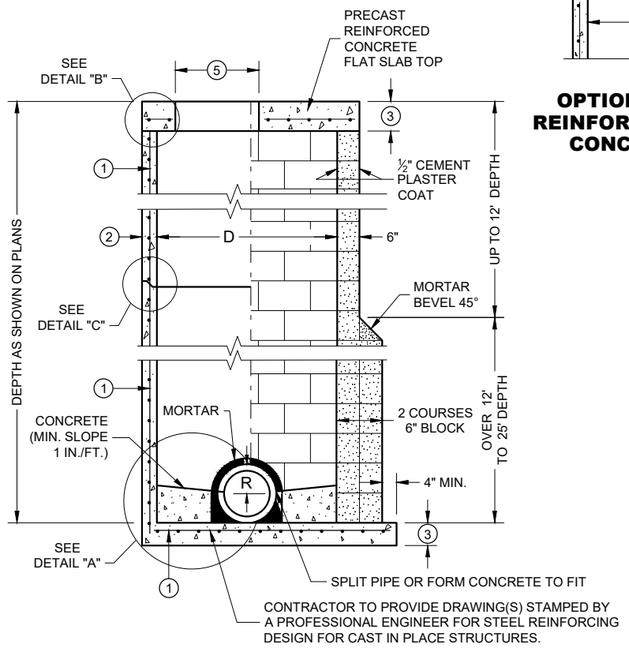
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

6 S.D.D. 8 A 8-2



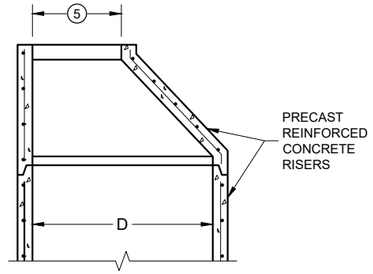
PLAN VIEW
CIRCULAR OPENING



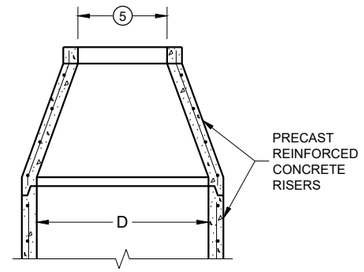
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

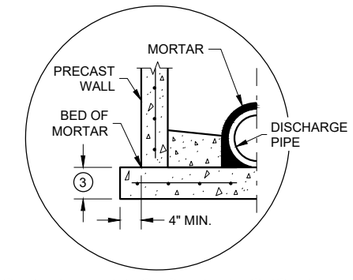
MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

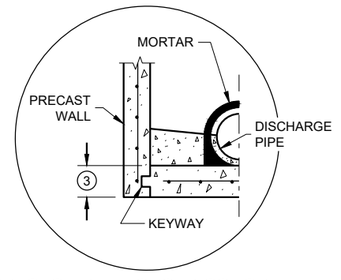
PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42*	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES.
SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

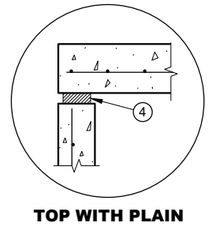


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

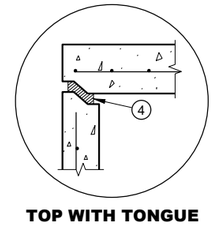


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

DETAIL "A"

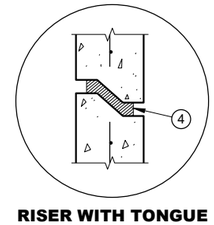


TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

DETAIL "B"



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "C"

GENERAL NOTES

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STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

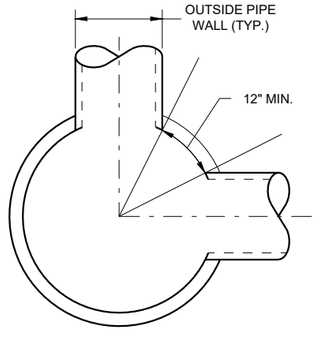
(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP.).

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

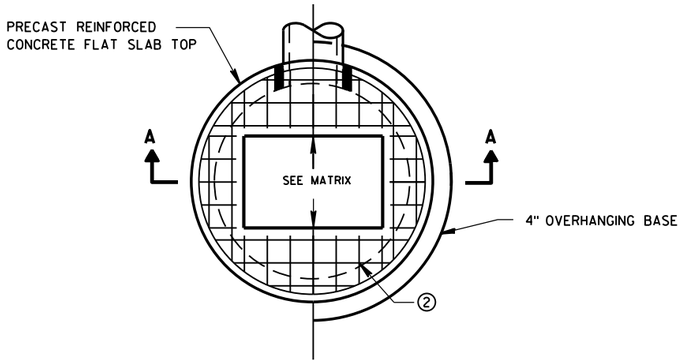
MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

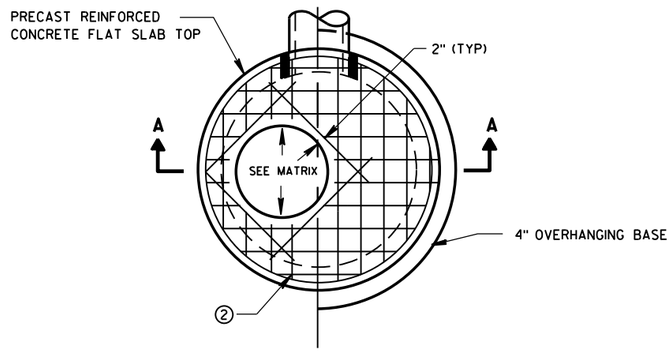
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

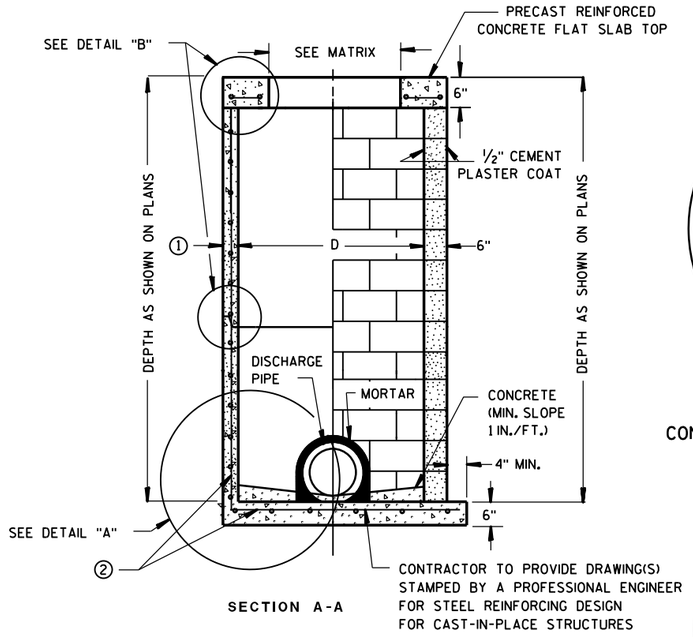
6
SDD 08B09 - 03



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

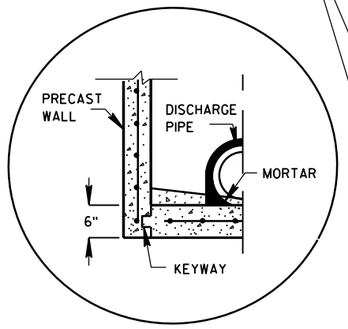


SECTION A-A

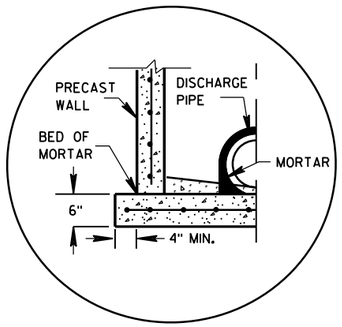
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

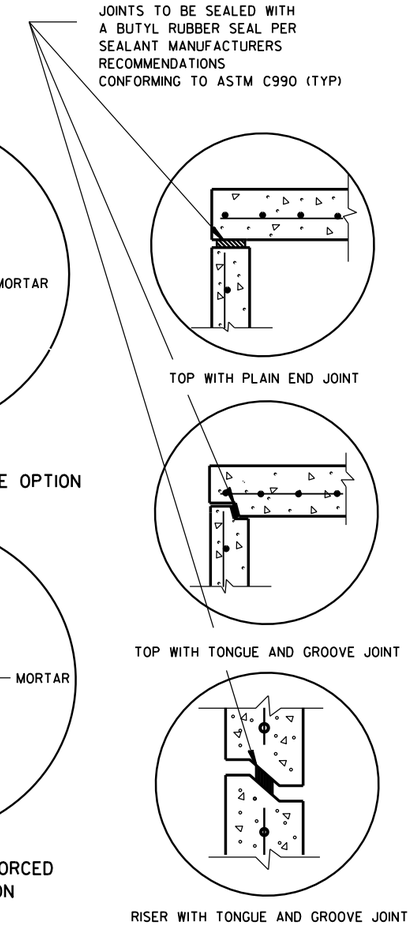


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

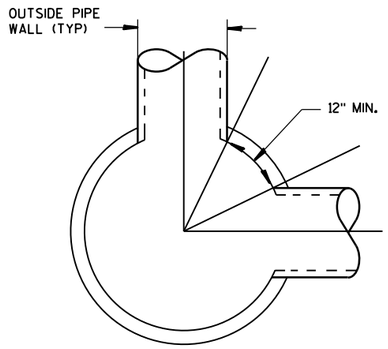
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

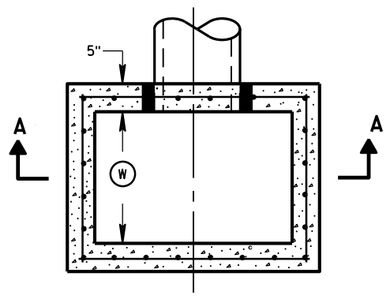
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

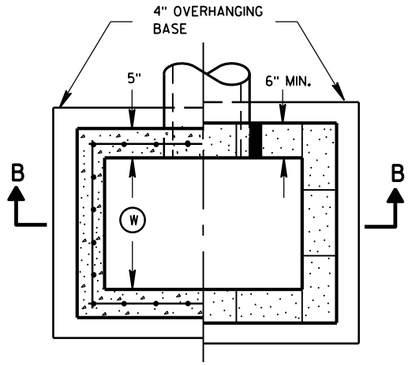
INLETS 3-FT AND 4-FT DIAMETER

6

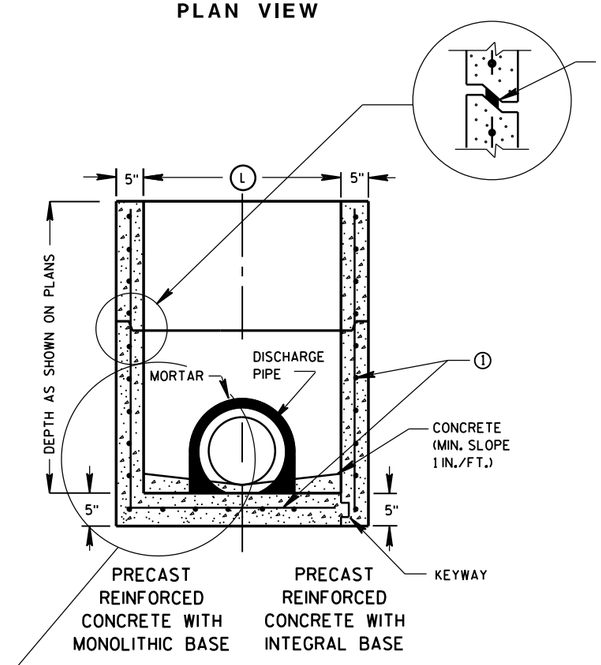
S.D.D. 8 C 6-2



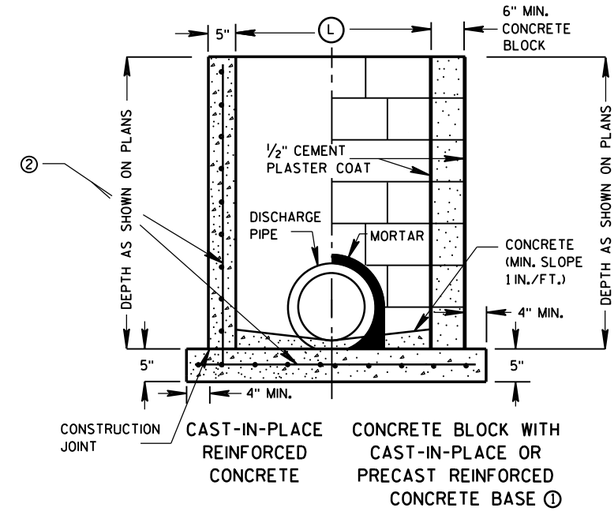
PLAN VIEW



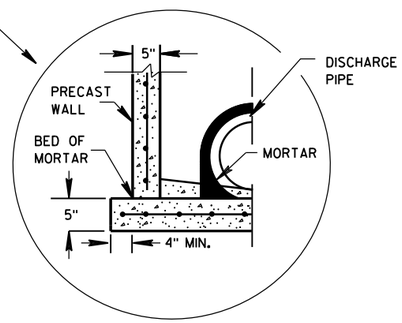
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

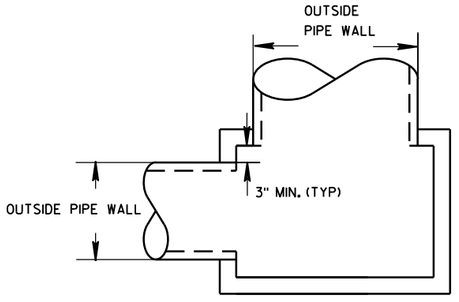
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH Ⓦ (FT)	LENGTH Ⓛ (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

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S.D.D. 8 C 7-2

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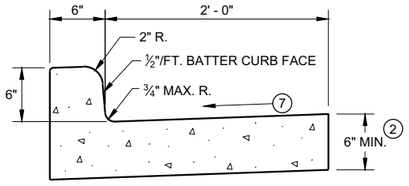
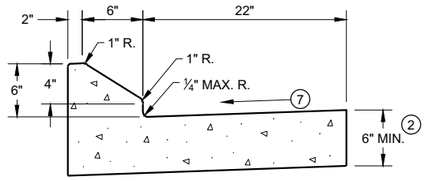
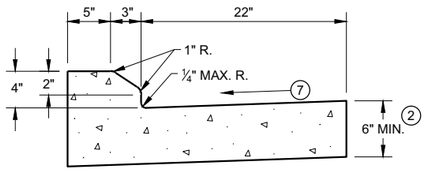
S.D.D. 8 C 7-2



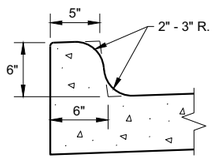
TYPES A (1) & D



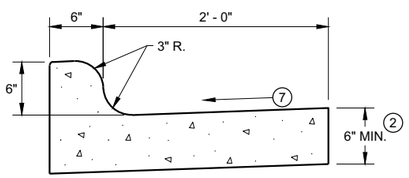
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

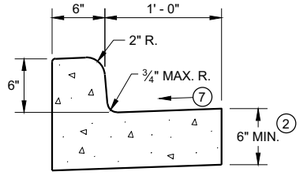


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



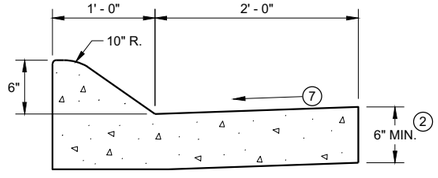
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"



TYPES A (1) & D

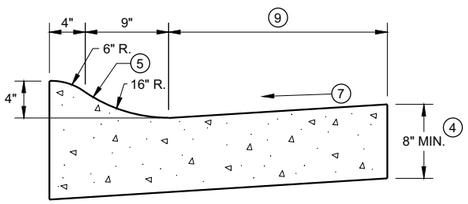
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

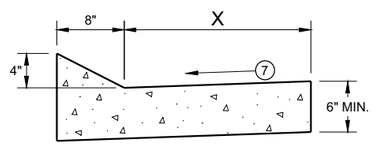
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

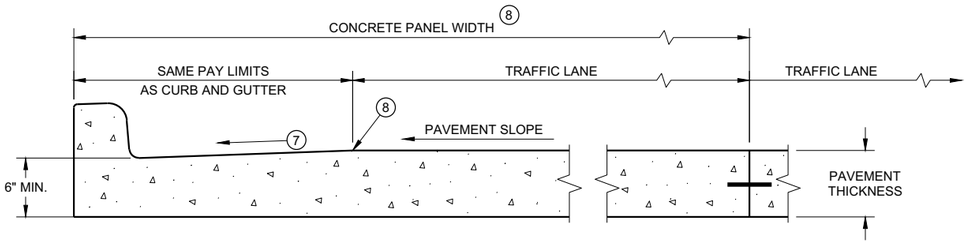


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

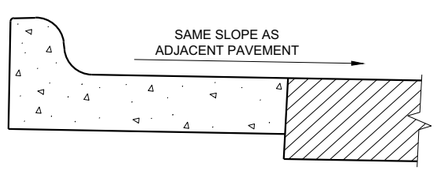
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

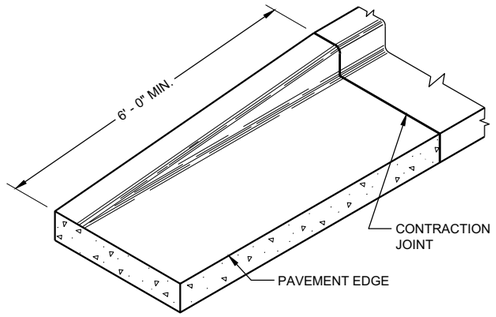
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

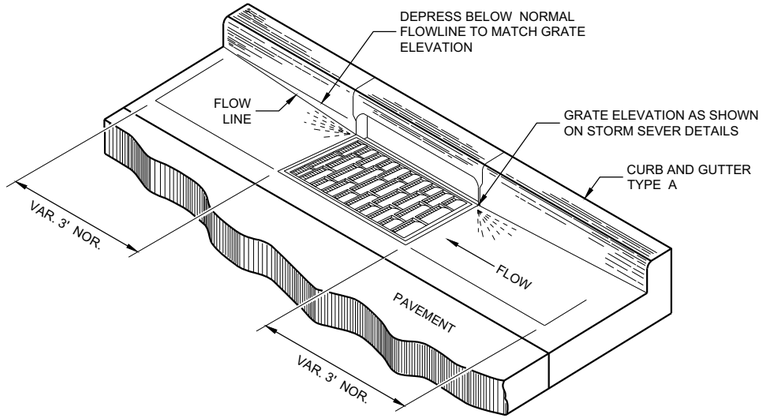
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D01 - 22a
SDD 08D01 - 22a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

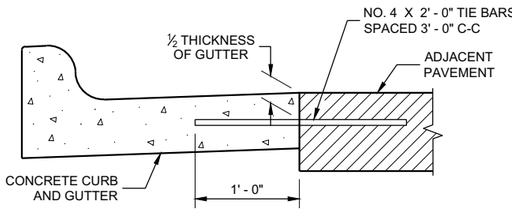
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

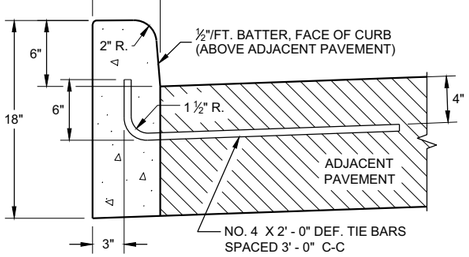
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

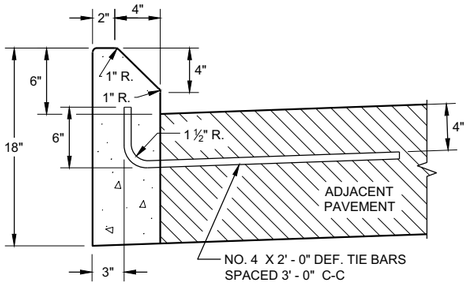
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

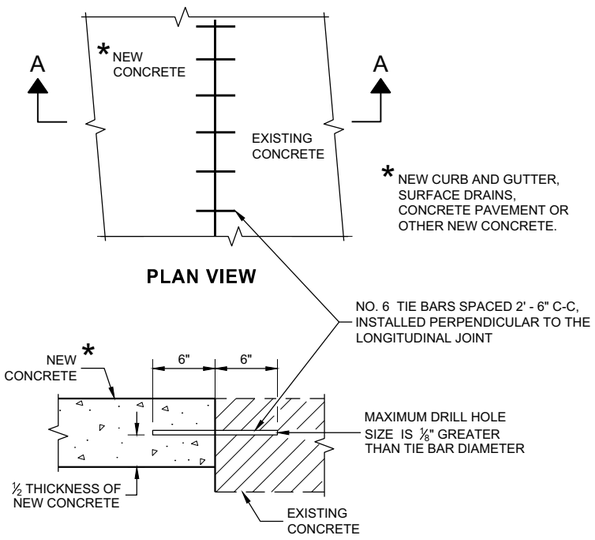


TYPES A (1) & D



TYPES G (1) & J

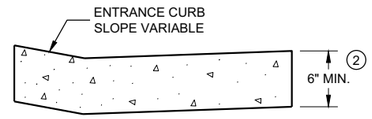
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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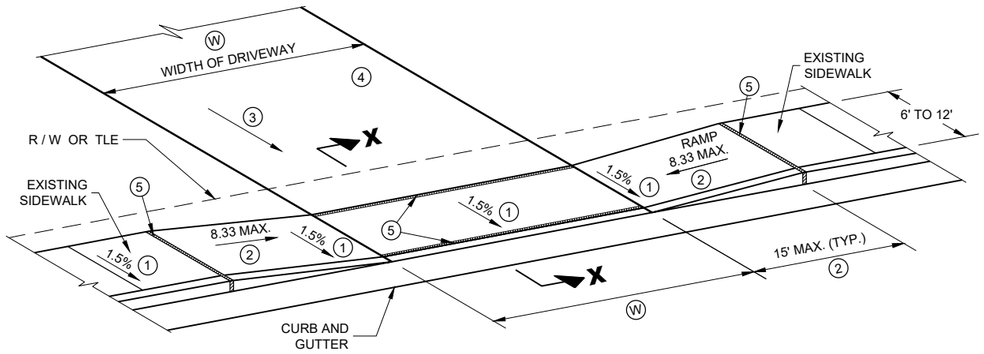
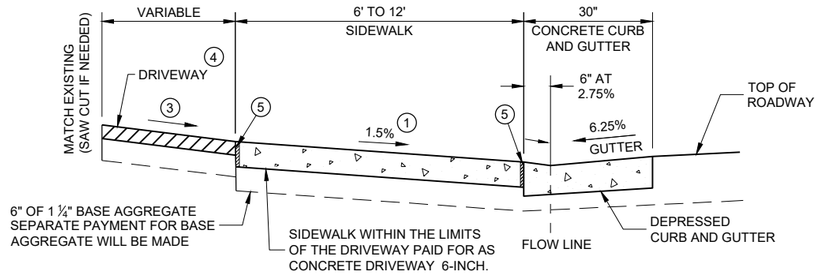
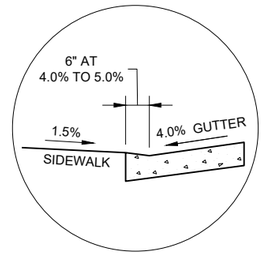
SDD08D01 - 22b



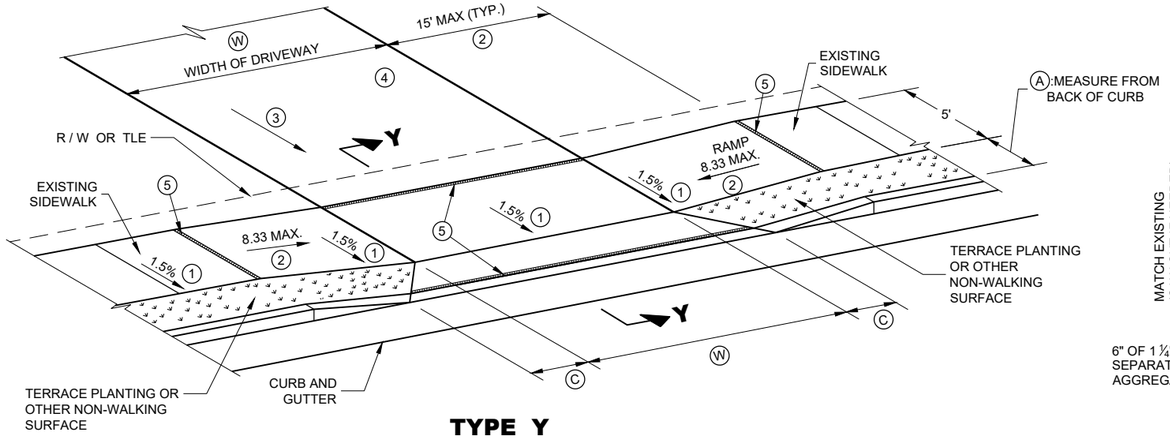
TYPE X
SIDEWALK ABUTS CURB AND GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X - X



SECTION X - X
4% GUTTER SLOPE



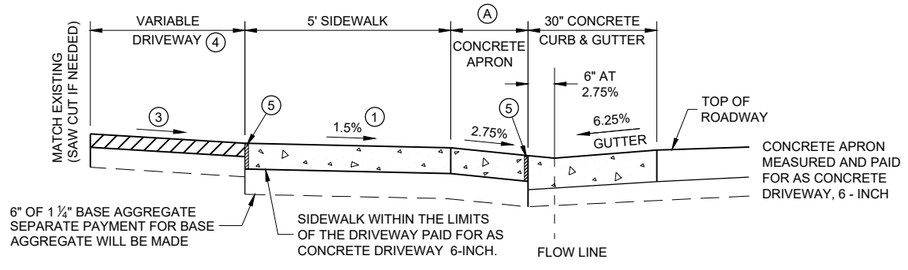
TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

W: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

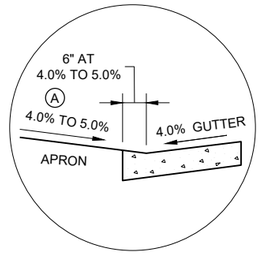
16' MIN. - 35' MAX. COMMERCIAL (CE)

TABLE Y

Ⓐ FEET	Ⓒ FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'



NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS



SECTION Y - Y
4% GUTTER SLOPE

SECTION Y - Y
DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER
(URBAN AND SUBURBAN)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

Ⓦ IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

③ DRIVEWAY SLOPES: DESIRABLE MAXIMUM
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

④ DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

⑤ ½" EXPANSION JOINT FILLER

DRIVEWAY AND SIDEWALK RAMPS TYPES X AND Y

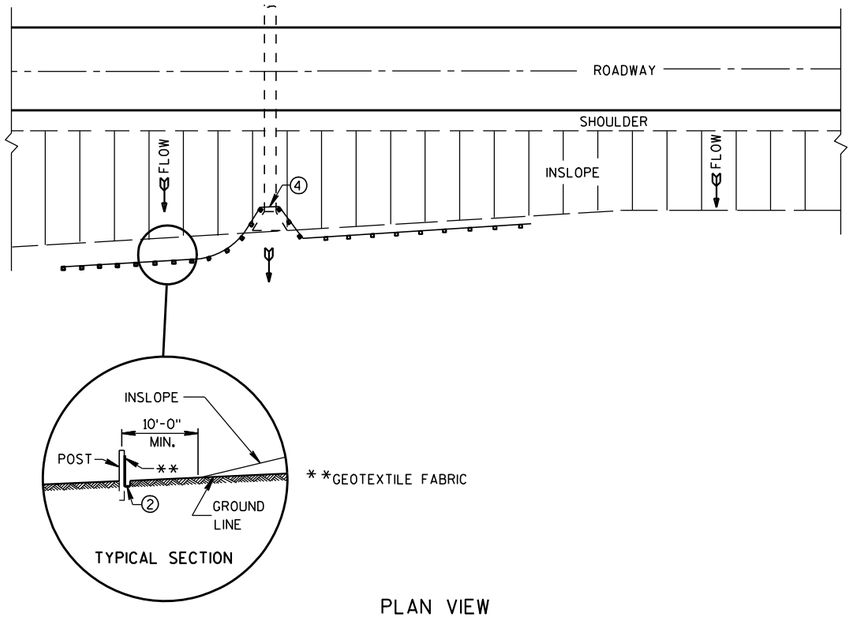
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

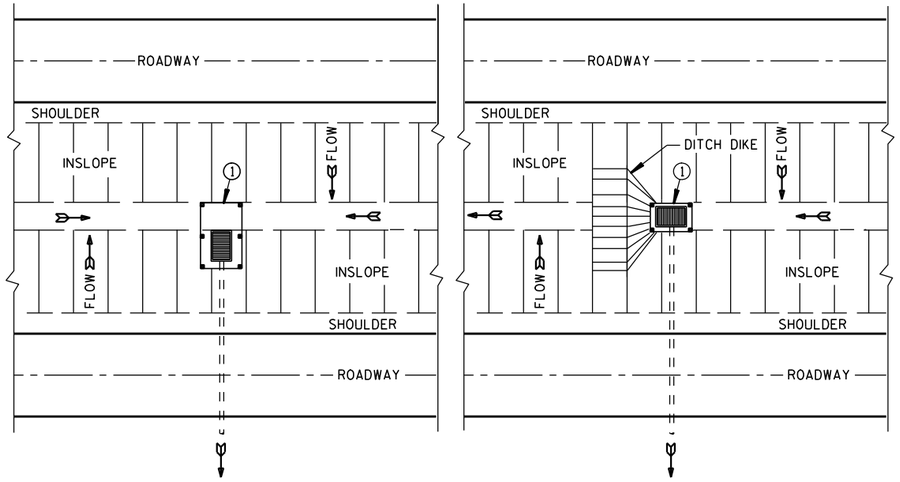
SDD 08D18 - 03

SDD 08D18 - 03



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



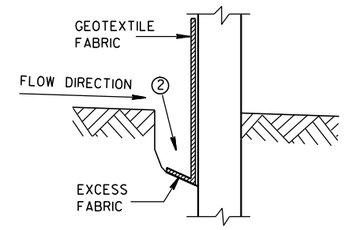
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

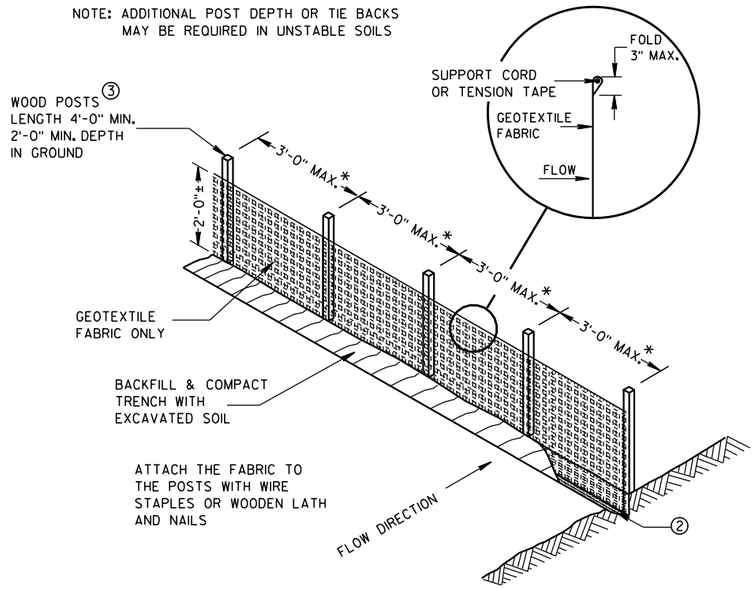
GENERAL NOTES

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

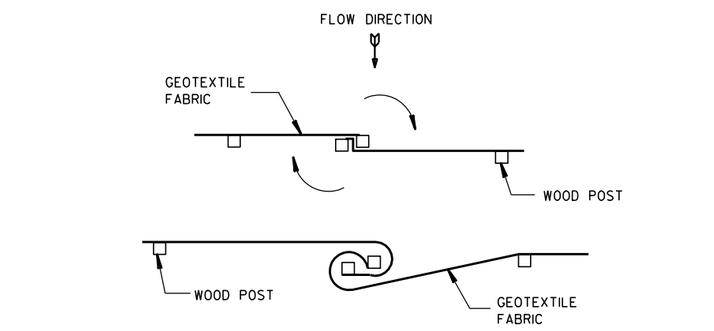
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



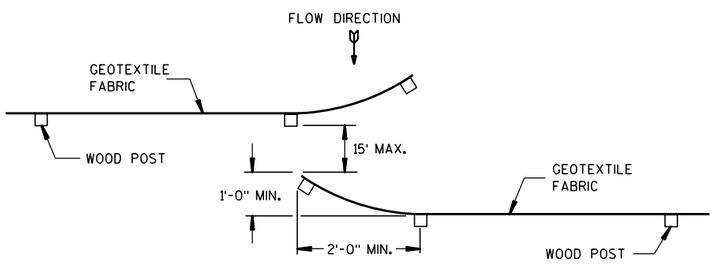
TRENCH DETAIL



SILT FENCE

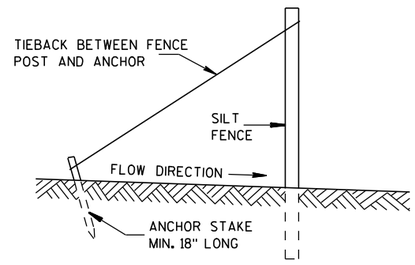


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 8 E 9-6

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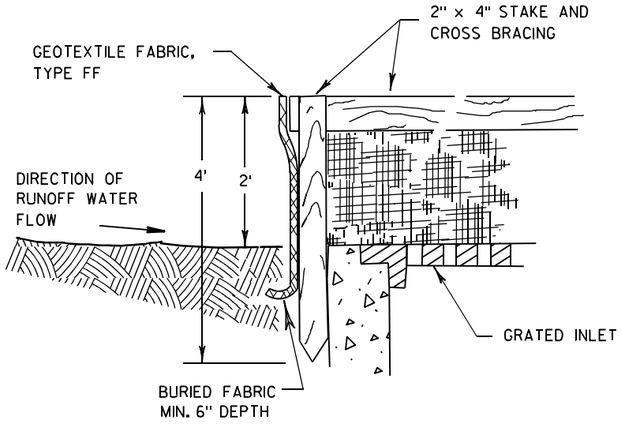
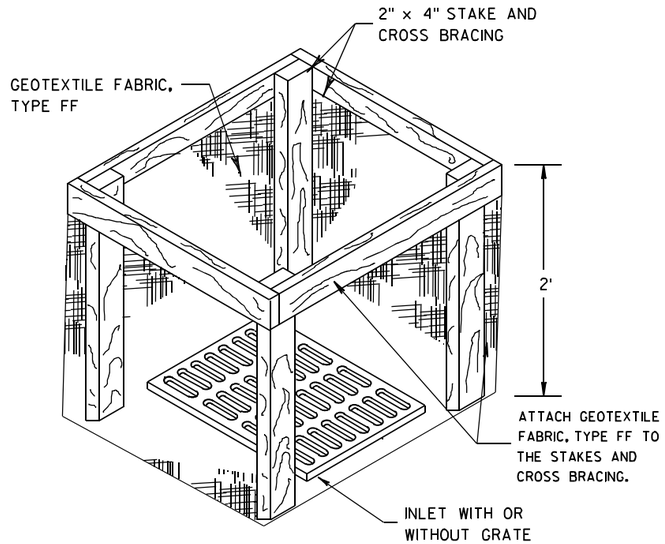
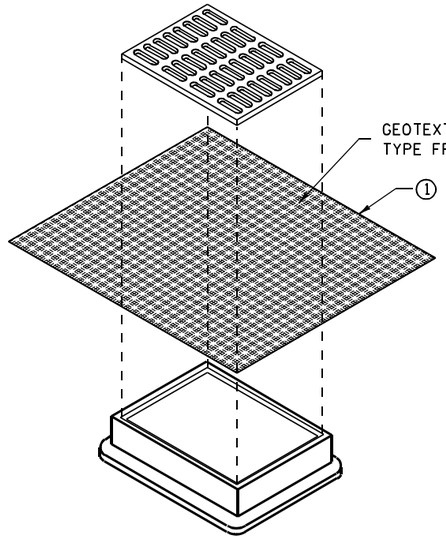
S.D.D. 8 E 9-6



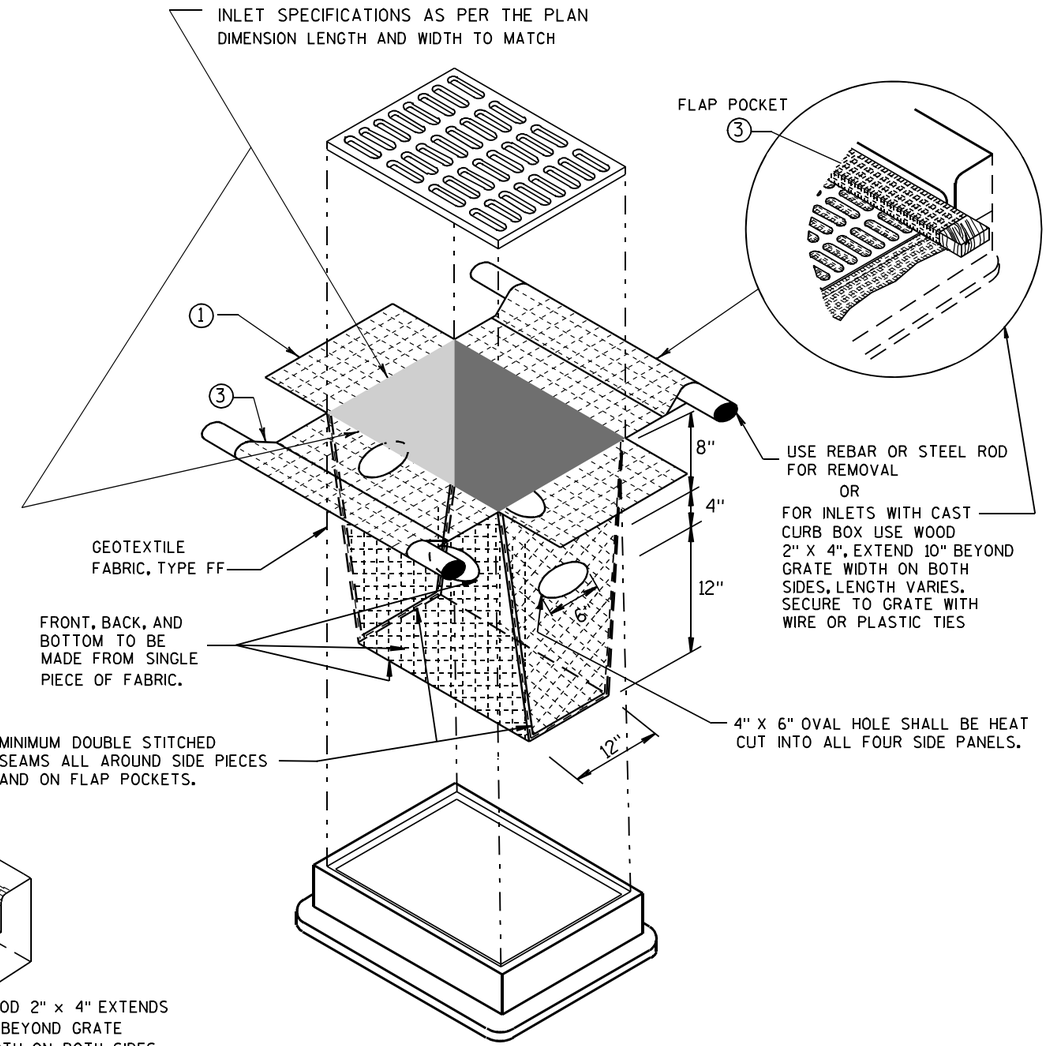


INLET PROTECTION, TYPE A



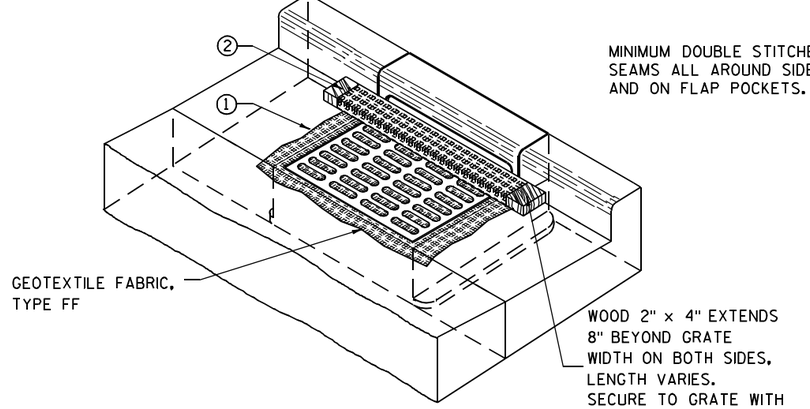
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

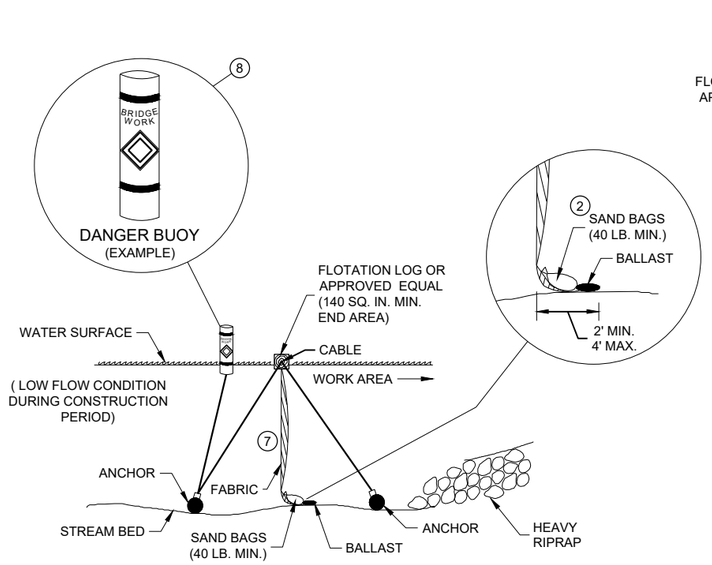
APPROVED

10/16/02
DATE

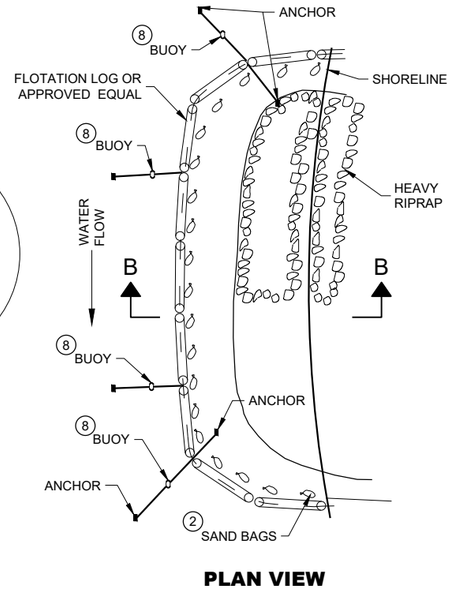
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 E 10-2

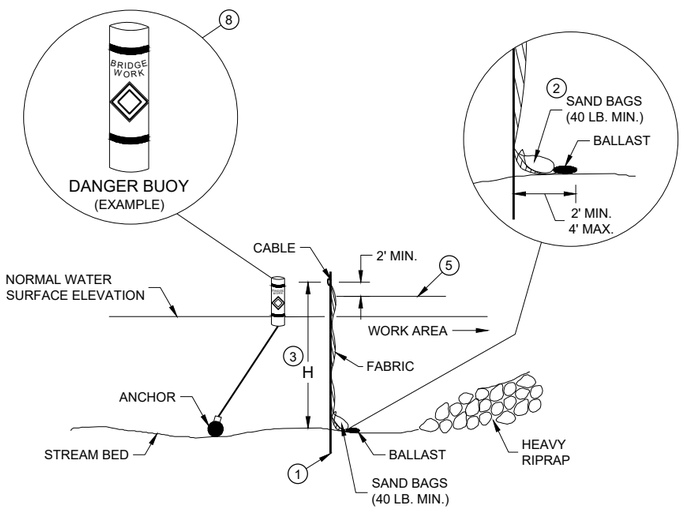


SECTION B - B

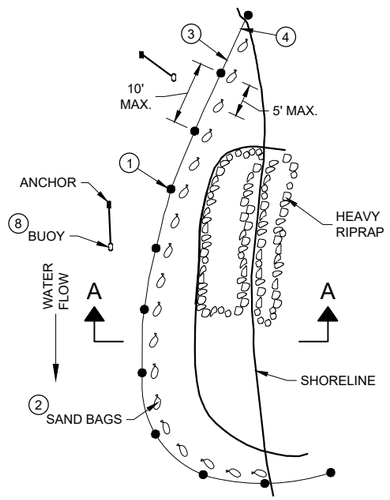


PLAN VIEW

TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A - A



PLAN VIEW

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

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

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

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

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

(3) WHEN BARRIER HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.

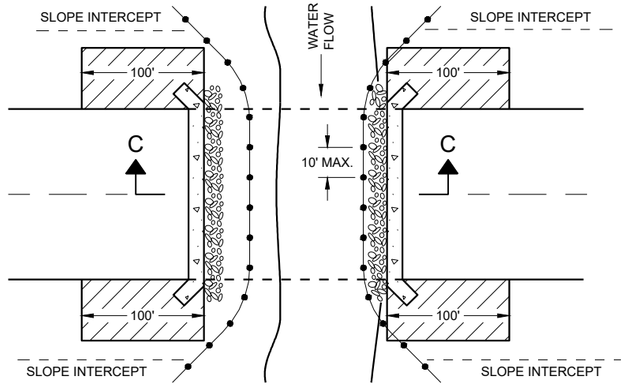
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(5) ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.

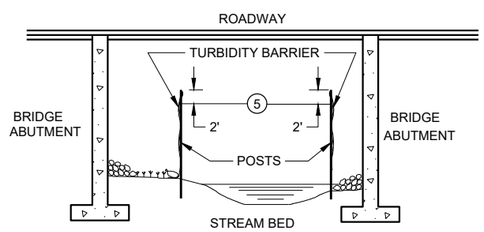
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

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

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



PLAN VIEW



SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6
SDD 08E11 - 02

METAL APRON ENDWALLS

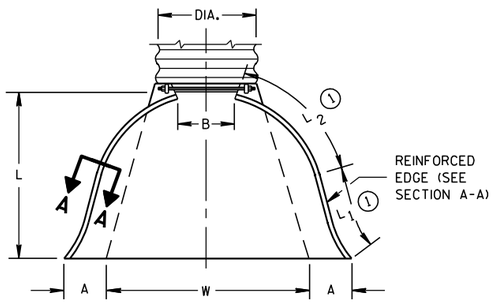
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

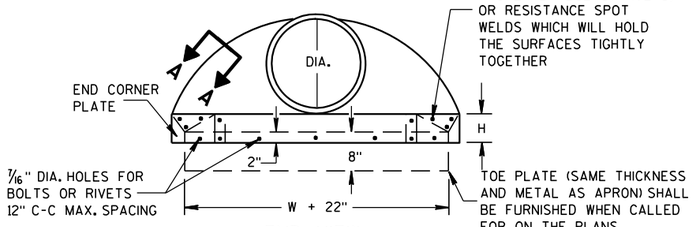
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

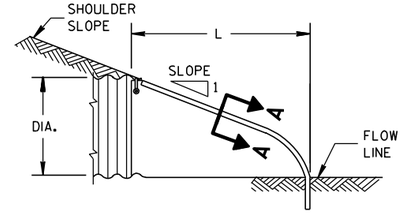
*MINIMUM
**MAXIMUM



PLAN VIEW

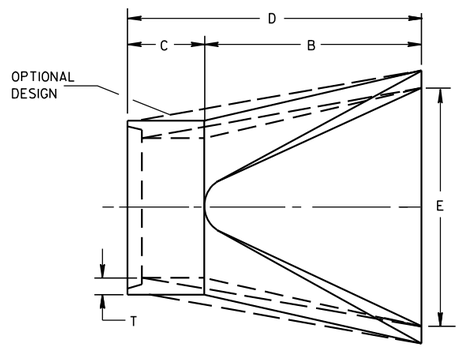


END VIEW

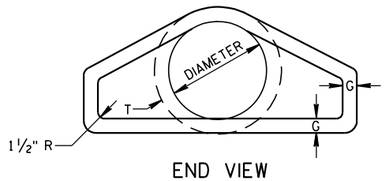


SIDE ELEVATION

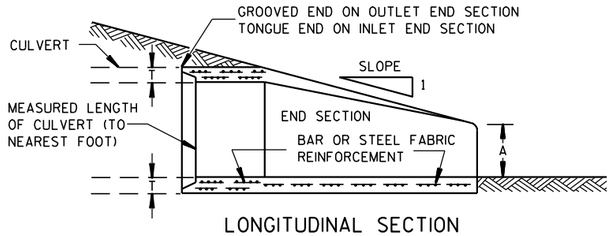
METAL ENDWALLS



PLAN

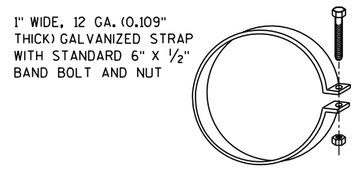


END VIEW



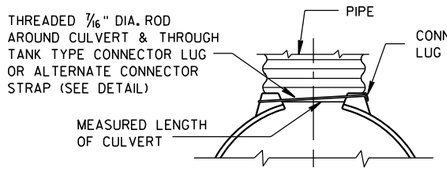
LONGITUDINAL SECTION

CONCRETE ENDWALLS

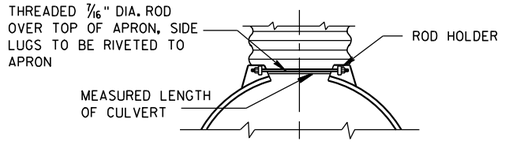


ALTERNATE FOR TYPE 1 CONNECTION

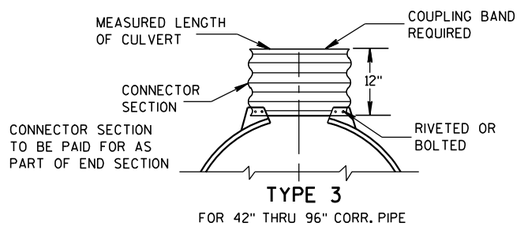
END SECTION CONNECTOR STRAP



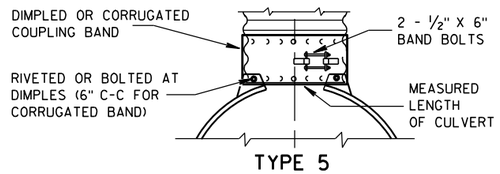
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

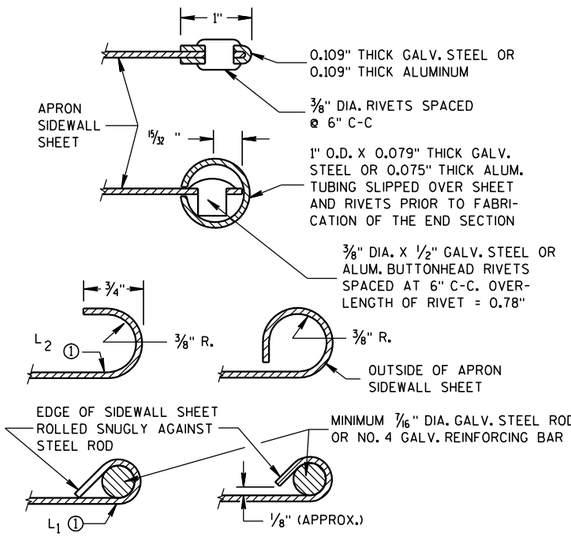
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

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.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

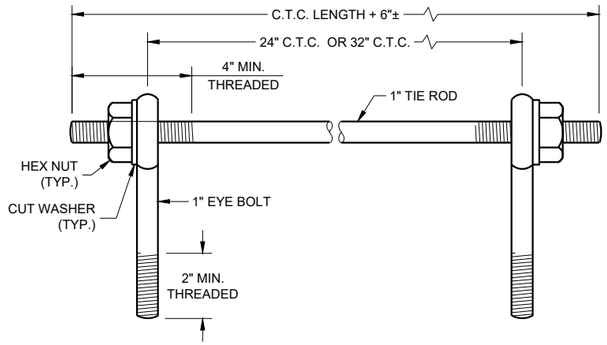
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

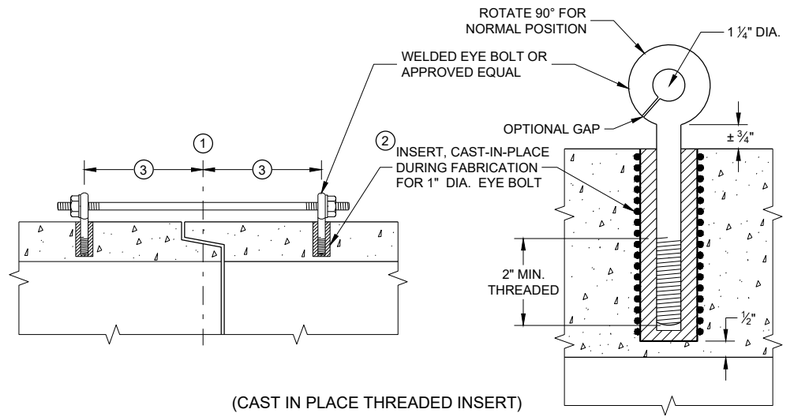
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

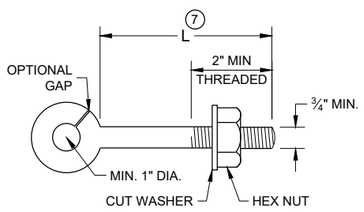
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

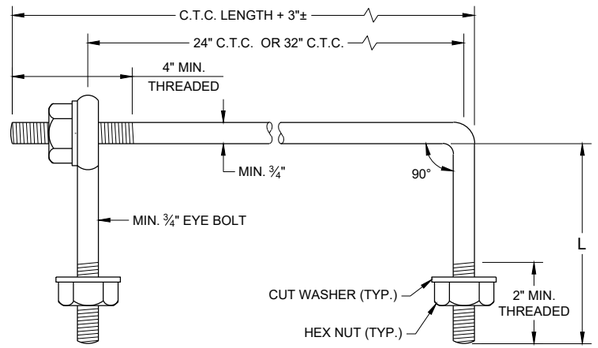
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

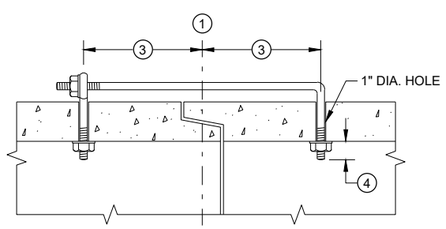


EYE BOLT (7)

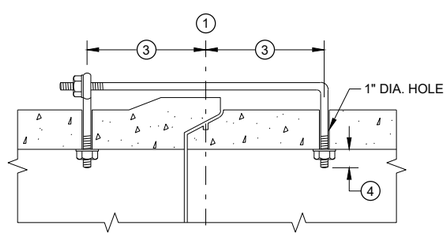
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

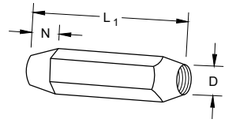
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

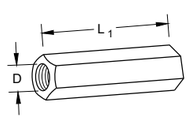
EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

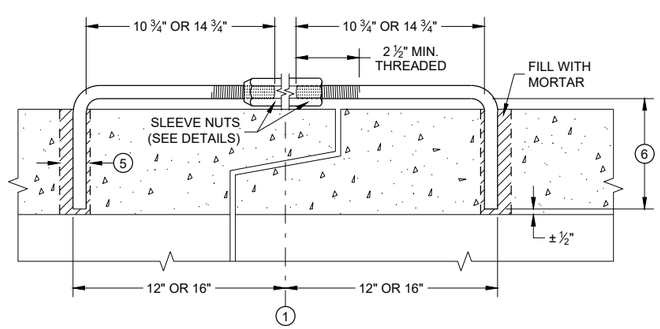
DIMENSIONS SHOWN ARE IN INCHES





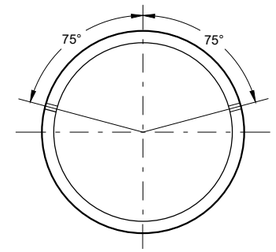
RIGHT AND LEFT THREADS

SLEEVE NUTS



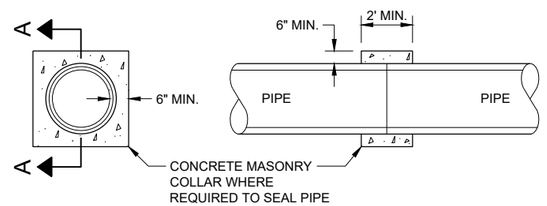
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

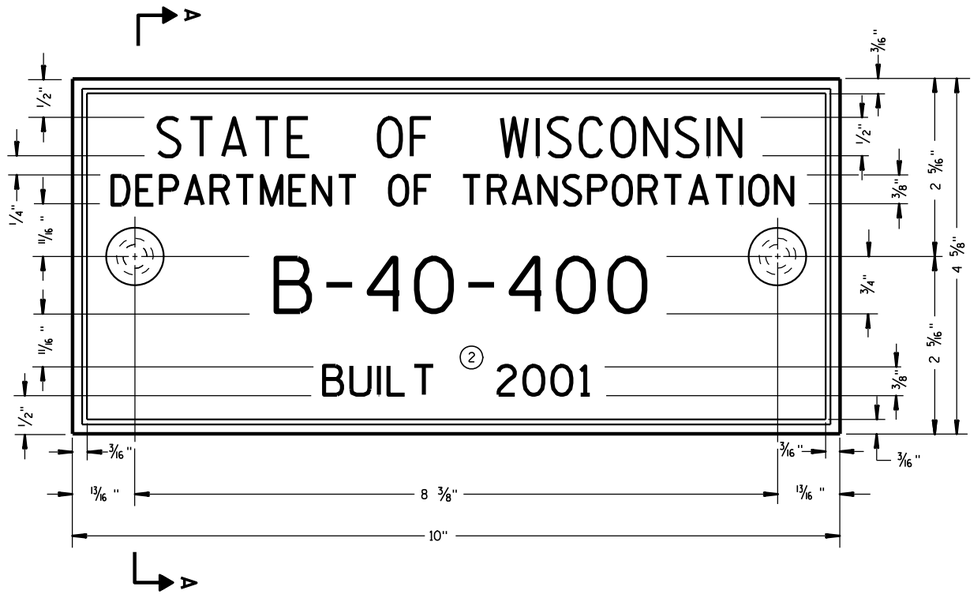
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 08F04 - 08

SDD 08F04 - 08



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

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

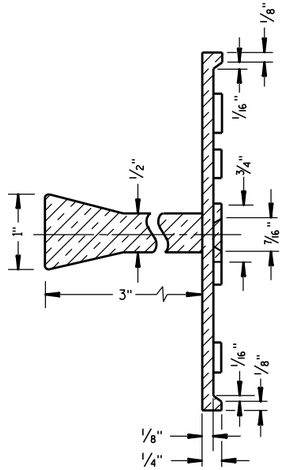
GENERAL NOTES

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

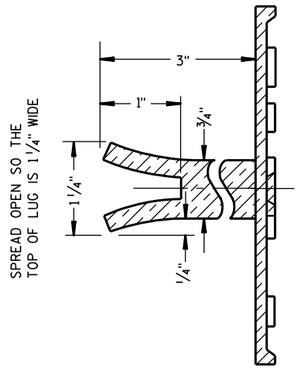
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

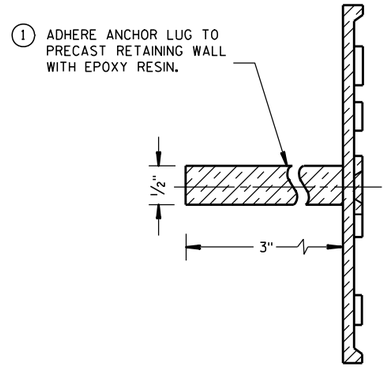
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

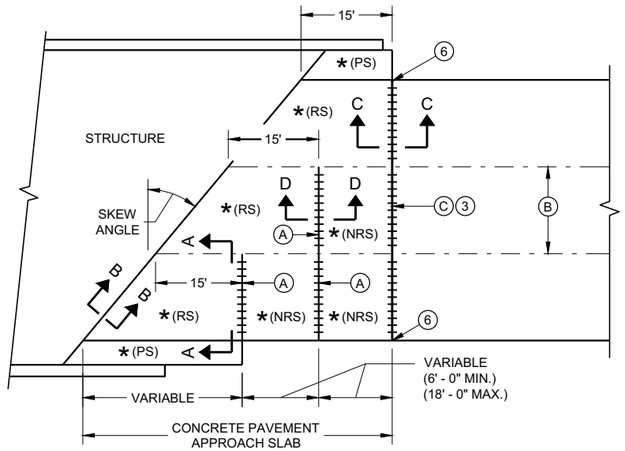
3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

FHWA

6

S.D.D. 12 A 3-10



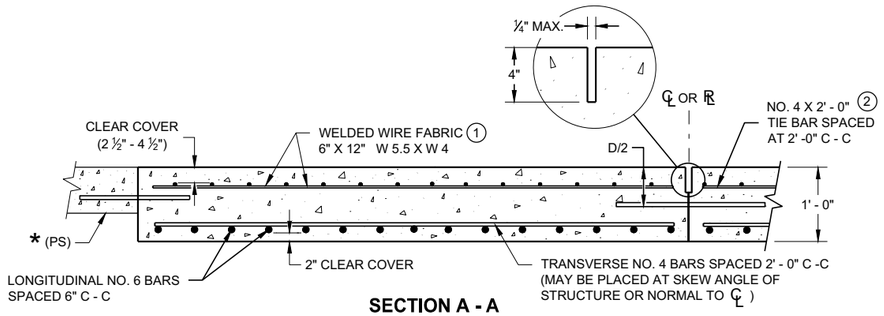
SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)

* (RS) = REINFORCED CONCRETE SLAB

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

* (NRS) - NON - REINFORCED CONCRETE SLAB

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



SECTION A - A
REINFORCEMENT POSITIONING DETAIL

GENERAL NOTES

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

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

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

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

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

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

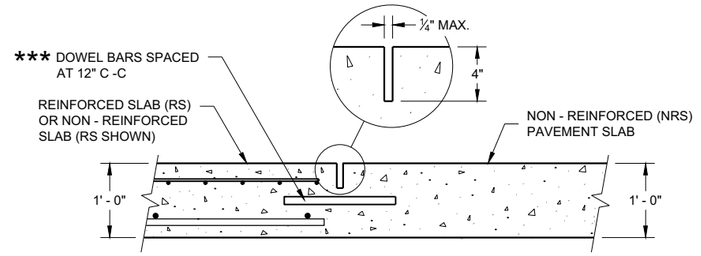
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

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

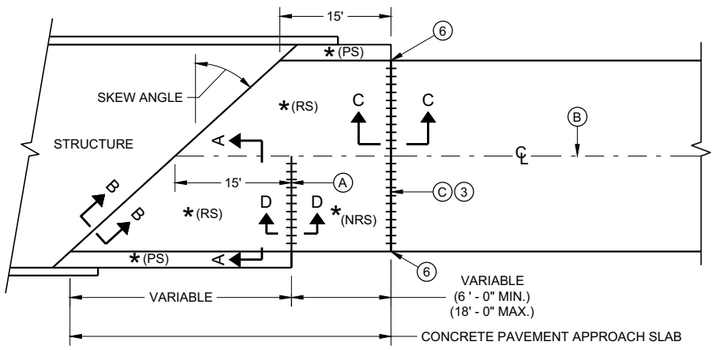
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

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

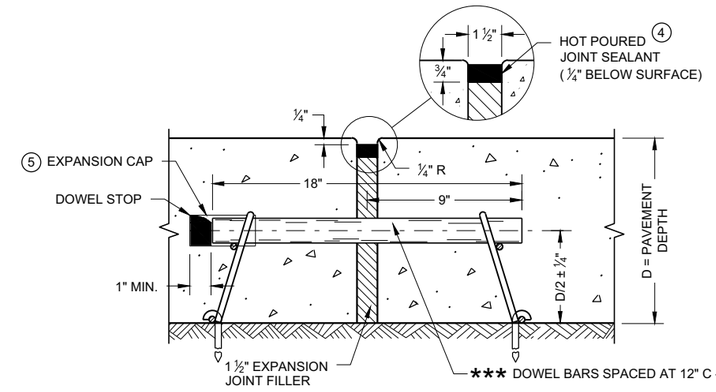


SECTION D - D
CONTRACTION JOINT

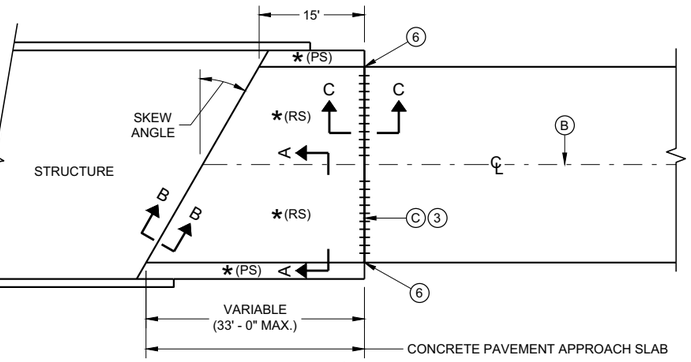


SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')

SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT

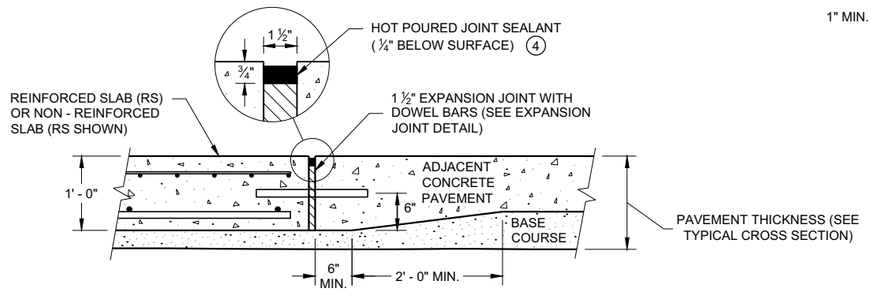


EXPANSION JOINT DETAIL



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

APPROACH SLAB AND ADJACENT PAVEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

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

FHWA

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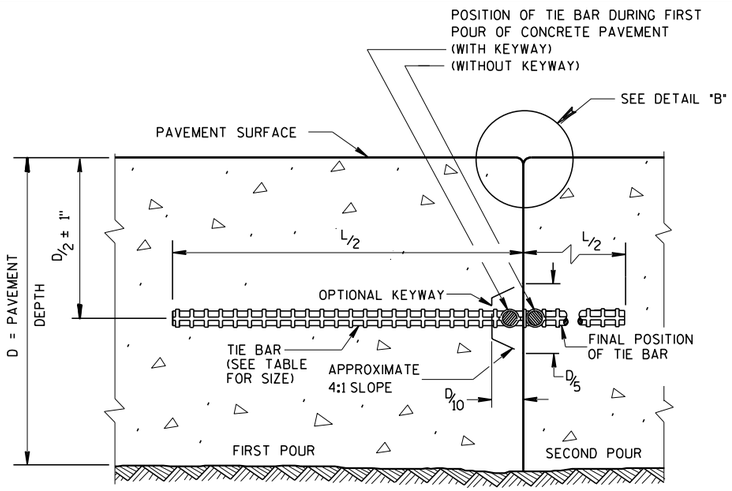
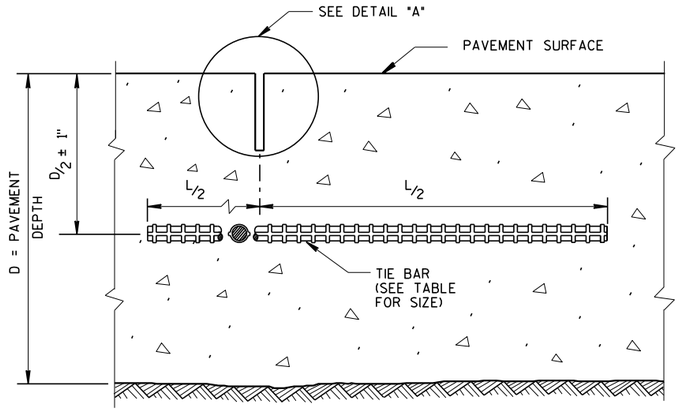
SDD 13B02 - 09a



CONSTRUCTION JOINT



SAWED JOINT

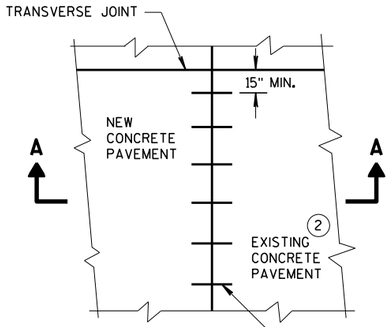
GENERAL NOTES

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

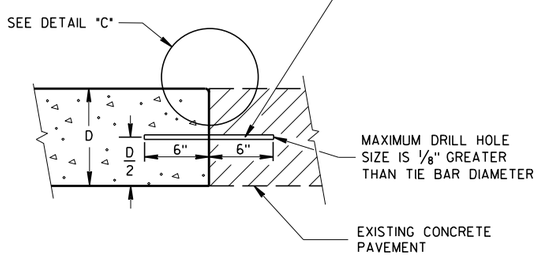
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

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

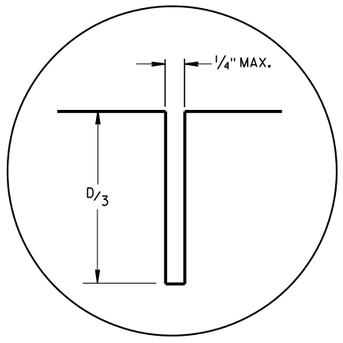


PLAN VIEW

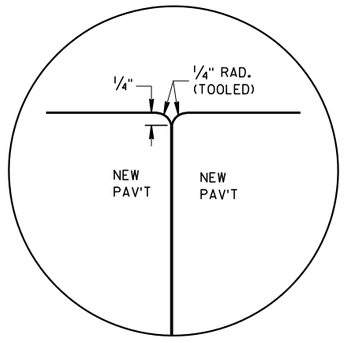


SECTION A-A

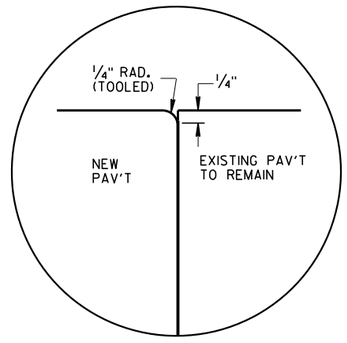
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



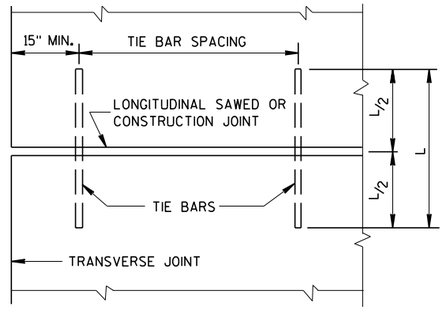
DETAIL "C"

TIE BAR TABLE

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

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

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



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp — PAVEMENT SUPE
FHWA

6

S.D.D. 13 C 1-19

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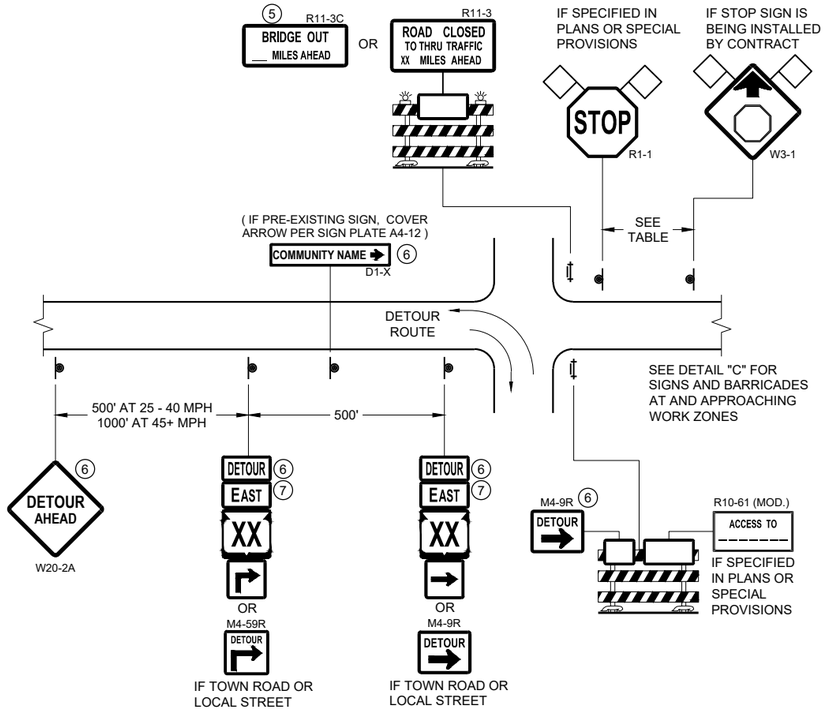
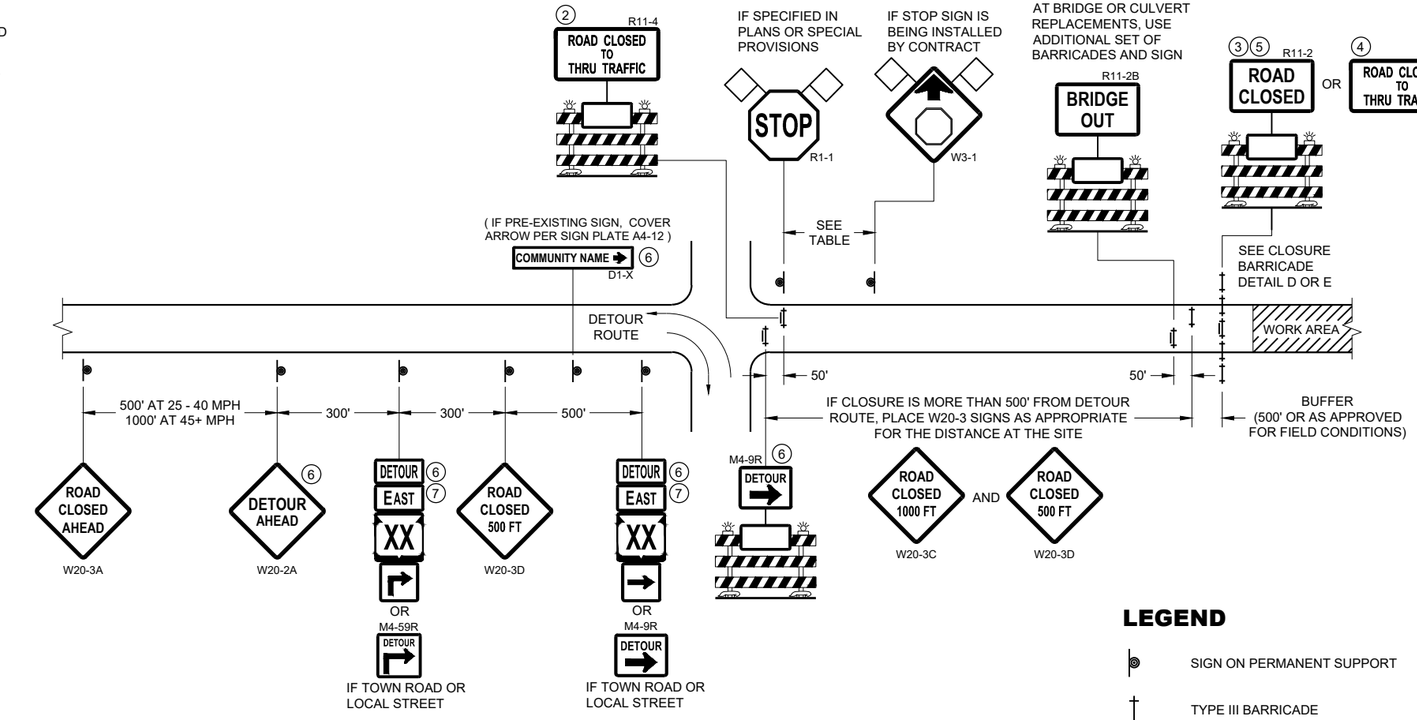
S.D.D. 13 C 1-19



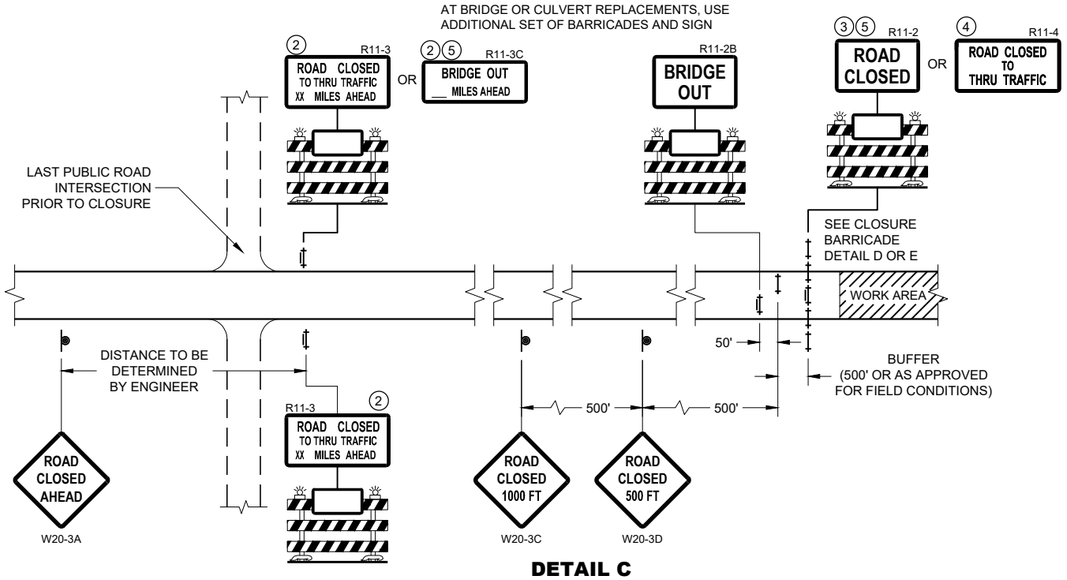
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



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
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 15C02 - 08a

SDD 15C02 - 08a

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

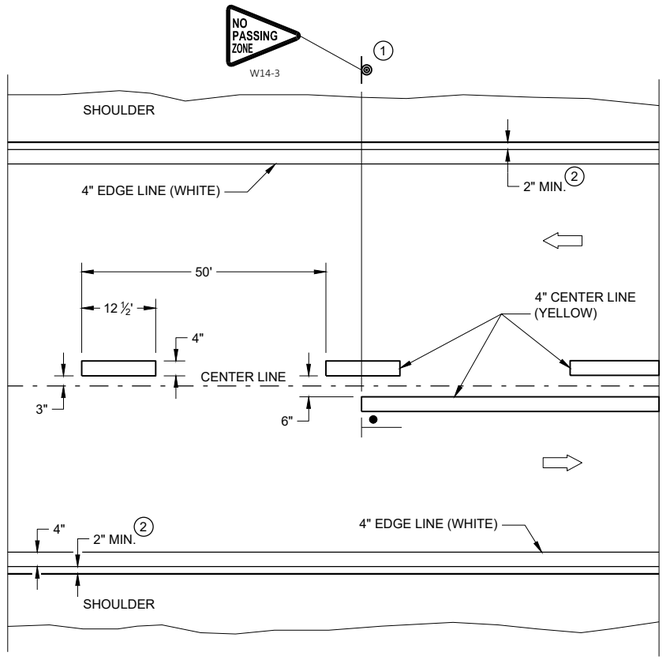
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

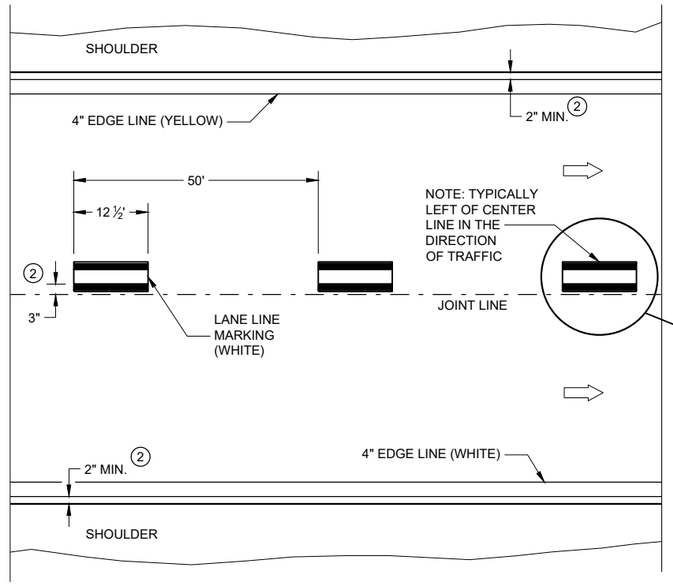
"T" MARKING

SIGN ON PERMANENT SUPPORT

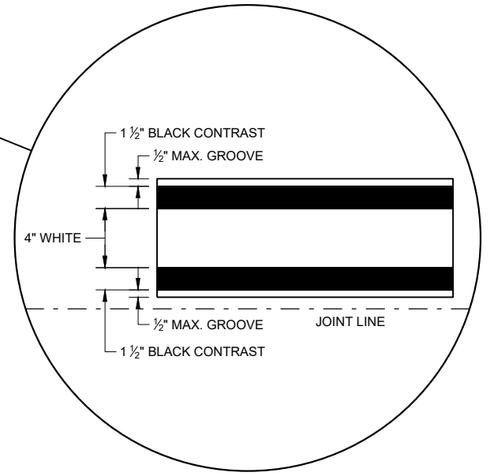
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

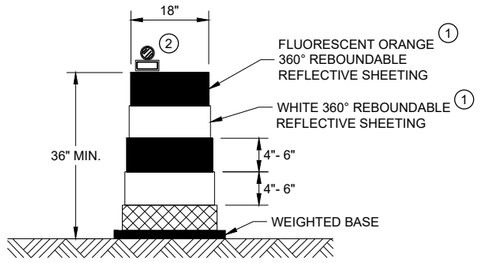
SDD 15C08 - 22a

SDD 15C08 - 22a

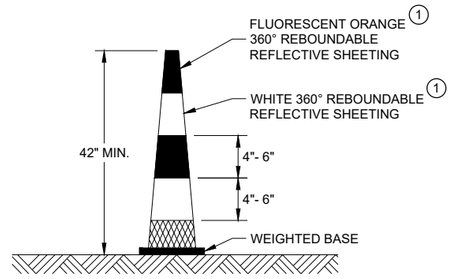
GENERAL NOTES

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

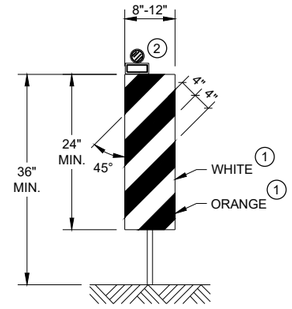


DRUM



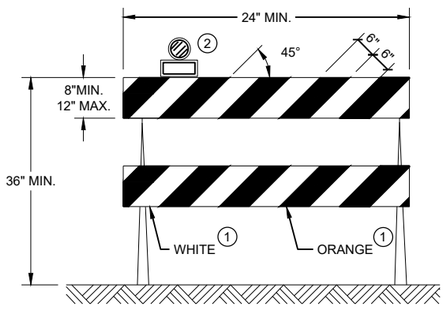
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



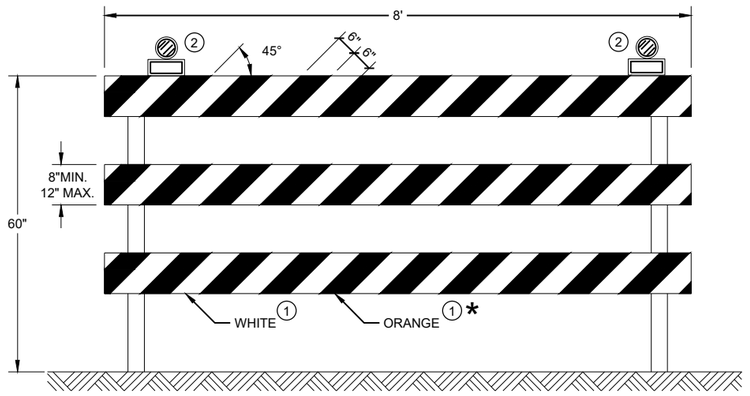
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 09b

GENERAL NOTES

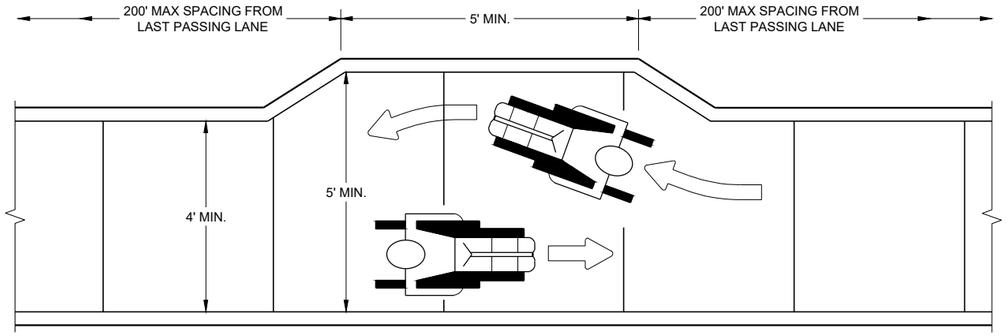
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

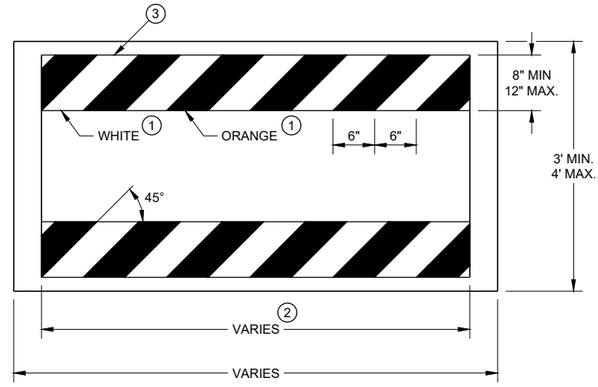
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

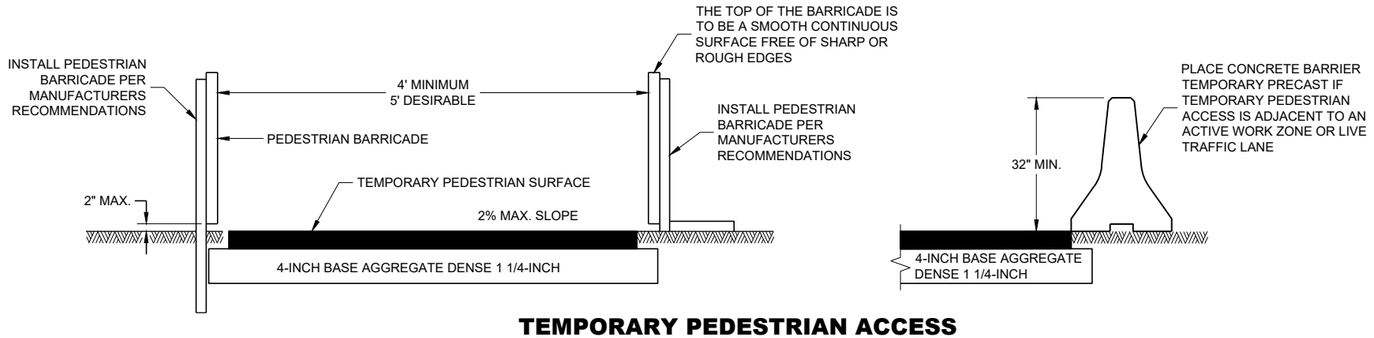
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*

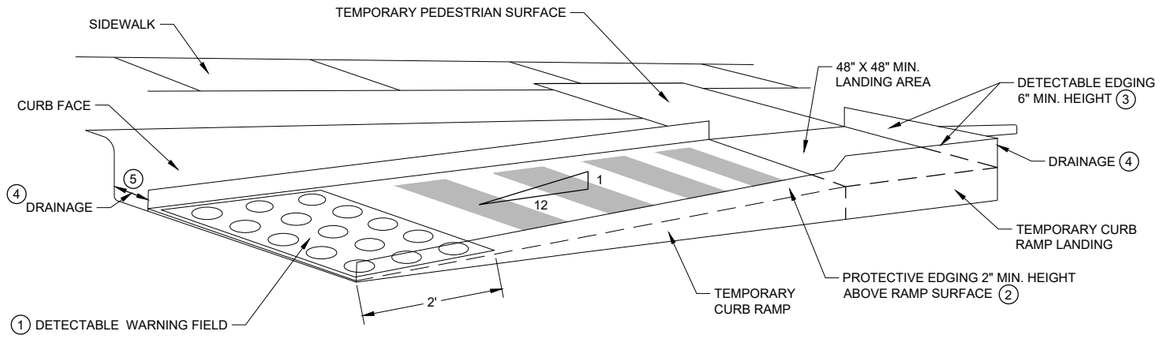


TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 07a



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

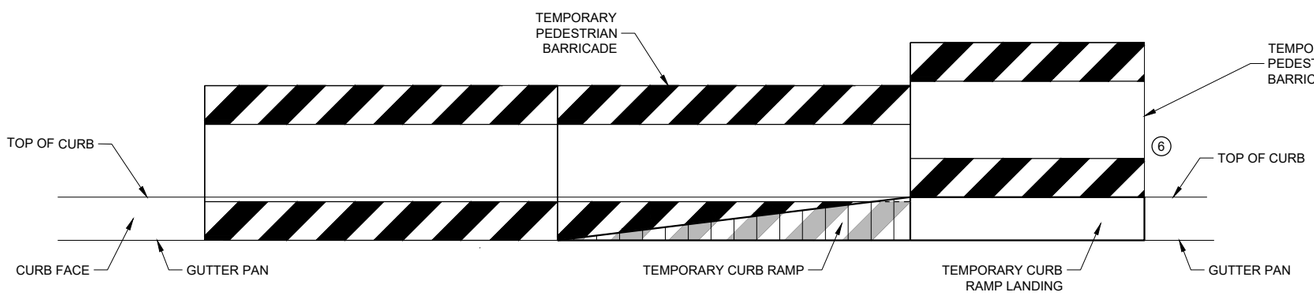
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

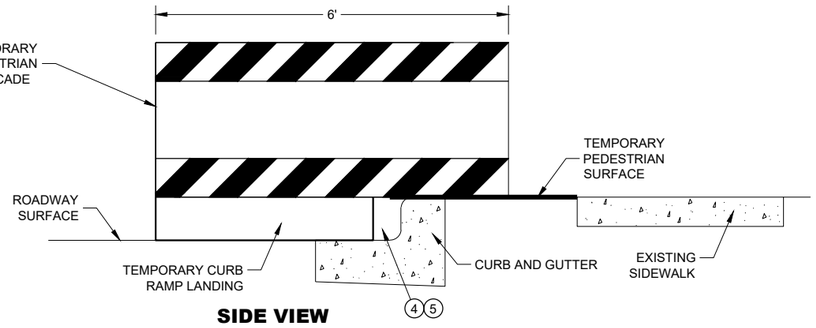
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) 6" MINIMUM BETWEEN CURB FACE AND EDGE OF RAMP

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

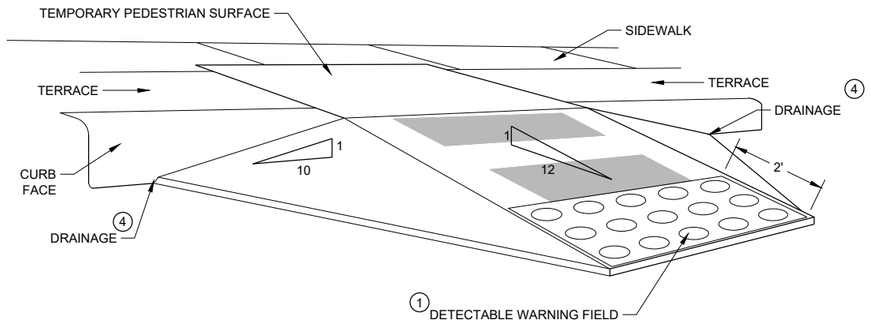
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

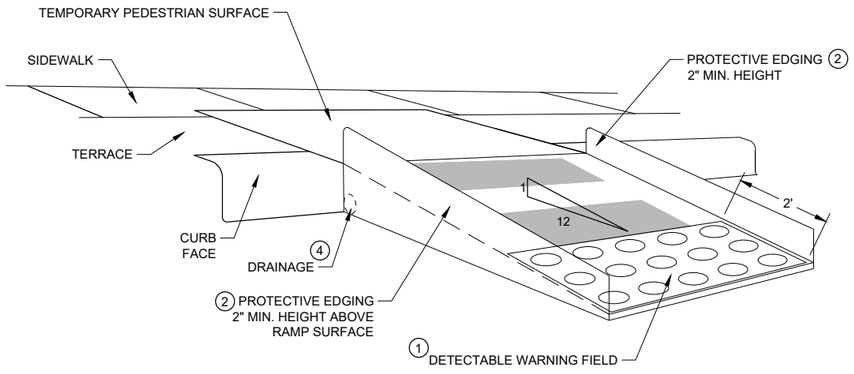
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 07b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES

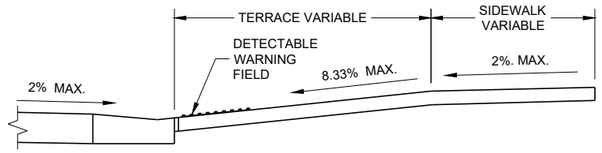
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

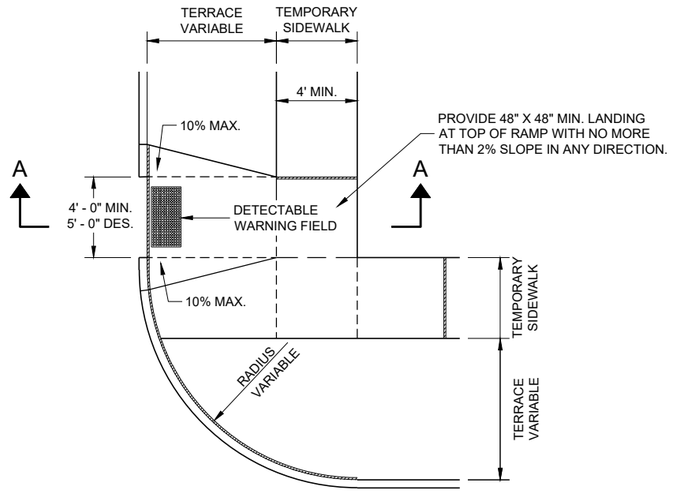
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

6

6

SDD 15D30 - 07d

SDD 15D30 - 07d

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

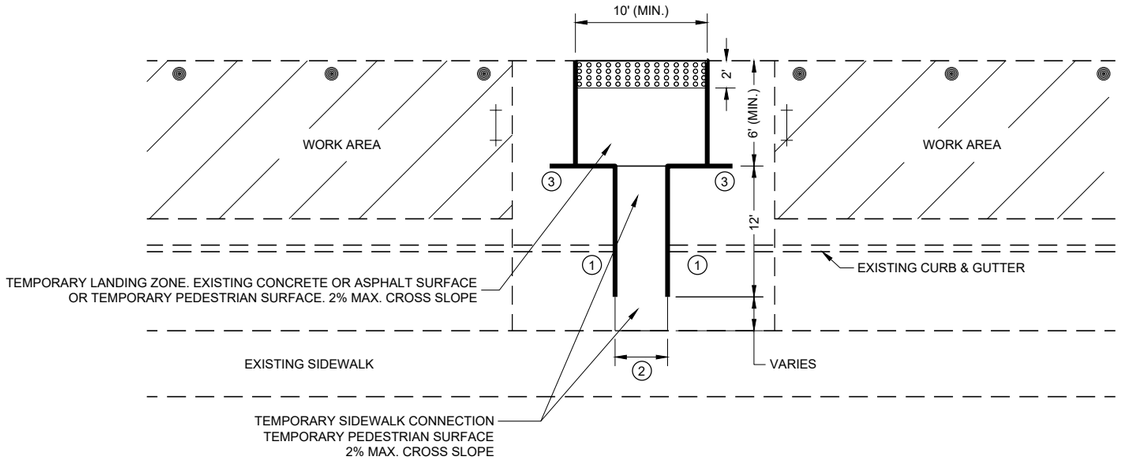
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

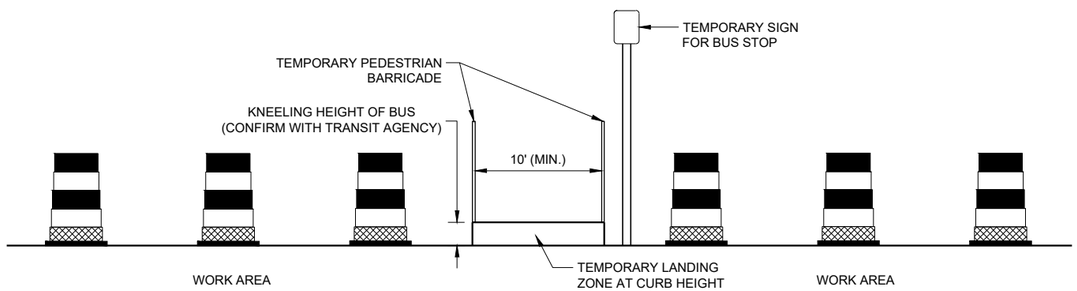
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

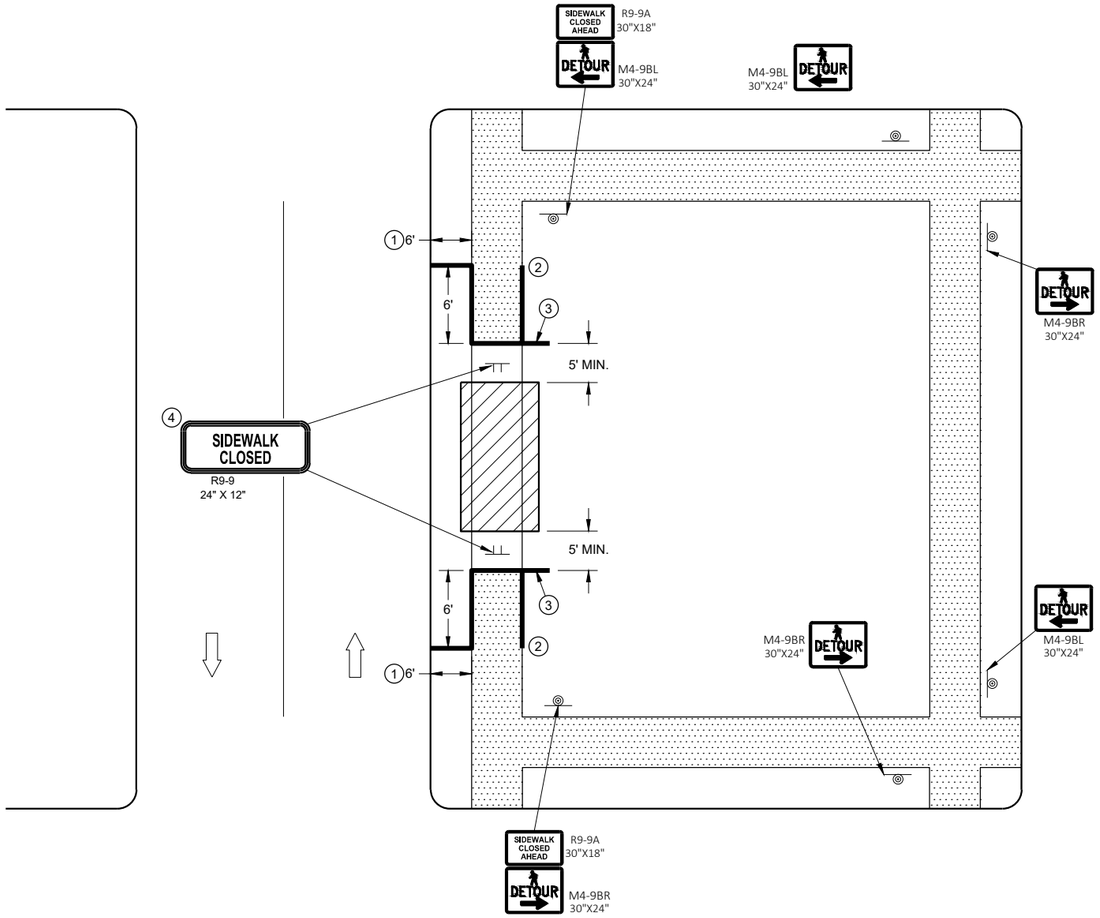
SDD 15D30 - 07e

6

SDD 15D30 - 07e

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

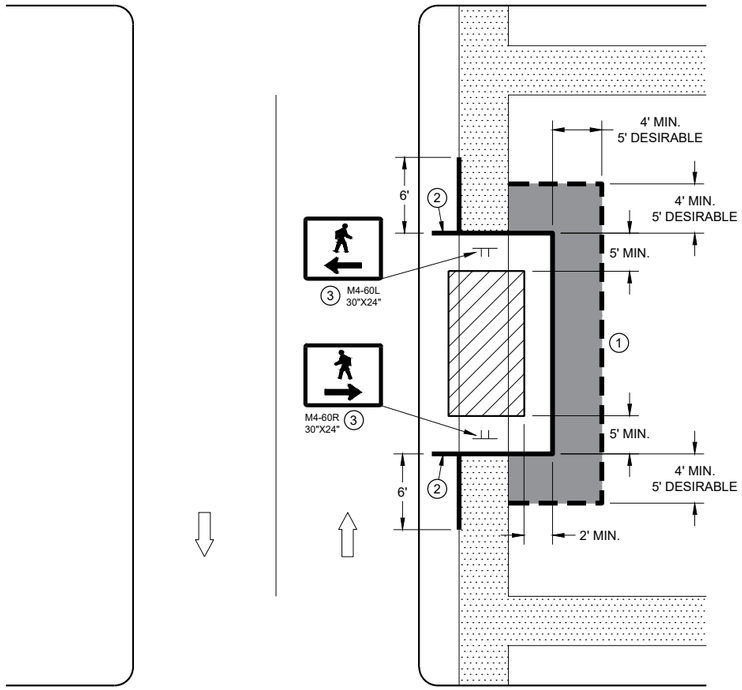
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

1. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
2. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

6

SDD 15D30 - 07g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD15D30 - 07g

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

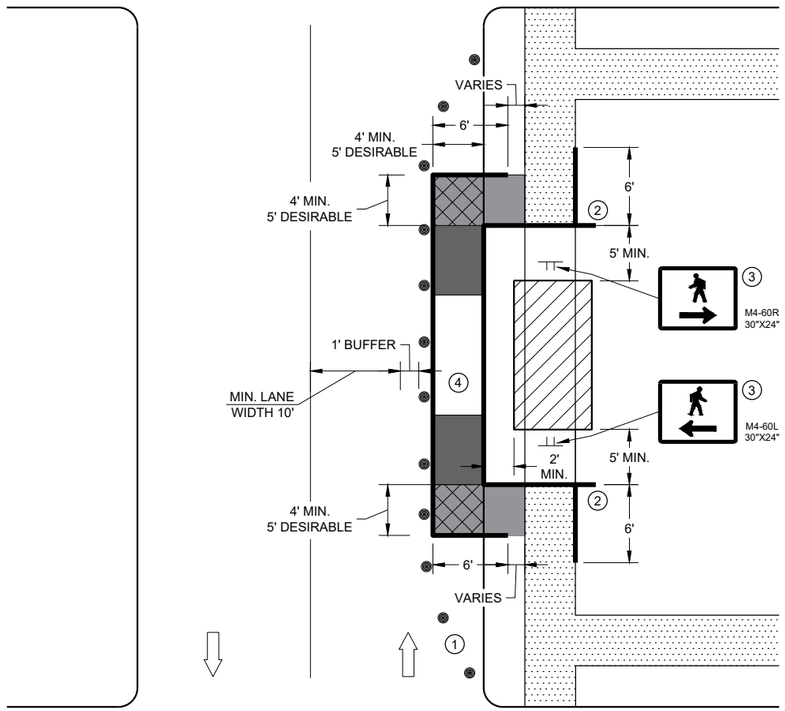
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.

(2) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.

(3) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

(4) USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.

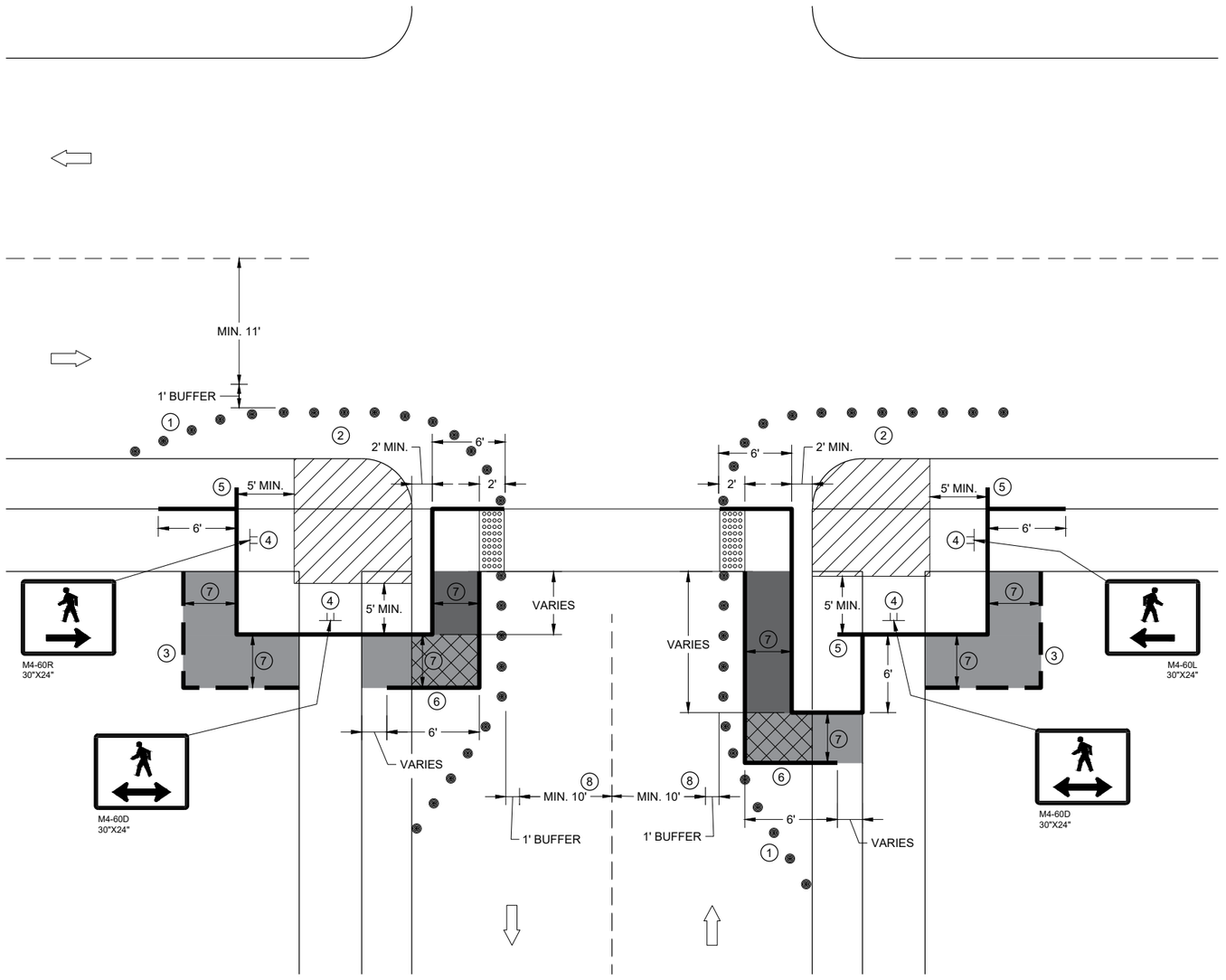


SIDEWALK DIVERSION, SINGLE SIDE

6

SDD 15D30 - 07h

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

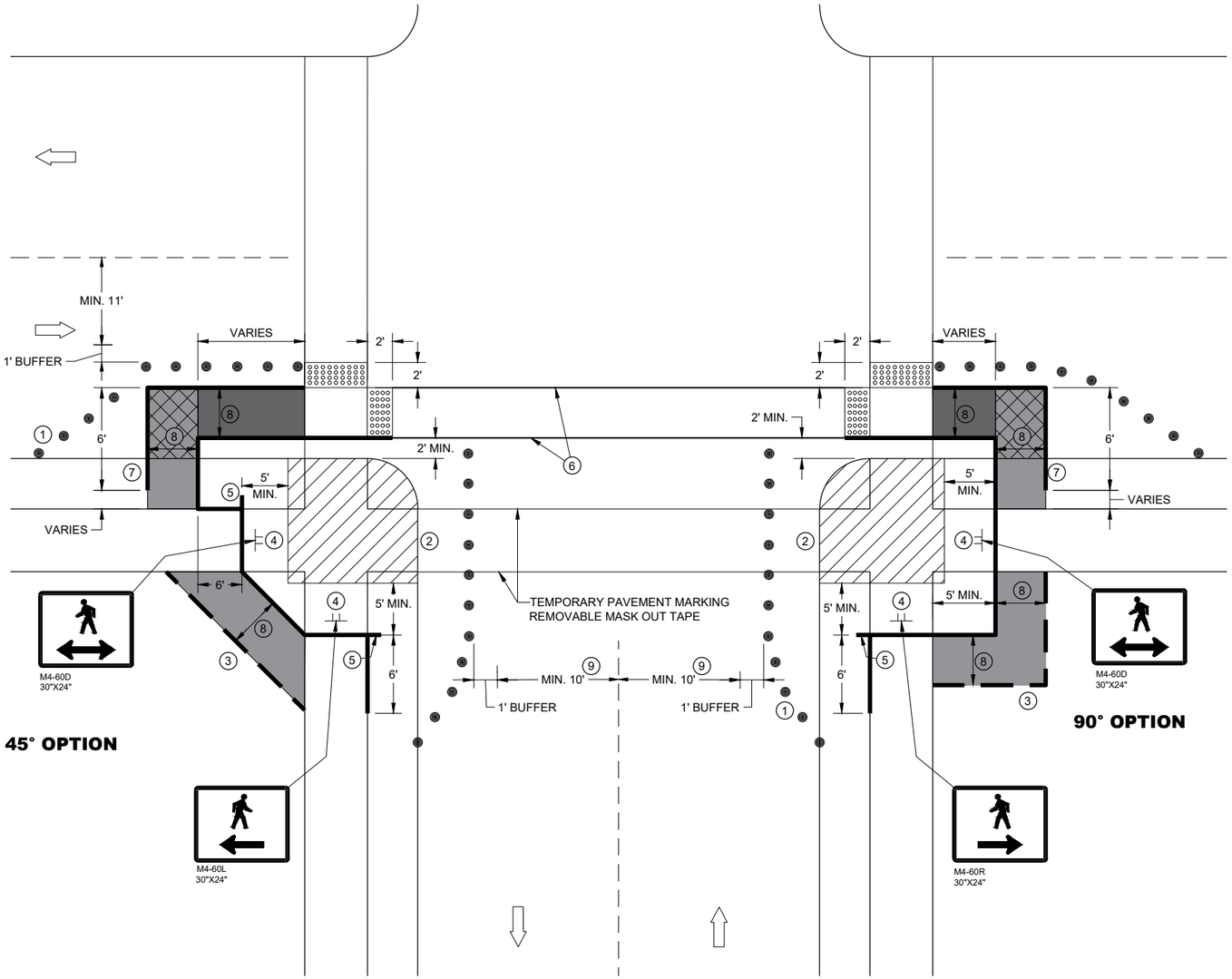
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 07i



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

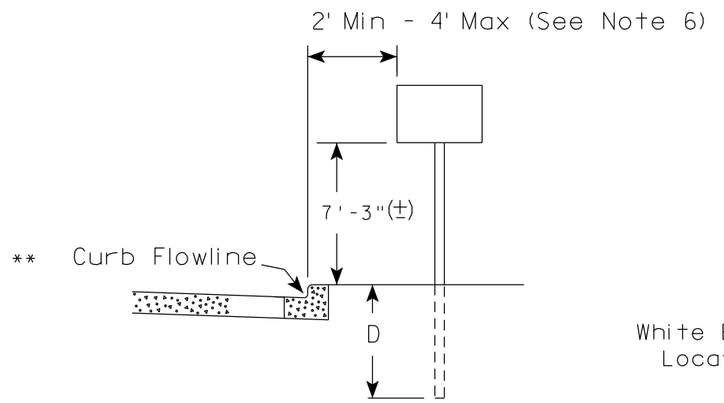
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

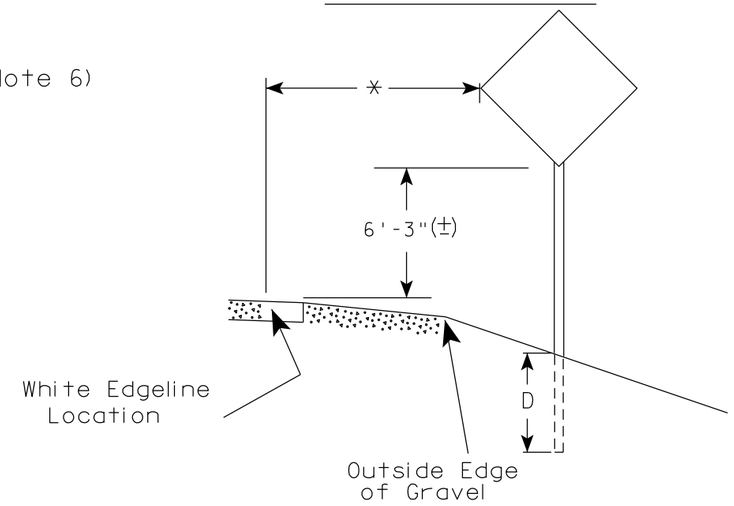
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

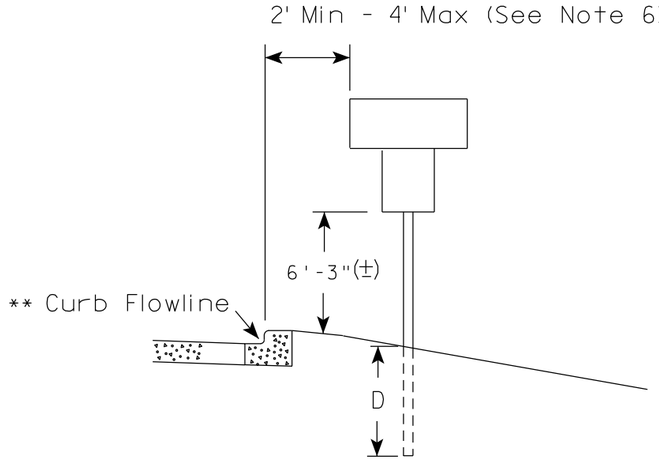
6
SDD 15D30 - 07j

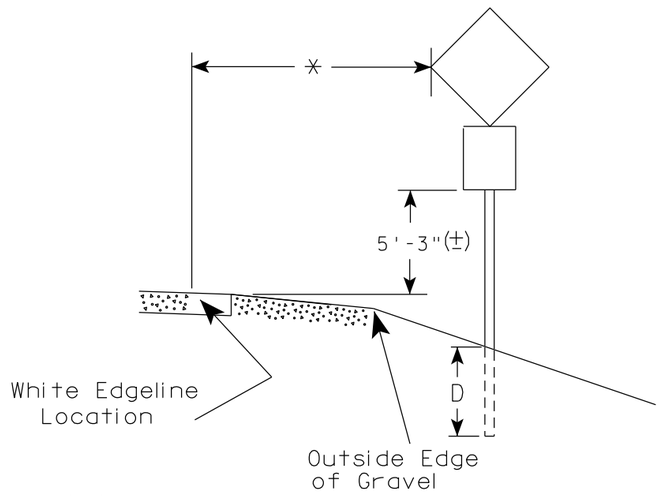
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

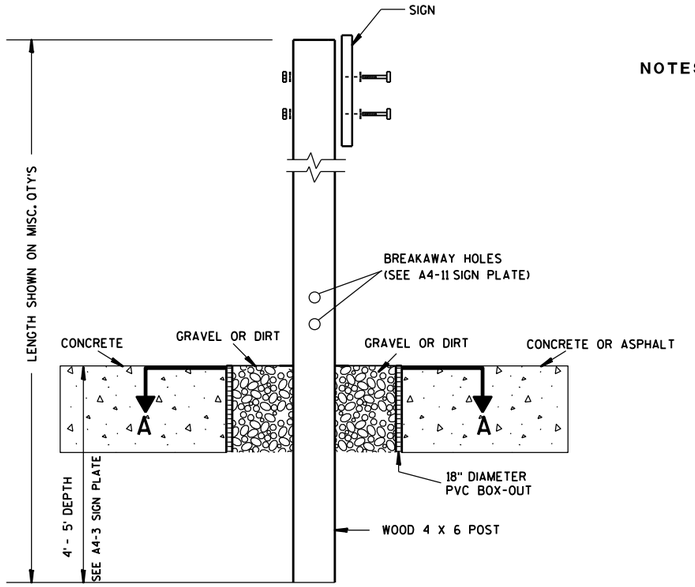
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

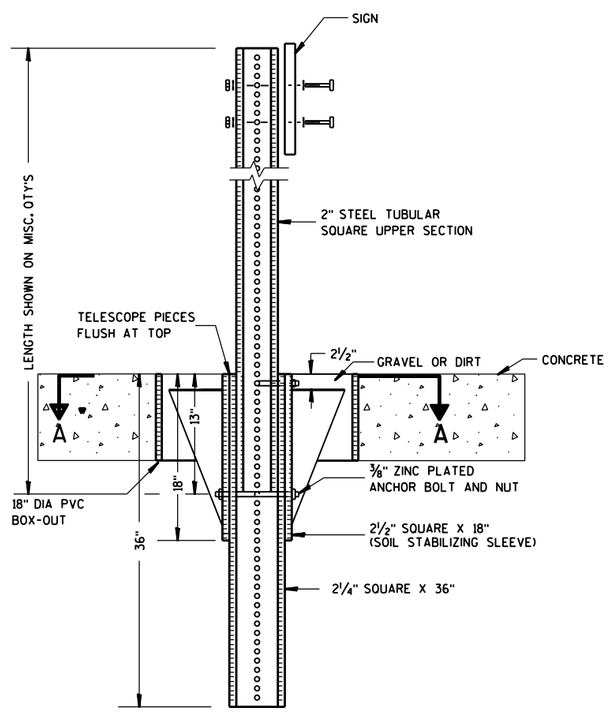
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 49	E



ELEVATION VIEW

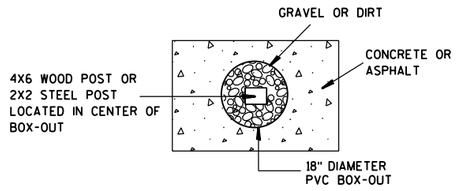
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

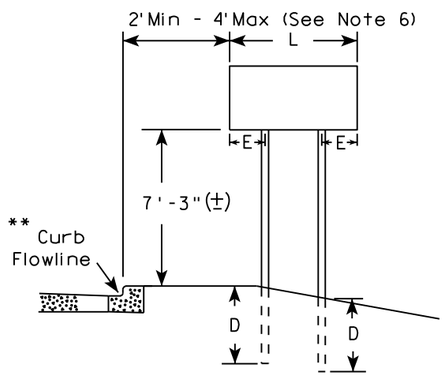
APPROVED Matthew R Rauch
for State Traffic Engineer

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

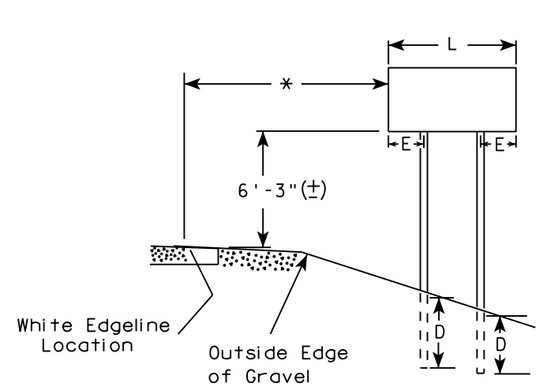
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

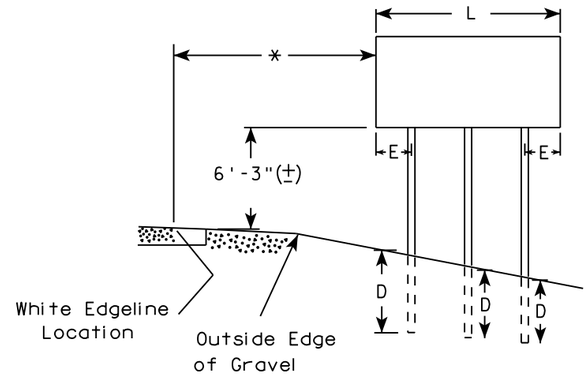
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

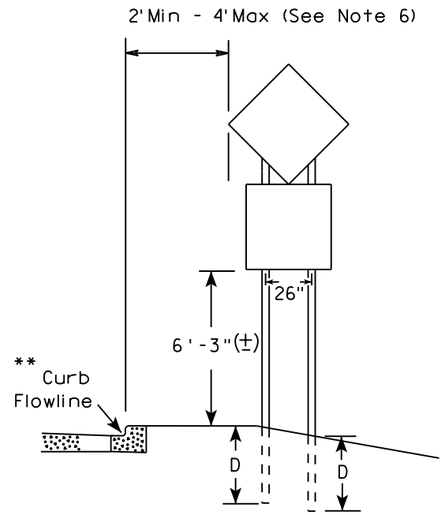
URBAN AREA



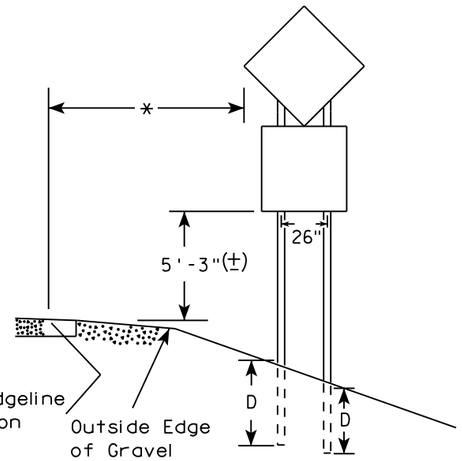
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

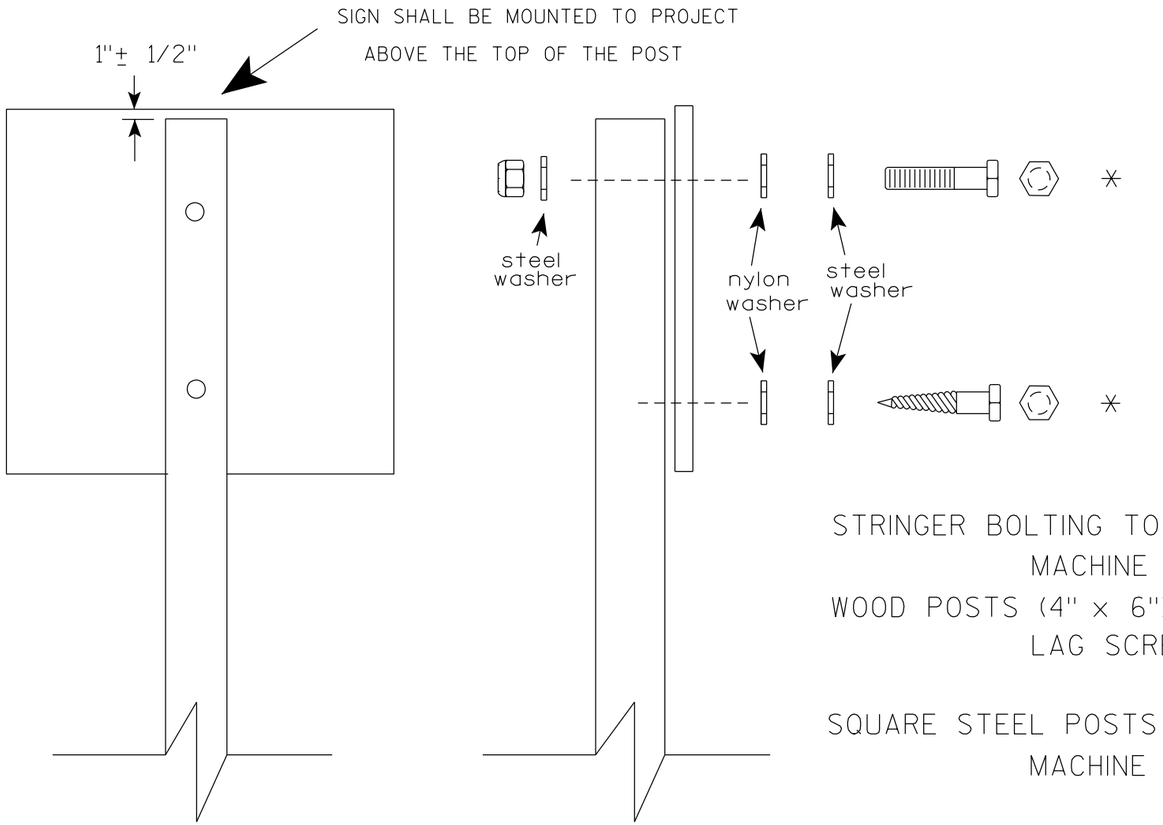
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 51	E



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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

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

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

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

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

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

ATTACHMENT OF SIGNS TO POSTS

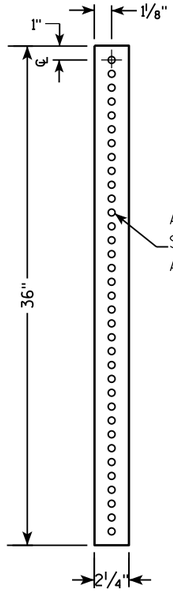
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

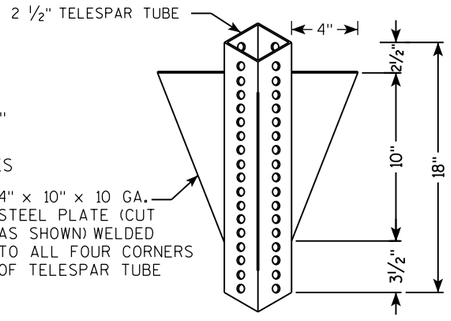
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

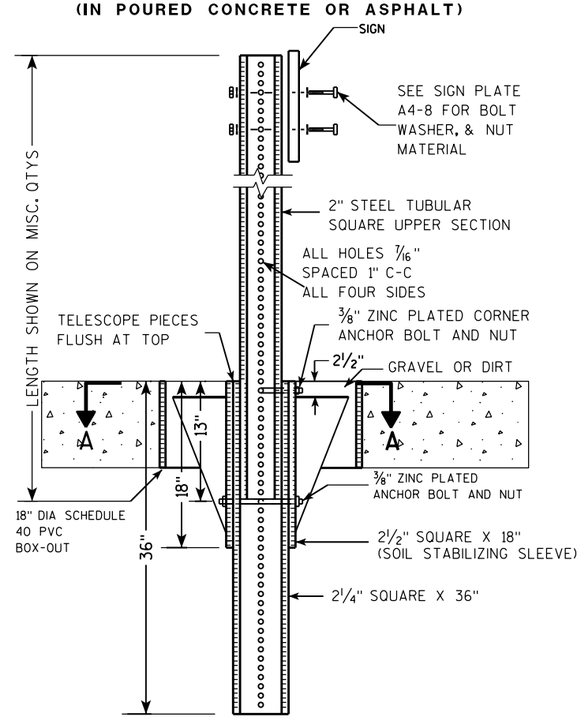
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



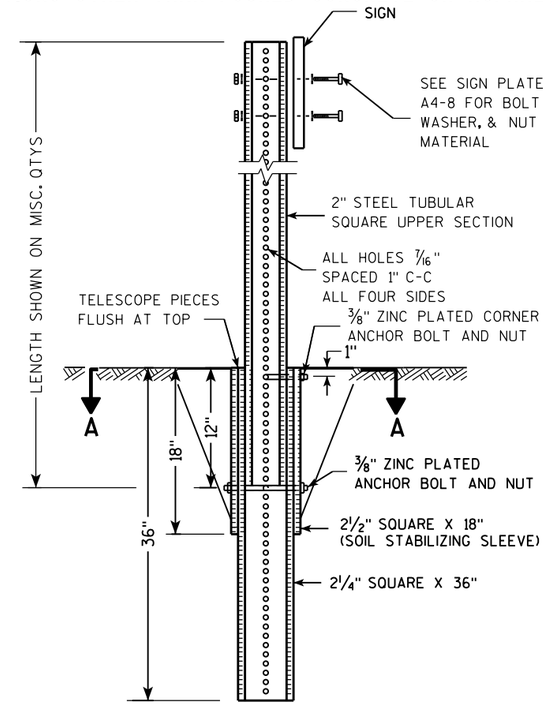
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

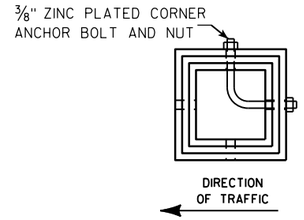


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

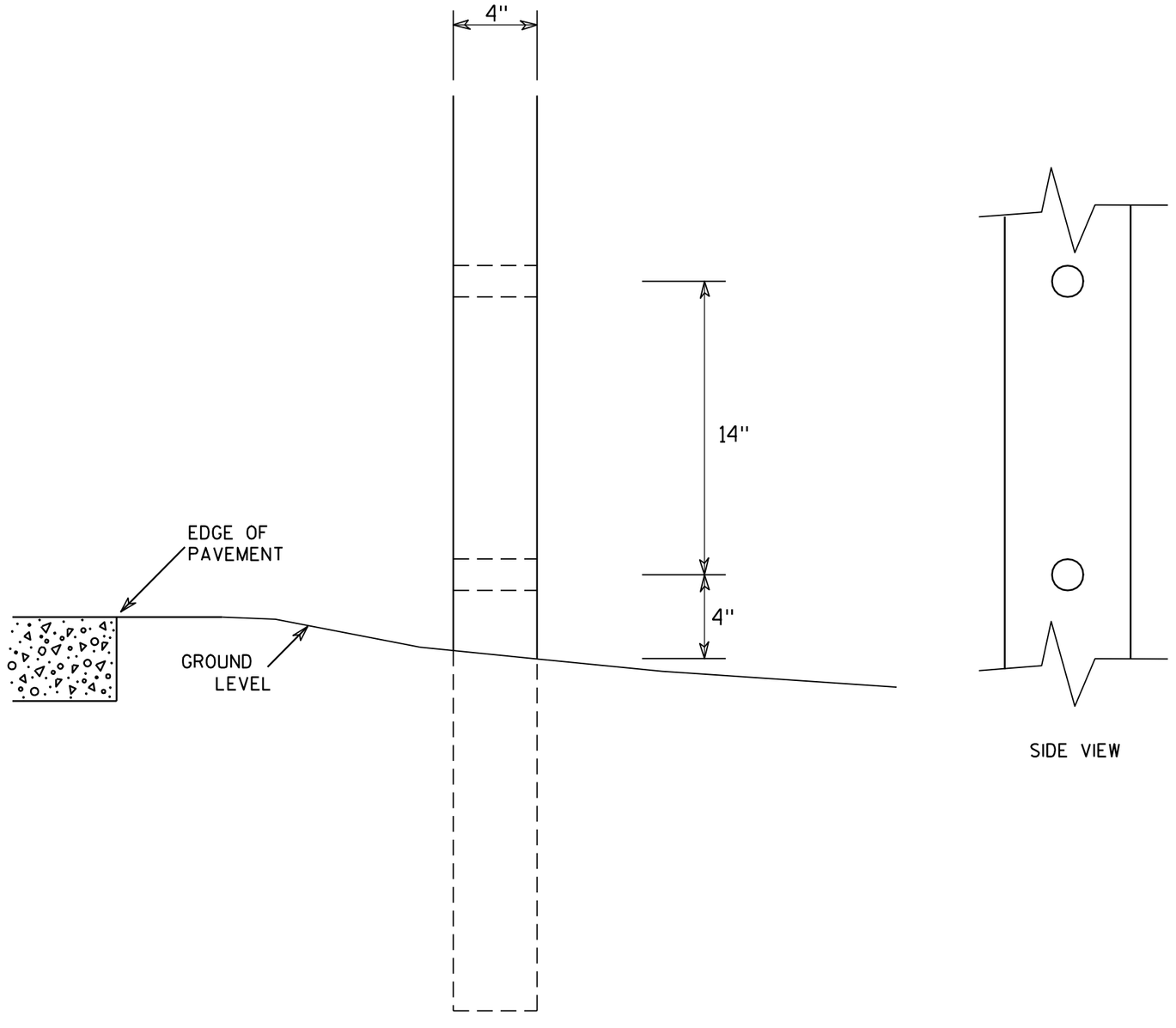
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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



SIDE VIEW

GENERAL NOTES

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

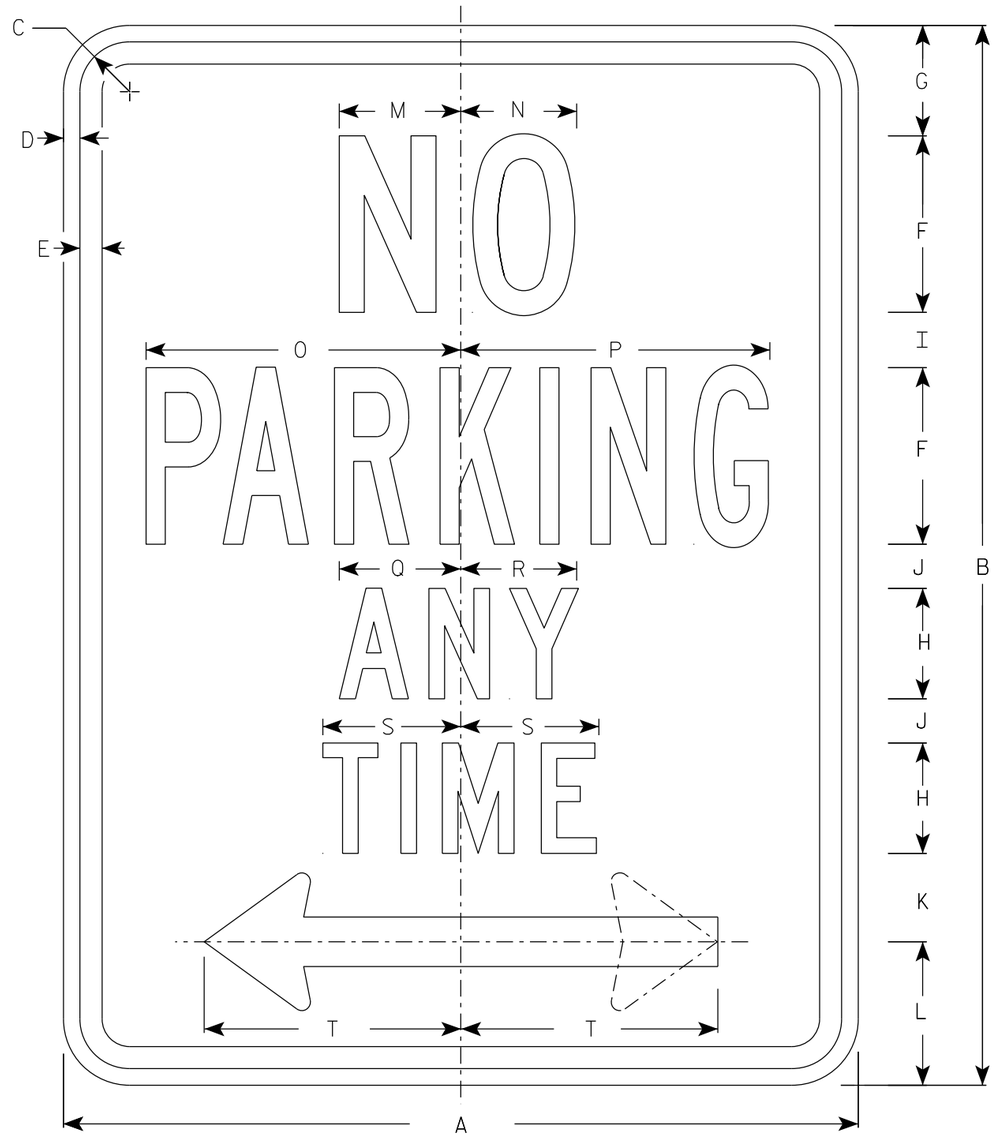
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

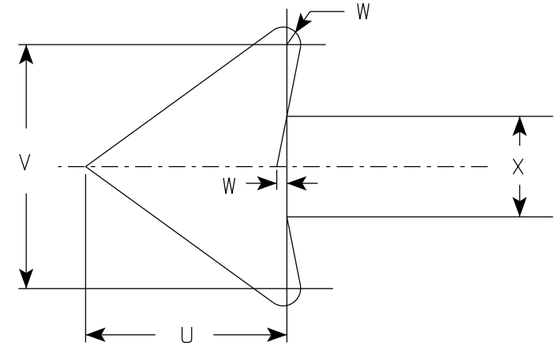
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 54	E



R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



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	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

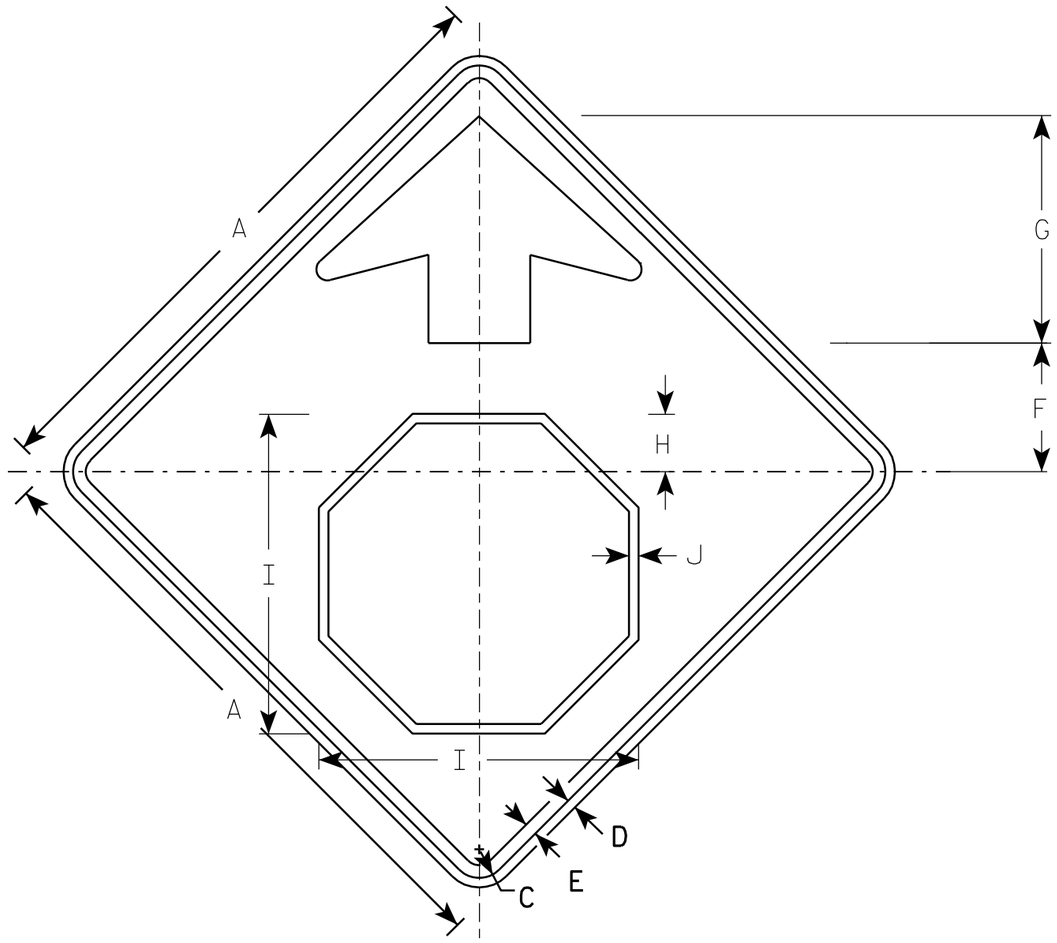
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. R7-1.10

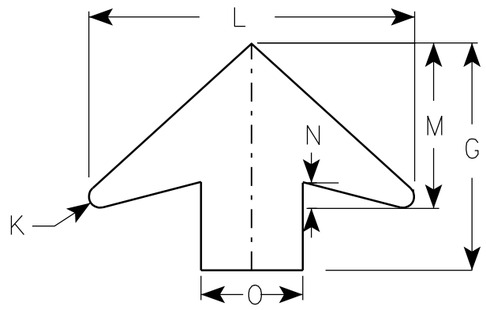
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 55 E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

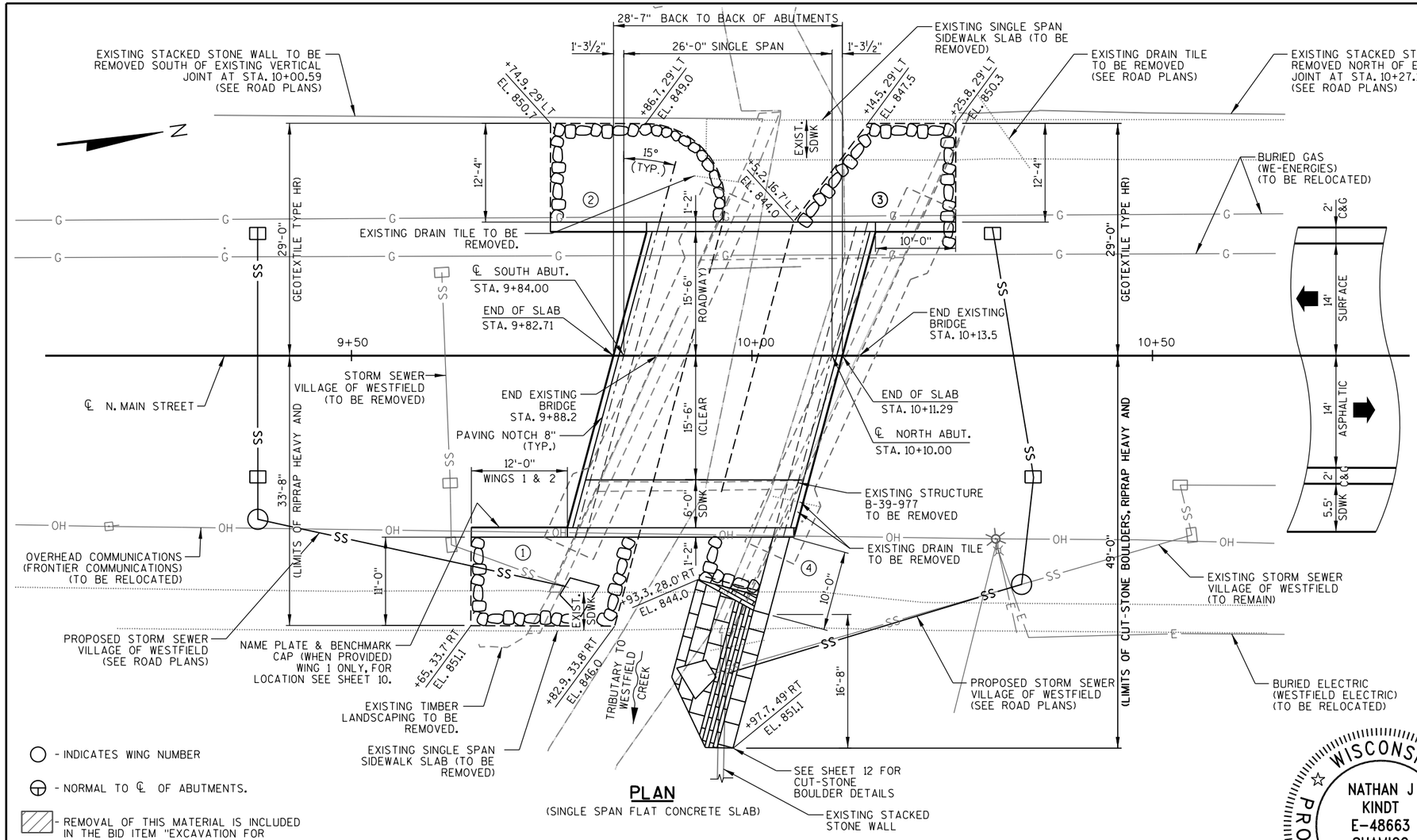
DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 56 E

STATE PROJECT NUMBER

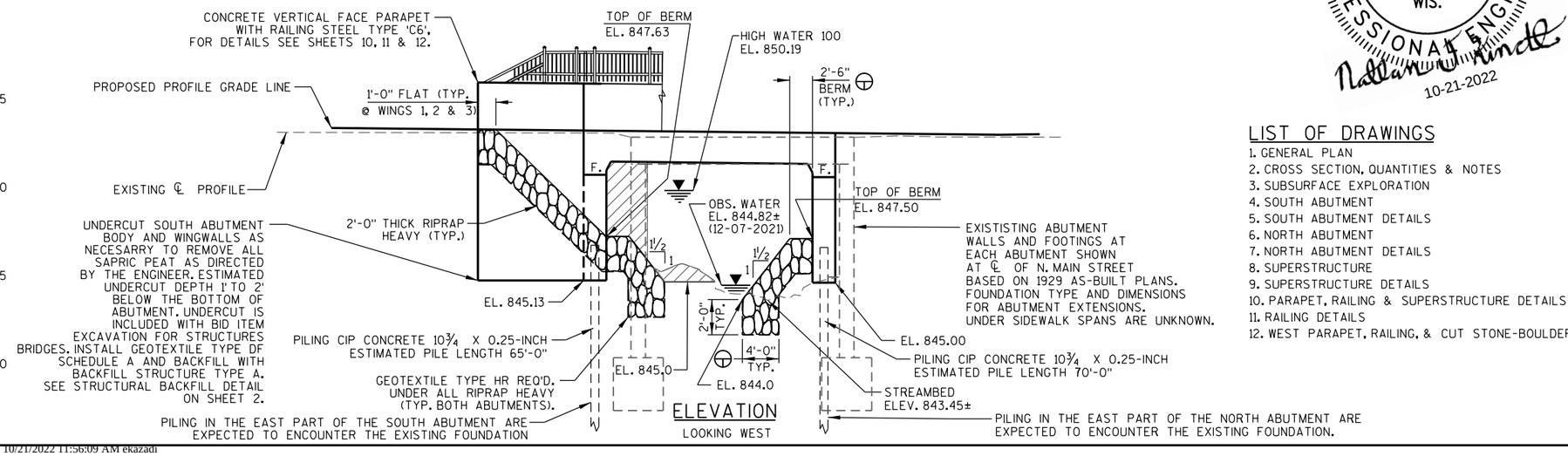
6744-02-70



PLAN

(SINGLE SPAN FLAT CONCRETE SLAB)

- ◯ - INDICATES WING NUMBER
- ⊖ - NORMAL TO ℄ OF ABUTMENTS.
- ▨ - REMOVAL OF THIS MATERIAL IS INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-39-81".



ELEVATION

LOOKING WEST

DESIGN DATA

LIVE LOAD:

DESIGN LOADING : HL-93
INVENTORY RATING FACTOR : 1.20
OPERATIONAL RATING FACTOR : 1.56

TRAFFIC DATA:

A.A.D.T. (2023) = 2,930
A.A.D.T. (2043) = 3,510
R.D.S. = 30 MPH

WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS.

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

MATERIAL PROPERTIES:

CONCRETE MASONRY, SUPERSTRUCTURE — f'_c = 4,000 P.S.I.
ALL OTHER — f'_c = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 — f_y = 60,000 P.S.I.
PILING CIP CONCRETE 10¾ × 0.25-INCH — f_y = 45,000 P.S.I.

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON PILING CIP CONCRETE 10¾ X 0.25-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 125 TONS ✳ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS ARE 65'-0" AT THE SOUTH ABUTMENT AND 70'-0" AT THE NORTH 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.

HYDRAULIC DATA:

100 YEAR FREQUENCY

DRAINAGE AREA — 1.14 SQ. MI.
Q_{100} — 556 C.F.S.
VELOCITY — 9.23 FT./SEC.
WATERWAY AREA — 60 SQ. FT.
SCOUR CRITICAL CODE — 5
HIGH WATER $_{100}$ ELEVATION — 850.19
Q_2 — 80 C.F.S.
Q_2 VELOCITY — 6.14 FT./SEC.
Q_2 ELEVATION — 846.16

ROADWAY OVERFLOW DESIGN FREQUENCY

OVERTOPPING FREQUENCY — > 100 YEARS

WISCONSIN PROFESSIONAL ENGINEER
NATHAN J KINDT
E-48663
SUAMICO WIS.
10-21-2022

CONSULTANT DESIGN CONTACT:
JULIA ZEHNER
(608) 355-8878

BRIDGE OFFICE CONTACT:
AARON BONK
(608) 261-0261

LIST OF DRAWINGS

NO.	DATE	REVISION	BY

MSA
ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1230 SOUTH BLVD., BARABOO WI 53913
(608) 242-7771 www.msa-ps.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/07/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-39-81

N. MAIN ST. OVER TRIBUTARY TO WESTFIELD CREEK

COUNTY MARQUETTE — ~~TOWN/CITY/~~VILLAGE WESTFIELD

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
NJK	JZ	RLR	NJK

GENERAL PLAN

SHEET 1 OF 12
57

8

8

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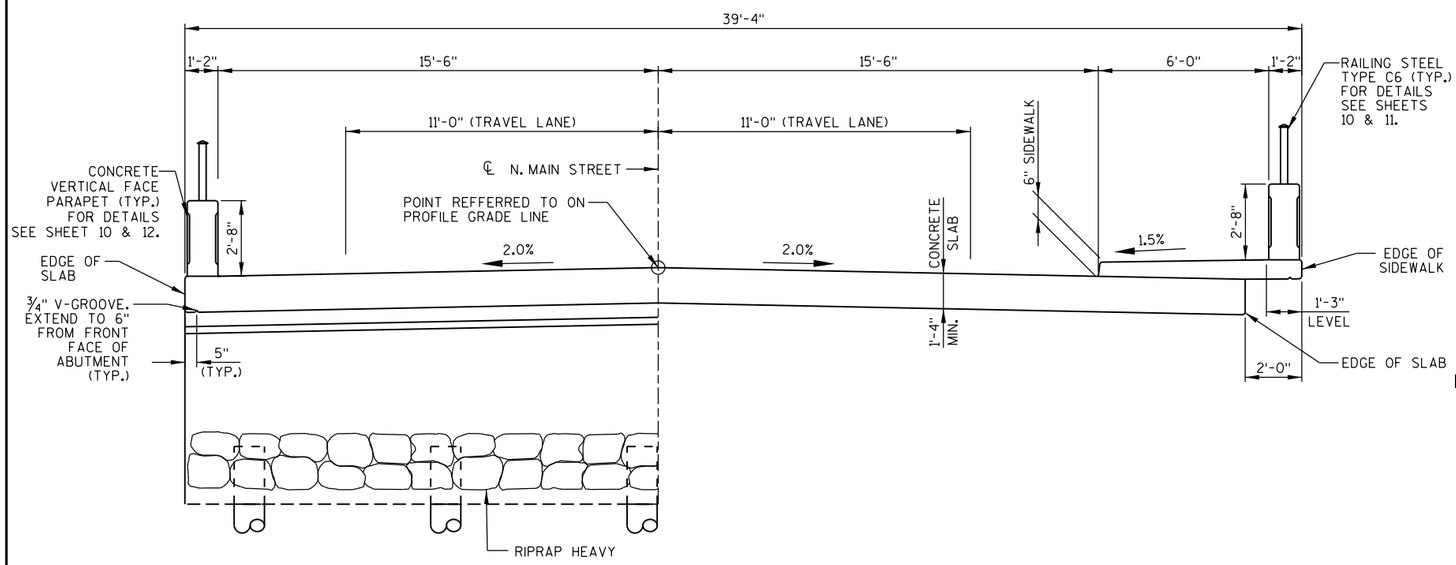
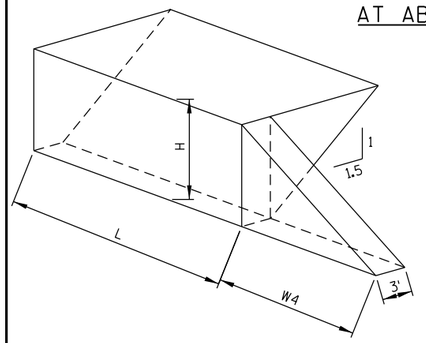


AT ABUTMENTS

IN SPAN

CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

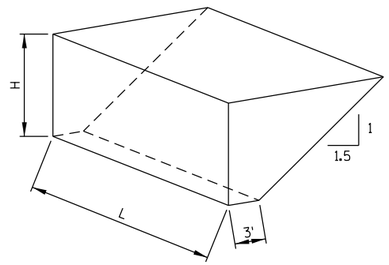


N. ABUTMENT BACKFILL DIAGRAM

L = OUT-TO-OUT OF ABUTMENT (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
W4 = WING 4 LENGTH (FT)

$V_{CF} = (L)(3.0')(H)+(L)(0.5)(1.5H)(H)+(0.5)(H)(W4)(3.0')$

$V_{TON} = V_{CF}(2.0)/27$



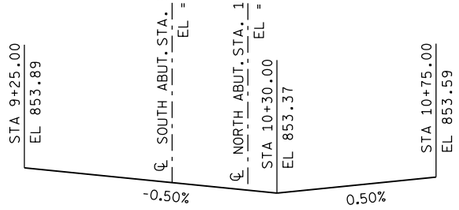
S. ABUTMENT BACKFILL DIAGRAM

L = OUT-TO-OUT OF ABUTMENT, INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)

$V_{CF} = (L)(3.0')(H)+(L)(0.5)(1.5H)(H)$

$V_{CY} = V_{CF}(EF)/27$

$V_{TON} = V_{CY}(2.0)$



PROFILE GRADE LINE - N. MAIN STREET

TOTAL ESTIMATED QUANTITIES

	ITEM NUMBER	BID ITEM	UNIT	SOUTH ABUT.	NORTH ABUT.	SUPER.	TOTAL
◧	203.0270	REMOVING STRUCTURE OVER WATERWAY DEBRIS CAPTURE B-39-977	EACH	-	-	-	1
	206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-39-81	EACH	-	-	-	1
	206.5001	COFFERDAMS B-39-81	EACH	-	-	-	1
	210.1500	BACKFILL STRUCTURE TYPE A	TON	206	162	-	368
	502.0100	CONCRETE MASONRY BRIDGES	CY	43.2	37.4	71.4	152
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	9	128	137
	502.3210	PIGMENTED SURFACE SEALER	SY	-	-	39	39
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2460	2320	-	4780
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1810	1210	13870	16890
	513.7031	RAILING STEEL TYPE C6	LF	-	-	91	91
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	11	9	-	20
	550.2104	PILING CIP CONCRETE 10 3/4 x 0.25-INCH	LF	390	420	-	810
	606.0300	RIPRAP HEAVY	CY	72	57	-	129
	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	112	93	-	205
	645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	103	45	-	148
	645.0120	GEOTEXTILE TYPE HR	SY	133	141	-	274
	SPV.0060.01	REMOVE, SALVAGE, AND REINSTALL STACKED STONE WALL	EACH	-	1	-	1
	SPV.0165.02	CUT-STONE BOULDERS	SF	-	168	-	168
		NON-BID ITEMS					
		PREFORMED FILLER	SIZE				1/2"&3/4"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

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

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-39-81" FOR THE ABUTMENTS.

CONFLICTS WITH EXISTING FOUNDATIONS ARE ANTICIPATED. FOUNDATION REMOVAL LIMITS TO BE DETERMINED BY THE ENGINEER IN THE FIELD AND SHALL BE INCLUDED UNDER BID ITEM " REMOVING STRUCTURE OVER WATERWAY DEBRIS CAPTURE B-39-977". PRE-BORING ROCK OR CONSOLIDATED MATERIALS IS AN ACCEPTABLE ALTERNATE METHOD TO ADDRESS FOOTING CONFLICTS AND IF USED SHALL BE INCLUDED UNDER THE BID ITEM "REMOVING STRUCTURE OVER WATERWAY DEBRIS CAPTURE B-39-977".

COFFERDAMS AND DEWATERING ARE REQUIRED FOR THE REMOVAL OF THE EXISTING ABUTMENTS IN CONFLICT WITH PROPOSED PILING, FOR REMOVAL OF PEAT AT THE SOUTH ABUTMENT, AND FOR BACKFILL STRUCTURE TYPE A BELOW THE WATER ELEVATION.

◧- THIS STRUCTURE WILL REPLACE THE EXISTING STRUCTURE, B-39-977, A 25.3 FT. LONG, SINGLE SPAN CONCRETE FLAT SLAB BRIDGE ON FULL RETAINING CONCRETE ABUTMENTS ON SPREAD FOOTINGS WITH 27.0 FT. CLEAR ROAD WIDTH. THE REMOVAL OF EXISTING CONCRETE SINGLE SPAN STRUCTURE, THE TWO CONCRETE SINGLE SPAN SIDEWALK SPANS ON THE EXISTING ABUTMENT EXTENSIONS, AND ALL EXISTING DRAIN TILES THROUGH ABUTMENTS SHALL BE INCLUDED WITH THE BID ITEM "REMOVE STRUCTURE OVER WATERWAY DEBRIS CAPTURE B-39-977". THE CONTRACTOR IS ALLOWED TO ISOLATE THE DEMO AREA AND BYPASS WATER IN LIEU OF A FULL DEBRIS CAPTURE SYSTEM.

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

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS, INCLUDING 2' FOR REPLACEMENT OF PEAT REMOVAL UNDER THE SOUTH ABUTMENT, AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET, AND FOR 2.5 FEET UNDER THE SOUTH ABUMENT. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF THE EXCAVATION AND EXTEND 2'-0 ABOVE BOTTOM OF ABUTMENT. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

BACKFILL THE COFFERDAMS TO THE BOTTOM OF THE PROPOSED SOUTH ABUTMENT BEFORE REMOVING THE SHEETING. BACKFILL PLACED WITHIN COFFERDAMS TO THE BOTTOM OF PROPOSED ABUTMENT SHALL BE INCLUDED WITH THE BID ITEM COFFERDAMS B-39-81.

EXCAVATION BELOW THE NORTH ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL.

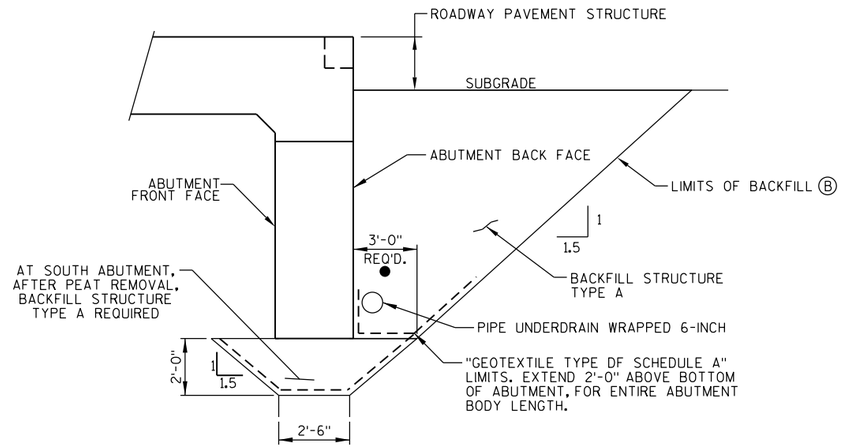
PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF SLAB, TO THE FACE & TOP OF PAVING NOTCHES, TO THE TOP AND INSIDE FACE OF SIDEWALK, AND TO THE EXPOSED SURFACES ON THE TOP AND FRONT FACE OF WING 4.

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

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

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

PARAPETS AND SIDEWALK ON TOP OF SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.



STRUCTURE BACKFILL DETAIL

● NORMAL TO ℄ OF ABUTMENTS

STATE PROJECT NUMBER

6744-02-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-39-81

DRAWN BY RLR | PLANS CK'D. NJK

CROSS SECTION, QUANTITIES & NOTES

SHEET 2 OF 12

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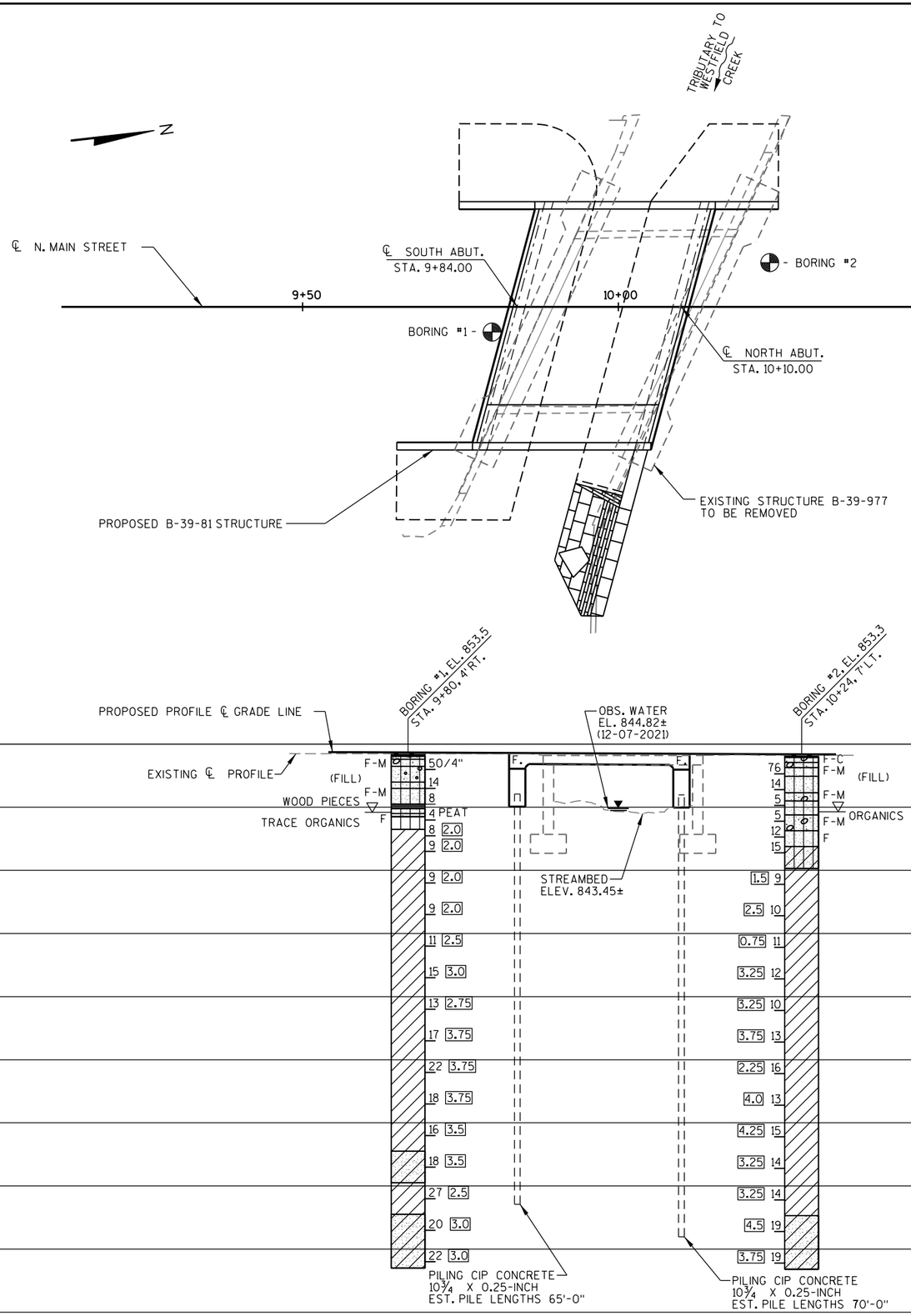
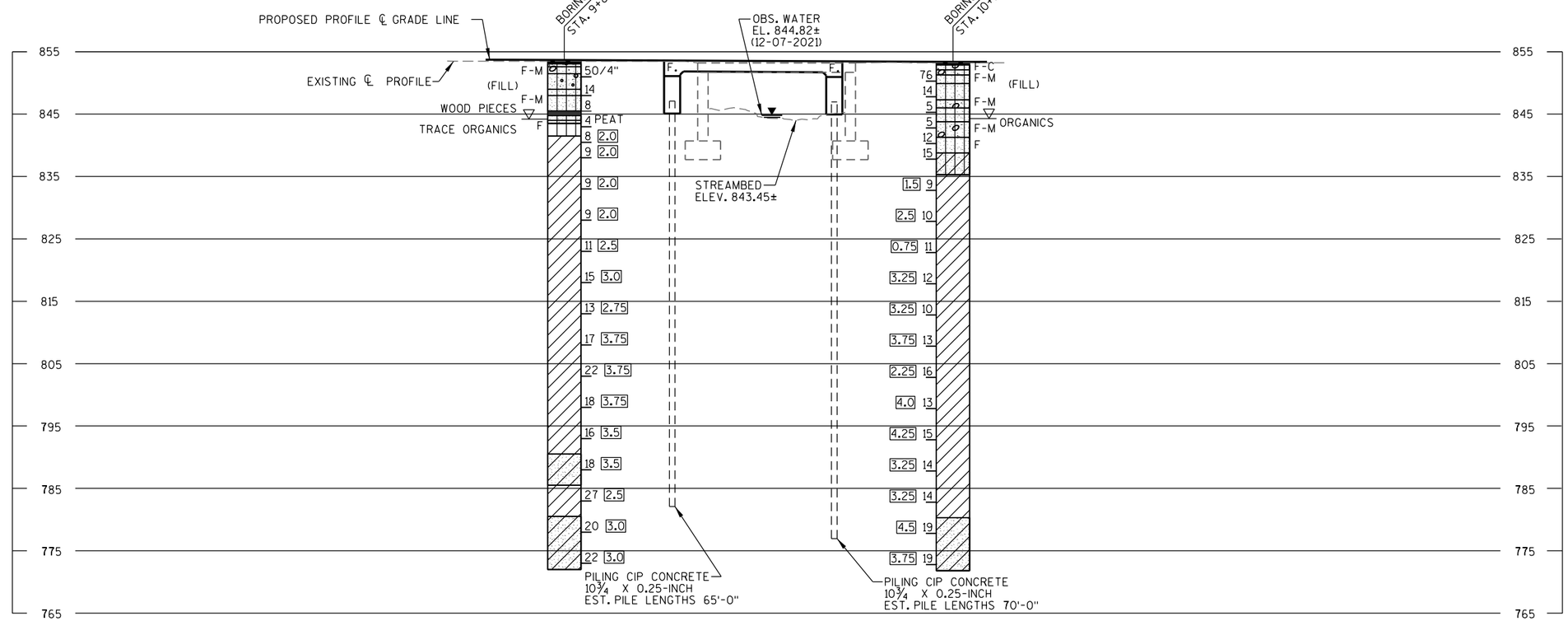


BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	2-10-2022	289,405.2	428,419.6
2	2-11-2022	289,450.2	428,413.7
BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.			
REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(11) MARQUETTE COUNTY			



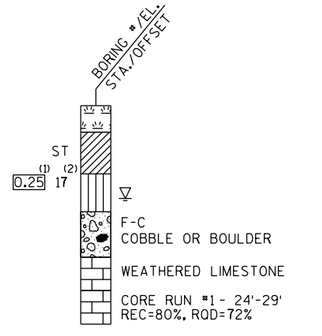
STATE PROJECT NUMBER

6744-02-70

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

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

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-39-81

DRAWN BY RLR | PLANS CK'D. NJK

SUBSURFACE EXPLORATION

SHEET 3 OF 12
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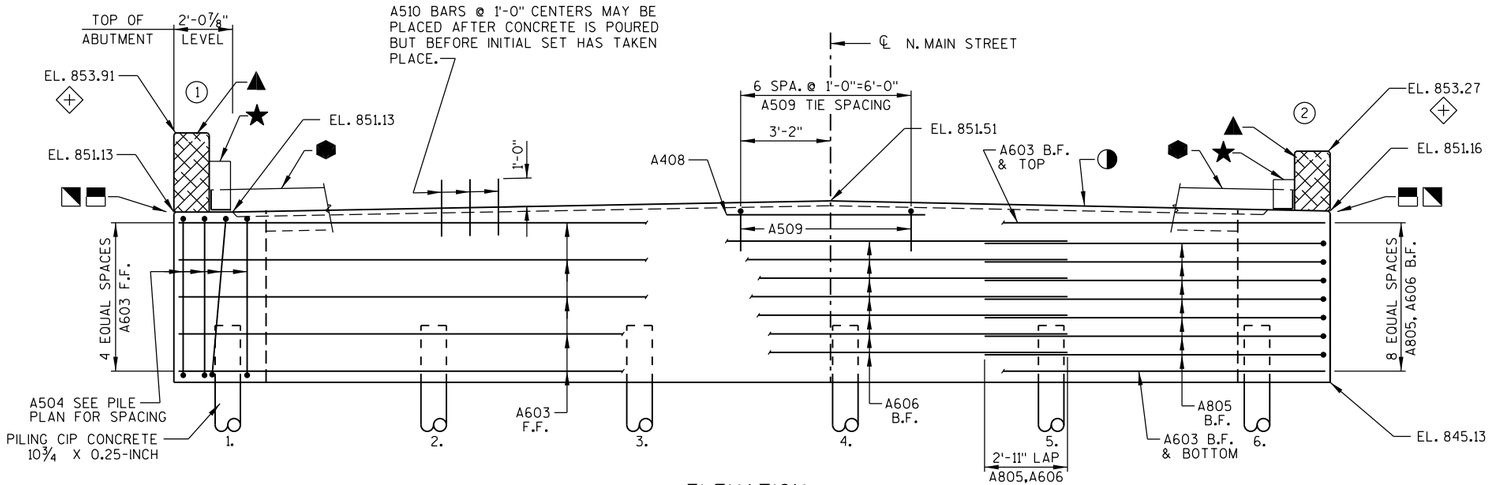
STATE PROJECT NUMBER
6744-02-70

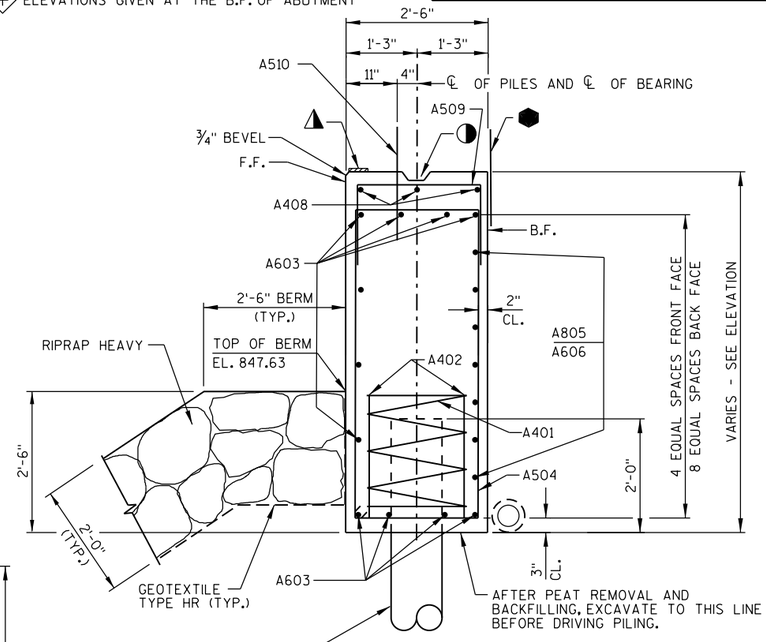


FRONT FACE BAR STEEL REINF.

ELEVATION
(LOOKING SOUTH)

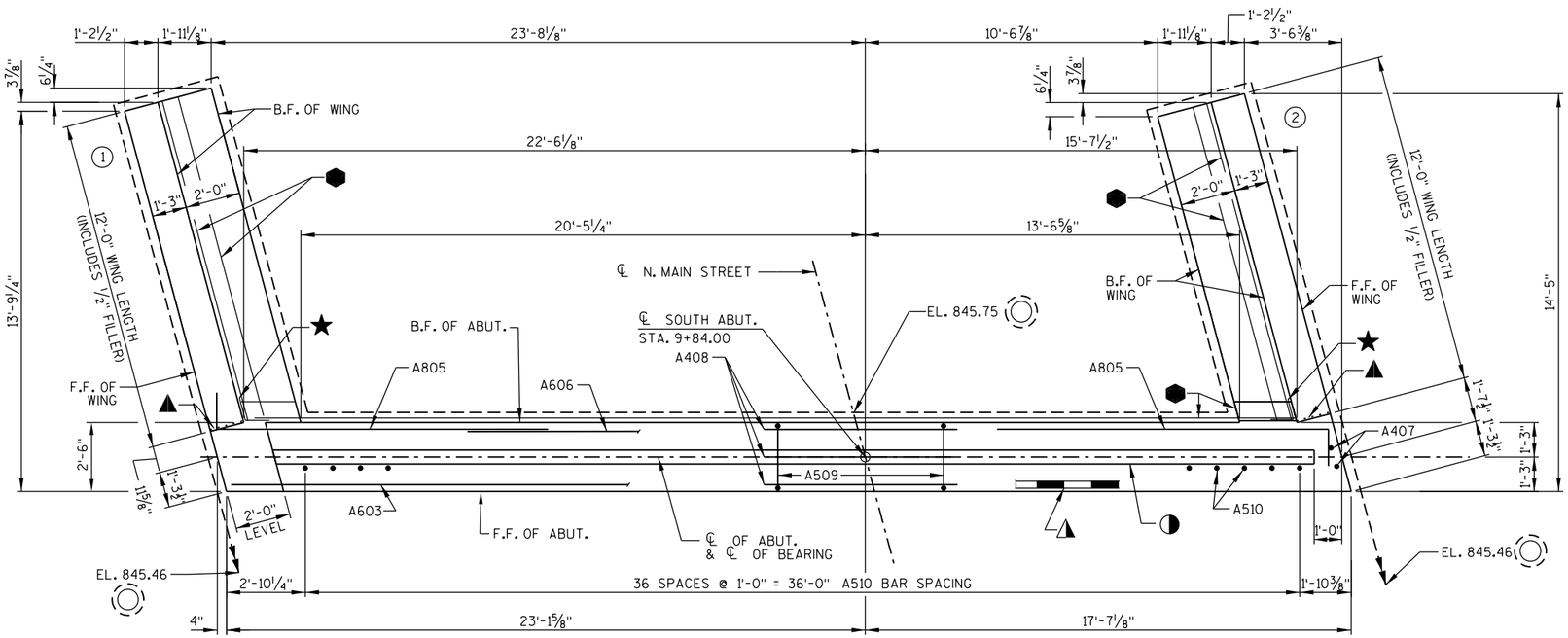
BACK FACE BAR STEEL REINF.

NOTES:
FOR WING DETAILS SEE SHEET 5.
⟡ ELEVATIONS GIVEN AT THE B.F. OF ABUTMENT



SOUTH ABUTMENT TO BE SUPPORTED ON PILING CIP CONCRETE 10 3/4 x 0.25-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 125 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS ARE 65'-0". FOR PILE SPLICE DETAILS SEE SHEET 5.

TYPICAL SECTION THRU ABUTMENT
(LOOKING EAST)

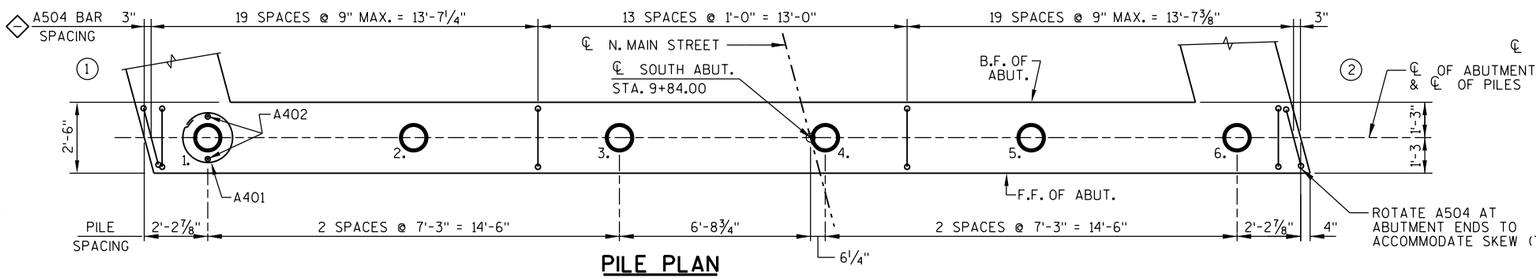


PLAN

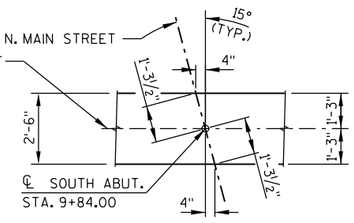
LEGEND

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

- OPTIONAL KEYED CONSTRUCTION JOINT ON WING FORMED BY BEVELED 2x6. IF JOINT IS USED PLACE ⬢ ON B.F. OF WING.
- 3/4" "V" GROOVE ON FRONT FACE OF WING WALL, REQ'D. ONLY WHERE CONST. JOINT IS USED.
- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2x6.
- 1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE).
- 4"x 3/4" FILLER, EXTEND FULL LENGTH OF ABUTMENT BETWEEN EDGES OF SLAB.
- VERTICAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND FROM BRIDGE SEAT TO BOTTOM OF PAVING NOTCH.
- HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND BETWEEN WINGS.
- PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE TYPE HR AT FACE OF RIPRAP HEAVY. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE. FOR RODENT SHIELD DETAILS SEE SHEET 7.
- ◯ INDICATES WING NUMBER ⟡ A504 BARS TO BE PLACED TO MISS PILING.



PILE PLAN



LAYOUT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-39-81

DRAWN BY RLR PLANS CK'D. NJK

SOUTH ABUTMENT

SHEET 4 OF 12
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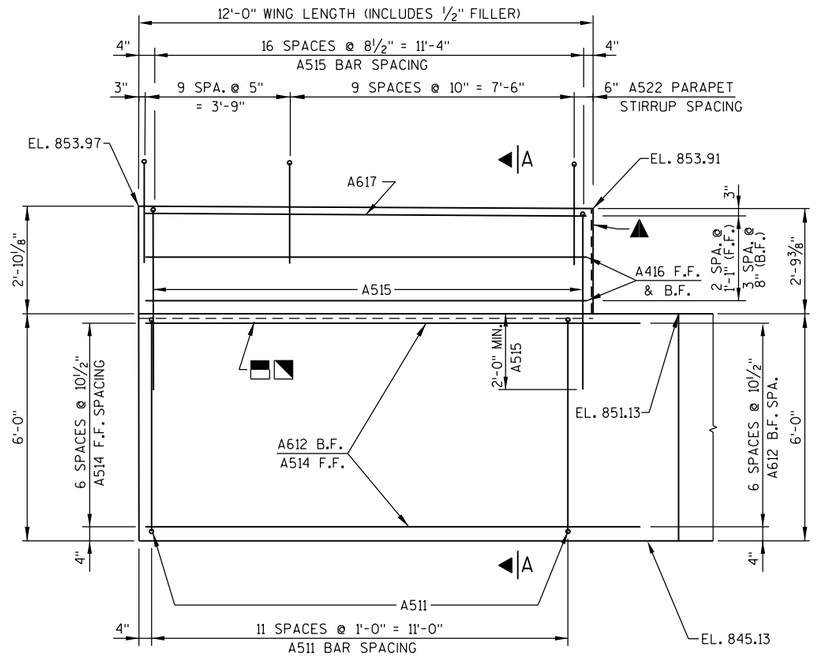
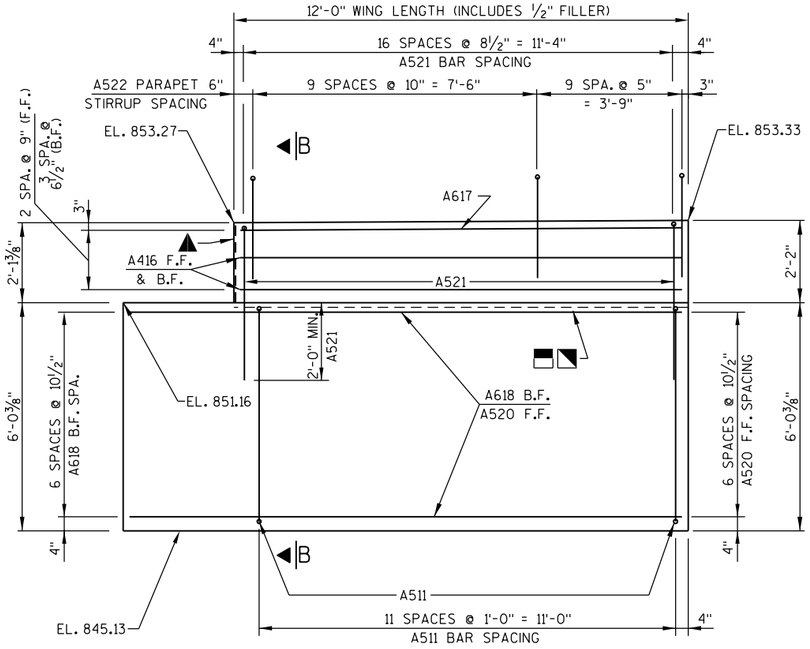
STATE PROJECT NUMBER

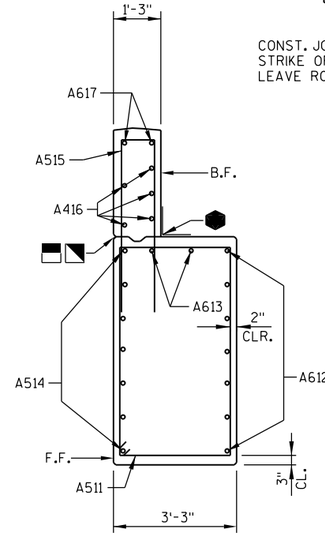
6744-02-70



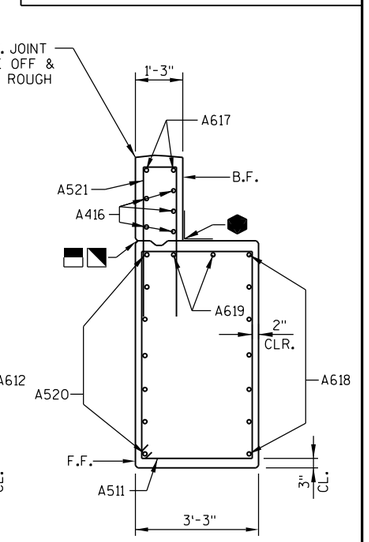
ELEVATION WING 1



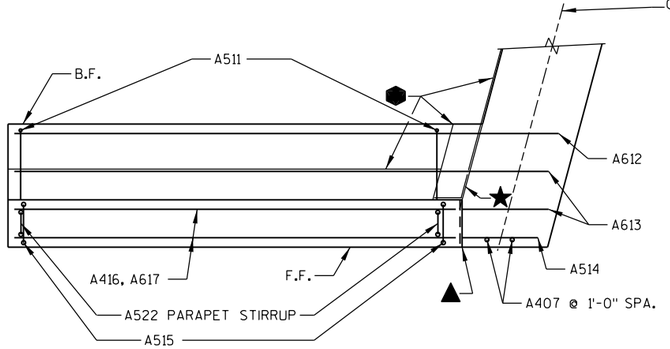
ELEVATION WING 2



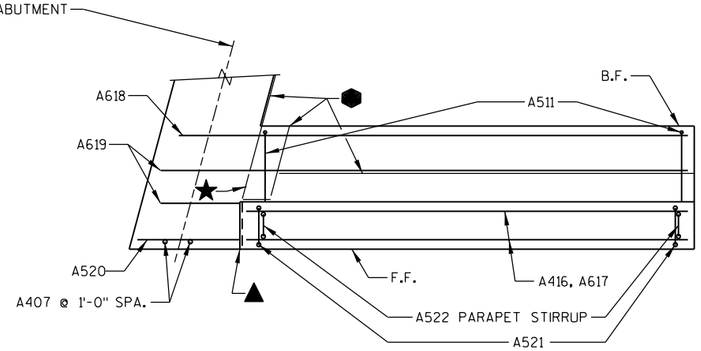
SECTION A-A THRU WING 1



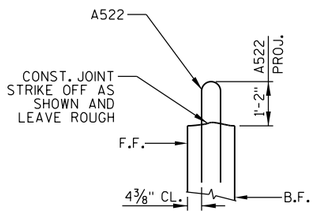
SECTION B-B THRU WING 2



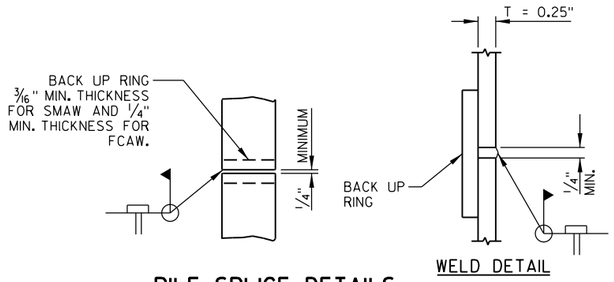
PLAN WING 1



PLAN WING 2



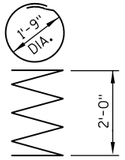
PARAPET STIRRUP PROJECTION DETAIL



PILE SPLICE DETAILS

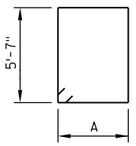
WELD DETAIL

SEE SHEET 4 LEGEND FOR DESCRIPTION OF

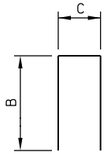


A401

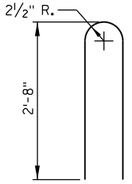
A805
STD. 90° HOOK



MARK	A
A504	2'-2"
A511	2'-11"



MARK	B	C
A509	1'-5"	2'-2"
A515	4'-8"	11"
A521	4'-0"	11"



A522

STIRRUP RADII SHOWN ARE MEASURED TO THE INSIDE OF THE BAR BEND.

(COATED) 1810 LBS.

BILL OF BARS (SOUTH ABUTMENT) (UNCOATED) 2460 LBS.

MARK	NUMBER REQUIRED COATED	NUMBER REQUIRED UNCOATED	LENGTH	BENT	LOCATION
A401	-	6	28'-0"	X	ABUTMENT BODY - 1 SPIRAL WRAP @ EACH PILE
A402	-	12	2'-3"		ABUTMENT BODY - 2 @ EACH PILE - VERT.
A603	-	11	40'-4"		ABUTMENT BODY - F.F., TOP, B.F. & BOTTOM - HORIZ.
A504	-	52	16'-2"	X	ABUTMENT BODY - STIRRUP - VERT.
A805	-	14	13'-2"	X	ABUTMENT BODY - B.F. @ WINGS - HORIZ.
A606	-	7	22'-2"		ABUTMENT BODY - B.F. @ CENTER - HORIZ.
A407	-	4	5'-7"		ABUTMENT BODY - ENDS @ WINGS - VERT.
A408	-	3	7'-0"		ABUTMENT BODY - TOP - HORIZ.
A509	-	7	4'-9"	X	ABUTMENT BODY - TOP - TIES - VERT.
A510	37	-	2'-0"		ABUTMENT BODY - TOP - DOWEL - VERT.
A511	24	-	17'-8"	X	WINGS 1 & 2 - BASE - STIRRUP - VERT.
A612	7	-	14'-5"		WING 1 - BASE - B.F. - HORIZ.
A613	2	-	14'-2"		WING 1 - BASE - TOP - CENTER - HORIZ.
A514	7	-	13'-11"		WING 1 - BASE - F.F. - HORIZ.
A515	17	-	10'-0"	X	WING 1 - TOP - STIRRUP - VERT.
A416	10	-	11'-7"		WINGS 1 & 2 - TOP - F.F. & B.F. - HORIZ.
A617	4	-	11'-7"		WINGS 1 & 2 - TOP - F.F. & B.F. - HORIZ.
A618	7	-	13'-5"		WING 2 - BASE - B.F. - HORIZ.
A619	2	-	13'-11"		WING 2 - BASE - TOP - CENTER - HORIZ.
A520	7	-	14'-6"		WING 2 - BASE - F.F. - HORIZ.
A521	17	-	8'-8"	X	WING 2 - TOP - STIRRUP - VERT.
A522	38	-	5'-8"	X	WINGS 1 & 2 - TOP - PARAPET STIRRUP - VERT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

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STRUCTURE B-39-81

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SOUTH ABUTMENT DETAILS

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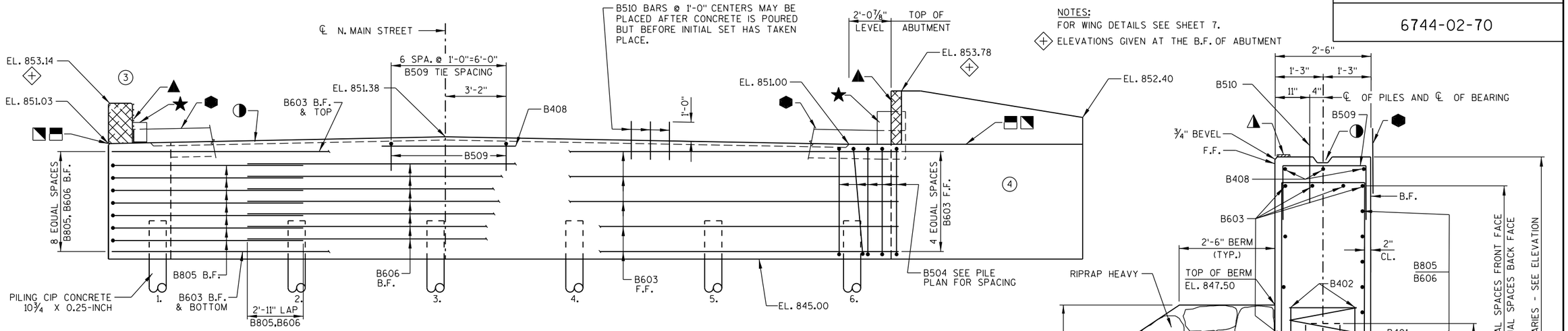
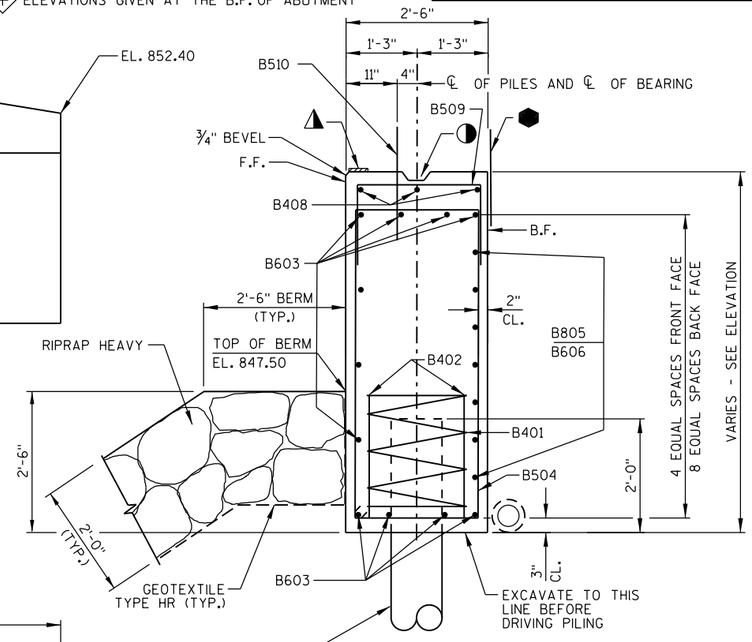


BACK FACE BAR STEEL REINF.

FRONT FACE BAR STEEL REINF.

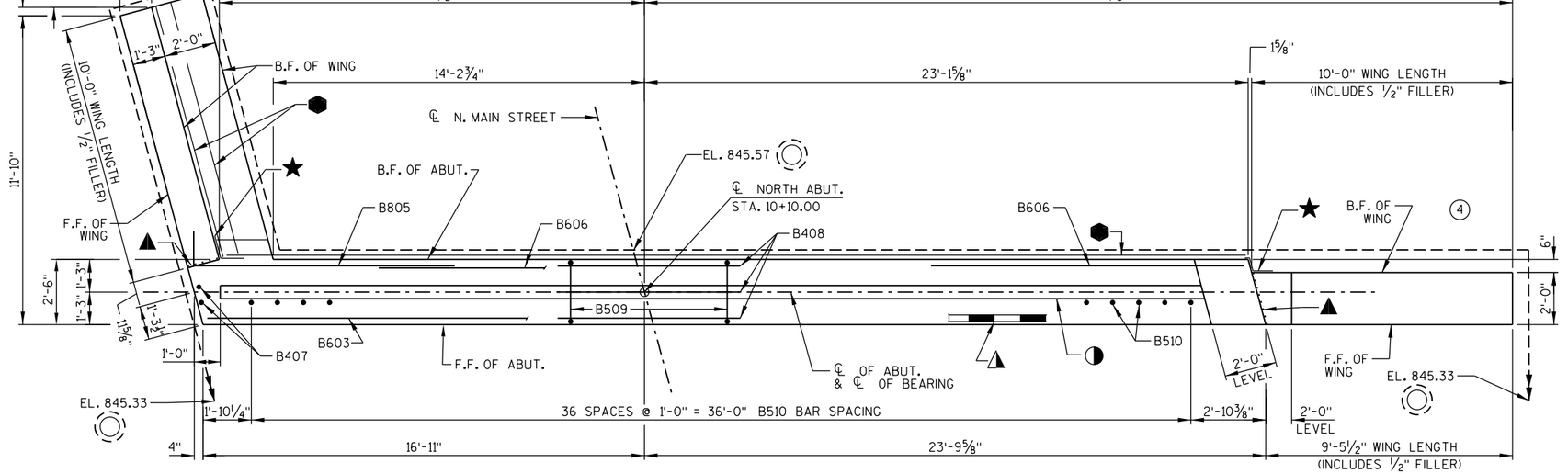
ELEVATION
(LOOKING NORTH)

NOTES:
FOR WING DETAILS SEE SHEET 7.
◇ ELEVATIONS GIVEN AT THE B.F. OF ABUTMENT



NORTH ABUTMENT TO BE SUPPORTED ON PILING CIP CONCRETE 10¾ x 0.25-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 125 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS ARE 70'-0". FOR PILE SPLICE DETAILS SEE SHEET 5.

TYPICAL SECTION THRU ABUTMENT
(LOOKING WEST)

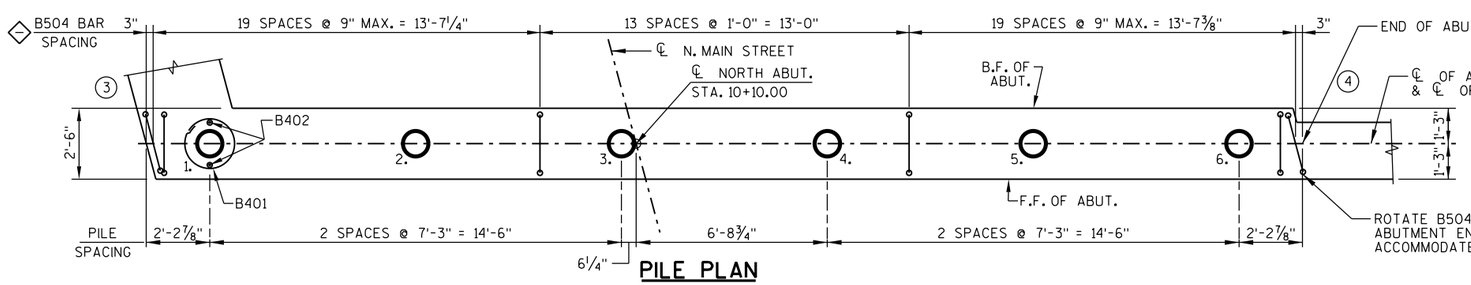


PLAN

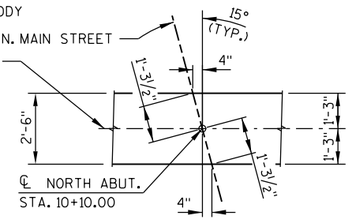
LEGEND

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

- OPTIONAL KEYED CONSTRUCTION JOINT ON WING FORMED BY BEVELED 2×6. IF JOINT IS USED PLACE ⬢ ON B.F. OF WING.
- ¾" "V" GROOVE ON FRONT FACE OF WING WALL, REQ'D. ONLY WHERE CONST. JOINT IS USED.
- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2×6.
- ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).
- 4"× ¾" FILLER, EXTEND FULL LENGTH OF ABUTMENT BETWEEN EDGES OF SLAB.
- ★ VERTICAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND FROM BRIDGE SEAT TO BOTTOM OF PAVING NOTCH.
- ⬢ HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND BETWEEN WINGS.
- PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE TYPE HR AT FACE OF RIPRAP HEAVY. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE. FOR RODENT SHIELD DETAILS SEE SHEET 7.
- ◯ INDICATES WING NUMBER ◇ B504 BARS TO BE PLACED TO MISS PILING.



PILE PLAN



LAYOUT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-39-81

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NORTH ABUTMENT

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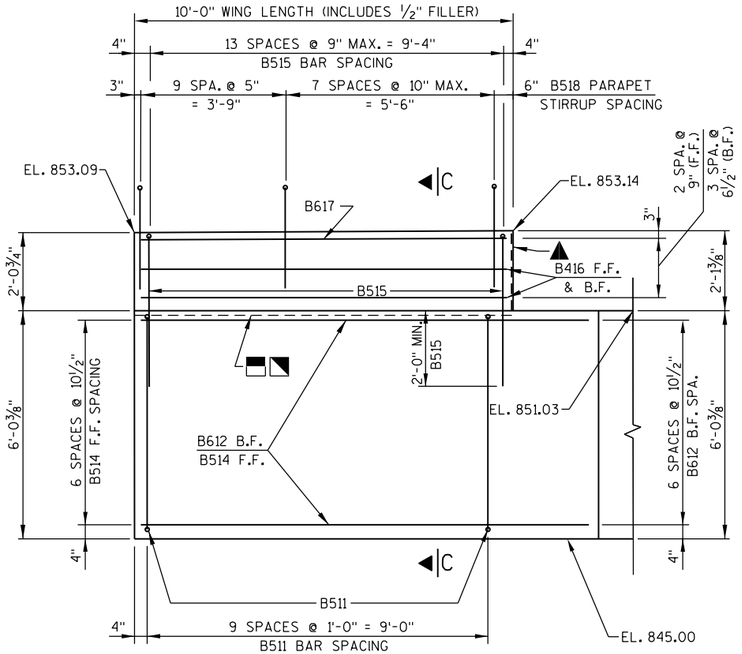
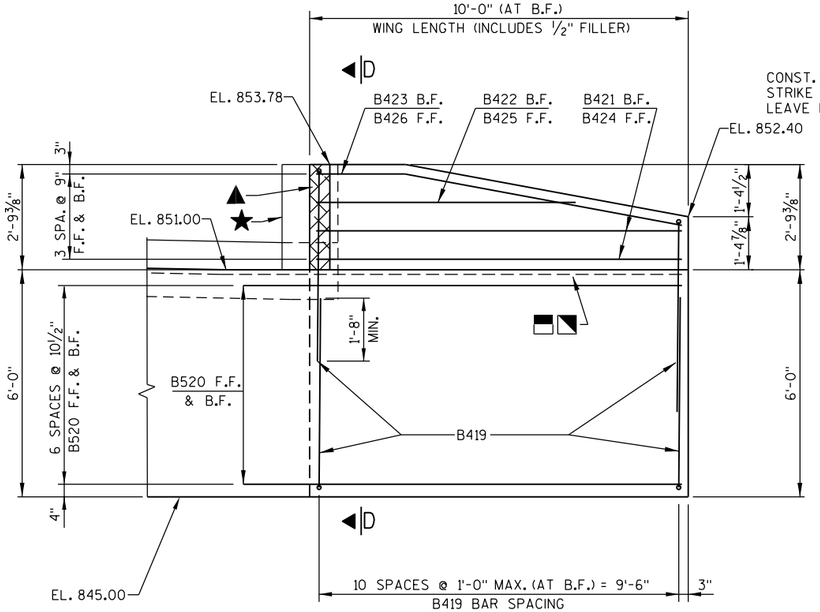
STATE PROJECT NUMBER

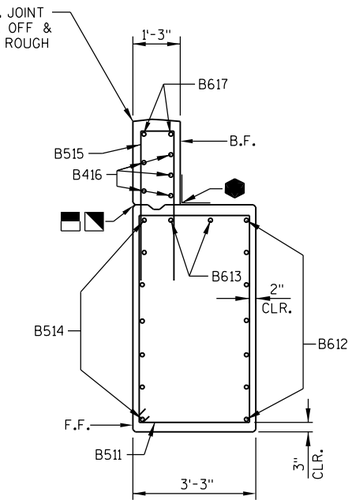
6744-02-70



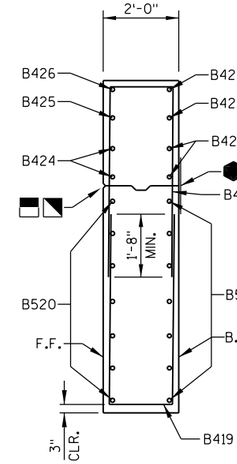
ELEVATION WING 3



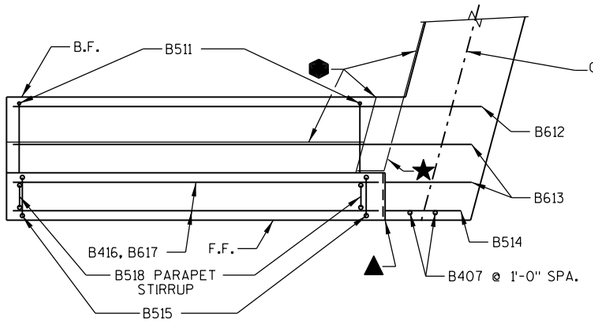
ELEVATION WING 4



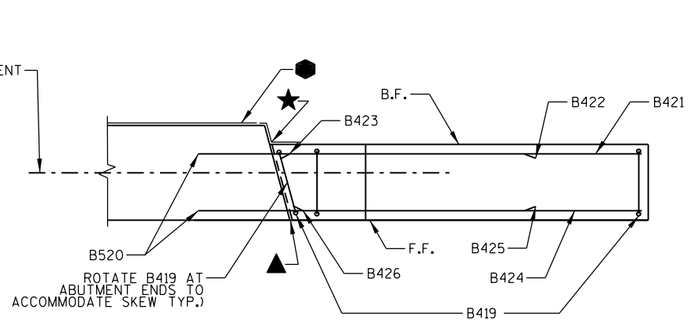
SECTION C-C
THRU WING 3



SECTION D-D
THRU WING 4



PLAN WING 3



PLAN WING 4

(COATED) 1210 LBS.
(UNCOATED) 2320 LBS.

BILL OF BARS (NORTH ABUTMENT)

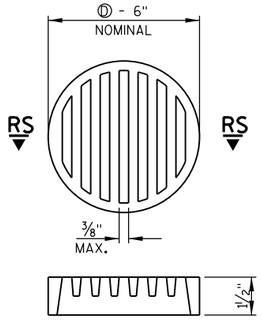
MARK	NUMBER REQUIRED COATED	NUMBER REQUIRED UNCOATED	LENGTH	BENT	LOCATION
B401	-	6	28'-0"	X	ABUTMENT BODY - 1 SPIRAL WRAP @ EACH PILE
B402	-	12	2'-3"		ABUTMENT BODY - 2 @ EACH PILE - VERT.
B603	-	11	40'-4"		ABUTMENT BODY - F.F., TOP, B.F. & BOTTOM - HORIZ.
B504	-	52	16'-2"	X	ABUTMENT BODY - STIRRUP - VERT.
B805	-	7	13'-2"	X	ABUTMENT BODY - B.F. @ WINGS - HORIZ.
B606	-	7	33'-1"		ABUTMENT BODY - B.F. @ CENTER - HORIZ.
B407	-	2	5'-7"		ABUTMENT BODY - VERT. END @ WING 3.
B408	-	3	7'-0"		ABUTMENT BODY - TOP - HORIZ.
B509	-	7	4'-9"	X	ABUTMENT BODY - TOP - TIES - VERT.
B510	37	-	2'-0"		ABUTMENT BODY - TOP - DOWEL - VERT.
B511	10	-	17'-8"	X	WING 3 - BASE - STIRRUP - VERT.
B612	7	-	12'-5"		WING 3 - BASE - B.F. - HORIZ.
B613	2	-	12'-1"		WING 3 - BASE - TOP - CENTER - HORIZ.
B514	7	-	11'-11"		WING 3 - BASE - F.F. - HORIZ.
B515	14	-	10'-0"	X	WING 3 - TOP - STIRRUP - VERT.
B416	5	-	9'-7"		WING 3 - TOP - F.F. & B.F. - HORIZ.
B617	2	-	9'-7"		WING 3 - TOP - F.F. & B.F. - HORIZ.
B518	17	-	5'-8"	X	WING 3 - TOP - PARAPET STIRRUP - VERT.
B419	22	-	11'-6"	X	WING 4 - STIRRUP - VERT.
B520	14	-	11'-9"		WING 4 - BASE - F.F. & B.F. - HORIZ.
B421	2	-	9'-6"		WING 4 - TOP - B.F. - HORIZ.
B422	1	-	6'-9"		WING 4 - TOP - B.F. - HORIZ.
B423	1	-	9'-8"	X	WING 4 - TOP - B.F. - HORIZ.
B424	2	-	9'-1"		WING 4 - TOP - F.F. - HORIZ.
B425	1	-	6'-3"		WING 4 - TOP - F.F. - HORIZ.
B426	1	-	9'-3"	X	WING 4 - TOP - F.F. - HORIZ.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

RODENT SHIELD NOTES:

ORIENT SHIELD SO SLOTS ARE VERTICAL.

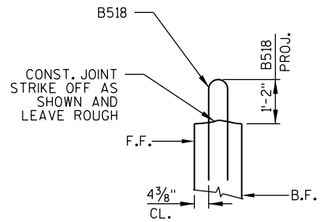
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH STAINLESS STEEL SHEET METAL SCREWS. THE RODENT SHIELD, PIPE COUPLING AND SCREWS, SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".



SECTION RS-RS

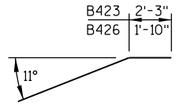
RODENT SHIELD

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



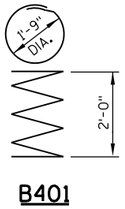
PARAPET STIRRUP
PROJECTION DETAIL

B805
STD. 90° HOOK

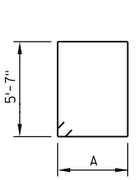


B423, B426

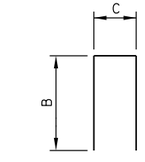
SEE SHEET 6 LEGEND
FOR DESCRIPTION OF



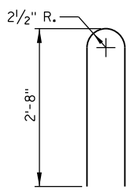
B401



MARK	A
B504	2'-2"
B511	2'-11"



MARK	B	C
B509	1'-5"	2'-2"
B515	4'-8"	11"
B419	5'-0"	1'-8"



B518

STIRRUP RADII SHOWN ARE MEASURED TO THE INSIDE OF THE BAR BEND.

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NORTH ABUTMENT DETAILS

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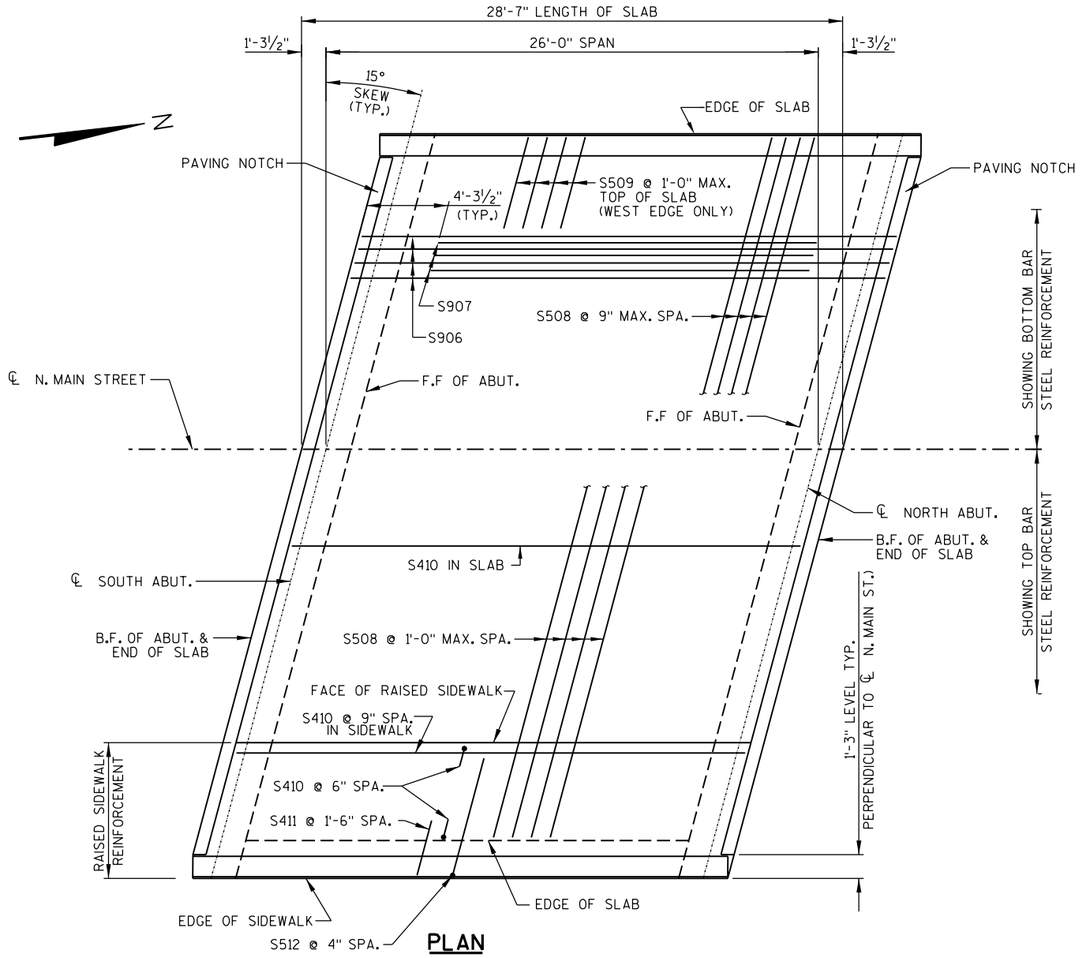
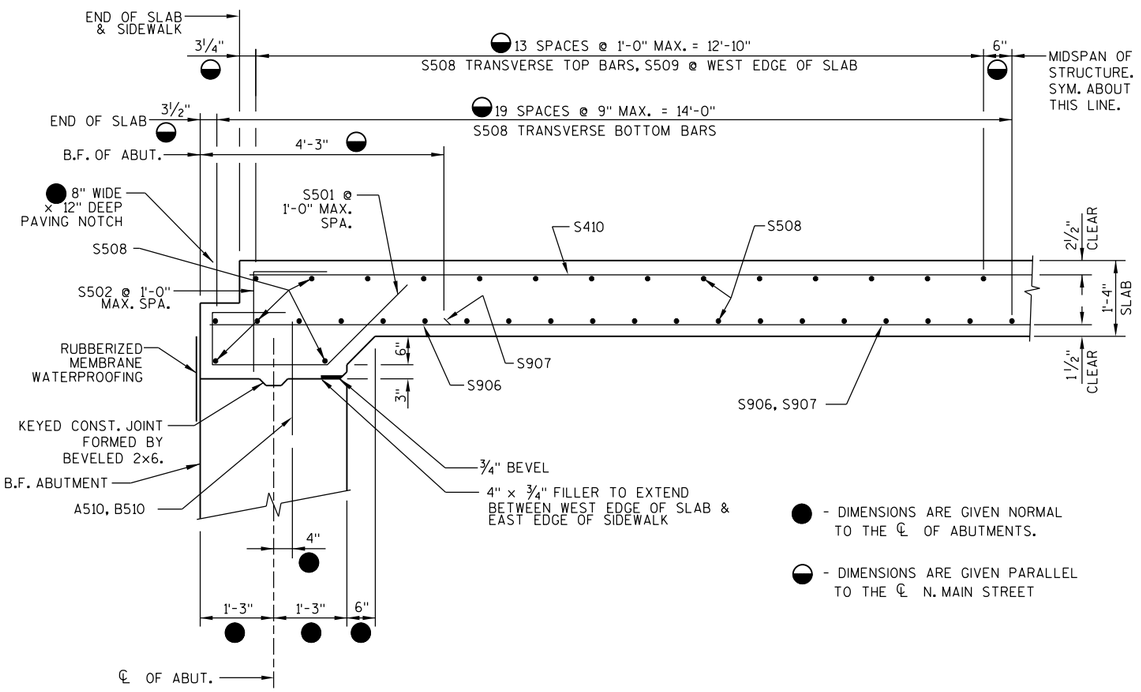
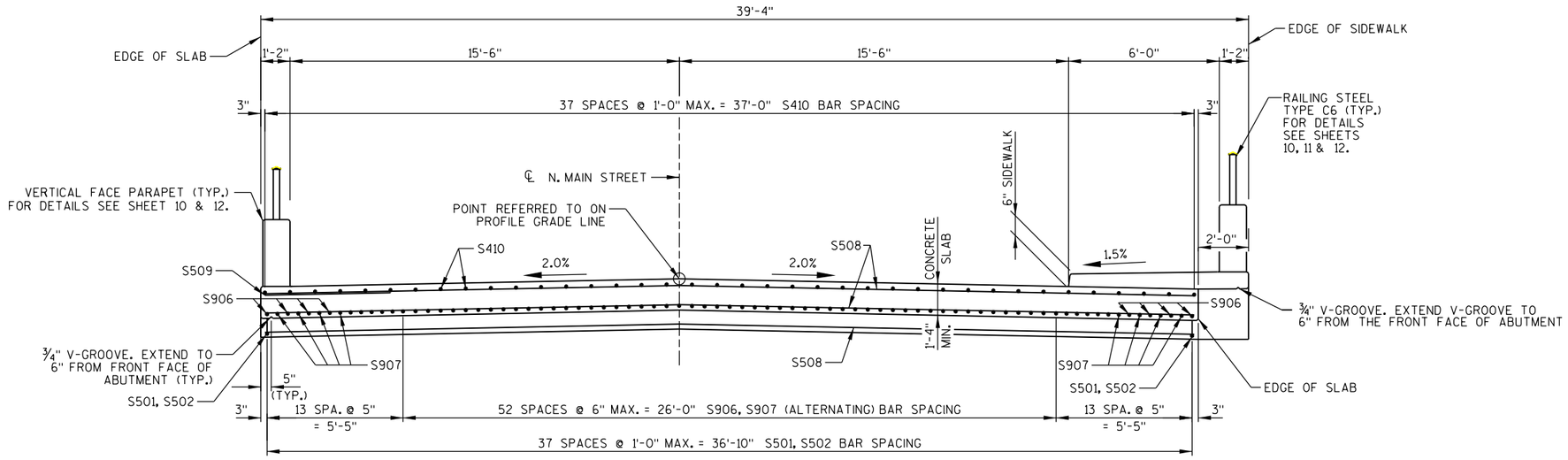


PLAN



PART LONGITUDINAL SECTION



CROSS SECTION THRU BRIDGE

(LOOKING NORTH)
ALL DIMENSIONS ARE GIVEN PERPENDICULAR TO THE C/L OF N. MAIN ST.

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SUPERSTRUCTURE

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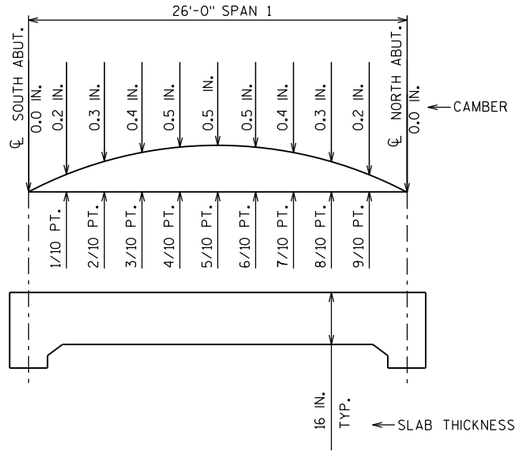
SURVEY TOP OF SLAB ELEVATIONS

	SOUTH ABUTMENT	5/10 PT.	NORTH ABUTMENT
WEST GUTTER			
℄ N. MAIN STREET			
EAST GUTTER			

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ℄ OF ABUTMENTS, AND AT 5/10 PTS. TO VERIFY CAMBER, TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR ℄. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

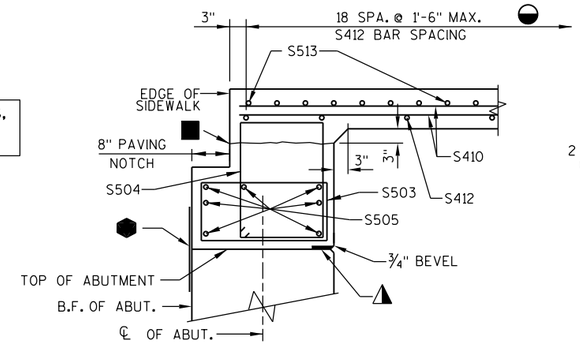


CAMBER AND SLAB THICKNESS DIAGRAM

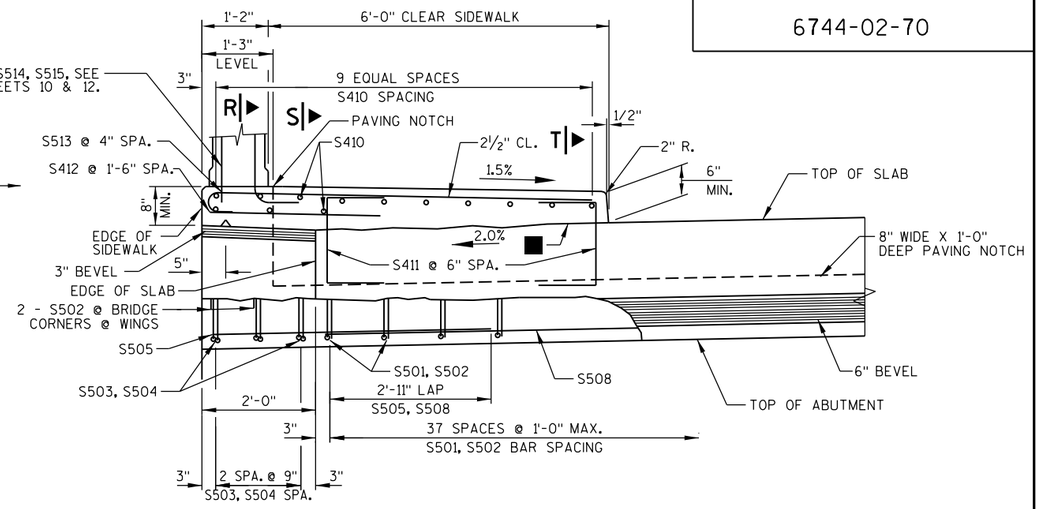
CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS.

CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

RAISED SIDEWALK & PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.



SECTION S-S THRU SIDEWALK OVERHANG



R▶ S▶ T▶

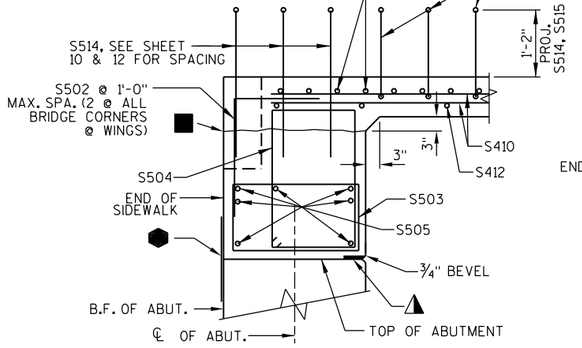
SECTION THRU EAST EDGE OF SLAB AT ABUTMENT

(LOOKING SOUTH)

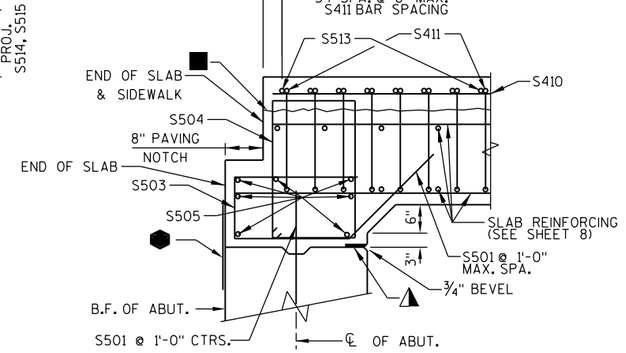
ALL DIMENSIONS ARE GIVEN PERPENDICULAR TO THE ℄ OF N. MAIN ST.

LEGEND

- ⬢ - 18" RUBBERIZED MEMBRANE WATERPROOFING.
- ■ - CONSTRUCTION JOINT STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE CROSS SLOPE.
- ◭ - 4" × ¾" FILLER, EXTEND FULL LENGTH OF ABUTMENT.
- ◒ - DIMENSIONS ARE GIVEN PARALLEL TO THE ℄ OF ABUTMENTS.
- ● - DIMENSIONS ARE GIVEN NORMAL TO THE ℄ OF N. MAIN STREET



SECTION R-R @ PARAPET ON SIDEWALK



SECTION T-T THRU SIDEWALK & SLAB

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

	TOP OF SLAB ELEVATION AT FINAL GRADE
MINUS ---	SLAB THICKNESS
PLUS ---	CAMBER
PLUS ---	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS =	TOP OF SLAB FALSEWORK ELEVATION

TOP OF SLAB ELEVATIONS

	C/L BRG SOUTH ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	C/L BRG NORTH ABUT.
WEST EDGE OF SLAB	853.24	853.23	853.22	853.20	853.19	853.18	853.16	853.15	853.14	853.13	853.11
C/L N MAIN ST.	853.60	853.59	853.57	853.56	853.55	853.53	853.52	853.51	853.49	853.48	853.47
EAST EDGE OF SLAB	853.21	853.20	853.19	853.17	853.16	853.15	853.13	853.12	853.11	853.10	853.08

NOTE:

THE TOP OF SLAB ELEVATIONS AT WEST EDGE OF SLAB ARE THE SAME AT THE TRAFFIC FACE OF WEST PARAPET.

NOTES

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

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

FILL IN THE TABLE OF "SURVEY TOP OF SLAB ELEVATIONS" FOR SPAN 1 ON AS BUILT PLANS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-39-81

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SUPERSTRUCTURE DETAILS

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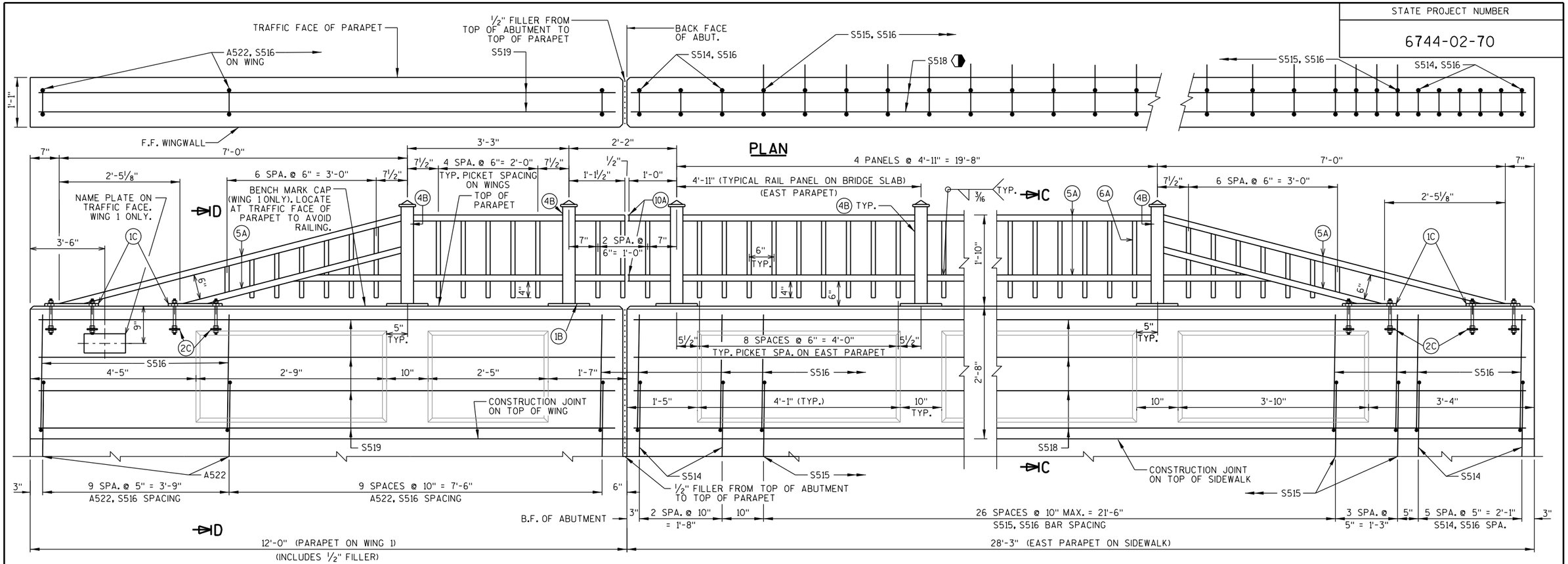
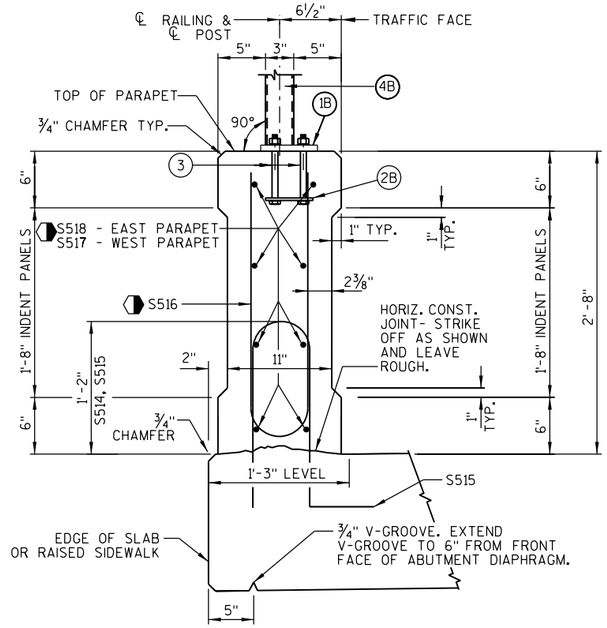
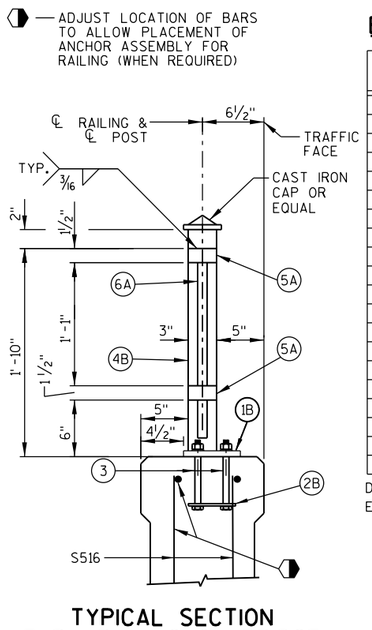




SECTION C-C THRU PARAPET ON BRIDGE



TYPICAL SECTION THRU RAILING ON BRIDGE

ELEVATION OF EAST PARAPET

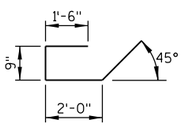
(LOOKING WEST)

BILL OF BARS (COATED) 13,870 LBS.

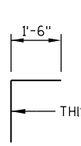
MARK	NUMBER REQUIRED	LENGTH	BENT	DESCRIPTION
S501	76	5'-11"	X	ABUT. DIAPH. - STIRRUP - VERT.
S502	80	3'-1"	X	ABUT. DIAPH. - TIE - VERT.
S503	6	6'-8"	X	ABUT. DIAPH. END - STIRRUP - VERT.
S504	6	8'-2"	X	ABUT. DIAPH. END - STIRRUP - VERT.
S505	14	5'-1"		ABUT. DIAPH. END - TRANS.
S906	40	28'-3"		SLAB - BOTTOM - LONGIT.
S907	39	20'-0"		SLAB - BOTTOM - LONGIT.
S508	71	38'-3"		SLAB - TOP & BOTTOM - TRANS.
S509	28	5'-0"		SLAB - TOP @ WEST EDGE - TRANS.
S410	51	26'-10"		SLAB & SIDEWALK - TOP - LONGIT.
S411	110	3'-4"	X	SLAB & SIDEWALK - TIE - VERT.
S412	19	3'-0"		SIDEWALK - BOTTOM - TRANS.
S513	82	7'-4"	X	SIDEWALK - TOP - TRANS.
S514	15	5'-9"	X	PARAPET - OVER ABUT. - STIRRUP - VERT.
S515	59	4'-4"	X	PARAPET - ON SLAB - STIRRUP - VERT.
S516	129	4'-9"	X	PARAPET - STIRRUP - TOP - VERT.
S517	8	28'-3"		PARAPET - WEST - LONGIT.
S518	8	27'-11"		PARAPET - EAST - LONGIT.
S519	16	11'-7"		PARAPET - ON WINGS 1 & 2 - LONGIT.
S520	8	9'-7"		PARAPET - ON WING 3 - LONGIT.

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

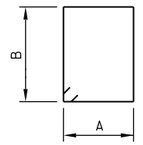
SEE SHEET 11 LEGEND FOR DESCRIPTION OF
1B 1C 2B 2C 3 4B 5A 6A 10A 9A



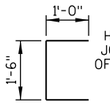
S501



S502



MARK	A	B
S503	2'-3"	9"
S504	1'-6"	2'-3"



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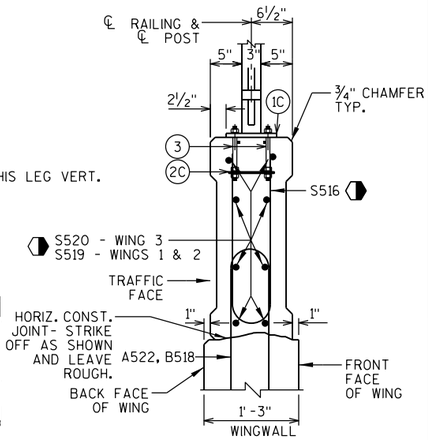
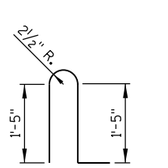
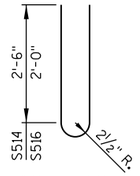


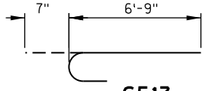
SECTION D-D



S515



S514, S516



S513
STD. 180° HOOK

STIRRUP RADII SHOWN ARE MEASURED TO THE INSIDE OF THE BAR BEND.

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-39-81

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PARAPET, RAILING & SUPERSTRUCTURE DETAILS

SHEET 10 OF 12
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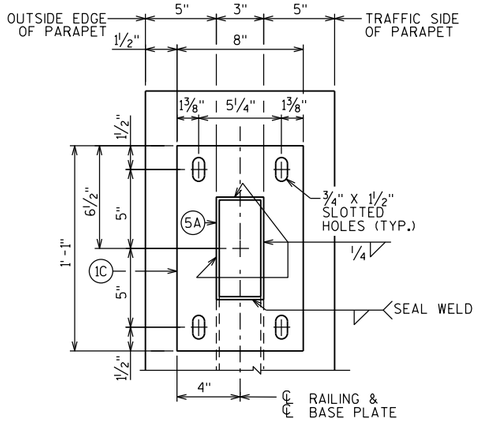
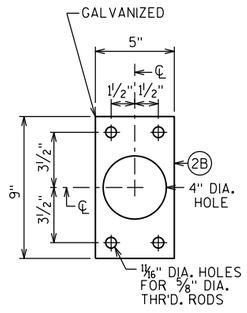
STATE PROJECT NUMBER

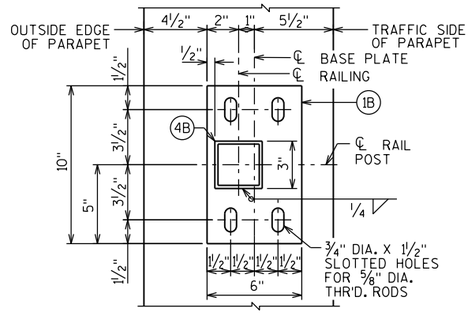
6744-02-70



END RAIL BASE PLATE



ANCHOR PLATE



TYPICAL RAIL POST BASE PLATE

LEGEND

(1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES.

(1C) PLATE ⅝" X 8" X 1'-1" WITH ¾" X 1½" SLOTTED HOLES.

(2B) ¼" X 5" X 9" ANCHOR PLATE WITH 11/16 " Φ HOLES FOR THR'D. RODS NO. 3.

(2C) ¼" X 2½" X 7¼" ANCHOR PLATE WITH 11/16 " Φ HOLES FOR THR'D. RODS NO. 3.

(3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS ⅝-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. EMBED 5" IN CONCRETE FOR END RAILS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.

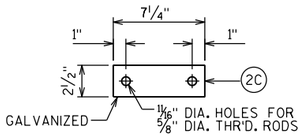
(4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(6A) BAR 1" X 1" PICKETS. PLACE VERTICAL. WELD TO NO. 5.

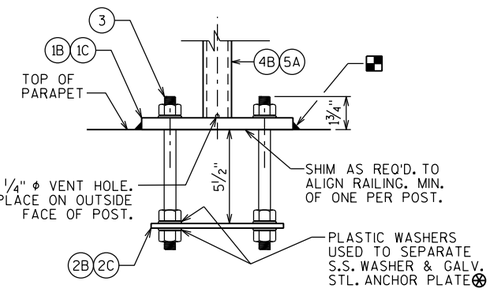
(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JOINTS.)



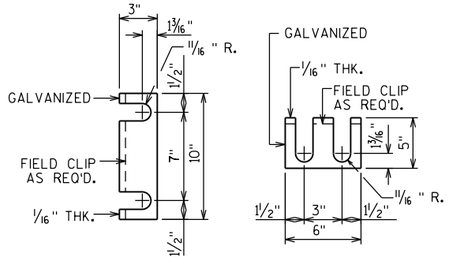
END RAIL ANCHOR PLATE

2 REQ'D. PER END RAIL BASE PLATE



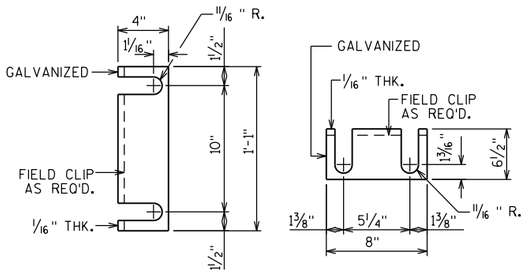
ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



RAIL POST SHIM DETAIL

(2 SETS PER POST)



END RAIL SHIM DETAIL

(2 SETS PER POST)

RAILING NOTES

BID ITEM FOR RAILING ON PARAPETS SHALL BE "RAILING STEEL TYPE C6", WHICH SHALL INCLUDE GALVANIZING, PAINTING, AND ALL STEEL RAILING ITEMS SHOWN.

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 CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

◪ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

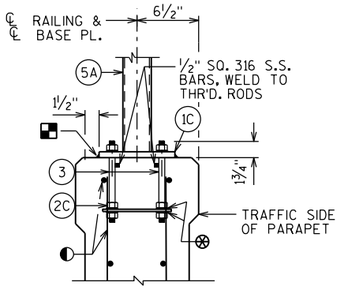
ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE TO ASTM A123.

PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED BLACK FEDERAL STANDARD COLOR NO. 27038.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 TO 4 POSTS.

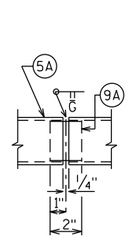
TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.



ANCHORAGE FOR END RAIL

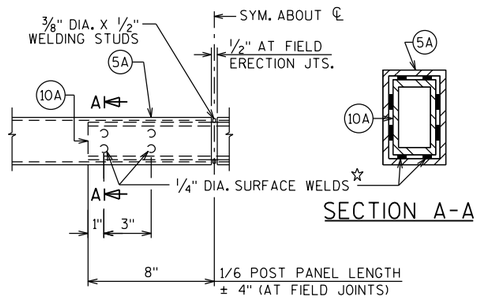
NOTE: ANCHOR PLATES & ½" SQ. BARS NOT REQ'D. WHEN ADHESIVE ANCHORS ARE USED.

◐ WHEN ADHESIVE ANCHORS ARE USED, FIELD BEND AND/OR DISPLACE TO AVOID HITTING LONGITUDINAL BAR WHEN DRILLING FOR ADHESIVE ANCHORS.



SHOP RAIL SPLICE DETAIL

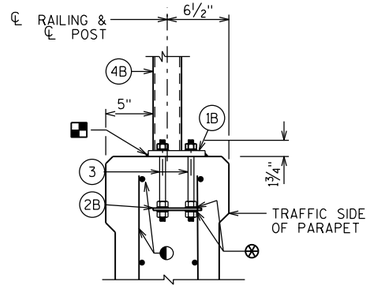
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION A-A

FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



ANCHORAGE FOR RAIL POST ON PARAPET

NOTE: ANCHOR PLATES NOT REQ'D. WHEN ADHESIVE ANCHORS ARE USED.

◐ IF ADHESIVE ANCHORS ARE USED AS AN ALTERNATIVE ANCHORAGE FOR RAIL POSTS, MAKE ADJUSTMENTS TO BAR STEEL POSITIONS PRIOR TO CASTING CONCRETE TO AVOID CONFLICTS WITH THE DRILLING OF ADHESIVE ANCHORS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-39-81

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RAILING DETAILS

SHEET 11 OF 12

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FILE= 177037_11.DGN

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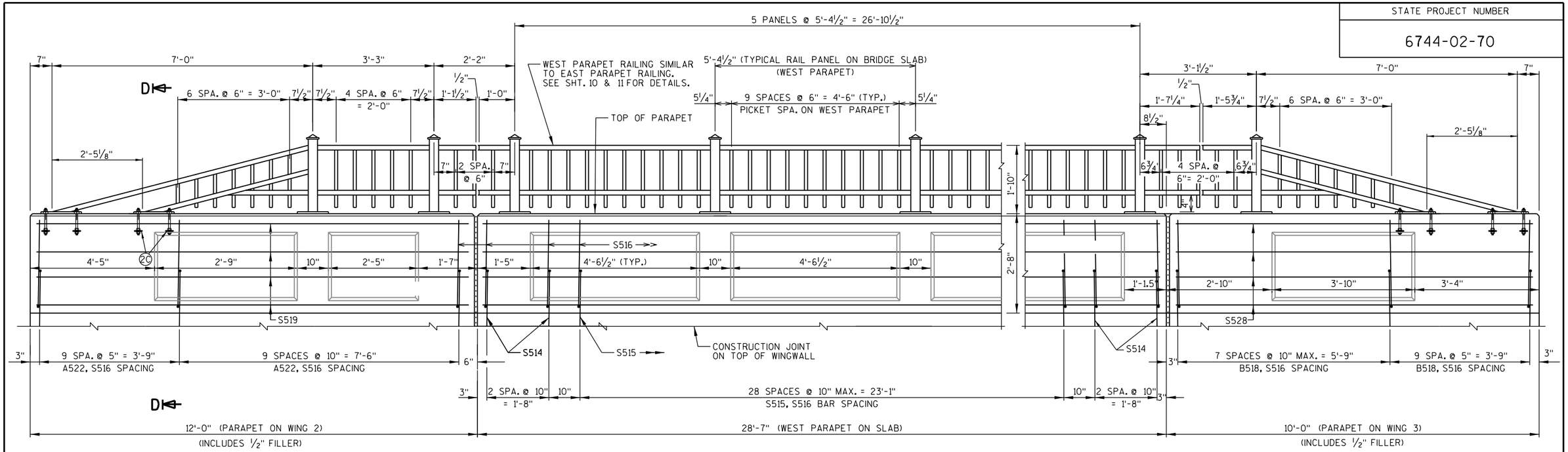
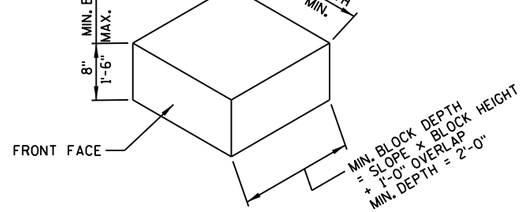
STATE PROJECT NUMBER

6744-02-70

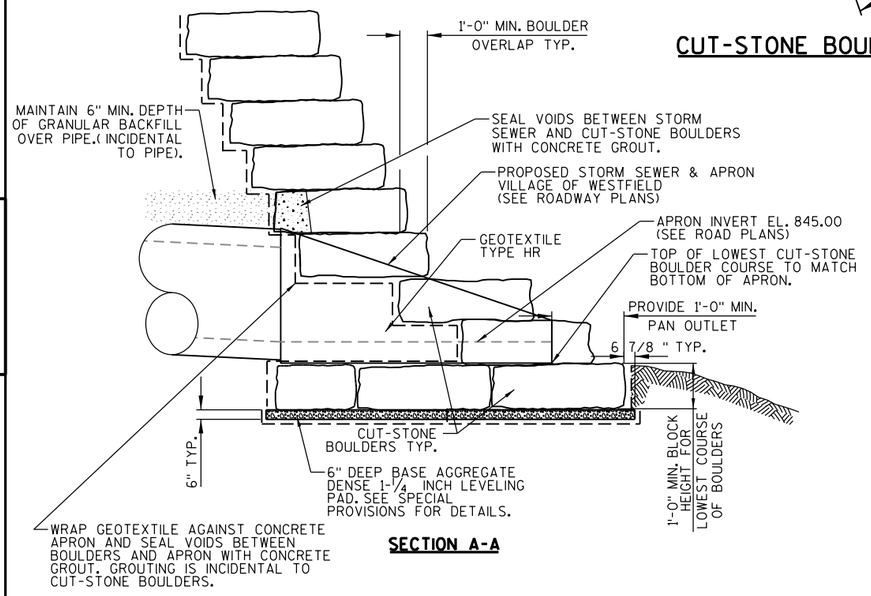


ELEVATION OF WEST PARAPET

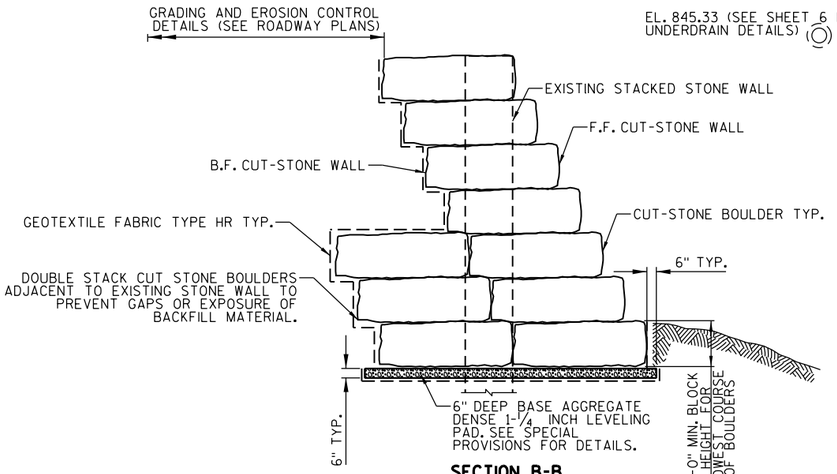
(LOOKING WEST)



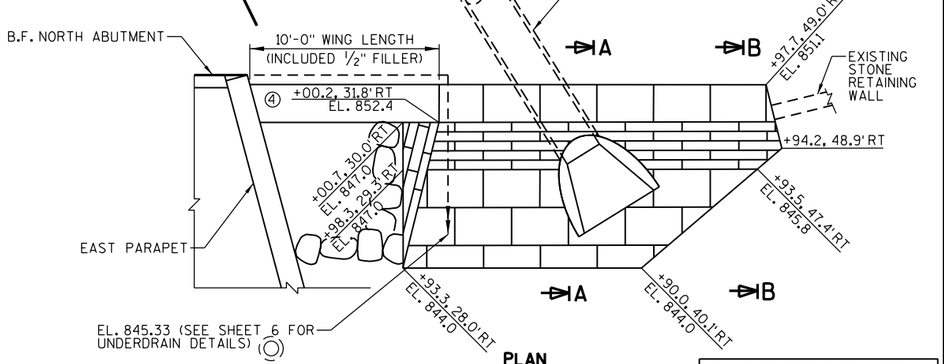
CUT-STONE BOULDER DETAIL



SECTION A-A



SECTION B-B



PLAN

CUT STONE BOULDER DETAILS

UNDERLAY CUT-STONE BOULDER WALL WITH GEOTEXTILE FABRIC TYPE HR. FOLD FABRIC SHEET ALONG BOTTOM & BACK OF WALL STEPS. EXTEND FABRIC TO OVERLAP 2'-0 MIN. TO FRONT FACES OF BRIDGE WING WALLS.

ALL CUT-STONE BOULDER ELEVATION SHOWN ARE TO TOP OF BOULDER LAYER.

NO.	DATE	REVISION	BY

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WEST PARAPET & CUT-STONE BOULDER DETAILS

SHEET 12 OF 12
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177037_12.dgn 8/31/2022 2:04:54 PM ekazadi

FILE= 177037_12.DGN

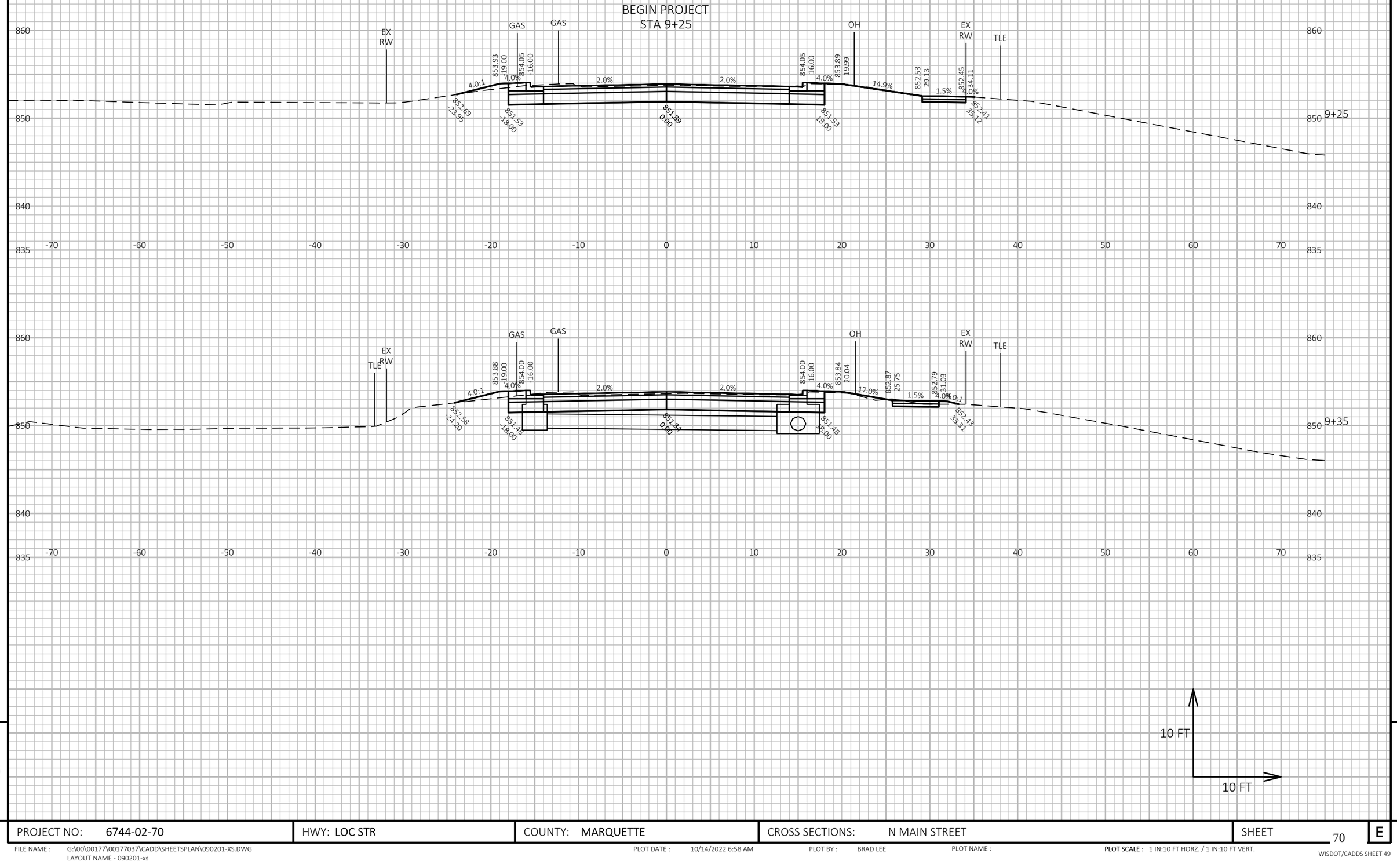
EARTHWORK SUMMARY

STA	EXCAVATION COMMON CY	EXCAVATION ROCK CY	FILL (1) CY	EXPANDED FILL (2) CY	WASTE CY	BORROW CY
9+25.00						
	27	0	1	1	26	-26
9+35.00						
	79	0	10	13	66	-66
9+64.62						
STRUCTURE B-39-0081						
10+20.39						
	22	0	1	1	21	-21
10+30.00						
	15	0	2	3	12	-12
10+35.17						
	39	0	10	13	26	-26
10+50.00						
	62	0	13	17	45	-45
10+75.00						
SUBTOTALS						
S. APPROACH	106	0	11	14	92	-92
N. APPROACH	138	0	26	34	104	-104
UNUSABLE PAVEMENT (3)						37
TOTALS	244	0	37	48	196	-196

(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.
(2) - FILL EXPANSION 30%
(3) - EXISTING PAVEMENT BASED ON AVE THK OF 4"

9

9



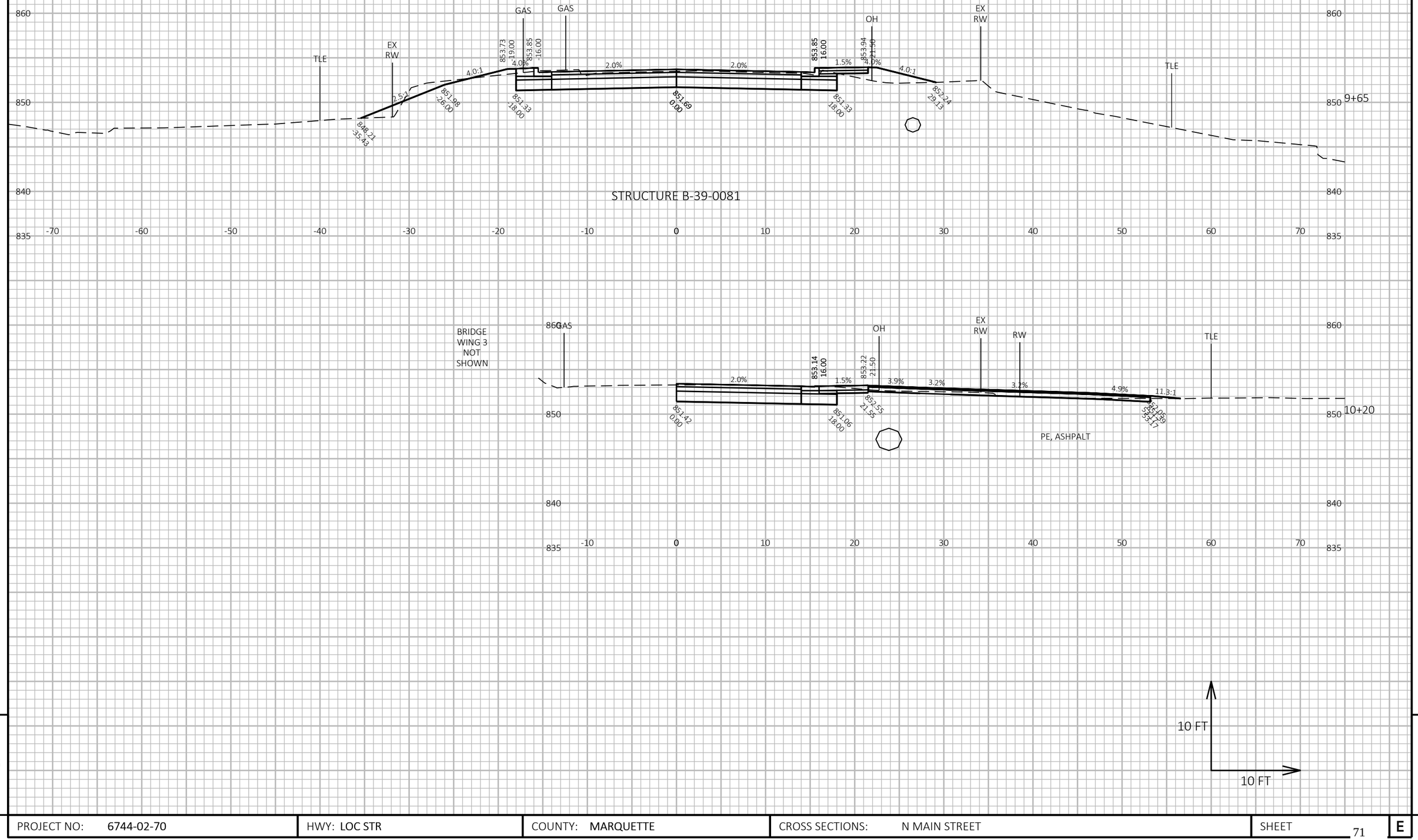
9

9

PROJECT NO: 6744-02-70	HWY: LOC STR	COUNTY: MARQUETTE	CROSS SECTIONS: N MAIN STREET	SHEET 70	E

FILE NAME : G:\00\00177\00177037\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-xs

PLOT DATE : 10/14/2022 6:58 AM PLOT BY : BRAD LEE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 6744-02-70	HWY: LOC STR	COUNTY: MARQUETTE	CROSS SECTIONS: N MAIN STREET	SHEET 71	E

FILE NAME : G:\00\00177\00177037\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090202-xs

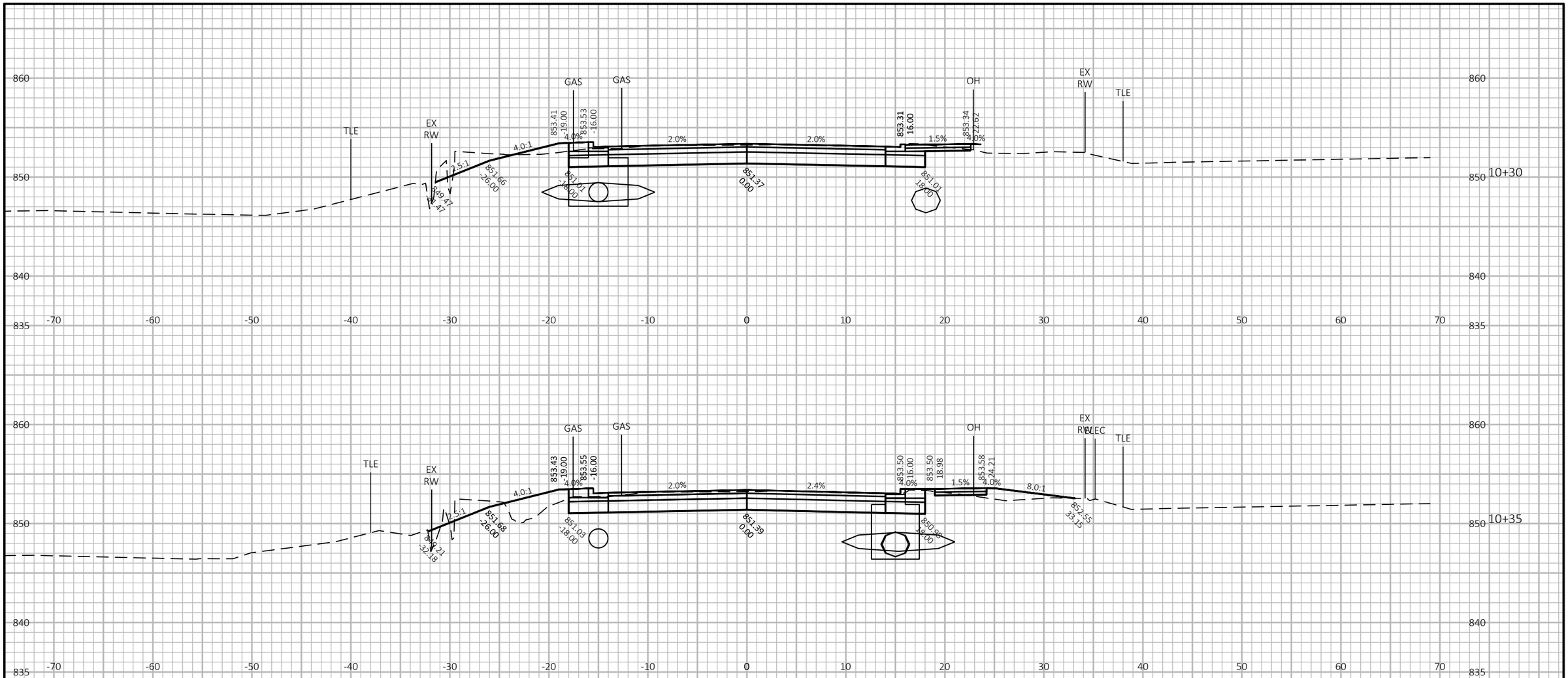
PLOT DATE : 10/14/2022 6:58 AM

PLOT BY : BRAD LEE

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 6744-02-70	HWY: LOC STR	COUNTY: MARQUETTE	CROSS SECTIONS: N MAIN STREET	SHEET 72	E

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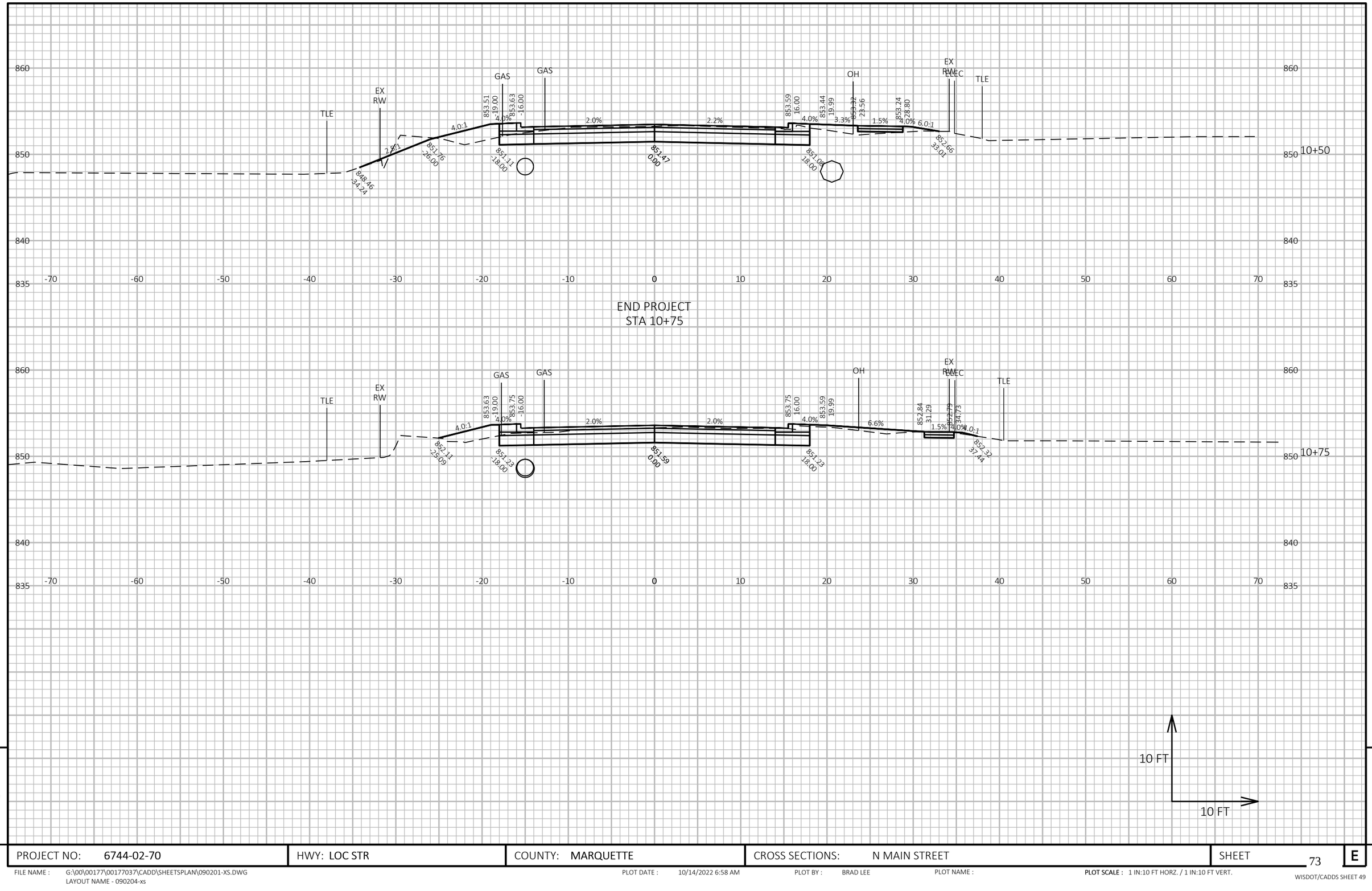
LAYOUT NAME - 090203-xs

PLOT DATE : 10/14/2022 6:58 AM PLOT BY : BRAD LEE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 6744-02-70	HWY: LOC STR	COUNTY: MARQUETTE	CROSS SECTIONS: N MAIN STREET	SHEET 73	E

FILE NAME : G:\00\00177\00177037\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090204-xs

PLOT DATE : 10/14/2022 6:58 AM

PLOT BY : BRAD LEE

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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through innovation and exceptional service.

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