

NEL
PROJECT ID: 4992-01-71
WITH: N/A
COUNTY: WINNEBAGO

MAY 2016

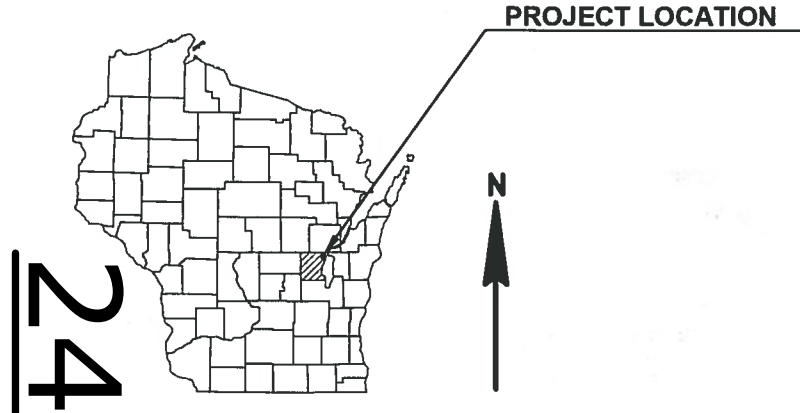
ORDER OF SHEETS

Section No. 1	Title
Section No. 2	Typical Sections and Details (Includes Erosion Control Plan)
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 4	Right of Way Plat
Section No. 5	Plan and Profile
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans
Section No. 9	Computer Earthwork Data
Section No. 9	Cross Sections

TOTAL SHEETS = 52

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
C MENASHA, THIRD ST
LAKE WINNEBAGO SLOUGH & APPROACHES
LOC STR
WINNEBAGO COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4992-01-71		

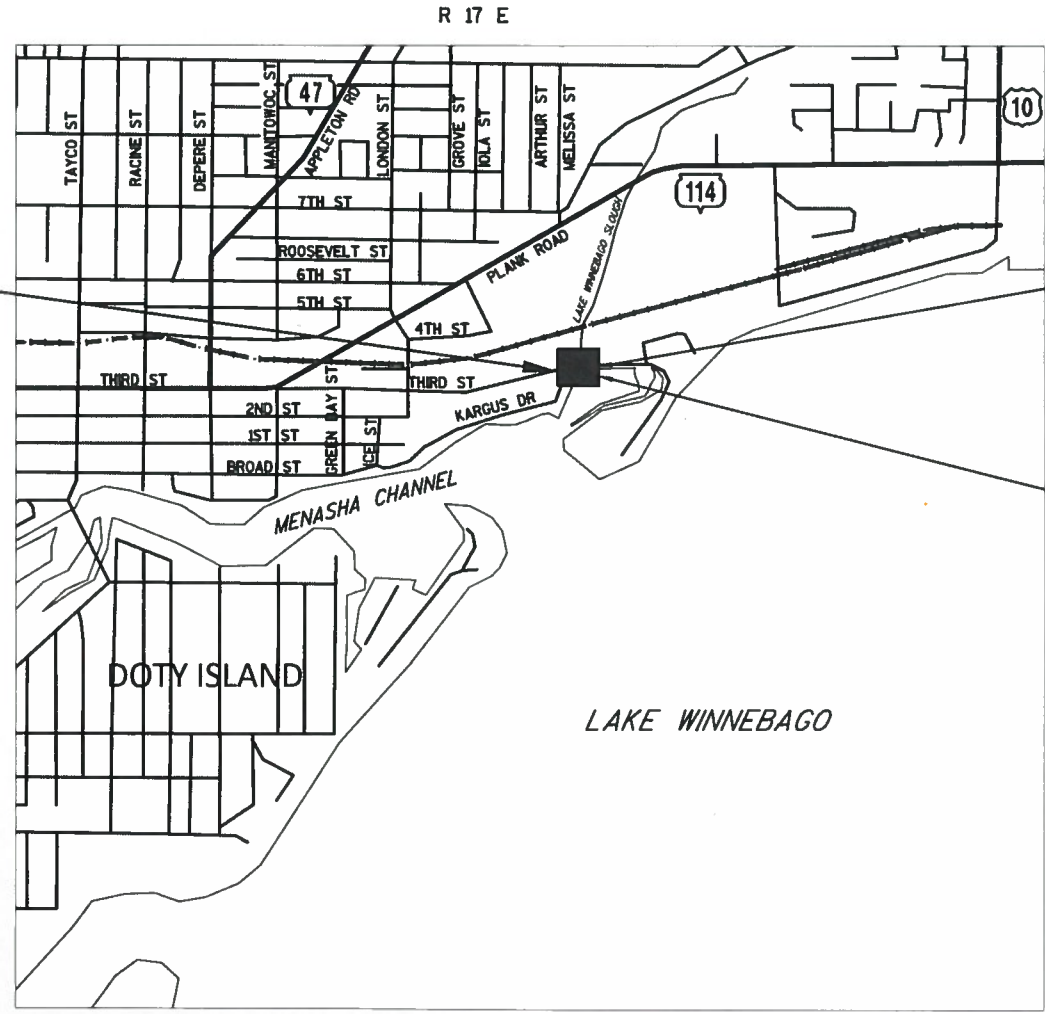


STATE PROJECT NUMBER
4992-01-71

DESIGN DESIGNATION

A.A.D.T.	2016	=	290
A.A.D.T.	2036	=	330
D.H.V.	2036	=	112
D.D.		=	59/41
T.		=	2.5%
DESIGN SPEED		=	30 MPH
ESALS		=	15,000

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



LAYOUT
SCALE 0 2000 FT
TOTAL NET LENGTH OF CENTERLINE = 0.053 MI.

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

ACCEPTED FOR
CITY OF MENASHA

1/21/2016 *Mark Riddle*
(Date) (Signature)

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES

1-19-16
(Date)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor AYRES ASSOCIATES
Designer AYRES ASSOCIATES
Management Consultant JT ENGINEERING

APPROVED FOR THE DEPARTMENT
DATE: 1/29/16 *[Signature]*
(Management Consultant Signature)

E

GENERAL NOTES

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

FILL EXPANSION FACTOR IS 30%.

PROPERTY LINES AS SHOWN ARE APPROXIMATE.

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

BEARINGS SHOWN ON THIS PLAN ARE TRUE BEARINGS TO THE NEAREST SECOND.

ALL TIES ON THIS PLAN ARE HORIZONTAL UNLESS DESCRIBED OTHERWISE.

PLACE EROSION CONTROL MEASURES AS SHOWN ON THE EROSION CONTROL PLAN.

THE EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SUBGRADE SHOULDER POINTS ARE TO BE FERTILIZED, SEEDED, AND EROSION MAT AS DIRECTED BY THE ENGINEER.

ELEVATIONS SHOWN ON THE ROADWAY CROSS SECTIONS ARE SUBGRADE ELEVATIONS AT THE CENTERLINE OF THE ROADWAY.

ALL ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF NAVD 88 (2012).

WISDOT WILL FURNISH A BENCHMARK MONUMENT TO BE SET BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER IN THE FIELD

SAW CUT LOCATIONS SHOWN ON THE PLAN ARE SUBJECT TO ADJUSTMENT BY THE ENGINEER IN THE FIELD. THE LINE OF SUCH SAW CUTS WILL BE NEATLY DELINEATED THROUGH THE ASPHALT WITHOUT ANY DAMAGE TO THE REMAINING PORTION OF THE EXISTING PAVEMENT.

FERTILIZER NOT TO BE PLACED WITHIN 20' OF LAKE WINNEBAGO SLOUGH.

UTILITIES

*** WE ENERGIES-GAS**
800 S. LYNDAL DRIVE
PO BOX 1699
APPLETON, WI. 54912-1699
ATTN: MR. CODY BECKMAN
E-MAIL: CODY.BECKMAN@WE-ENERGIES.COM

*** MENASHA UTILITIES-ELECTRIC**
321 MILWAUKEE STREET
P.O. BOX 340
MENASHA, WI 54952-0340
ATTN: MR. GREG SHULL
E-MAIL: GSHULL@WPPENERGY.ORG

*** MENASHA UTILITIES-WATER**
321 MILWAUKEE STREET
PO BOX 340
MENASHA, WI 54952-0340
ATTN: MR. SCOTT MAUER
E-MAIL: SMAUER@WPPENERGY.ORG

*** CITY OF MENASHA-SEWER**
140 MAIN STREET
MENASHA, WI 54952
ATTN: MR. MARK RADTKE-DIRECTOR OF PUBLIC WORKS
E-MAIL: MRADTKE@CI.MENASHA.WI.US

TELEPHONE 920-380-3422
MOBILE 920-428-1038

TELEPHONE 920-967-3430
MOBILE 920-475-4733

TELEPHONE 920-967-3400
MOBILE 920-707-3733

TELEPHONE 920-967-3610

*** TIME WARNER CABLE**
3520 EAST DESTINATION DRIVE
APPLETON, WI 54911
ATTN: MR. VINCE ALBIN
E-MAIL: VINCE.ALBIN@TWCABLE.COM

*** WE ENERGIES-ELECTRIC**
800 S. LYNDAL DRIVE
PO BOX 1699
APPLETON, WI. 54912-1699
ATTN: MR. ZACH DUGA
E-MAIL: ZACHARY.DUGA@WE-ENERGIES.COM

*** AT&T**
221 W. WASHINGTON ST.
FLOOR 4
APPLETON, WI 54911
ATTN: MR. JOE KASSAB
E-MAIL: JK572K@ATT.COM

*-MEMBER OF DIGGER'S 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 AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.25 ACRES
SOIL GROUP C

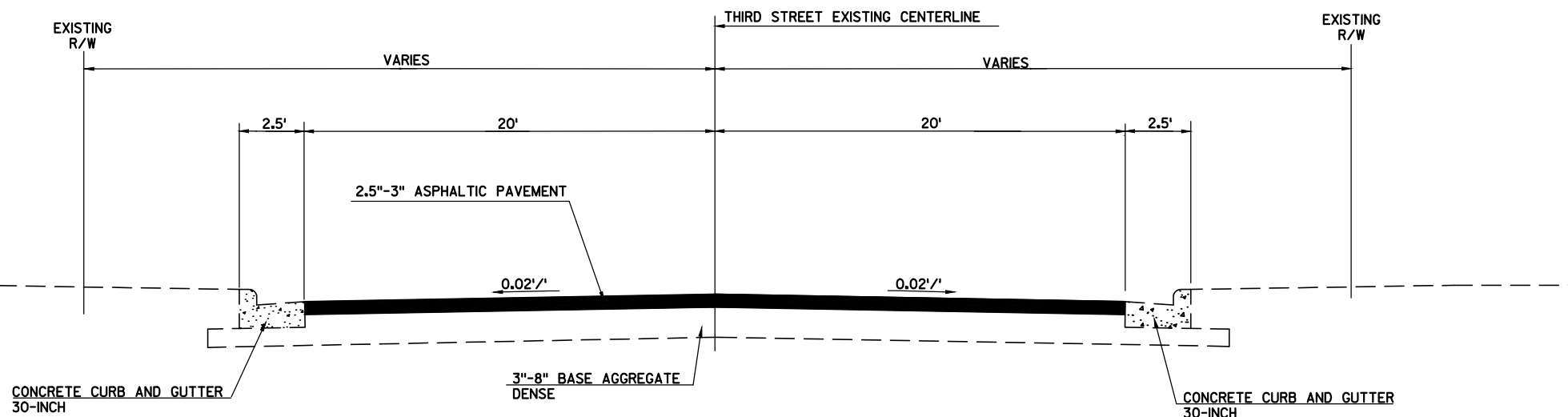
STANDARD ABBREVIATIONS

ADT	AVERAGE DAILY TRAFFIC	NC	NORMAL CROWN
AC	ASPHALT CEMENT	PT	POINT OF TANGENCY
AGG	AGGREGATE	PC	POINT OF CURVATURE
ASPH	ASPHALT	PI	POINT OF INTERSECTION
BM	BENCH MARK	PE	PRIVATE ENTRANCE
C/L	CENTERLINE	R	RADIUS
CONC	CONCRETE	REM	REMOVE
CMP	CORRUGATED METAL PIPE	R/L OR RL	REFERENCE LINE
CR.	CREEK	RCCP	REINFORCED CONCRETE CULVERT PIPE
D	DEGREE OF CURVE	RCPSS	REINFORCED CONCRETE PIPE STORM SEWER
DHV	DESIGN HOUR VOLUME	R.O.	RUNOUT
ESALS	EQUIVALENT SINGLE AXIS LOADS	R/W	RIGHT-OF-WAY
EXIST	EXISTING	STA	STATION
FE	FIELD ENTRANCE	SE	SUPER ELEVATION
HYD	HYDRANT	SS	STORM SEWER
IP	IRON PIPE OR PIN	T	TANGENT
L	LENGTH OF CURVE	TEL	TELEPHONE
LC	LONG CHORD OF CURVE	TLE	TEMPORARY LIMITED EASEMENT
LR	LENGTH OF RUNOFF	T	TRUCKS
MH	MANHOLE	VC	VERTICAL CURVE
		W	WELL

DEPARTMENT OF NATURAL RESOURCES

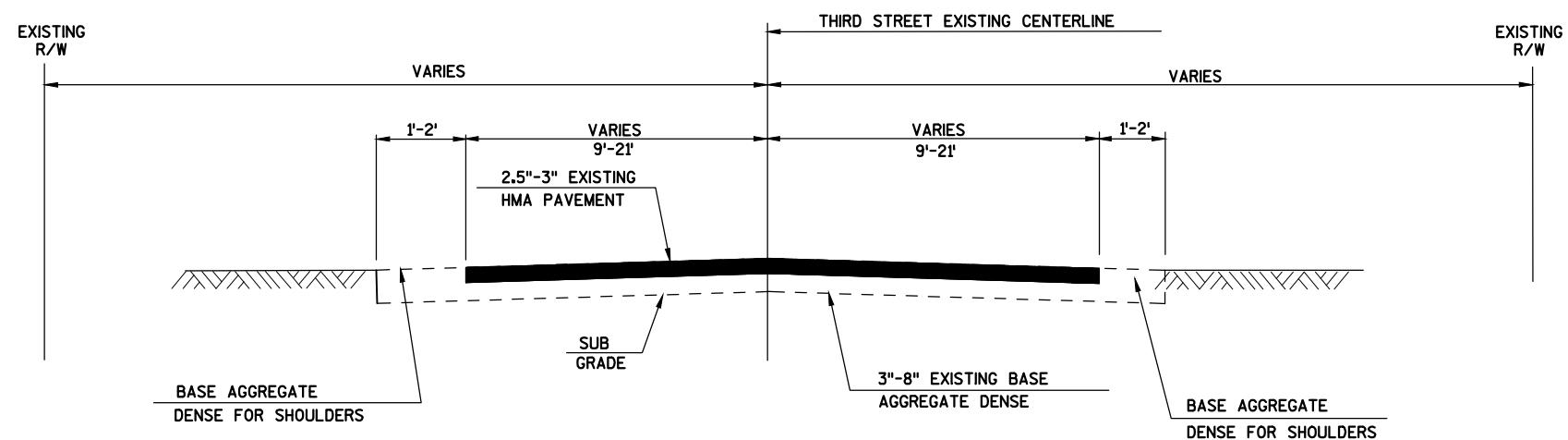
WDNR
2984 SHAWANO AVE.
GREEN BAY, WISCONSIN 54313
ATTENTION: JAY SCHIEFELBEIN
E-MAIL: JEREMIAH.SCHIEFELBEIN@WISCONSIN.GOV

TELEPHONE 920-360-3784



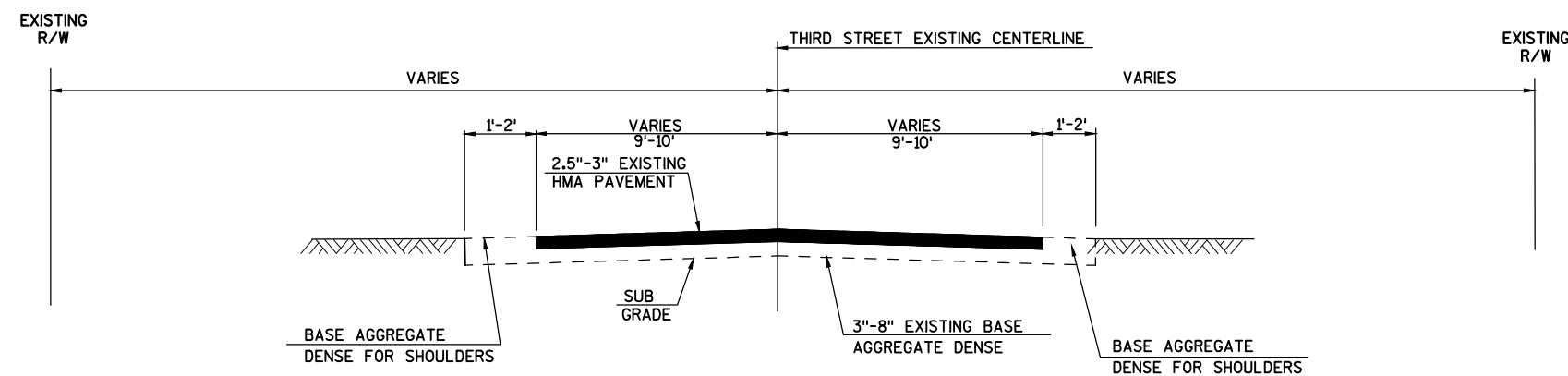
TYPICAL EXISTING SECTION FOR THIRD STREET

STA. 8+40 - STA. 9+20



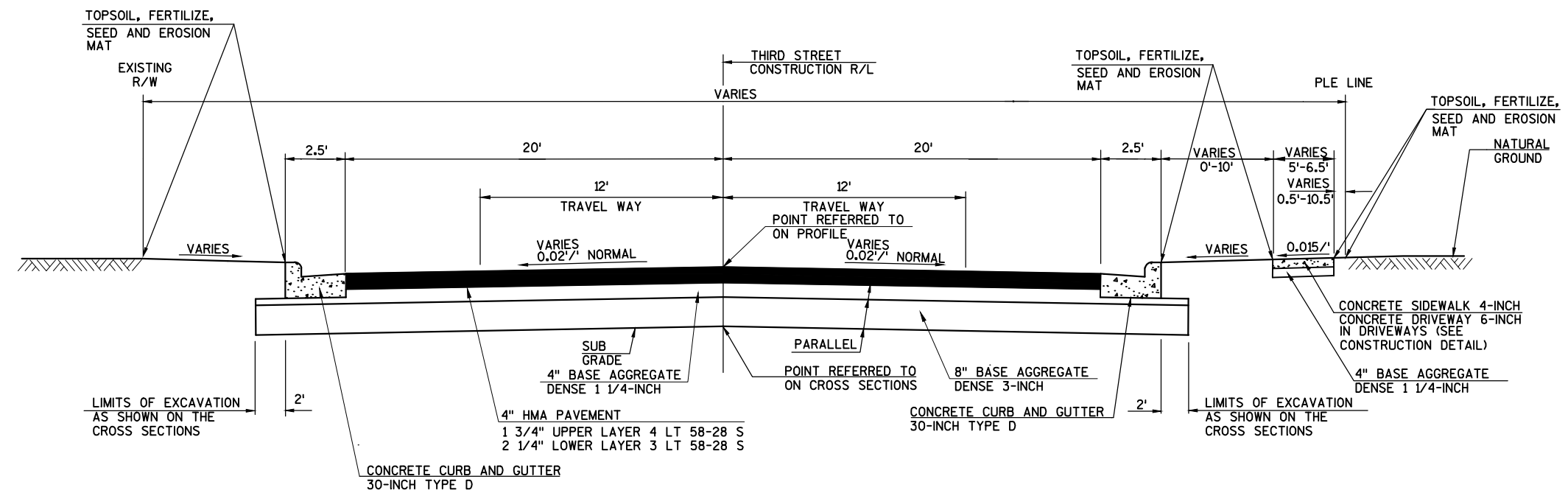
EXISTING TYPICAL SECTION FOR THIRD STREET

STA. 9+20 - STA. 9+82 (EXISTING BRIDGE DECK)



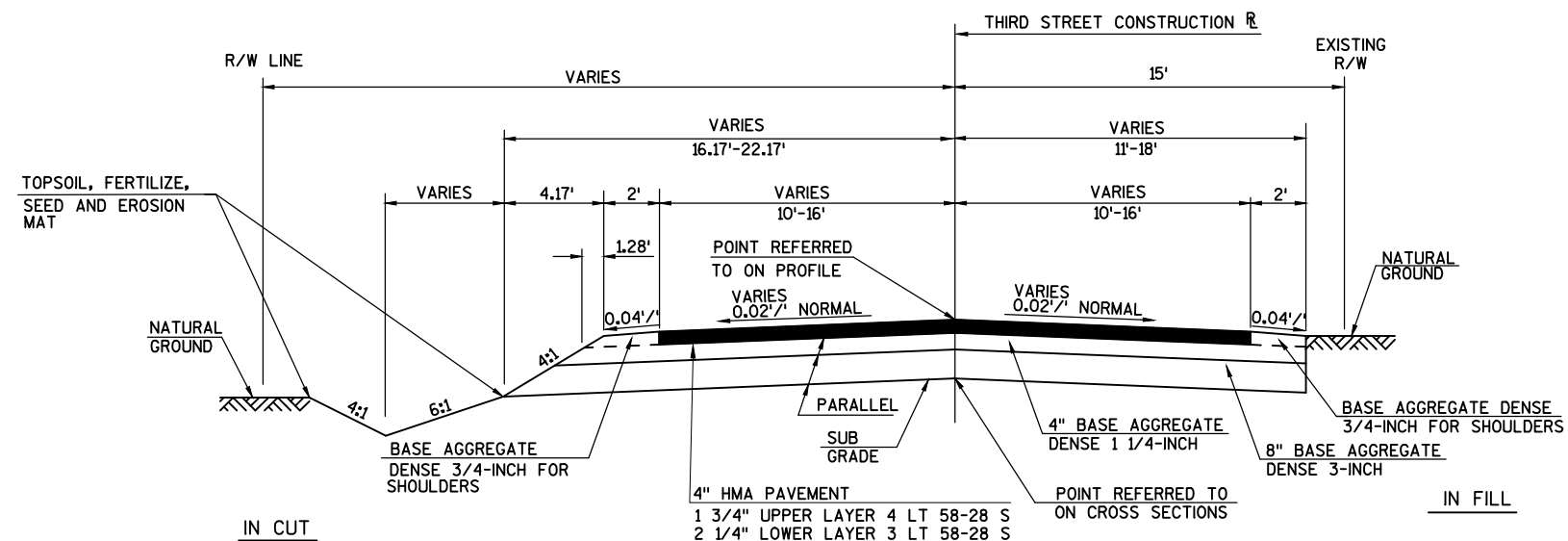
EXISTING TYPICAL SECTION FOR THIRD STREET

STA. 10+16 (EXISTING BRIDGE DECK) - STA. 11+20



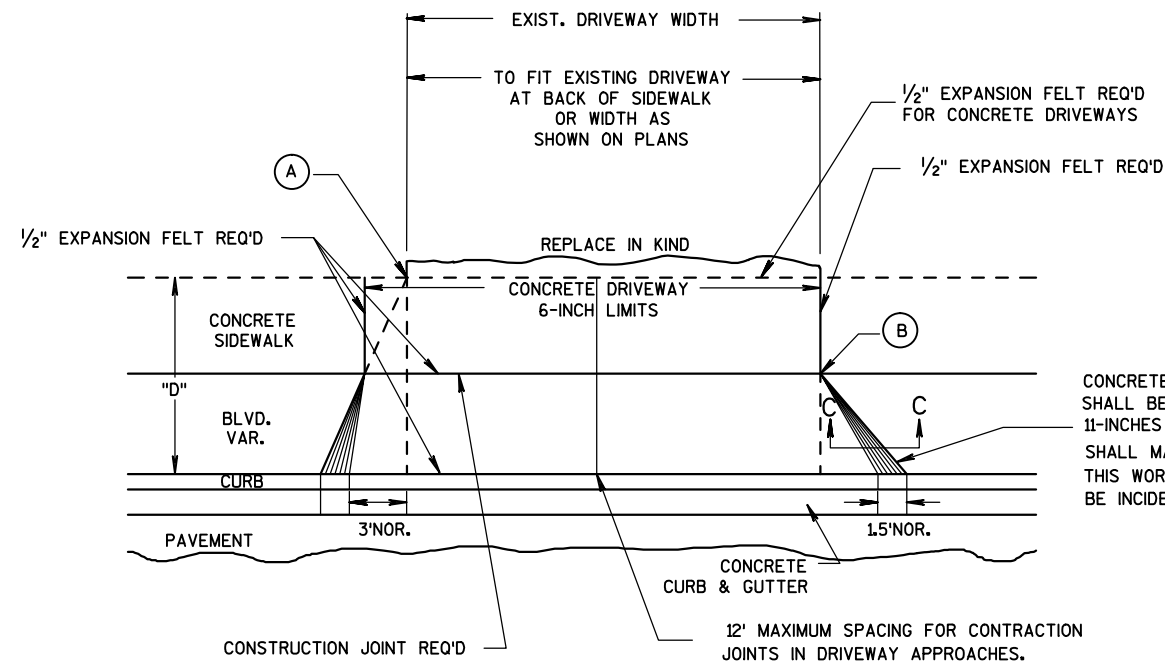
TYPICAL FINISHED SECTION FOR THIRD STREET

STA. 8+40 - STA. 9+82.75



TYPICAL FINISHED SECTION FOR THIRD STREET

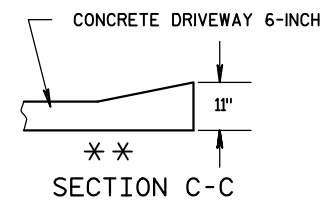
STA. 10+19.25 - STA. 11+20



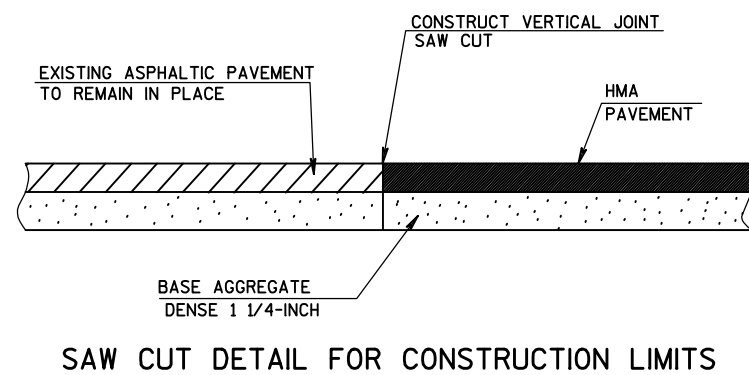
(A) WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

(B) WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK

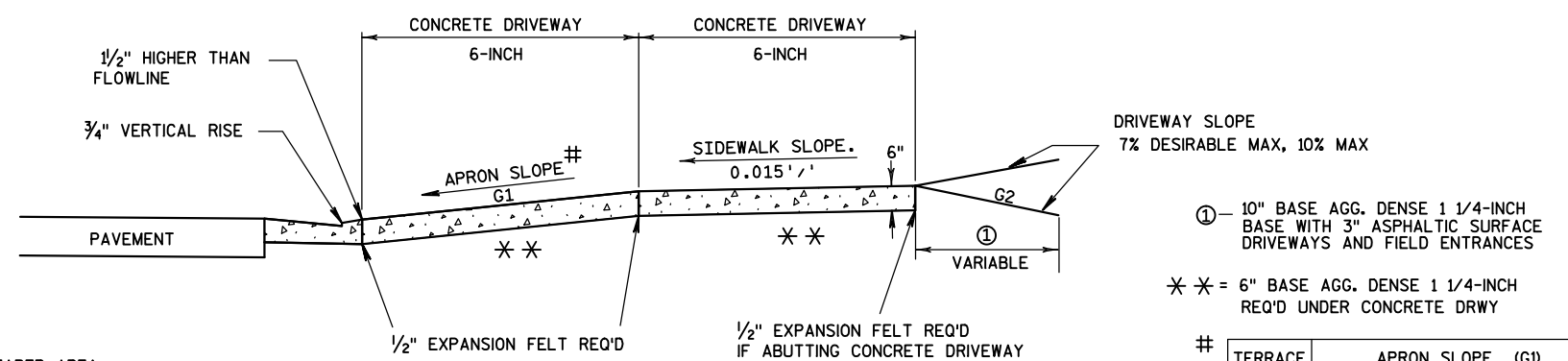
PLAN VIEW



DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB AND GUTTER



SAW CUT DETAIL FOR CONSTRUCTION LIMITS



TYPICAL SIDEWALK SECTION

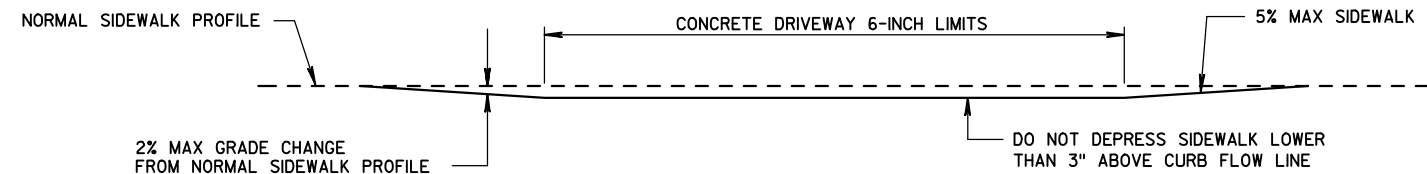
① — 10" BASE AGG. DENSE 1 1/4-INCH BASE WITH 3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

* * = 6" BASE AGG. DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY

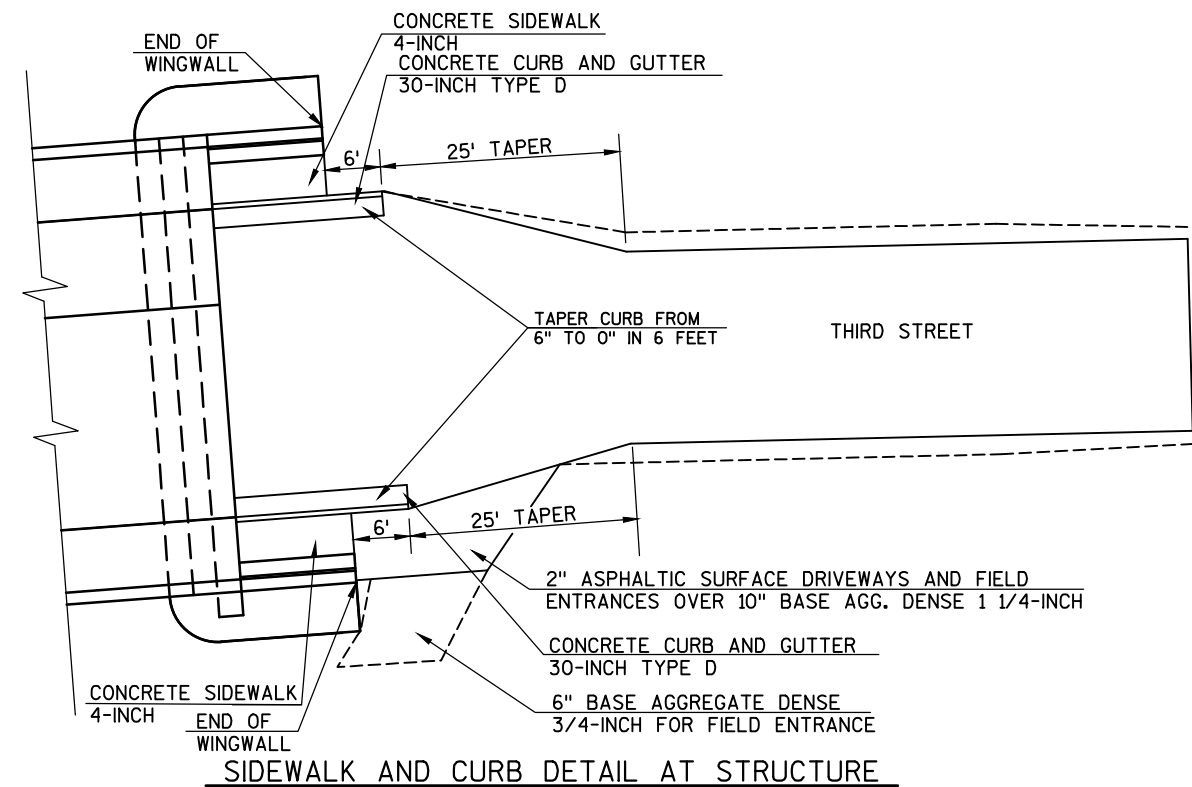
TERRACE WIDTH	APRON SLOPE (G1)		
	MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE

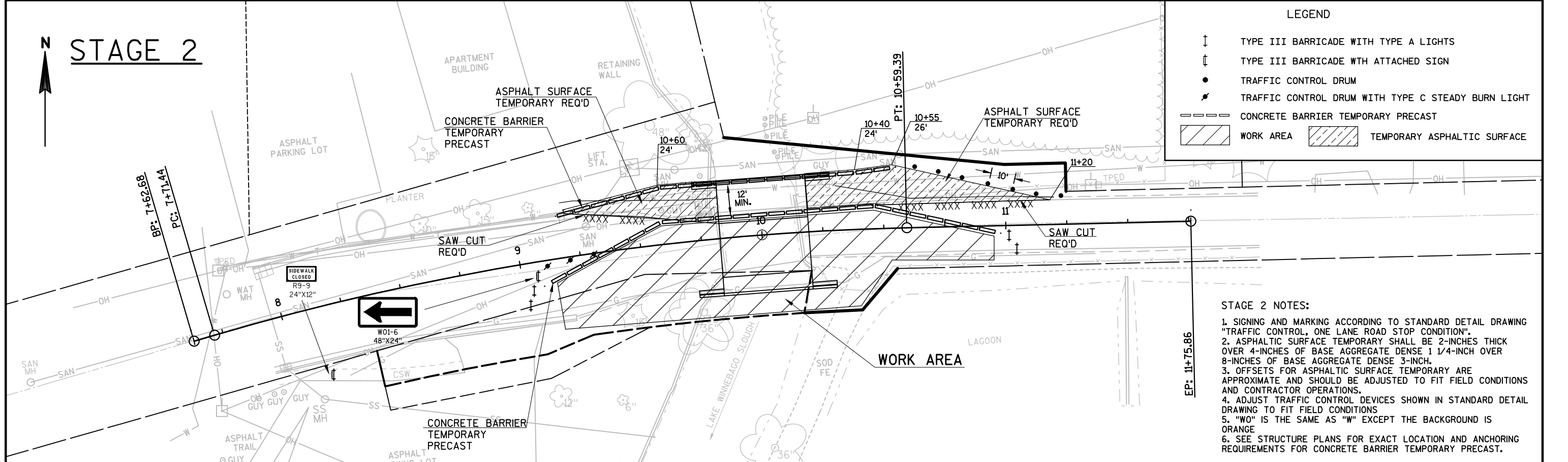
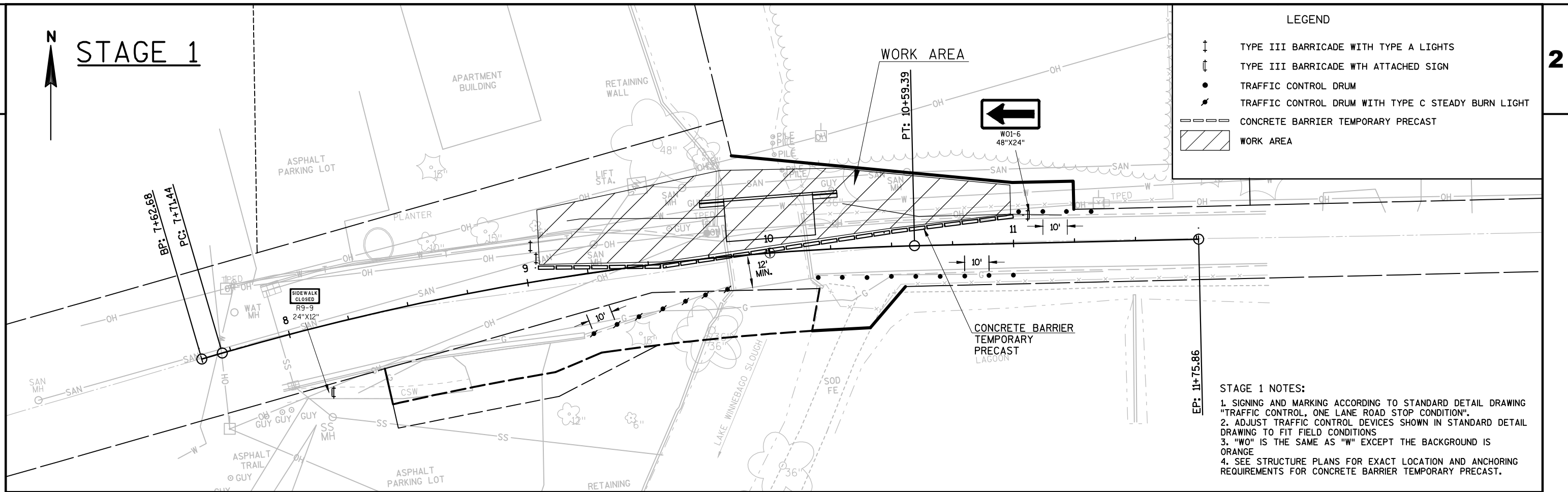


DEPRESSED SIDEWALK PROFILE DETAIL



SIDEWALK AND CURB DETAIL AT STRUCTURE

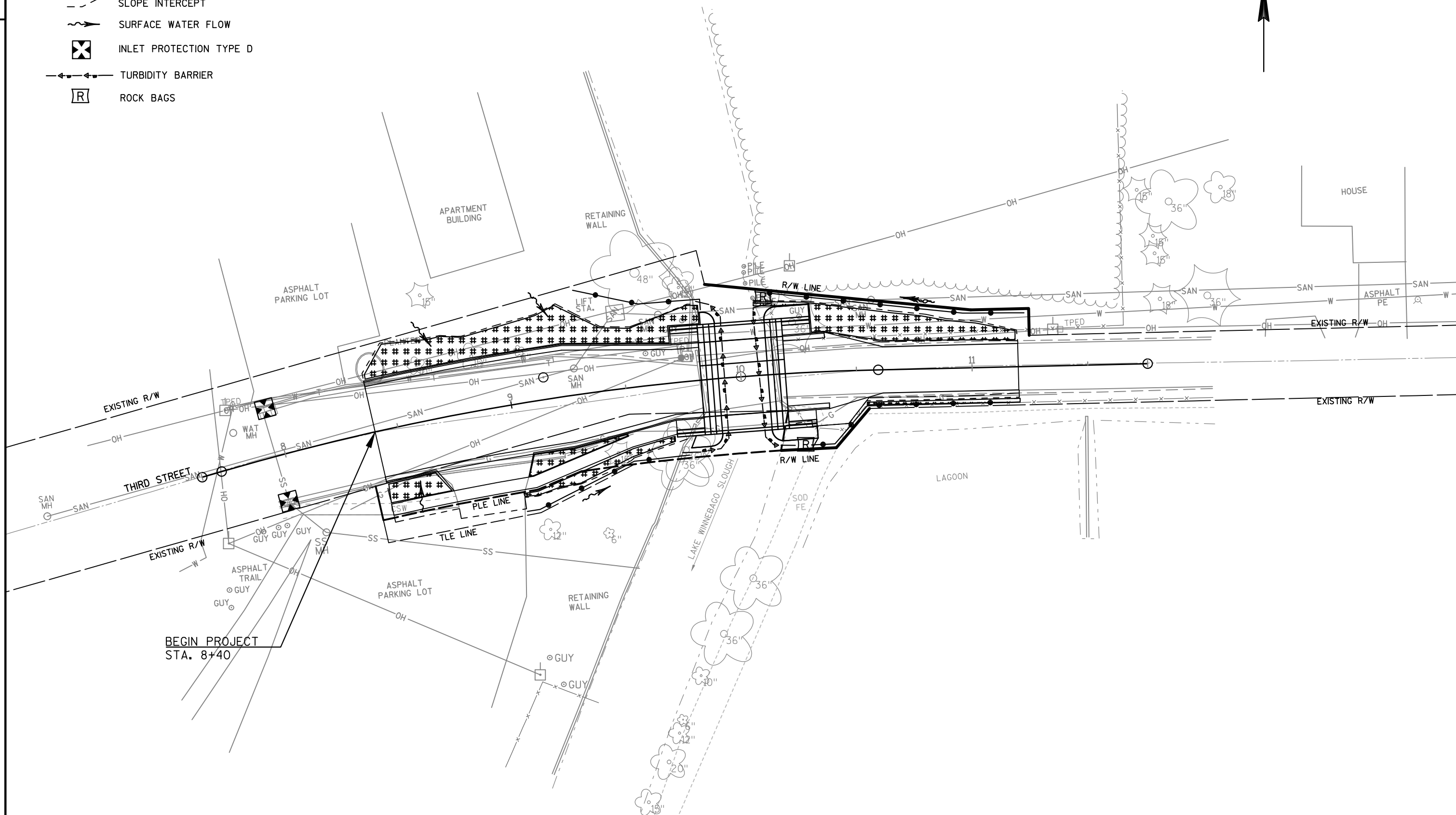
STAGE 1



LEGEND

- ##### EROSION MAT URBAN CLASS I TYPE A
- SILT FENCE
- - - SLOPE INTERCEPT
- ~ SURFACE WATER FLOW
- ⊗ INLET PROTECTION TYPE D
- ←←← TURBIDITY BARRIER
- [R] ROCK BAGS

N



DATE 01MAR16		E S T I M A T E O F Q U A N T I T I E S			
LINE					4992-01-71
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTI TY
0010	201.0205	Grubbing	STA	4.000	4.000
0020	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 10+00	LS	1.000	1.000
0030	204.0150	Removing Curb & Gutter	LF	160.000	160.000
0040	204.0155	Removi ng Concrete Sidewalk	SY	17.000	17.000
0050	204.0170	Removi ng Fence	LF	130.000	130.000
0060	205.0100	Excavati on Common	CY	475.000	475.000
0070	206.1000	Excavation for Structures Bridges (structure) 01. B-70-323	LS	1.000	1.000
0080	206.5000	Cofferdams (structure) 01. B-70-323	LS	1.000	1.000
0090	210.0100	Backfill Structure	CY	220.000	220.000
0100	305.0110	Base Aggregate Dense 3/4-Inch	TON	20.000	20.000
0110	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	300.000	300.000
0120	305.0130	Base Aggregate Dense 3-Inch	TON	560.000	560.000
0130	416.0160	Concrete Driveway 6-Inch	SY	60.000	60.000
0140	416.0610	Drilled Tie Bars	EACH	4.000	4.000
0150	455.0605	Tack Coat	GAL	45.000	45.000
0160	460.4000	HMA Cold Weather Paving	TON	50.000	50.000
0170	460.5223	HMA Pavement 3 LT 58-28 S	TON	115.000	115.000
0180	460.5224	HMA Pavement 4 LT 58-28 S	TON	90.000	90.000
0190	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	15.000	15.000
0200	465.0125	Asphaltic Surface Temporary	TON	35.000	35.000
0210	502.0100	Concrete Masonry Bridges	CY	227.000	227.000
0220	502.3200	Protective Surface Treatment	SY	190.000	190.000
0230	502.6102	Masonry Anchors Type S 1/2-Inch	EACH	146.000	146.000
0240	505.0400	Bar Steel Reinforcement HS Structures	LB	5,800.000	5,800.000
0250	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	26,810.000	26,810.000
0260	505.0905	Bar Couplers No. 5	EACH	100.000	100.000
0270	505.0906	Bar Couplers No. 6	EACH	36.000	36.000
0280	511.1200	Temporary Shoring (structure) 01. B-70-323	SF	110.000	110.000
0290	516.0500	Rubberized Membrane Waterproofing	SY	30.000	30.000
0300	550.0020	Pre-Boring Rock or Consolidated Material s	LF	160.000	160.000
0310	550.0500	Pile Points	EACH	16.000	16.000
0320	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	192.000	192.000
0330	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	325.000	325.000
0340	602.0405	Concrete Sidewalk 4-Inch	SF	580.000	580.000
0350	603.8000	Concrete Barrier Temporary Precast Delivered	LF	330.000	330.000
0360	603.8125	Concrete Barrier Temporary Precast Installed	LF	530.000	530.000
0370	606.0300	Riprap Heavy	CY	85.000	85.000
0380	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	180.000	180.000
0390	616.0700.S	Fence Safety	LF	300.000	300.000
0400	619.1000	Mobilization	EACH	1.000	1.000
0410	624.0100	Water	MGAL	10.000	10.000
0420	625.0100	Topsoil	SY	550.000	550.000
0430	628.1504	Silt Fence	LF	350.000	350.000
0440	628.1520	Silt Fence Maintenance	LF	1,400.000	1,400.000
0450	628.2006	Erosion Mat Urban Class I Type A	SY	550.000	550.000
0460	628.6005	Turbidity Barriers	SY	170.000	170.000
0470	628.7015	Inlet Protection Type C	EACH	2.000	2.000

DATE 01MAR16		E S T I M A T E O F Q U A N T I T I E S			
LINE					4992-01-71
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0480	628.7020	Inlet Protection Type D	EACH	2.000	2.000
0490	628.7570	Rock Bags	EACH	20.000	20.000
0500	629.0210	Fertilizer Type B	CWT	0.600	0.600
0510	630.0140	Seeding Mixture No. 40	LB	15.000	15.000
0520	630.0200	Seeding Temporary	LB	10.000	10.000
0530	638.2602	Removing Signs Type II	EACH	4.000	4.000
0540	638.3000	Removing Small Sign Supports	EACH	2.000	2.000
0550	642.5001	Field Office Type B	EACH	1.000	1.000
0560	643.0100	Traffic Control (project) 01. 4992-01-71	EACH	1.000	1.000
0570	643.0300	Traffic Control Drums	DAY	2,650.000	2,650.000
0580	643.0420	Traffic Control Barricades Type III	DAY	650.000	650.000
0590	643.0705	Traffic Control Warning Lights Type A	DAY	960.000	960.000
0600	643.0715	Traffic Control Warning Lights Type C	DAY	975.000	975.000
0610	643.0900	Traffic Control Signs	DAY	3,000.000	3,000.000
0620	645.0120	Geotextile Fabric Type HR	SY	165.000	165.000
0630	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	540.000	540.000
0640	649.1400	Temporary Pavement Marking Stop Line Removable Tape 24-Inch	LF	60.000	60.000
0650	650.4500	Construction Staking Subgrade	LF	244.000	244.000
0660	650.5000	Construction Staking Base	LF	244.000	244.000
0670	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	325.000	325.000
0680	650.6500	Construction Staking Structure Layout (structure) 01. B-70-323	LS	1.000	1.000
0690	650.9910	Construction Staking Supplemental Control (project) 01. 6498-05-71	LS	1.000	1.000
0700	650.9920	Construction Staking Slope Stakes	LF	244.000	244.000
0710	690.0150	Sawing Asphalt	LF	225.000	225.000
0720	690.0250	Sawing Concrete	LF	10.000	10.000
0730	715.0502	Incentive Strength Concrete Structures	DOL	1,362.000	1,362.000
0740	SPV.0060	Special 01. Utility Line Opening	EACH	2.000	2.000
0750	SPV.0060	Special 02. Adjusting Sanitary Manhole Cover	EACH	2.000	2.000

GRUBBING

STATION	TO	STATION	LOCATION	201.0205 GRUBBING STA
8+40	-	11+65	THIRD STREET	4
TOTAL				4

REMOVING CURB AND GUTTER

STATION	TO	STATION	LOCATION	204.0150 LF
8+40	-	9+20	THIRD STREET, LT	80
8+40	-	9+20	THIRD STREET, RT	80
TOTAL				160

REMOVING FENCE

STATION	TO	STATION	LOCATION	204.0170 LF
10+20	-	11+25	THIRD STREET, LT	130
TOTAL				130

EARTHWORK SUMMARY

Division	From/To Station	Location	Common Excavation (item #205.0100)	Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Waste
			Cut				Factor 1.30		
1	9+20 - 11+20	TEMPORARY WIDENING - STAGE 1 TRAFFIC CONTROL	55	0	55	0	0	55	55
	9+20 - 11+20	REMOVAL OF TEMPORARY WIDENING OUTSIDE OF RECONSTRUCTION WIDTH - STAGE 2 TRAFFIC CONTROL	20	5	15	0	0	15	20
	8+40 - 11+20	ROADWAY RECONSTRUCTION - STAGE 3 TRAFFIC CONTROL	400	82	318	42	55	263	345
	TOTALS		475	87	388	42	55	333	420

- 4) Unusable Pavement Material = Existing Asphaltic Pavement (To Be Wasted)
5) Available Material = Cut - Unusable Pavement Material
13) Expanded Fill. Factor = 1.3 Expanded Fill = Unexpanded Fill * Fill Factor
14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

REMOVING CONCRETE SIDEWALK

STATION	TO	STATION	LOCATION	204.0155 SY
8+40	-	8+70	THIRD STREET, RT	17
TOTAL				17

BASE AGGREGATE DENSE AND WATER

STATION	TO	STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	305.0130 3-INCH TON	624.0100 WATER MGAL	COMMENT
8+40	-	9+82.75	THIRD STREET	-	180	330	5	
9+20	-	9+82.75	THIRD STREET	-	20	35	1	TEMPORARY WIDENING
10+19.25	-	11+20	THIRD STREET	-	30	55	1	TEMPORARY WIDENING
10+19.25	-	11+20	THIRD STREET	20	70	140	3	
TOTALS				20	300	560	10	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

DRILLED TIE BARS

STATION	LOCATION	416.0610 EACH	REMARKS
8+40	THIRD STREET, LT	2	TIE INTO EXISTING CURB & GUTTER
8+40	THIRD STREET, RT	2	TIE INTO EXISTING CURB & GUTTER
TOTAL		4	

ASPHALTIC SURFACE

STATION	TO	STATION	LOCATION	465.0125 ASPHALTIC SURFACE TEMPORARY TON	COMMENTS
9+20	-	9+82.75	THIRD STREET	15	TEMPORARY WIDENING
10+19	-	11+20	THIRD STREET	20	TEMPORARY WIDENING
TOTALS				35	

CONCRETE CURB AND GUTTER 30-INCH TYPE D

STATION	TO	STATION	LOCATION	601.0411 LF
8+40	-	9+82.75	THIRD STREET, LT	147
8+40	-	9+82.75	THIRD STREET, RT	142
10+19.25	-	10+37	THIRD STREET, LT	18
10+19.25	-	10+37	THIRD STREET, RT	18
TOTALS				325

FENCE SAFETY

STATION	TO	STATION	LOCATION	616.0700.S LF
8+40	-	9+75	THIRD STREET, LT	140
9+00	-	9+75	THIRD STREET, RT	70
UNDISTRIBUTED				90
TOTALS				300

HMA PAVEMENT & ASPHALTIC SURFACE

STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.4000 HMA COLD WEATHER PAVING	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	465.0120 DRIVEWAYS AND FIELD ENTRANCES TON
8+40	-	9+82.75	THIRD STREET	30	35	78	60	10
10+19.25	-	11+20	THIRD STREET	15	15	37	30	5
TOTALS				45	50	115	90	15

CONCRETE SIDEWALK & DRIVEWAY

STATION	TO	STATION	LOCATION	602.0405 SIDEWALK 4-INCH SF	416.0160 DRIVEWAY 6-INCH SY
8+40	-	9+82.75	THIRD STREET, RT	580	60
TOTALS				580	60

TOPSOIL, FERTILIZER, AND SEED

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB
8+40	-	9+82.75	THIRD STREET, LT	211	0.2	4	-
8+40	-	9+82.75	THIRD STREET, RT	103	0.1	2	-
10+19.25	-	11+20	THIRD STREET, LT	152	0.1	3	-
10+19.25	-	11+20	THIRD STREET, RT	34	0.1	1	-
UNDISTRIBUTED				50	0.1	5	10
TOTALS				550	0.6	15	10

- FERTILIZER NOT TO BE PLACED WITHIN 20' OF LAKE WINNEBAGO SLOUGH.
- TEMPORARY SEEDING TO BE PLACED ONLY ON TEMPORARY STOCKPILES AND TEMPORARY EMBANKMENTS, IF NEEDED.

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

SILT FENCE					
STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 MAINTENANCE LF
9+25	-	9+80	THIRD STREET, LT	55	220
9+00	-	9+75	THIRD STREET, RT	75	300
10+10	-	11+20	THIRD STREET, LT	115	460
10+25	-	11+20	THIRD STREET, RT	40	160
UNDISTRIBUTED				65	260
TOTALS				350	1,400

EROSION MAT URBAN CLASS I TYPE A				
STATION	TO	STATION	LOCATION	628.2006 SY
8+40	-	9+82.75	THIRD STREET, LT	211
8+40	-	9+82.75	THIRD STREET, RT	103
10+19.25	-	11+20	THIRD STREET, LT	152
10+19.25	-	11+20	THIRD STREET, RT	34
UNDISTRIBUTED				50
TOTAL				550

TURBIDITY BARRIERS		
STATION	LOCATION	628.6005 SY
WEST ABUTMENT	THIRD STREET	85
EAST ABUTMENT	THIRD STREET	85
TOTAL		170

ROCK BAGS		
STATION	LOCATION	628.7570 EACH
10+30	THIRD STREET, LT & RT	10
	UNDISTRIBUTED	10
TOTAL		20

INLET PROTECTION				
STATION	LOCATION	628.7015 TYPE C EACH	628.7020 TYPE D EACH	REMARKS
7+95	THIRD STREET, LT & RT	-	2	WEST OF PROJECT LIMITS
	UNDISTRIBUTED	2	-	
TOTAL		2	2	

REMOVING SIGNS & SUPPORTS			
STATION	LOCATION	638.2602 SIGNS TYPE II EACH	638.3000 SMALL SIGN SUPPORTS EACH
9+82	THIRD STREET	2	2
10+16	THIRD STREET	2	-
TOTALS		4	2

- OTHER EXISTING SIGNS & SUPPORTS WITHIN THE PROJECT
TO BE REMOVED BY THE CITY OF MENASHA

TRAFFIC CONTROL SUMMARY													
LOCATION	APPROXIMATE SERVICE DAYS	603.8000 CONCRETE BARRIER TEMPORARY PRECAST		643.0300 DRUMS		643.0420 BARRICADES TYPE III		643.0705 WARNING LIGHTS TYPE A		643.0715 WARNING LIGHTS TYPE C		643.0900 SIGNS	
		DELIVERED LF	INSTALLED LF	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS
STAGE 1	35	200	200	20	700	4	140	6	210	7	245	25	875
STAGE 2	60	130	330	10	600	6	360	10	600	3	180	25	1,500
STAGE 3	25	-	-	30	750	6	150	6	150	10	250	25	625
UNDISTRIBUTED	60	-	-	10	600	-	-	-	-	5	300	-	-
TOTALS		330	530		2,650		650		960		975		3,000

- STAGE 3 USE BARRELS TO DIRECT TRAFFIC. TRAFFIC MAY BE REDUCE TO ONE LANE. SHIFT CONDITIONS AS NECESSARY TO CONSTRUCT RAILING/BRIDGE SIDEWALK ON NORTH SIDE AND/OR ROADWAY.

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

TEMPORARY PAVEMENT MARKING

LOCATION	649.0400 REMOVABLE TAPE 4-INCH LF	649.1400 STOP LINE REMOVABLE TAPE 24-INCH LF
STAGE 1	140	30
STAGE 2	300	30
STAGE 3	-	-
UNDISTRIBUTED	100	-
TOTALS	540	60

- DURING STAGE 3 ROADWAY RECONSTRUCTION IS ANTICIPATED THEREFORE TEMPOARY PAVEMENT MARKING WILL NOT BE ABLE TO BE INSTALLED ON BASE AGGREGATE.

SAWING

STATION	LOCATION	ASPHALT 690.0150 LF	CONCRETE 690.0250 LF
8+40	THIRD STREET	39	10
9+50	THIRD STREET, LT	66	-
10+50	THIRD STREET, LT	100	-
11+20	THIRD STREET	20	-
TOTAL		225	10

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB & GUTTER LF	650.6500 STRUCTURE LAYOUT LS	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF	CATEGORY
8+40	-	9+82.75	THIRD STREET	143	143	289	-	1	143	0010
10+19.25	-	11+20	THIRD STREET	101	101	36	-	-	101	0010
SUBTOTALS				244	244	325	0	1	244	0010
10+00				THIRD STREET	-	-	-	1	-	0020
SUBTOTALS				0	0	0	1	0	0	0020
TOTALS				244	244	325	1	1	244	

UTILITY LINE OPENINGS

STATION	LOCATION	SPV.0060.01	REMARKS
EACH			
9+75	THIRD STREET, RT	1	LOCATING GAS LINE
10+25	THIRD STREET, RT	1	LOCATING GAS LINE
TOTAL		2	

ADJUSTING SANITARY MANHOLE COVER

STATION	LOCATION	SPV.0060.02 EACH	CATEGORY
9+29	THIRD STREET, LT	1	0030
9+67	THIRD STREET, LT	1	0030
TOTAL		2	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

SCHEDULE OF LANDS AND 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 CITY.

PARCEL NO.	OWNERSHIP	INTEREST REQUIRED	TOTAL ACRES	R/W (ACRES)			TOTAL ACRES REMAINING	PLE ACRES	TLE ACRES
				NEW	EXISTING	TOTAL			
1	GARY E. AVALONE	FEE	9.054	0.058	---	0.058	8.996	---	---
2	CITY OF MENASHA	FEE/PLE/TLE	13.144	0.011	---	0.011	13.133	0.077	0.038
50	MENASHA UTILITIES (ELEC)	RELEASE OF RIGHTS							
51	MENASHA UTILITIES (WATER)	RELEASE OF RIGHTS							
52	CITY OF MENASHA	RELEASE OF RIGHTS							
53	WE ENERGIES	RELEASE OF RIGHTS							

COURSE TABLE		
COURSE	BEARING	DISTANCE
101-121	N74°05'34"E	113.94'
121-106	N88°38'57"E	68.67'
106-105	S10°03'23"W	17.57'
105-107	SEE CURVE TABLE	
107-108	N40°18'38"E	22.15'
108-109	N88°38'57"E	69.73'
109-110	N01°18'36"W	16.56'

COURSE TABLE CONT.		
COURSE	BEARING	DISTANCE
110-111	N01°18'36"W	13.44'
111-112	N01°18'36"W	11.56'
112-113	S88°41'24"W	25.00'
113-114	N84°33'16"W	115.63'
114-119	N13°41'06"W	15.01'
119-120	S74°05'34"W	158.07'
120-100	S13°00'43"E	37.02'
100-101	S13°00'43"E	23.06'

EXCEPTION COURSE TABLE		
COURSE	BEARING	DISTANCE
101-120	N13°00'43"W	60.08'
120-119	N74°05'34"E	158.07'
119-114	S13°41'06"E	15.01'
114-115	S74°05'34"W	6.27'
115-116	S09°17'58"E	23.92'
116-117	S88°38'57"W	34.85'
117-118	N15°54'26"W	15.00'
118-115	N74°05'34"E	36.49'

R/W PROJECT NUMBER 4992-01-00	SHEET NUMBER 4.01	TOTAL SHEETS 1
FEDERAL PROJECT NUMBER		
PLAT OF RIGHT-OF-WAY REQUIRED FOR CITY OF MENASHA, THIRD ST LAKE WINNEBAGO SLOUGH & APPROACHES		
LOCAL ROAD	WINNEBAGO COUNTY	
CONSTRUCTION PROJECT NUMBER 4992-01-71	FILED	

CURVE TABLE				
COURSE	CHORD BEARING	CHORD	LENGTH	RADIUS
105-107	N87°02'11"E	23.93'	23.93'	1067.00'
105-104	N84°03'50"E	86.76'	86.78'	1067.00'
103-102	N78°49'53"E	67.91'	67.92'	1062.00'

PLE COURSE TABLE		
COURSE	BEARING	DISTANCE
101-121	N74°05'34"E	113.94'
121-106	N88°38'57"E	68.67'
106-105	S10°03'23"W	17.57'
105-104	SEE CURVE TABLE	
104-103	S67°05'04"W	20.50'
103-102	SEE CURVE TABLE	
102-101	N13°00'02"W	14.94'

FOUND WEST QUARTER CORNER 1" SQUARE IRON ROD
Y = 542630.806
X = 822853.121

LOT 1
CSM 88
V. 1 CSM, PG. 88
DOCUMENT 444762

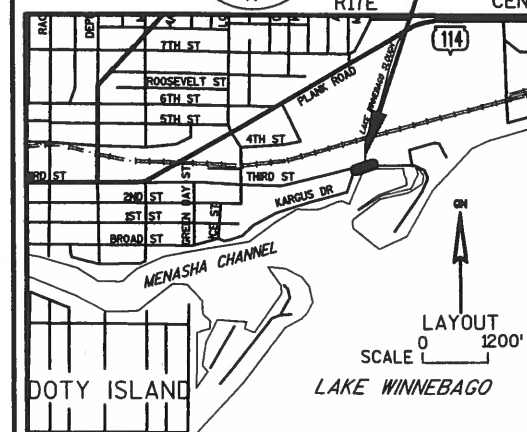
PI STA = 9+16.25
Y = 541721.489
X = 823031.360
DELTA = 14°59'55"
D = 5°12'31"
T = 144.80'
L = 287.95'
R = 1100.00'
PC STA = 7+71.44
PT STA = 10+59.39

LOT 1
CSM 104
V. 1 CSM, PG. 104
DOCUMENT 460328

BEGIN RELOCATION ORDER
STA. 8+34.95
Y = 541696.890
X = 822953.810
LOCATED 538.37' NORTH AND 92.51' EAST OF THE MEANDER CORNER ON THE WEST LINE OF SOUTHWEST QUARTER OF SECTION 13, T 20 N, R 17 E.

FOUND MEANDER CORNER SURVEY NAIL
Y = 541158.525
X = 822861.304

PROJECT LOCATION
TOTAL NET LENGTH OF CENTERLINE = 0.055 MILES



CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (1" UNLESS NOTED)

R/W MONUMENT

R/W STANDARD

SIGN

SECTION CORNER MONUMENT

SECTION CORNER SYMBOL

FEE (HATCH VARIES)

TEMPORARY LIMITED EASEMENT

PERMANENT LIMITED EASEMENT

R/W BOUNDARY POINT

PARCEL NUMBER

UTILITY PARCEL NUMBER

SGN NUMBER (OFF PREMISE)

BUILDING

SECTION LINE

QUARTER LINE

SIXTEENTH LINE

NEW REFERENCE LINE

NEW R/W LINE

EXISTING R/W LINE

PROPERTY LINE

LOT & TIE

CORPORATE LIMITS

SLOPE INTERCEPTS

NO ACCESS (BY STATUTORY AUTHORITY)

NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)

NO ACCESS (BY ACQUISITION)

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/DRIVEWAY CONNECTION

ACCESS RIGHTS

ACRES

CENTERLINE

CERTIFIED SURVEY MAP

CORNER

DOCUMENT

EASEMENT

FIELD ENTRANCE

LAND CONTRACT

MONUMENT

PAGE

PERMANENT LIMITED EASEMENT

PROPERTY LINE

RECORDED AS

BUILDING

REFERENCE LINE

RELEASE OF RIGHTS

REMAINING

RIGHT-OF-WAY

SECTION

STATION

TEMPORARY LIMITED EASEMENT

VOLUME

CURVE DATA

LONG CHORD

LONG CHORD BEARING

RADIUS

DEGREE OF CURVE

CENTRAL ANGLE OR DELTA

LENGTH OF CURVE

TANGENT

R/L

ROR

REM.

R/W

SEC.

STA.

TLE

V.

LCH

LCB

R

D

DELTA

L

TAN

CONVENTIONAL UTILITY SYMBOLS

WATER

GAS

TELEPHONE

OVERHEAD

TRANSMISSION LINES

ELECTRIC

CABLE TELEVISION

FIBER OPTIC

SANITARY SEWER

STORM SEWER

POWER POLE

TELEPHONE POLE

TELEPHONE PEDESTAL

ELECTRIC TOWER

COMPENSABLE

COMPENSABLE

LOT 2
MENASHA

R/W POINT STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y	X
100	8+34.95	0.00' RT	541696.890	822953.810
101	8+34.95	23.06' RT	541674.423	822959.002
102	8+34.95	38.00' RT	541659.868	822962.332
103	9+05.30	38.00' RT	541673.018	823028.984
104	9+25.85	33.00' RT	541681.002	823047.869
105	10+15.31	33.00' RT	541689.974	823134.159
106	10+19.52	15.92' RT	541707.269	823137.226
107	10+39.98	33.00' RT	541691.211	823158.058
108	10+55.21	16.60' RT	541708.098	823172.384
109	11+25.00	16.56' RT	541709.742	823242.092
110	11+25.00	0.00' RT	541726.299	823241.713
111	11+25.00	13.44' LT	541739.734	823241.406
112	11+25.00	25.00' LT	541751.292	823241.142
113	11+00.00	25.00' LT	541750.721	823216.148
114	9+87.79	41.02' LT	541761.694	823101.040
115	9+81.85	39.85' LT	541759.977	823095.014
116	9+83.48	15.99' LT	541736.373	823098.879
117	9+49.29	18.91' LT	541735.551	823064.037
118	9+47.05	33.74' LT	541749.977	823059.926
119	9+85.64	55.86' LT	541776.279	823097.488
120	8+34.94	37.02' LT	541732.957	822945.475
121	9+50.13	11.32' RT	541705.650	823068.575

APPROVED FOR
CITY OF MENASHA
12/22/2015 Mark Radtke
DATE
MENASHA DEPARTMENT OF PUBLIC WORKS

PLAT PREPARED BY

AYRES ASSOCIATES

THE SURVEY IS PREPARED AT THE REQUEST OF THE CITY OF MENASHA.

THE TOPOGRAPHY AND UTILITY SURVEY WAS PERFORMED IN JANUARY, 2015.

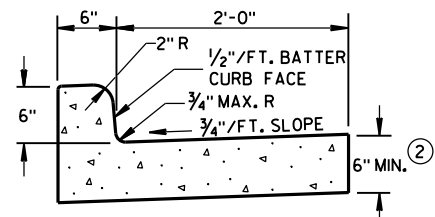
THIS SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

WISCONSIN
James R. Cappeart
S-3044
Green Bay Wis.
LAND SURVEYOR

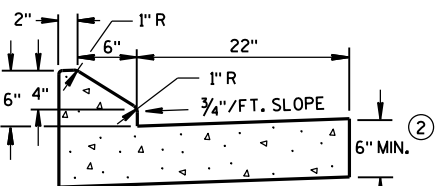
James R. Cappeart
JAMES R. CAPPEART, P.L.S.
S-3044
12/04/2015
DATE

Standard Detail Drawing List

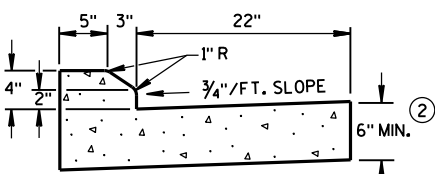
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-14H	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D32-04	TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION



TYPES A & D ①

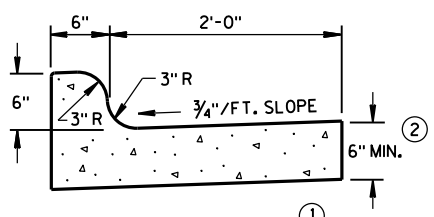


6" SLOPED CURB TYPES G & J ①



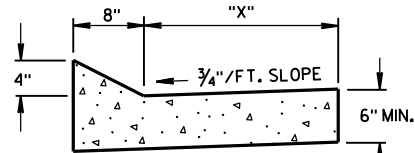
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



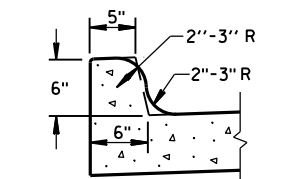
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

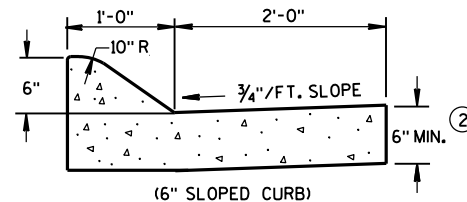


TYPES TBT & TBT ①
CONCRETE CURB & GUTTER

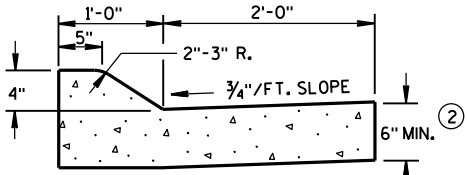
TBT & TBT	"X"
30"	22"
36"	28"



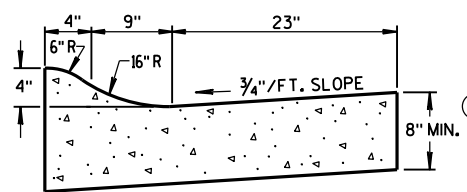
OPTIONAL CURB SHAPE
FOR TYPES K & L ①



(6" SLOPED CURB)

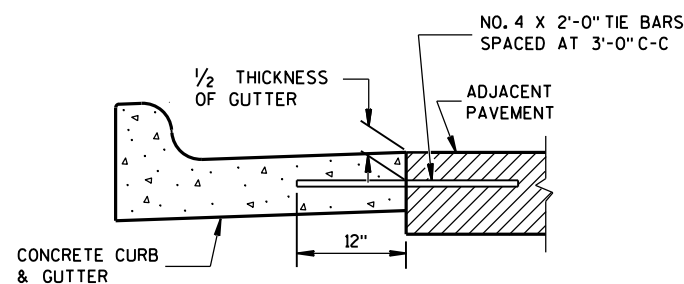


TYPES A & D ①

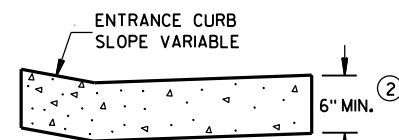


4" SLOPED CURB TYPES R & T ① ④

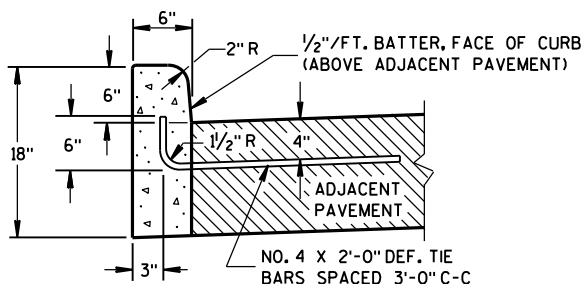
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

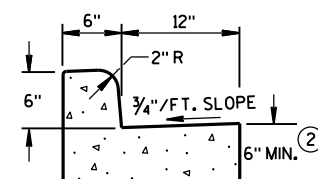


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

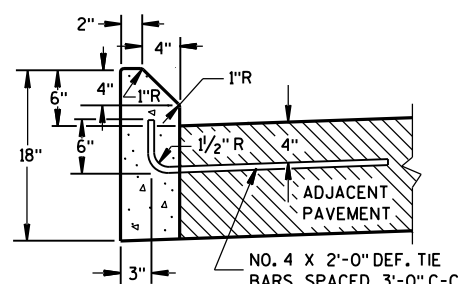


TYPES A & D ①

CONCRETE CURB



TYPES A & D
CONCRETE CURB & GUTTER 18"



TYPES G & J ①

GENERAL NOTES

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

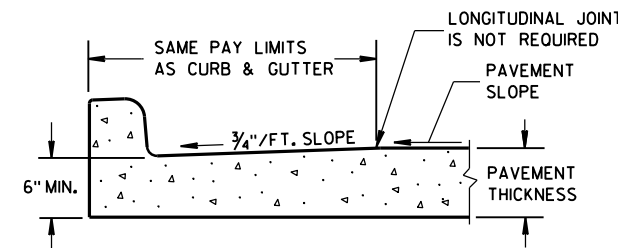
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

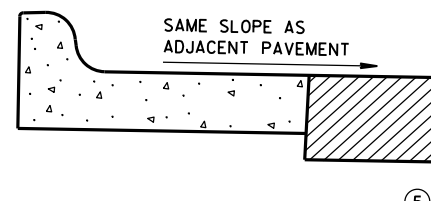
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

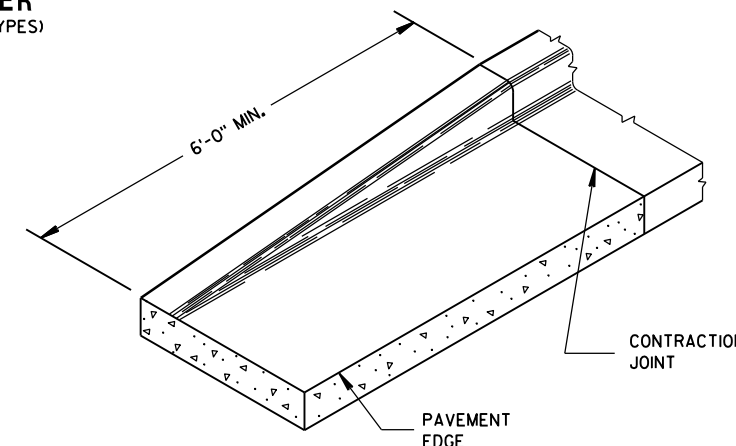
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



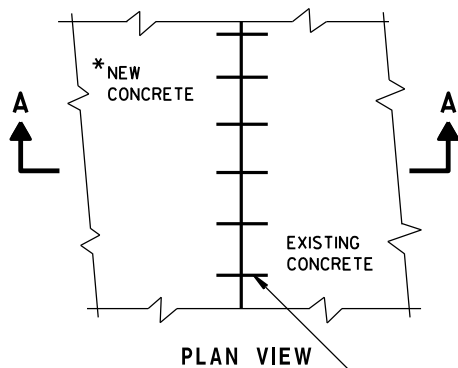
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



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



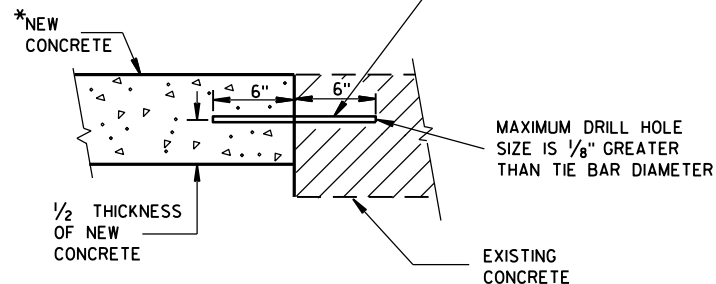
END SECTION CURB & GUTTER



PLAN VIEW

*NEW CURB & GUTTER,
SURFACE DRAINS,
CONCRETE PAVEMENT
OR OTHER NEW CONCRETE.

NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.



SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
FHWA

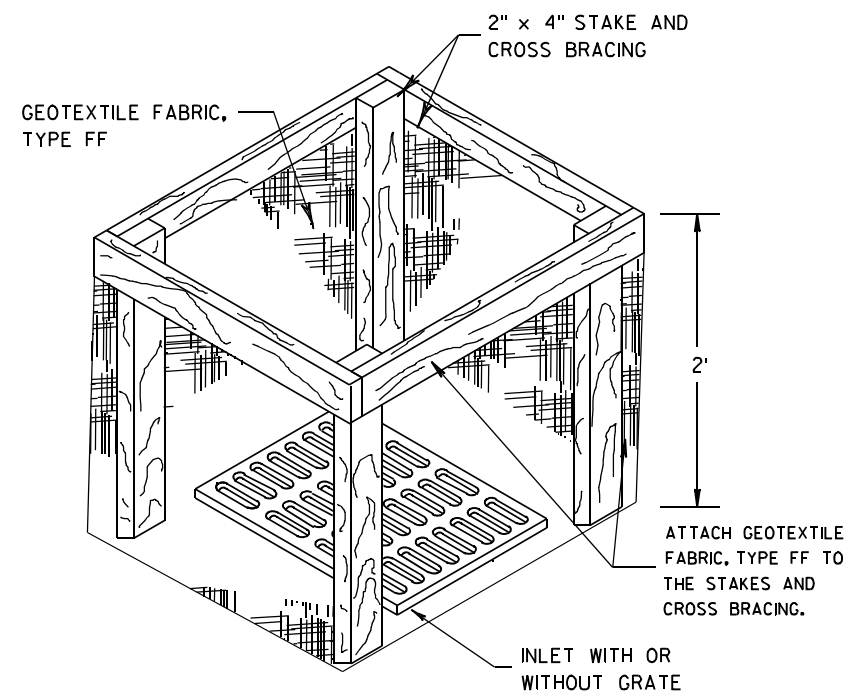
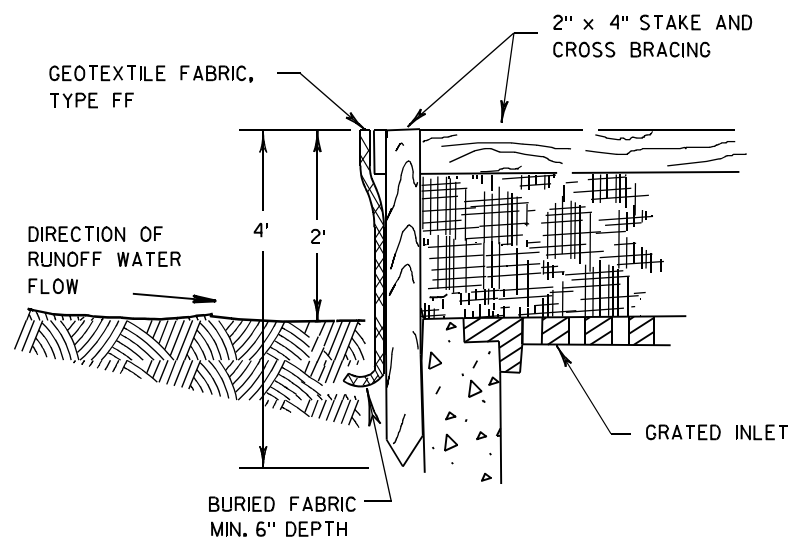
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



- 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 1 1/8" X 1 1/8" 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.



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>4-29-05</u> DATE	<u>/S/ Beth Cannestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER



INLET PROTECTION, TYPE A

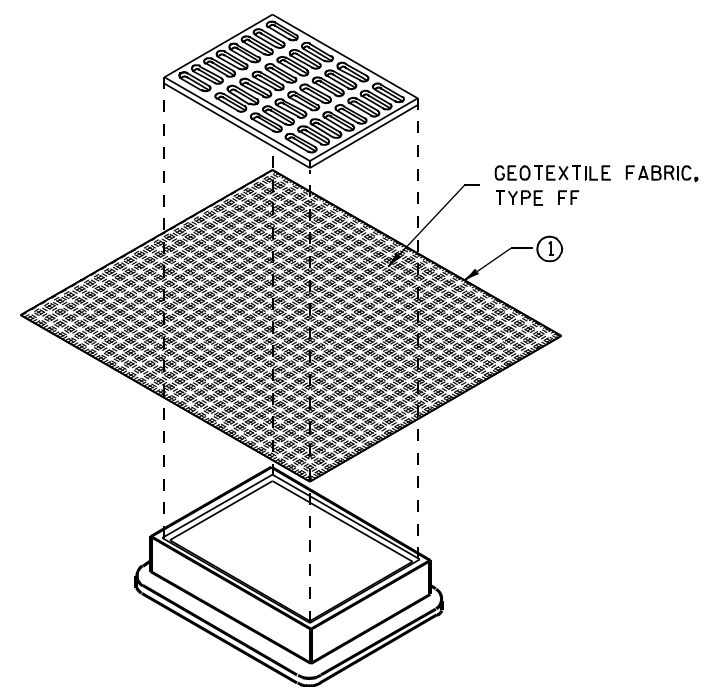
GENERAL NOTES

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.

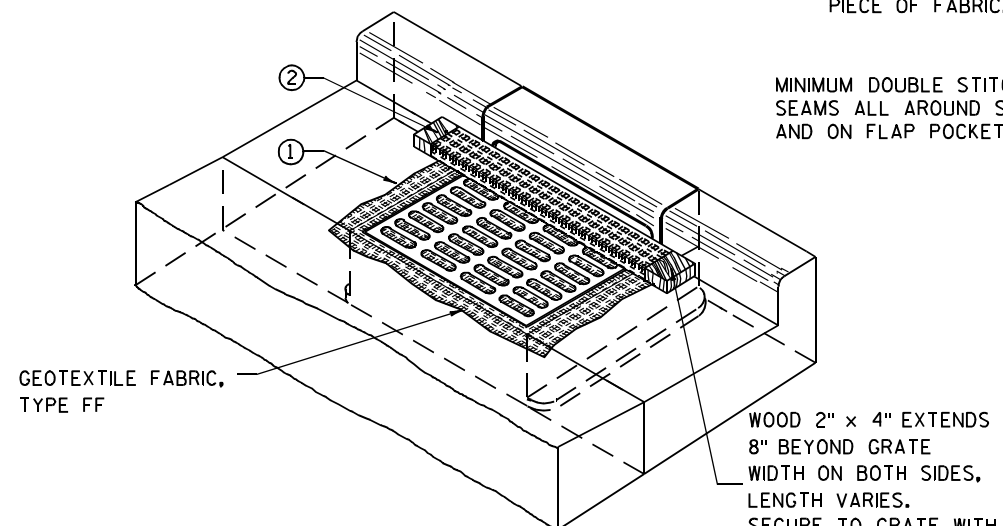
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

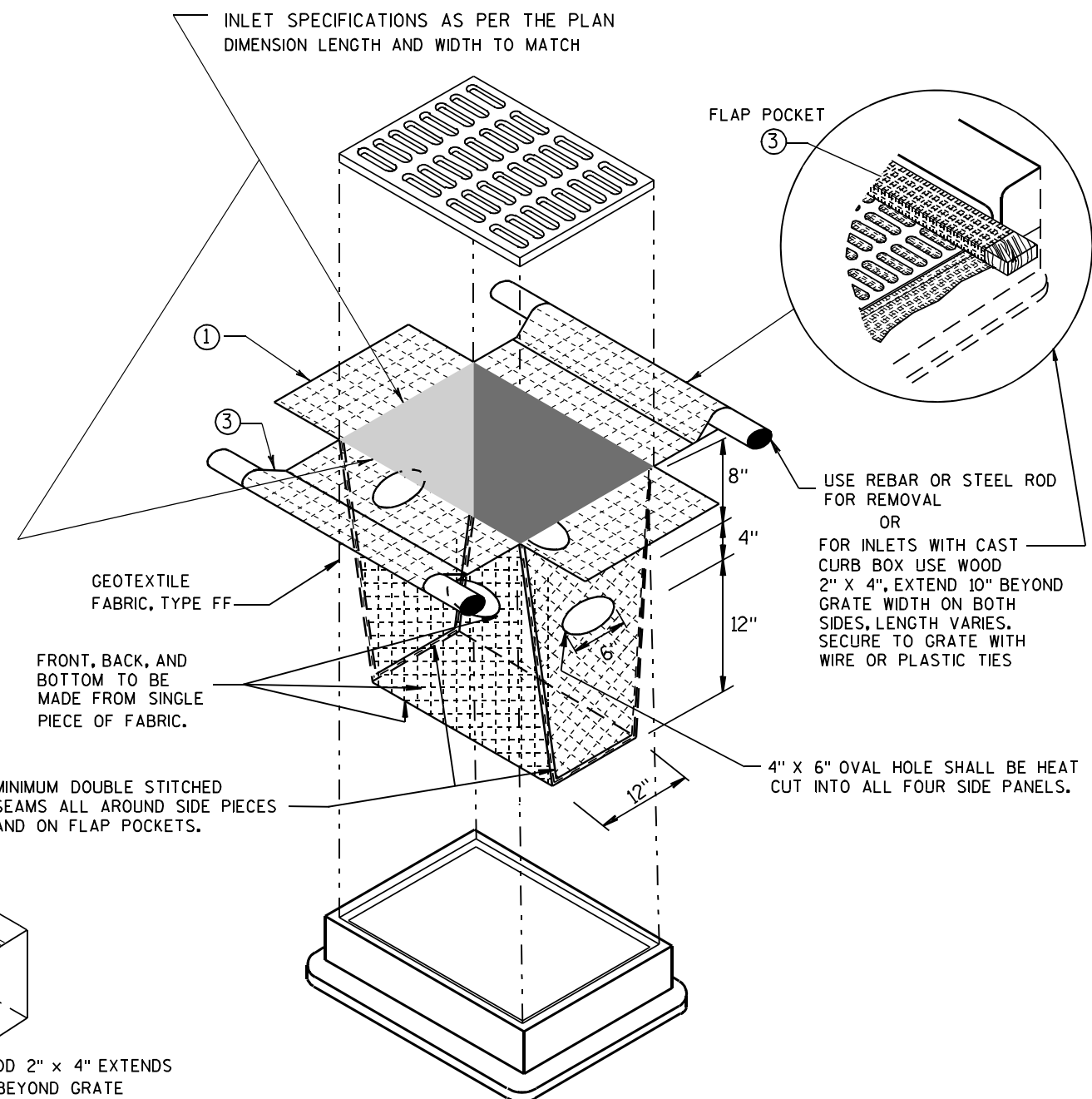
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



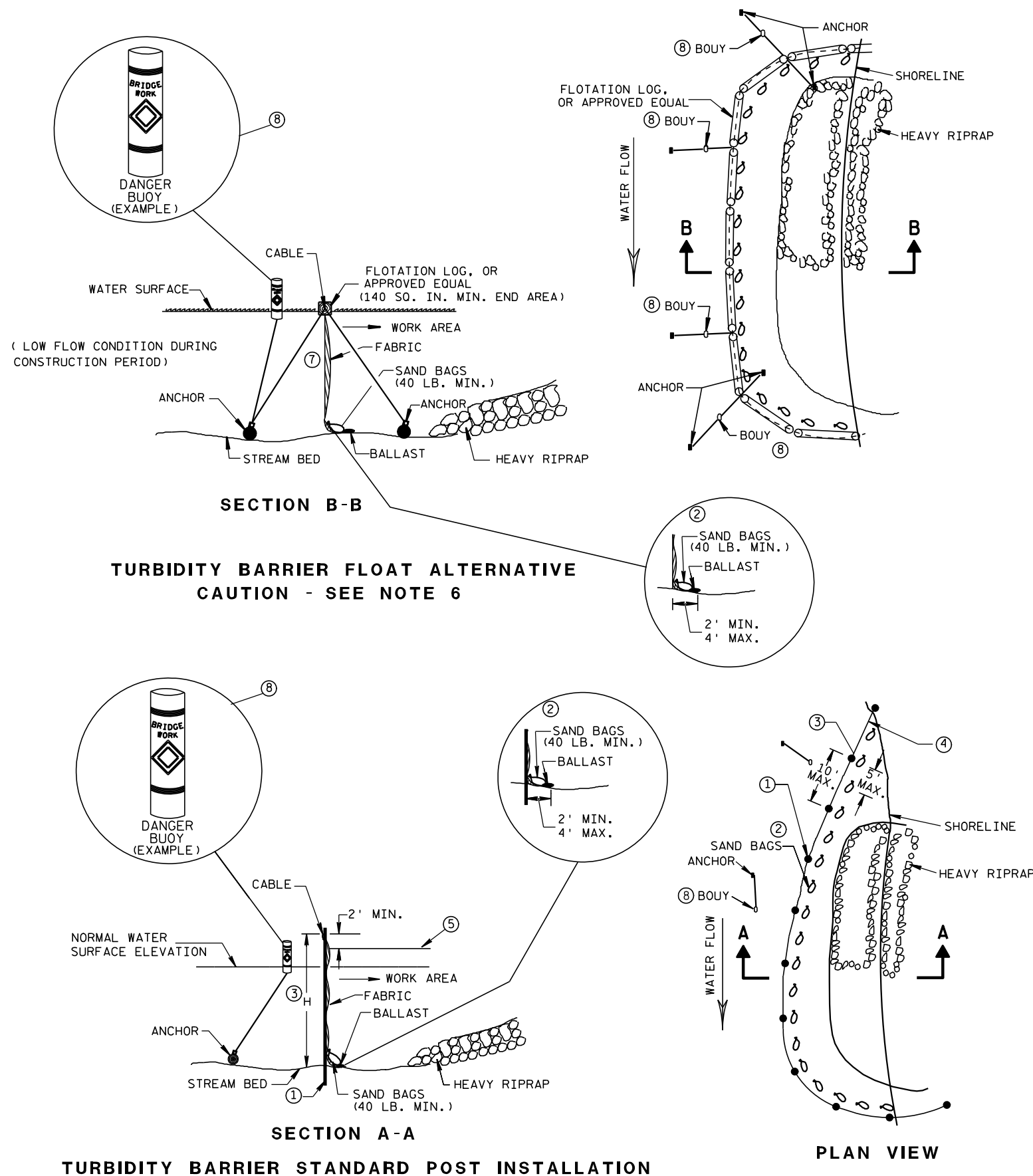
INLET PROTECTION, TYPE D

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

**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Cannestra
DATE
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER

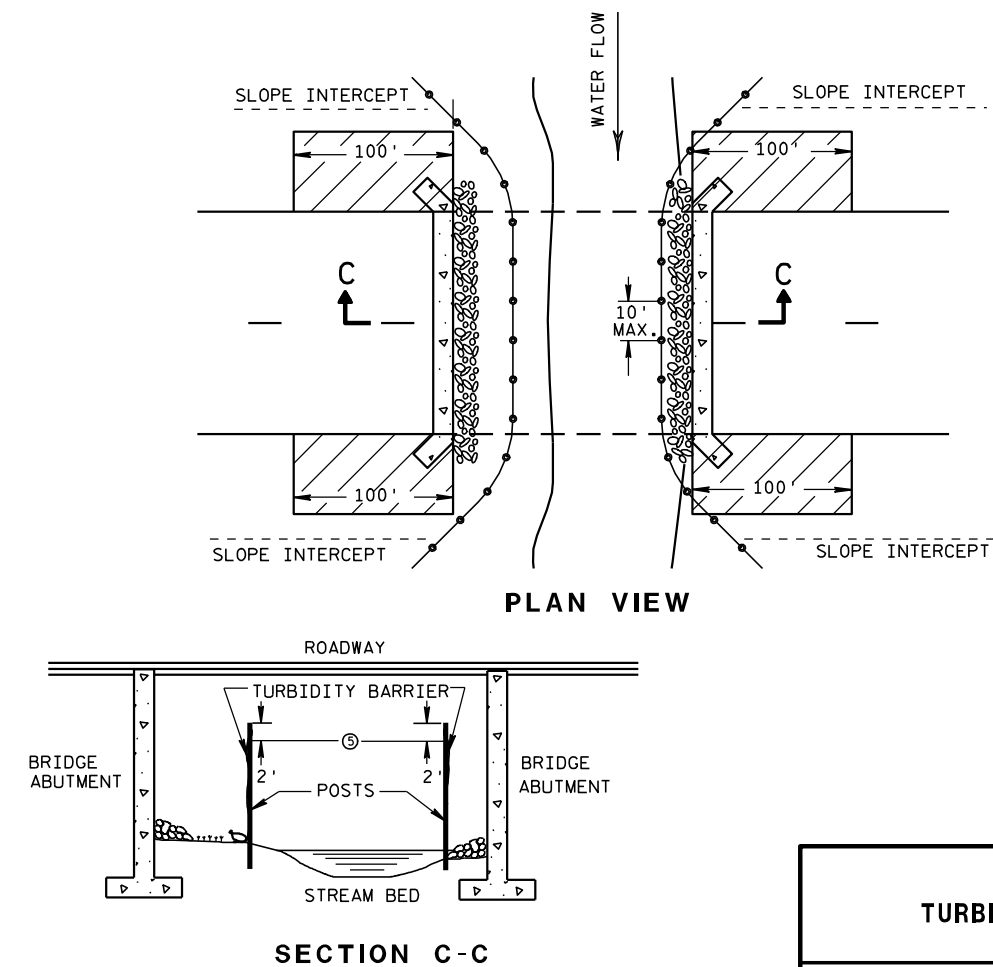


GENERAL NOTES

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

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

- ① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- ② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- ③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.
- ④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- ⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE 02 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 BED ROCK PREVENTS THE INSTALLATION OF POSTS.
- ⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- ⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

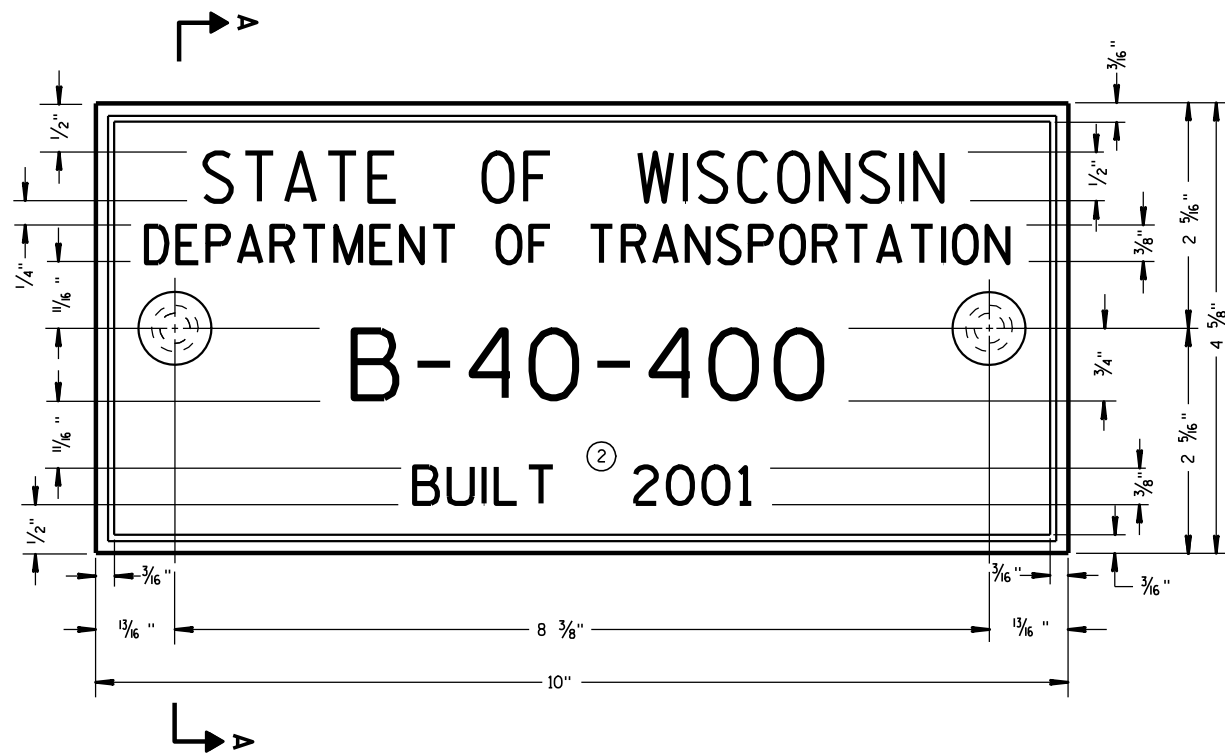
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

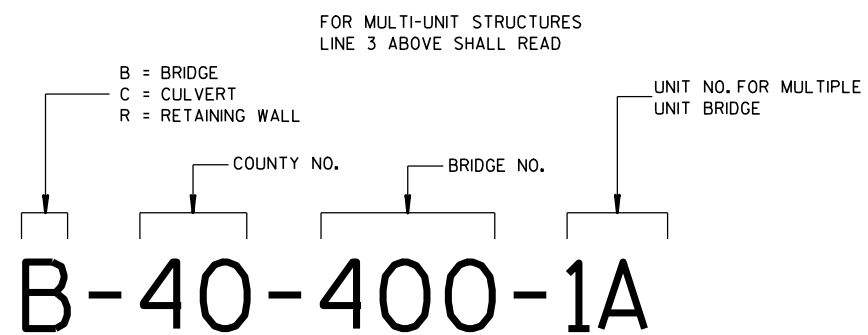
6/04/02
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



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



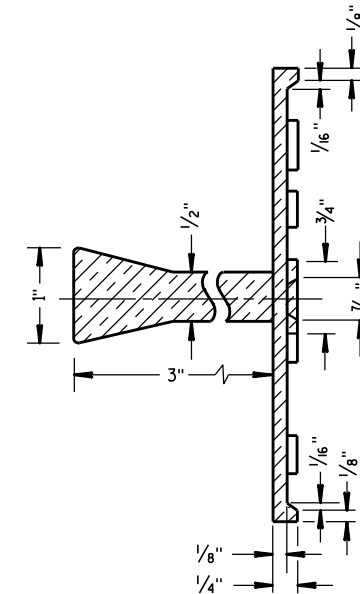
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

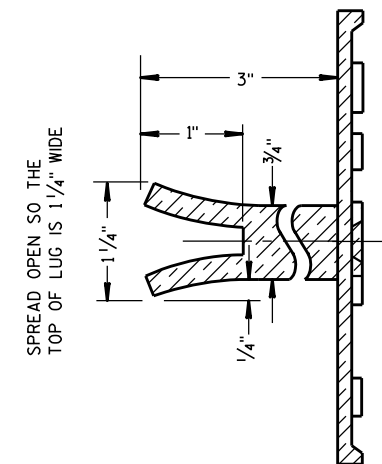
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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

- ① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.

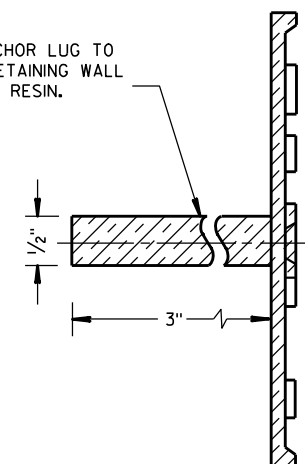


SECTION A-A



ALTERNATE LUG

- ① ADHERE ANCHOR LUG TO PRECAST RETAINING WALL WITH EPOXY RESIN.



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE
(STRUCTURES)**

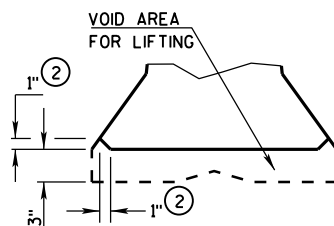
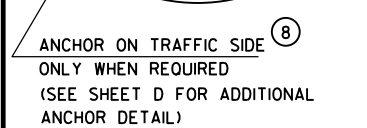
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

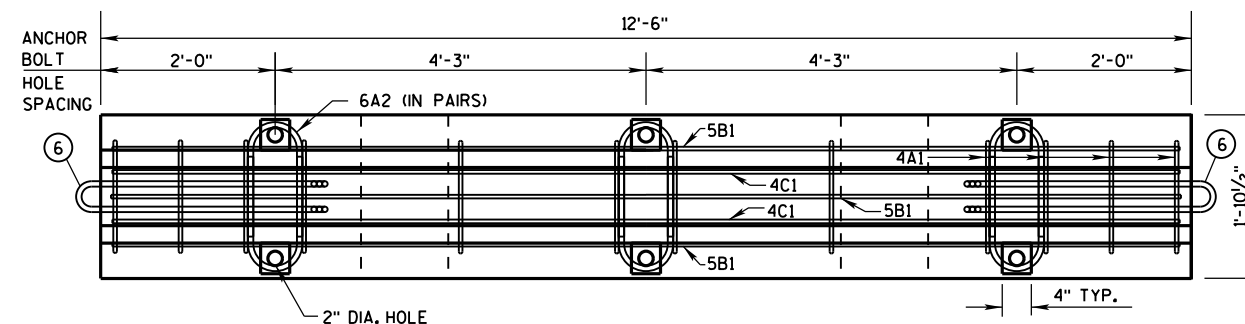
3/26/10
DATE

FHWA

/S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER

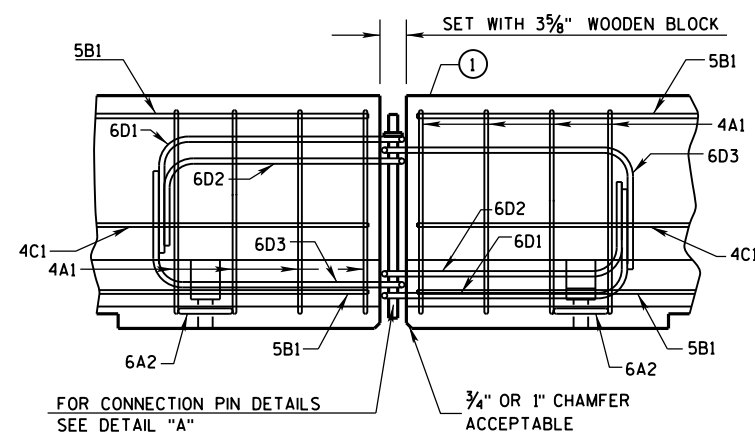


DETAIL "B"
LIFTING SLOT DETAIL

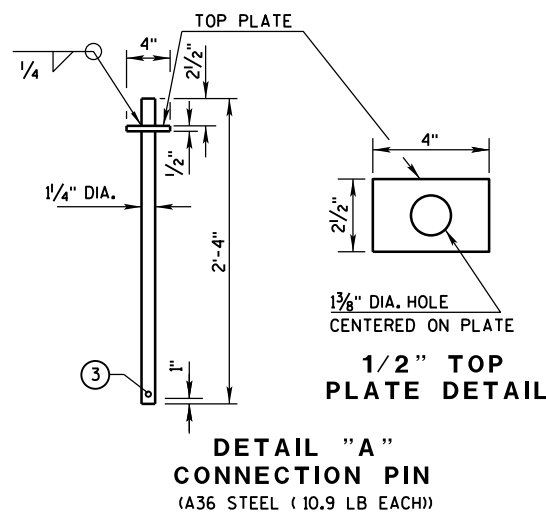


PLAN VIEW

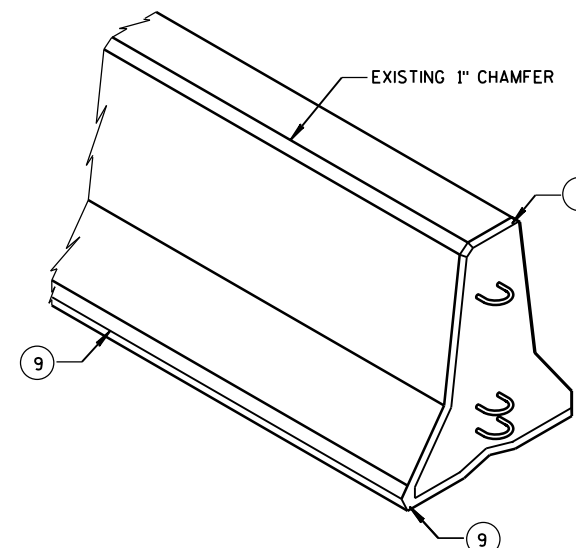
DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(d) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE $\frac{3}{4}$ " SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3- $\frac{1}{2}$ " PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN $\frac{1}{8}$ " OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.
PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - a. TYPE: WICBTP
 - b. MANUFACTURER
 - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ A $\frac{3}{8}$ " HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..
- ④ "V" NOTCH IS OPTIONAL.
- ⑤ THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).
- ⑥ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.
- ⑦ USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURER'S INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.
- ⑧ SEE SHEET D FOR ANCHORING CRITERIA.
- ⑨ 1" CHAMFER OPTIONAL.

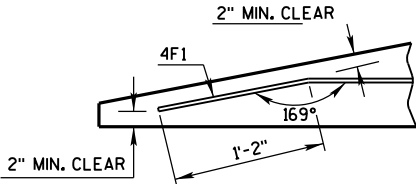
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

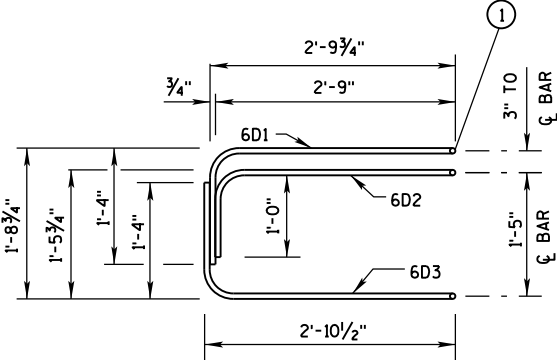
BARRIER TAPER SECTION
BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

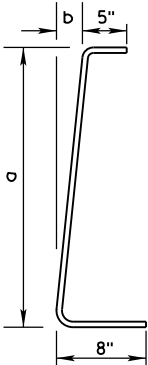
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



DETAIL "C"
BENT BAR DETAIL



ELEVATION
LOOP BAR ASSEMBLY



BAR	a	b
V1	10"	1"
V2	1'-1"	1 1/4"
V3	1'-5"	1 5/8"
V4	1'-8"	1 7/8"
V5	2'-0 1/2"	2 3/8"
V6	2'-3"	2 3/4"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

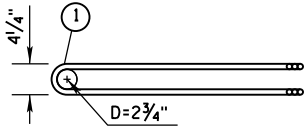
GENERAL NOTES

① NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

BARRIER SECTION
BILL OF MATERIALS

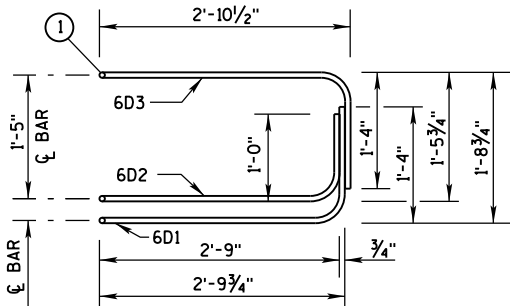
(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"

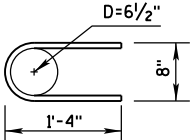


PLAN VIEW
LOOP BAR ASSEMBLY

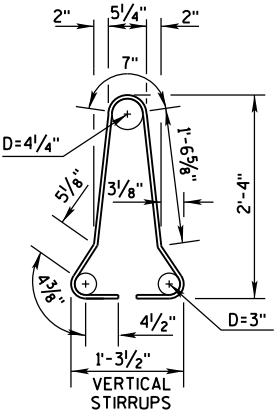
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2

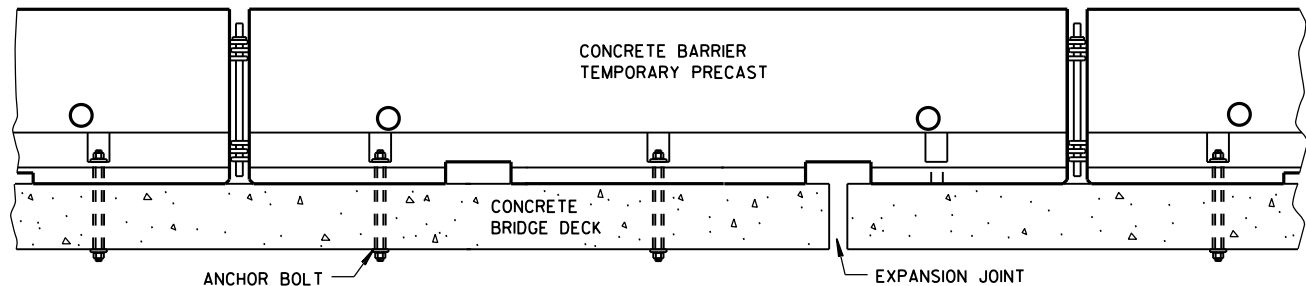
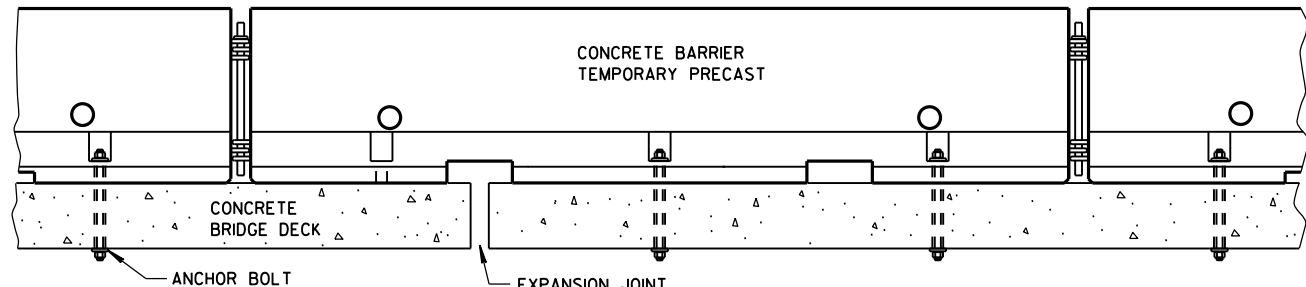


4A1

BARRIER SECTION

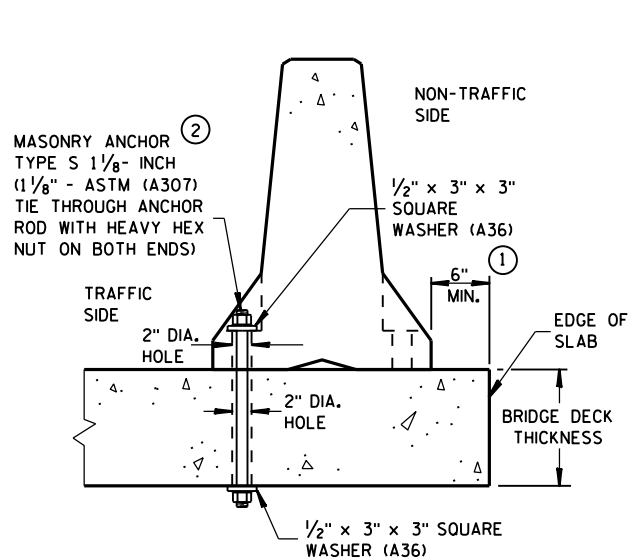
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



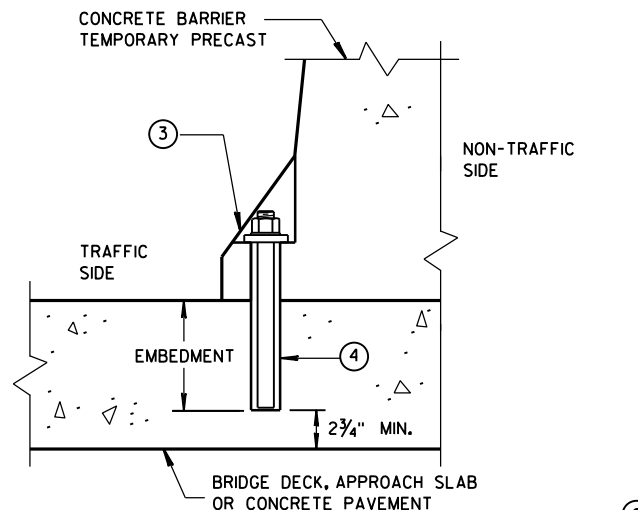
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



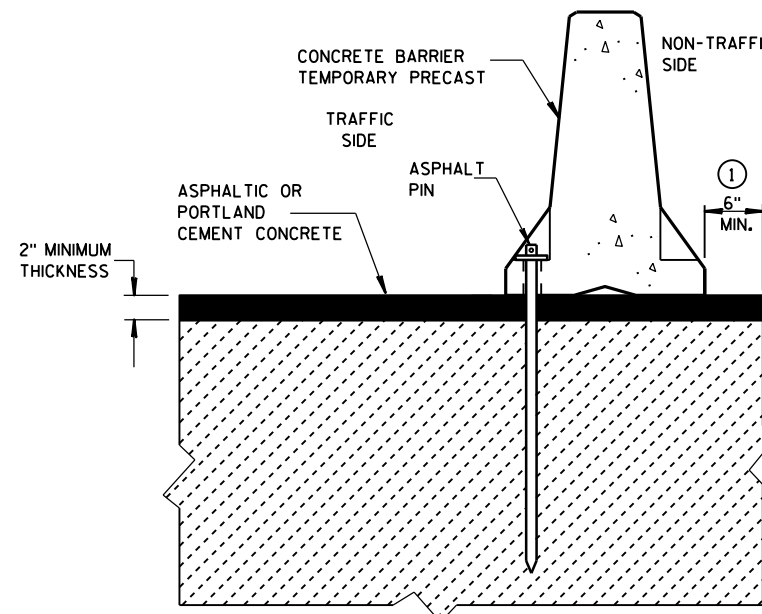
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



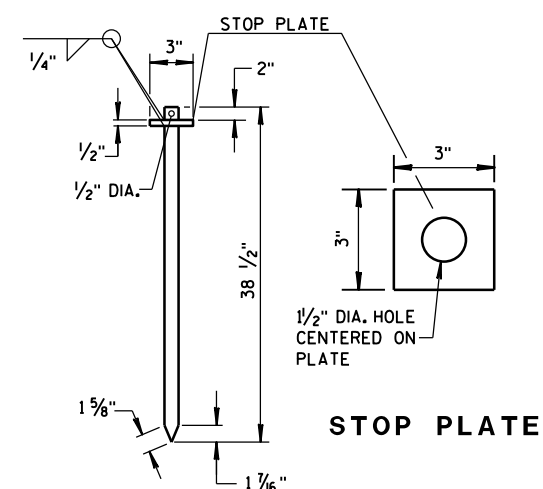
REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

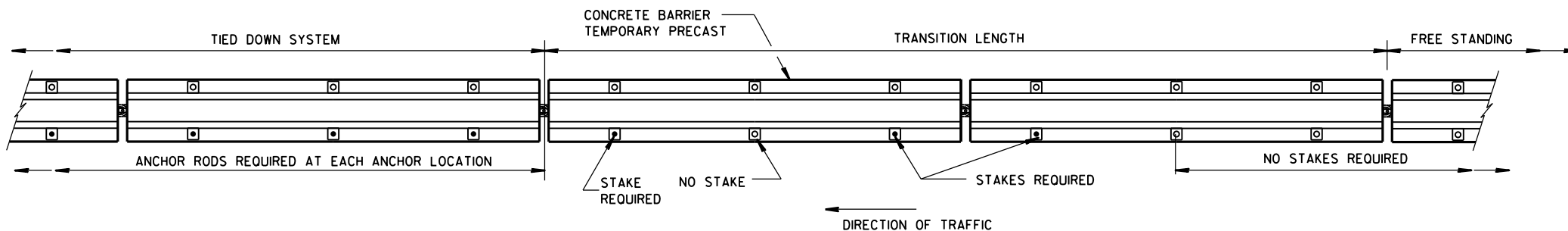


STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



ASPHALT PIN
(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

GENERAL NOTES

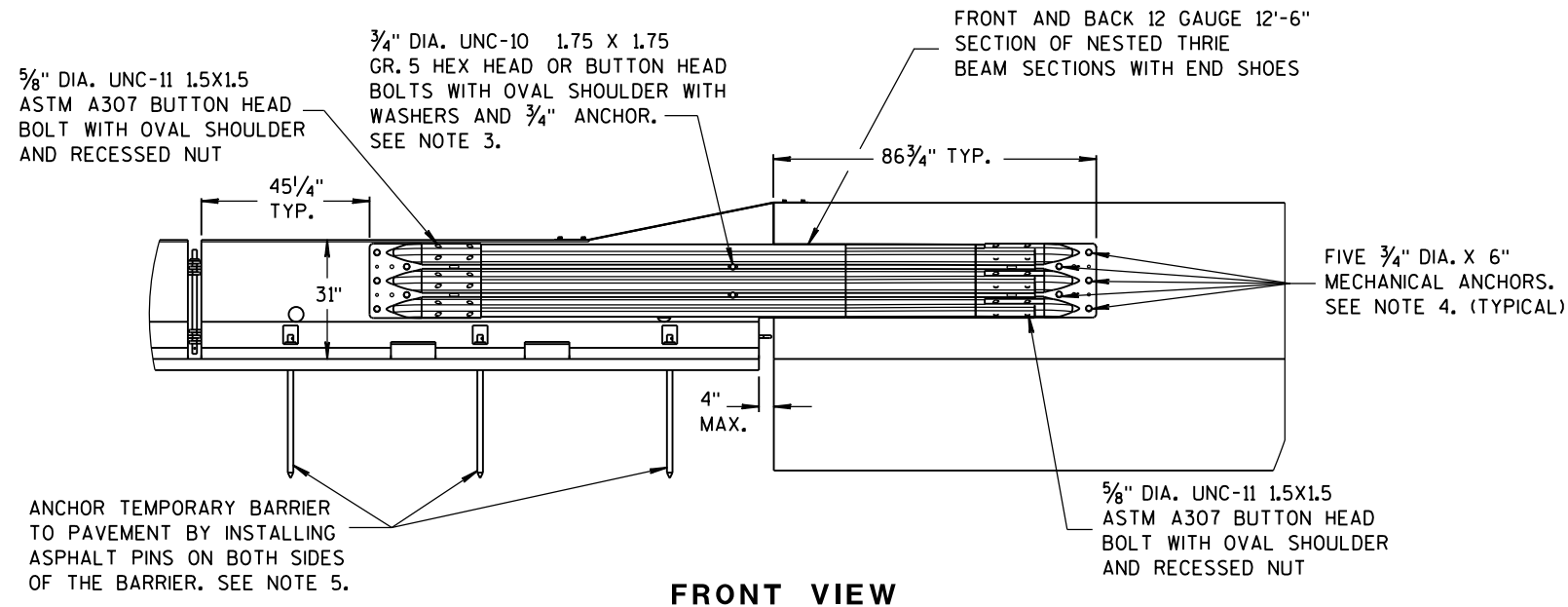
- CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.
- ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1 1/8-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERCIAL GROUT OR MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.
- 1/8" DIAMETER A307 THREADED ROD, 1/2" x 3" x 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.
- ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5/4" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

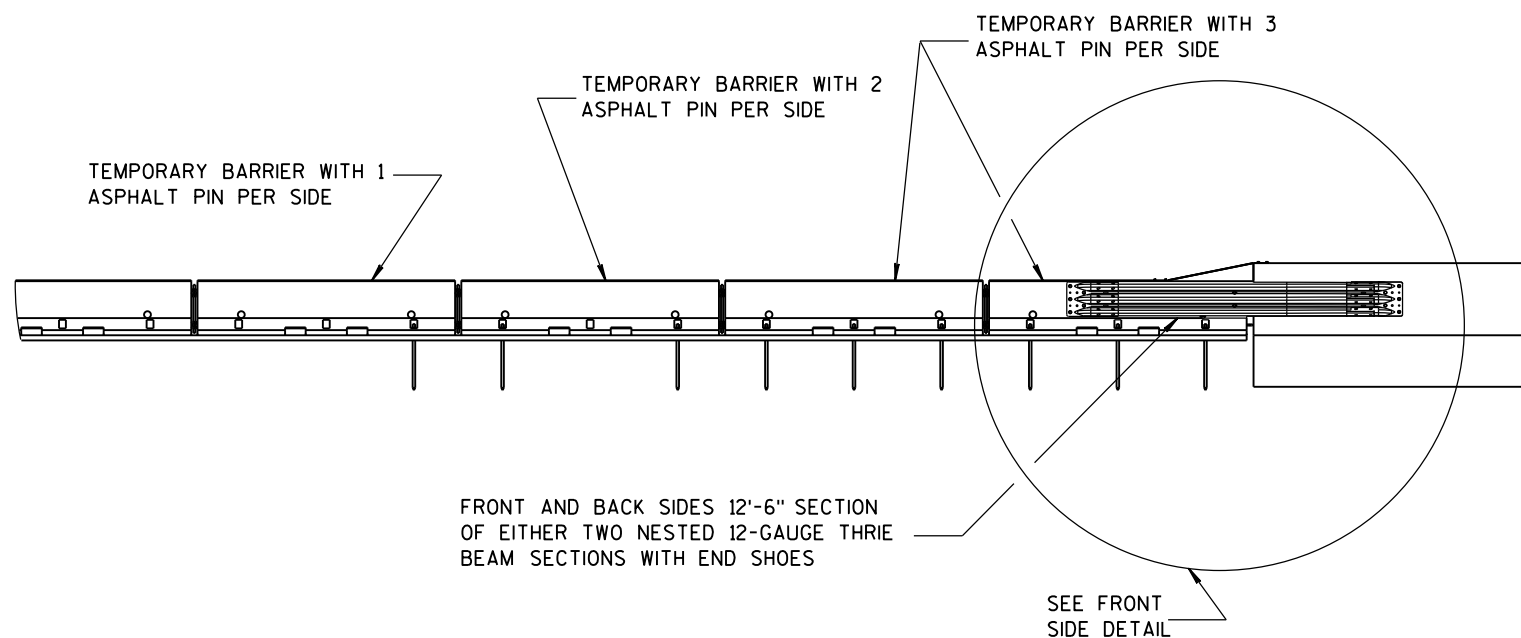
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FRONT VIEW

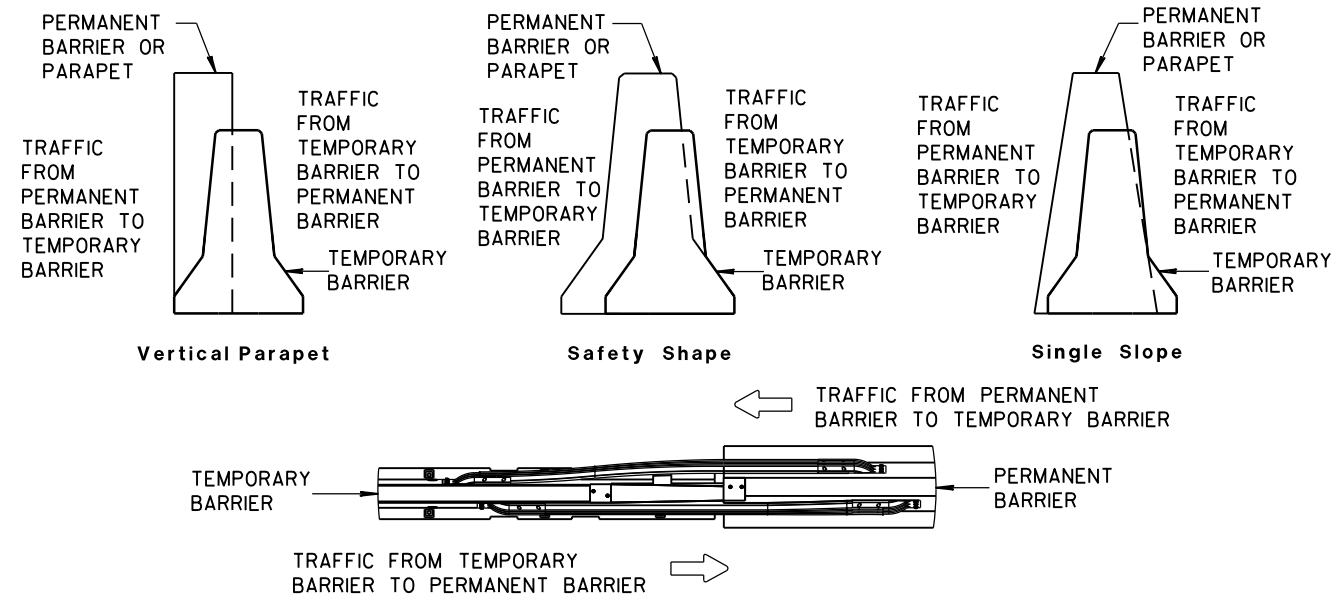
NOTES

1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

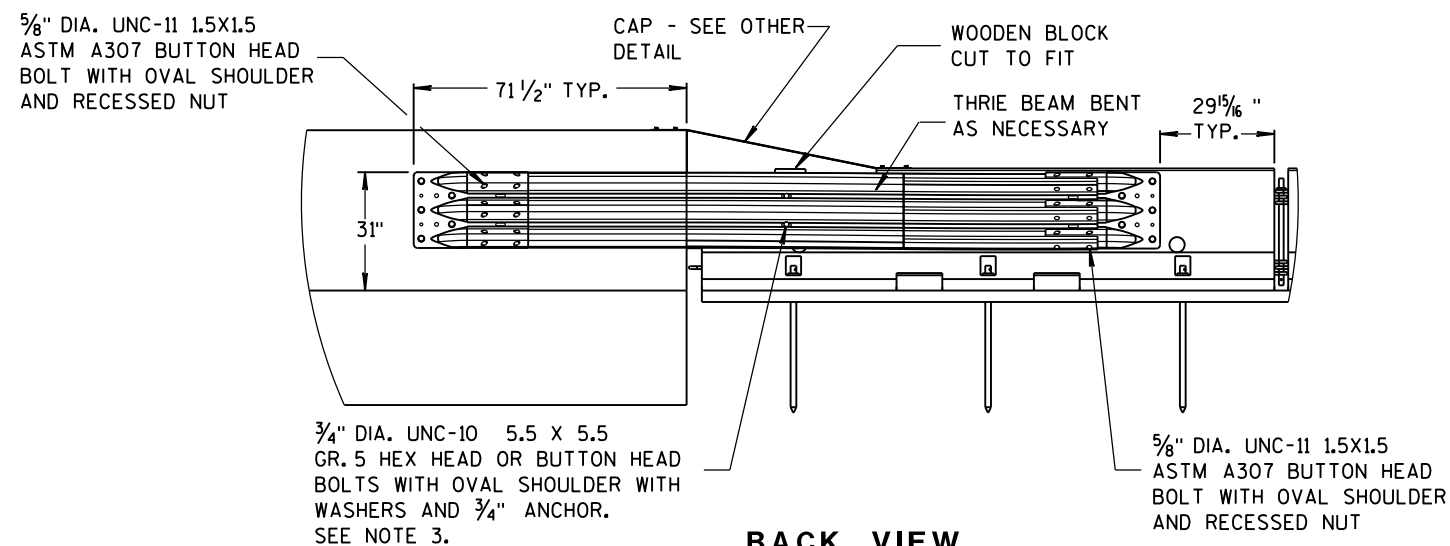


FRONT VIEW

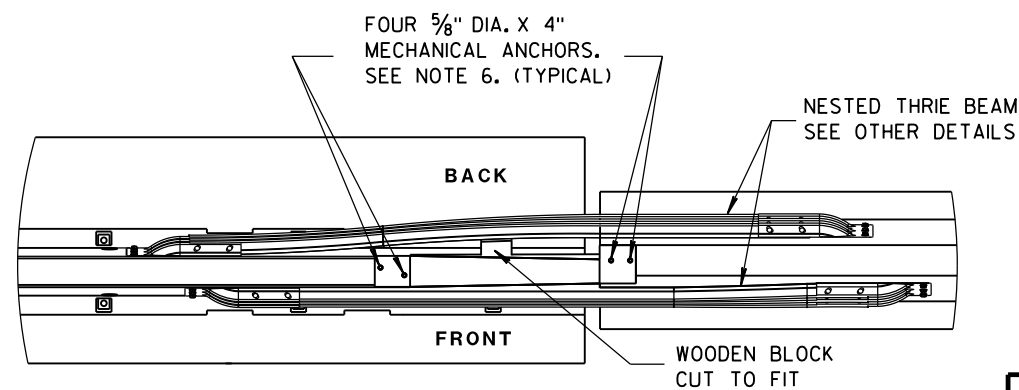
BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



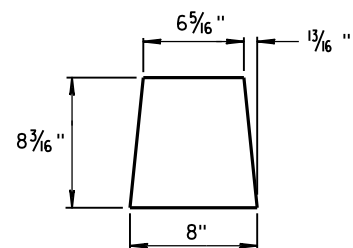
BACK VIEW



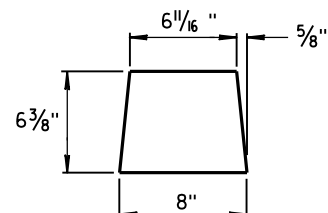
PLAN VIEW

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

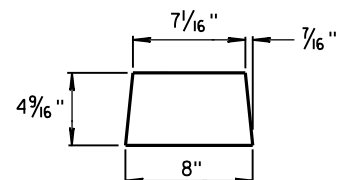
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



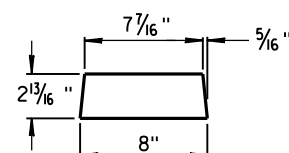
GUSSET 1



GUSSET 2

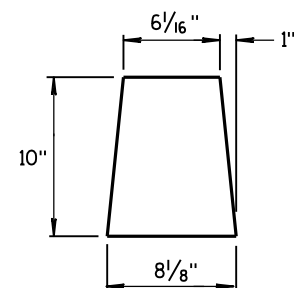


GUSSET 3

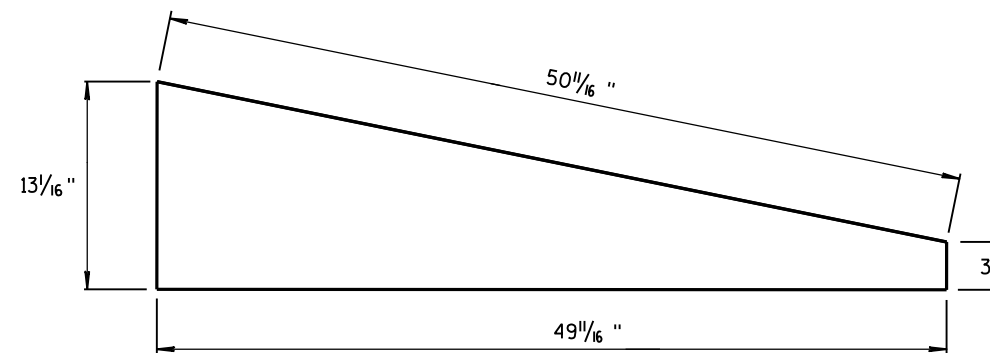


GUSSET 4

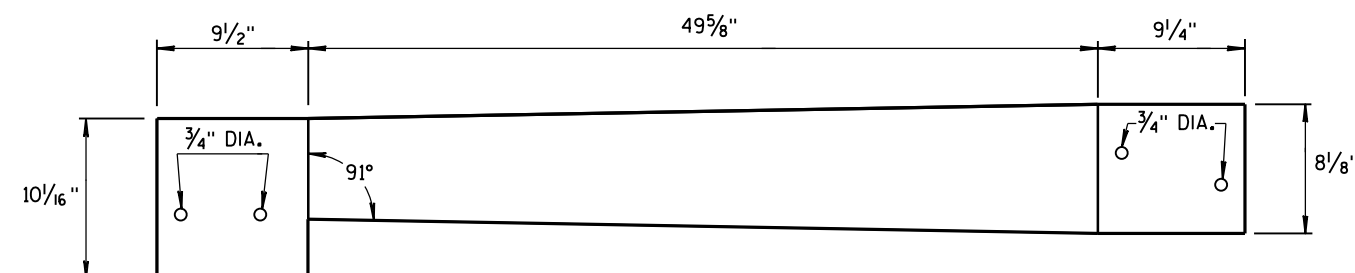
GUSSETS



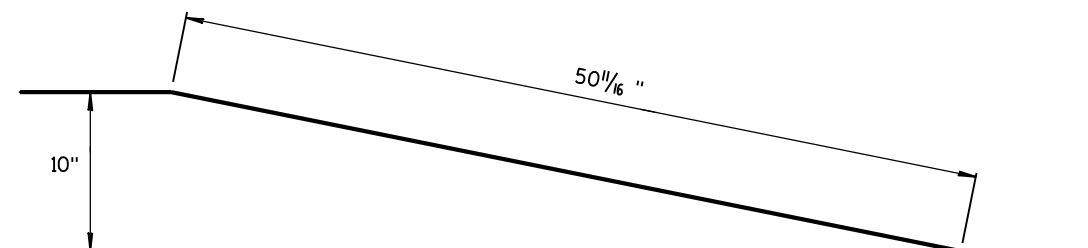
END PLATE



SIDE PLATE

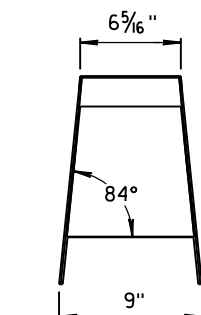
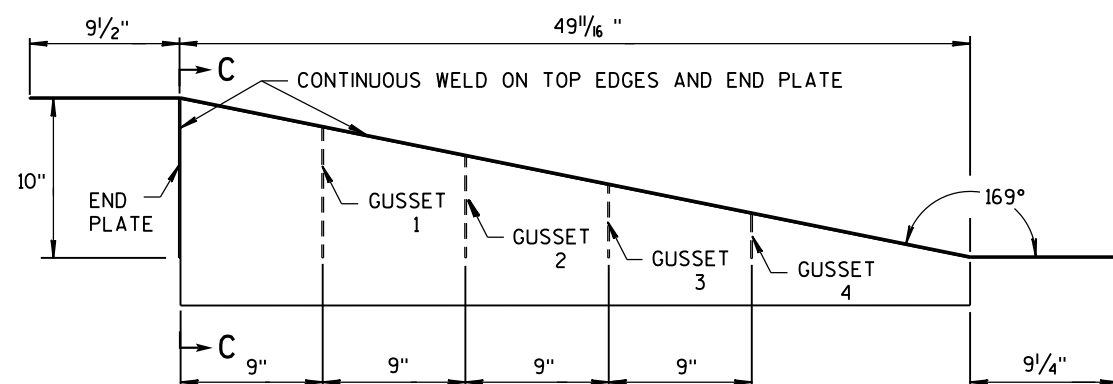
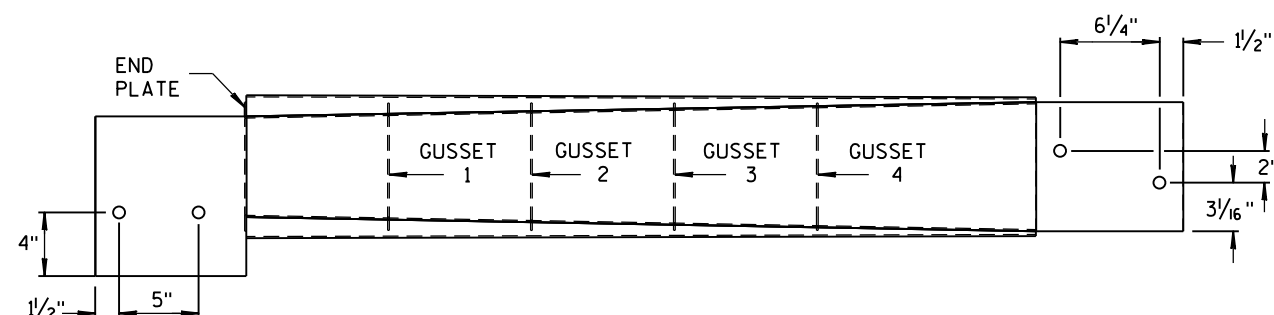


TOP PLATE



**SIDE, TOP AND END PLATES FOR CAP
FROM TEMPORARY CONCRETE BARRIER
TO 42" PERMANENT CONCRETE BARRIER**

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.



SECTION C-C

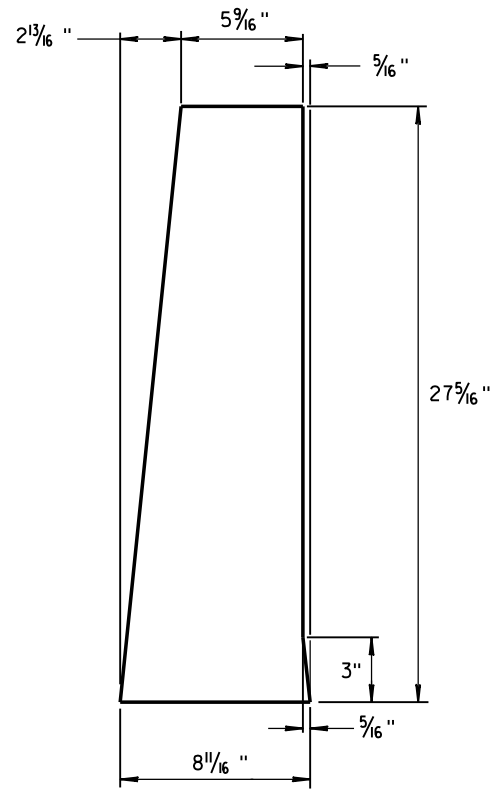
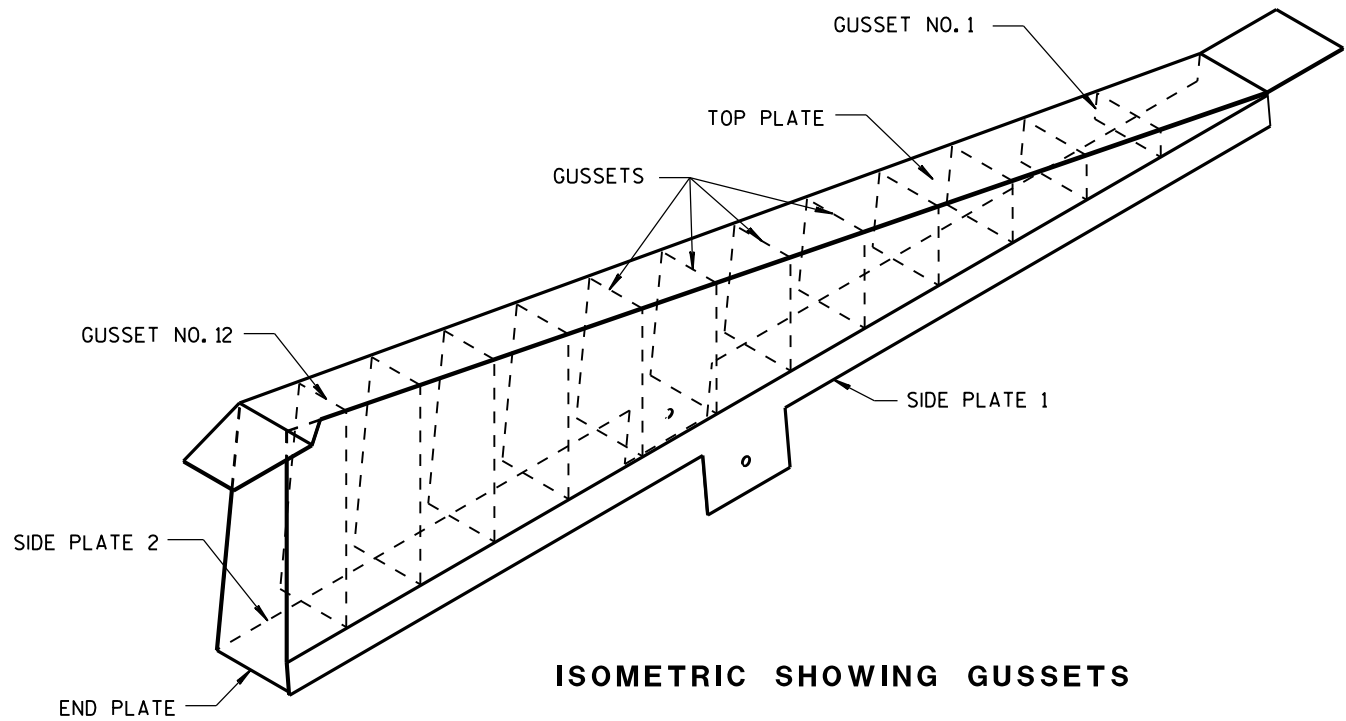
NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

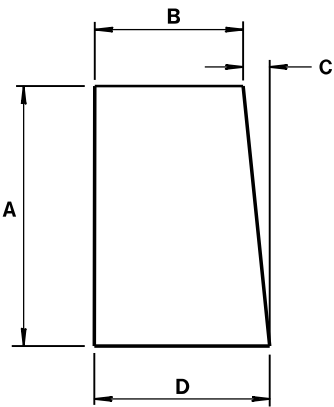
**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 42" PERMANENT CONCRETE BARRIER**

**CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



END PLATE
1/8" STEEL PLATE

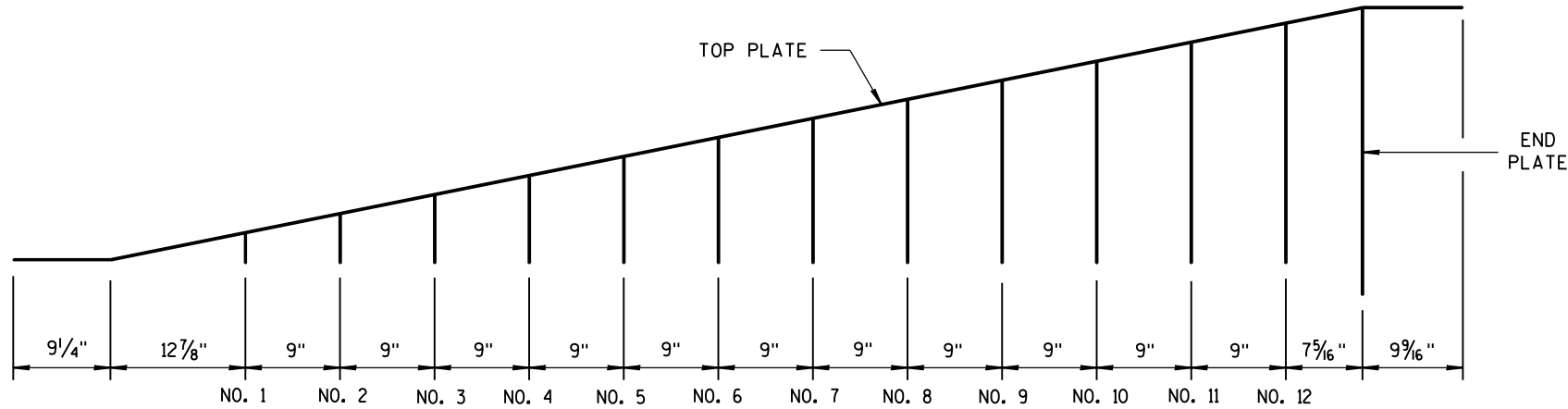


GUSSETS 1 - 12
ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 1/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16"	7 3/16"	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 5/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16"	6 1/16"	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

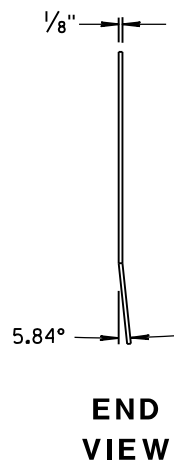
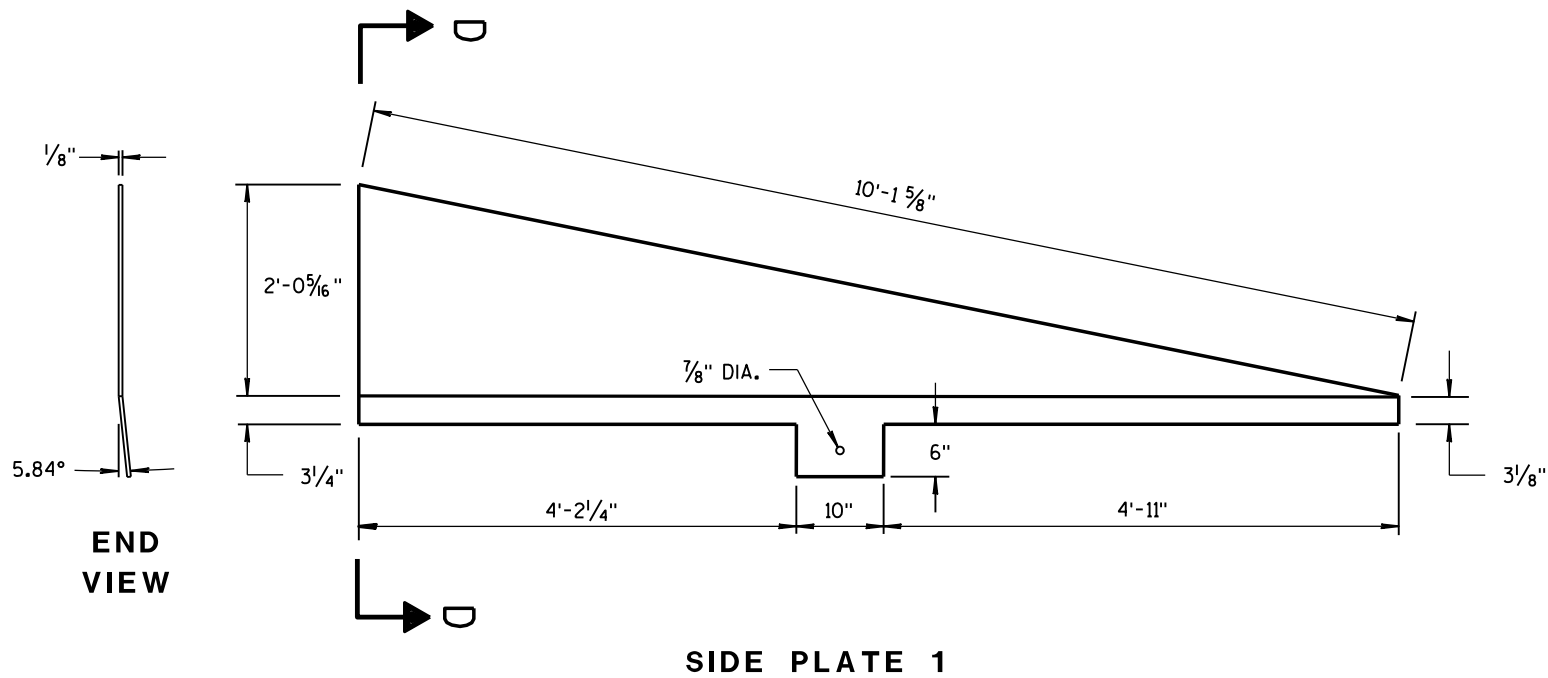
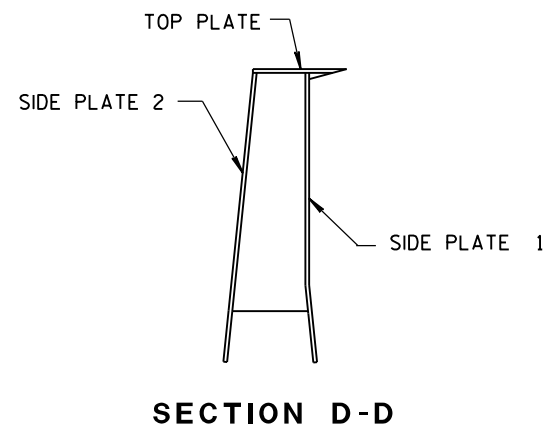
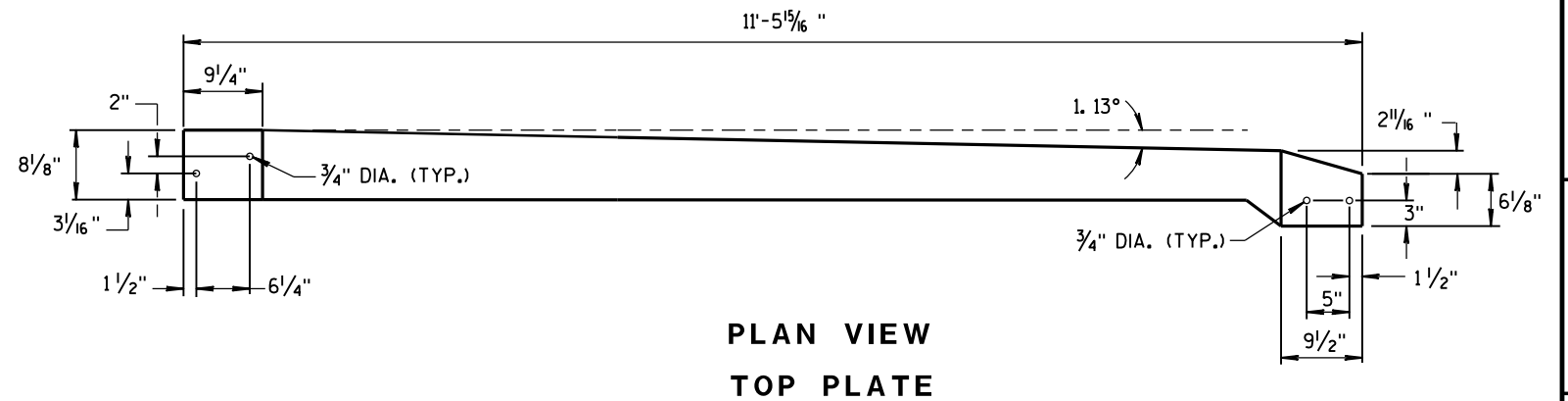
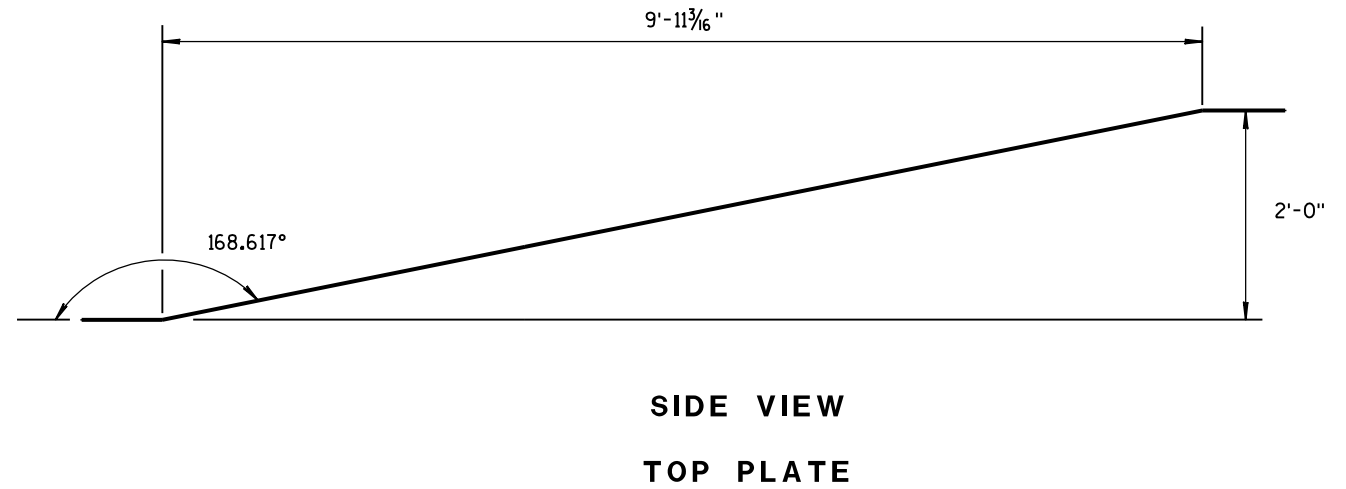
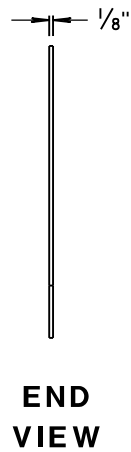
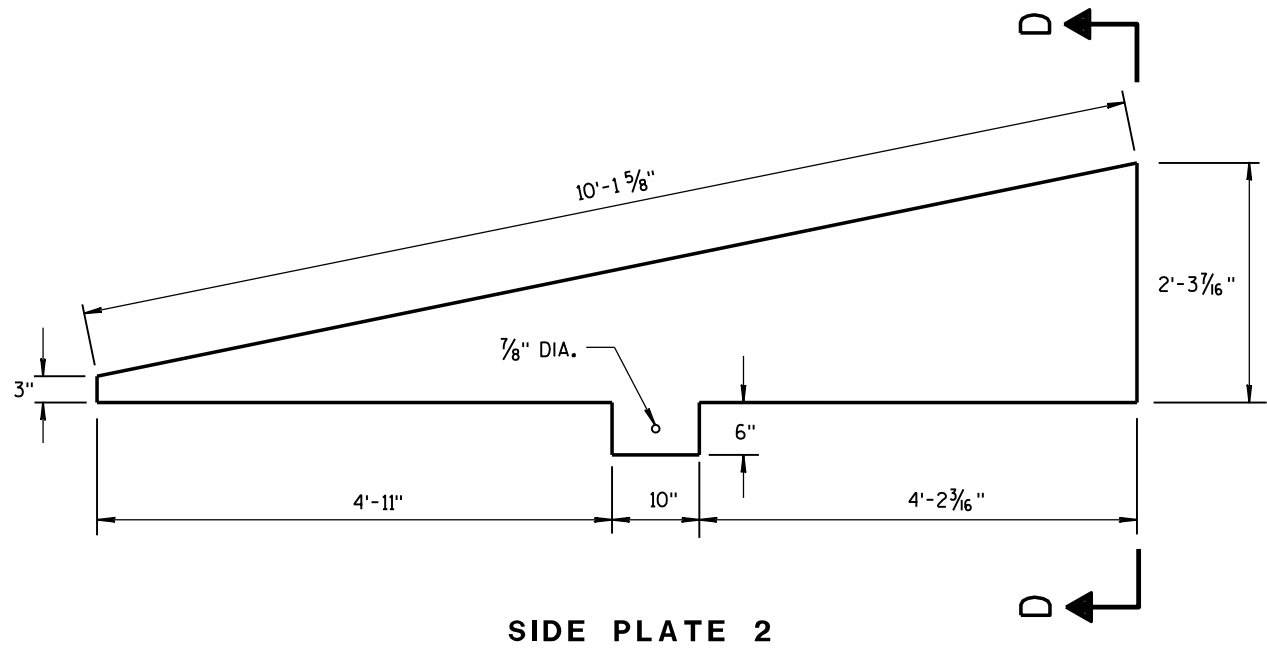
GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2014 DATE	/S/ Jerry H. Zogg ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA	

GENERAL NOTES

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

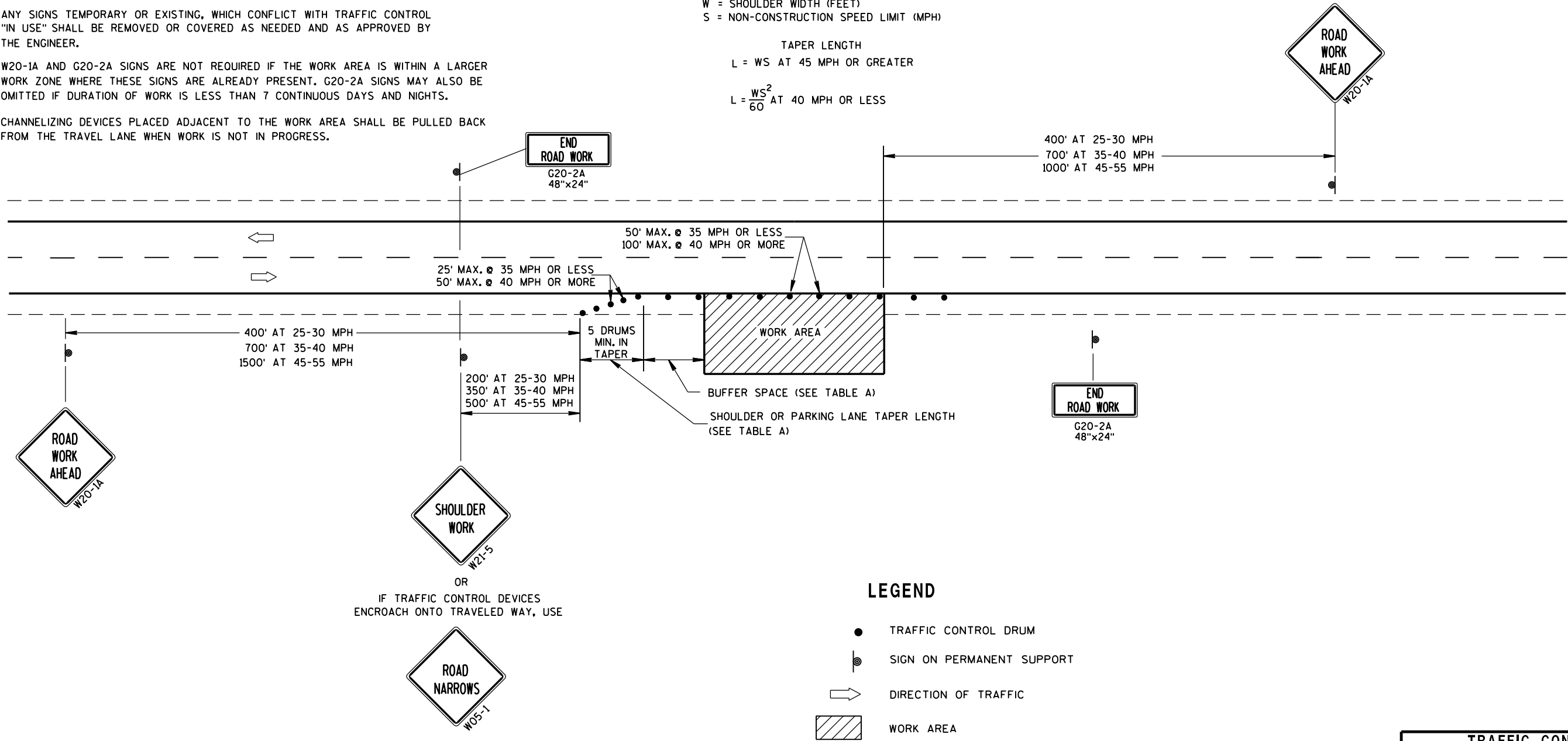
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S	W	4	6	8	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH
L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$


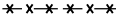









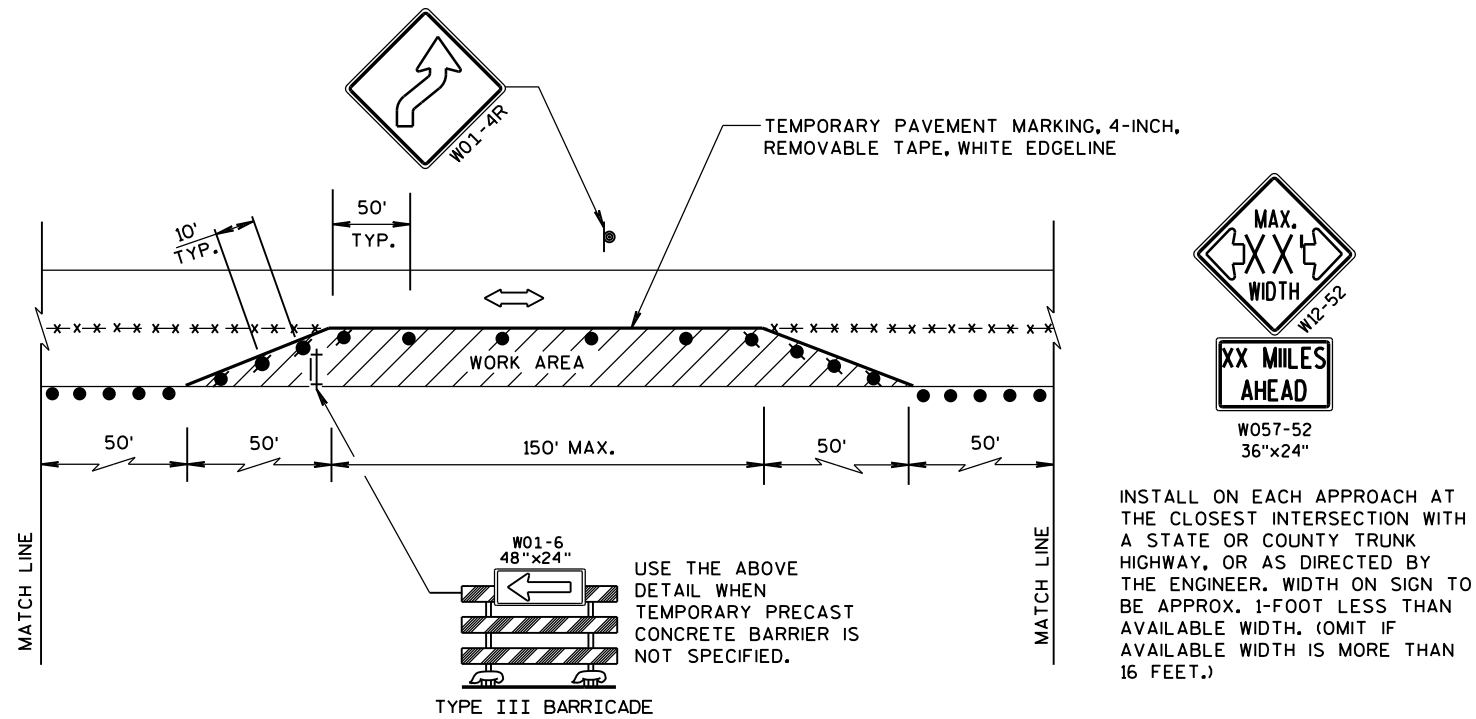
LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

LEGEND

- | | |
|---|--|
|  | SIGN ON PERMANENT SUPPORT |
|  | REMOVING PAVEMENT MARKING |
|  | TYPE III BARRICADE WITH ATTACHED SIGN |
|  | CONCRETE BARRIER TEMPORARY PRECAST |
|  | FLAGS, 16" x 16" MIN., (ORANGE) |
|  | TRAFFIC CONTROL DRUM |
|  | TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT |
|  | ASPHALTIC PAVEMENT WIDENING |
|  | DIRECTION OF TRAFFIC |



GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

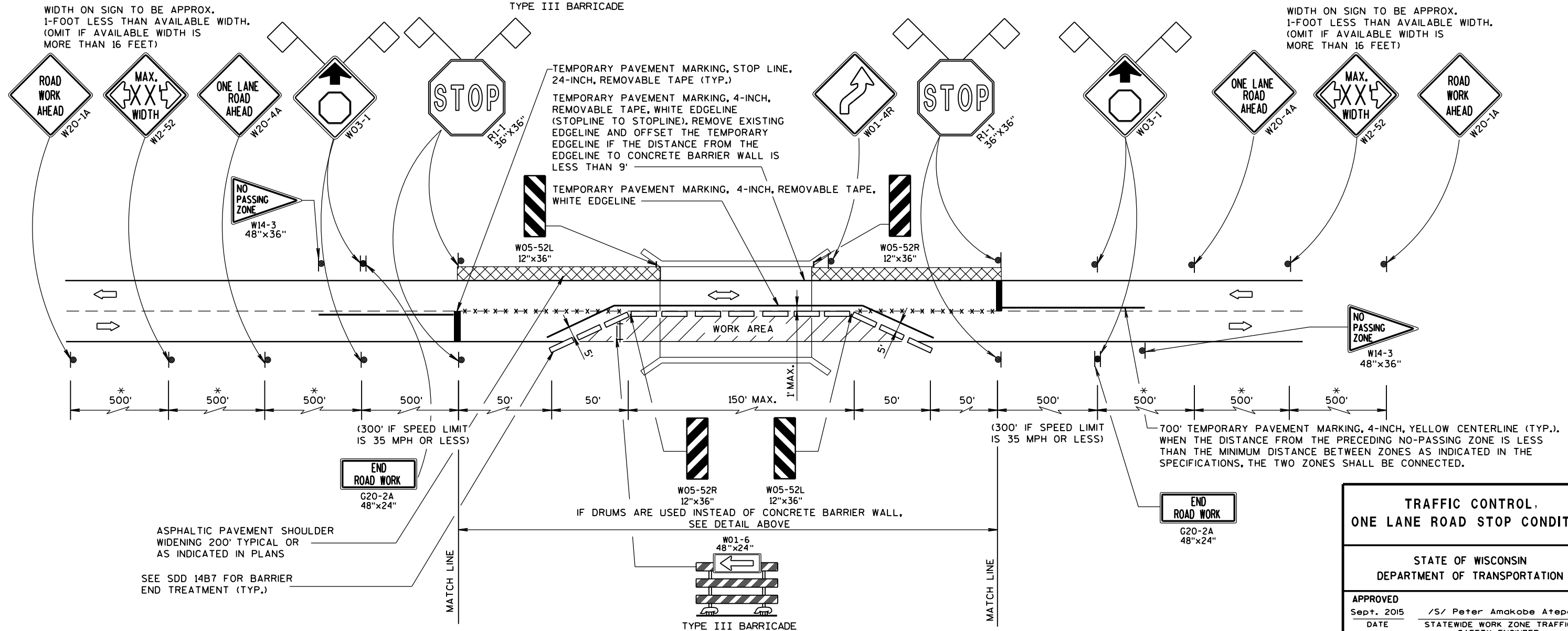
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE, AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

* 500-FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350-FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200-FOOT TYPICAL SPACING.



TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION	5 9
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED	
Sept. 2015	/S/ Peter Amokobe Atepe
DATE	STATEWIDE WORK ZONE TRAFFIC
	SAFETY ENGINEER
FHWA	

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.16
OPERATING RATING FACTOR: 1.50
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 #/S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY { SUPERSTRUCTURE f'_c = 4,000 p.s.i.
ALL OTHER f'_c = 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) f_y = 60,000 p.s.i.

HYDRAULIC DATA:

100 YEAR FLOOD

DRAINAGE AREA = 3.1 sq. mi.
WATERWAY AREA = 122 sq. ft.
 $V = 4.7$ f.p.s.
 $Q_{100} = 572$ c.f.s.
HIGH WATER₁₀₀ EL. 748.9
HIGH WATER₂ EL. 748.7
RDWY. OVERFLOW = N/A
SCOUR CRITICAL CODE = 8
LAKE WINNEBAGO REG. EL. 749.5

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON HP 10 x 42 STEEL PILING (WITH PILE POINTS) DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 130 TONS #PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED LENGTH 12'-0" AT EACH ABUTMENT. PRE-BORE PILING 10-FEET.

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

TRAFFIC DATA:

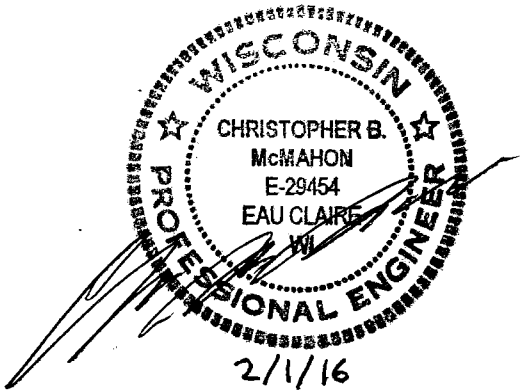
A.D.T. = 290 (2016)
A.D.T. = 330 (2036)
R.D.S. = 30 M.P.H.

FOR TYPICAL SECTIONS
SEE SHEET 2

NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY			
AYRES ASSOCIATES 3433 Oakwood Hills Parkway Eau Claire, WI 54701 www.AyresAssociates.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED <i>William C. Dreher</i> SDR		02/08/16	DATE
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE B-70-323			
3rd STREET OVER LAKE WINNEBAGO SLOUGH			
COUNTY	WINNEBAGO	TOWN/CITY/VILLAGE	MENASHA
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	JWZ	DESIGN CK'D.	JCK
DRAWN BY	JCK/CLS	PLANS CK'D.	CRM
GENERAL PLAN			SHEET 1 OF 14

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

CONSULTANT CONTACT:
CHRIS MCMAHON
(715)-834-3161



CURVE DATA

P.I. STA. 9+16.25
 $\Delta = 14^\circ 59' 55''$
 $D = 5^\circ 12' 31''$
 $R = 1100.00'$
 $T = 144.80'$
 $L = 287.95'$
 $E = 9.49'$
S.E. = N.C.

PLAN

SINGLE SPAN CONCRETE FLAT SLAB

COST OF EXCAVATION IN THE HATCHED AREAS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR "EXCAVATION FOR STRUCTURES BRIDGES B-70-323".

ELEVATION

LIST OF DRAWINGS

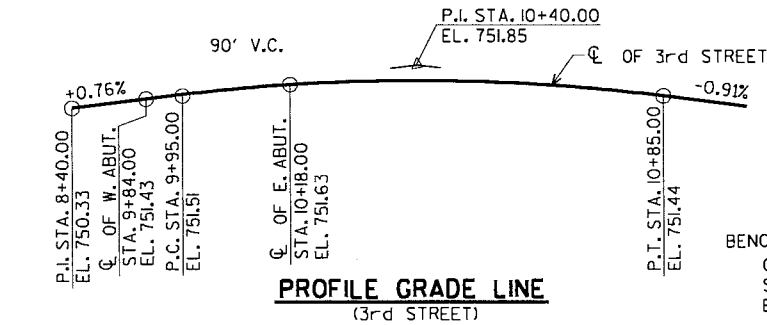
1. GENERAL PLAN
2. TYPICAL SECTIONS
3. QUANTITIES AND NOTES
4. SUBSURFACE EXPLORATION
5. WEST ABUTMENT
6. WEST ABUTMENT WING DETAILS
7. WEST ABUTMENT BILL OF BARS
8. EAST ABUTMENT
9. EAST ABUTMENT WING DETAILS
10. EAST ABUTMENT BILL OF BARS
11. SUPERSTRUCTURE
12. SUPERSTRUCTURE PLAN
13. SUPERSTRUCTURE DETAILS
14. VERTICAL FACE PARAPET 'TX'

\$PRENAME\$
U:\45-0403.00 - City of Menasha - 3rd Street+BRIDGE+450403 gp.dgn

CHECKED BY:
BACK CHECKED BY:
CORRECTED BY:

8

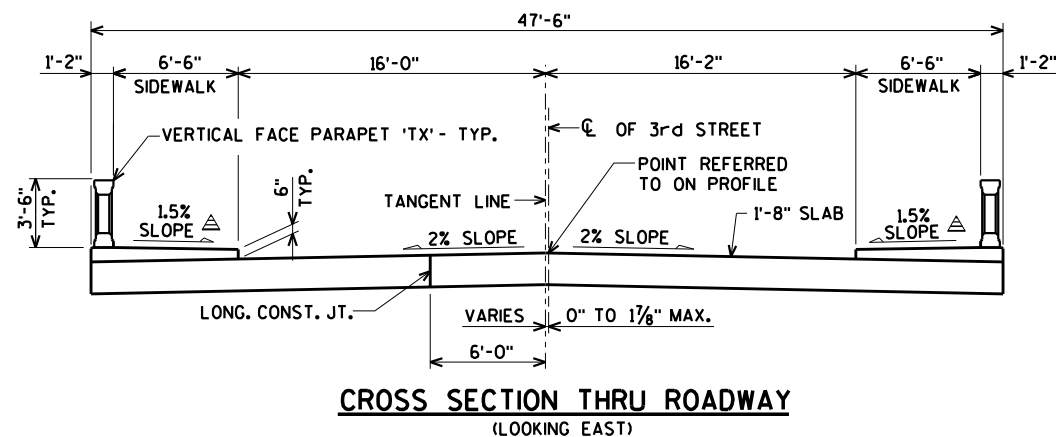
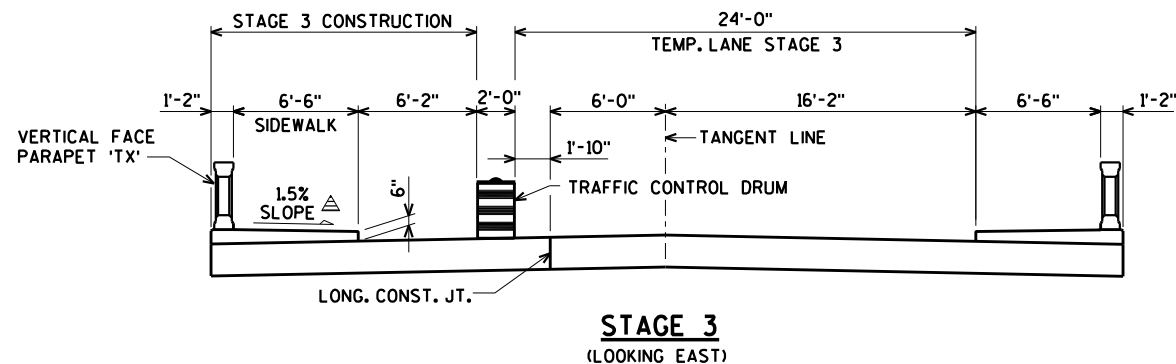
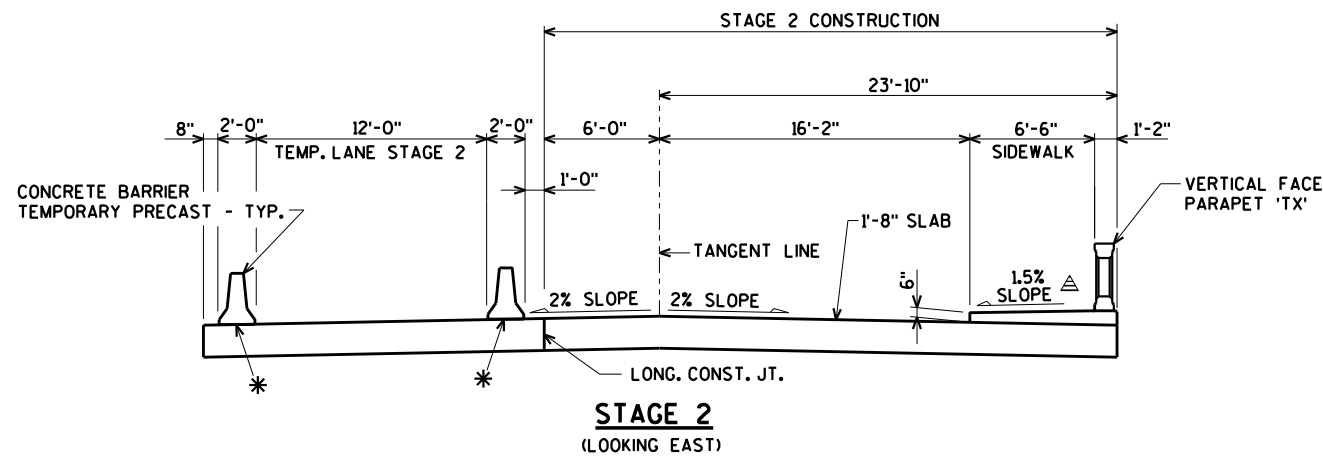
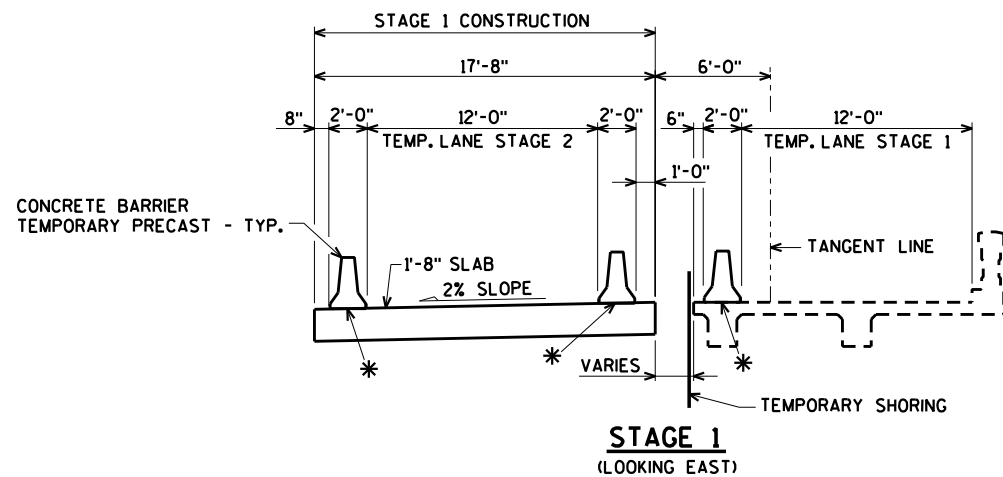
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STATE PROJECT NUMBER

4992-01-71



* TEMPORARY BARRIER WILL NEED TO BE ANCHORED DOWN DURING THIS STAGE.

△ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

8

8

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-323			
DRAWN BY JCK		PLANS CK'D. AEB	
TYPICAL SECTIONS			SHEET 2 OF 14

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

\$PRNAME\$
U:\45-0403.00 - City of Menasha - 3rd Street\BRIDGE\450403 gb.dgn

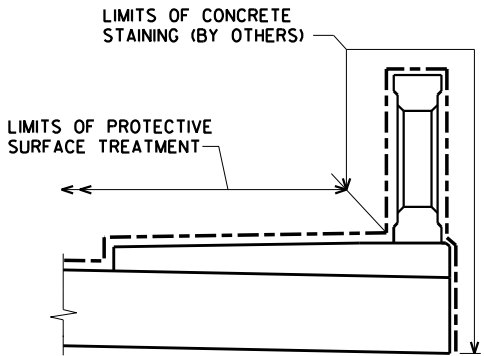
8

STATE PROJECT NUMBER

4992-01-71

TOTAL ESTIMATED QUANTITIES

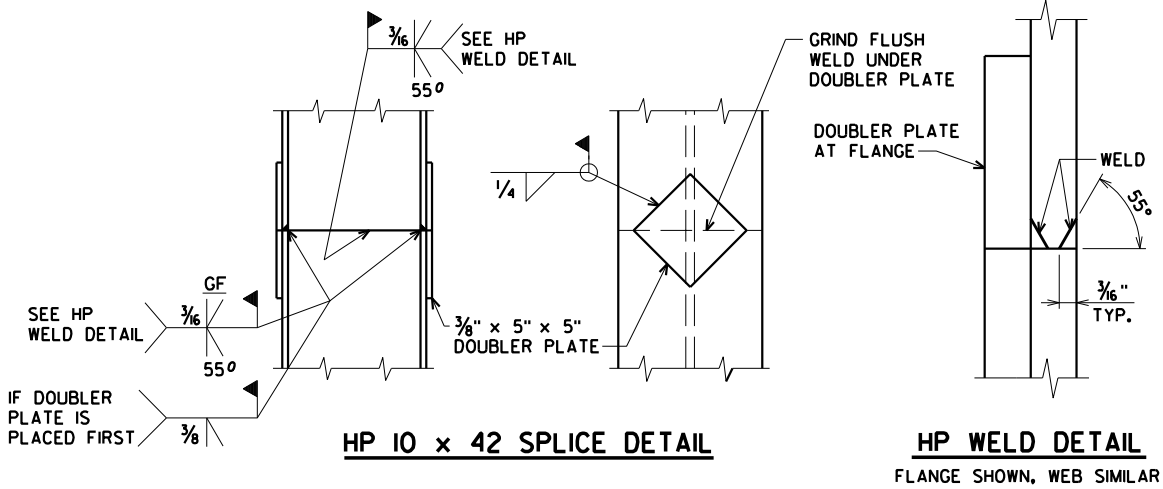
BID ITEM NUMBER	BID ITEMS	UNIT	W. ABUT.	E. ABUT.	SUPER.	TOTAL
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00	LS	-----	-----	-----	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-70-323	LS	-----	-----	-----	1
206.5000	COFFERDAMS B-70-323	LS	-----	-----	-----	1
210.0100	BACKFILL STRUCTURE	CY	110	110	-----	220
502.0100	CONCRETE MASONRY BRIDGES	CY	46	46	135	227
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-----	-----	190	190
502.6102	MASONRY ANCHORS TYPE S 1/2-INCH	EACH	-----	-----	146	146
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,900	2,900	-----	5,800
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2,240	2,240	22,330	26,810
505.0905	BAR COUPLERS NO. 5	EACH	-----	-----	100	100
505.0906	BAR COUPLERS NO. 6	EACH	18	18	-----	36
511.1200	TEMPORARY SHORING B-70-323	SF	55	55	-----	110
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	15	15	-----	30
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIAL	LF	80	80	-----	160
550.0500	PILE POINTS	EACH	8	8	-----	16
550.1100	PILING STEEL HP 10-INCH x 42 LB	LF	96	96	-----	192
606.0300	RIPRAP HEAVY	CY	35	50	-----	85
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	90	90	-----	180
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	75	90	-----	165
	NON-BID ITEMS					
	FILLER	SIZE	-----	-----	-----	1/2" & 3/4"



SURFACE TREATMENT DETAIL

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 NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.
JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.
THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET AND IN THE ABUTMENT DETAILS.
SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURES UNLESS OTHERWISE APPROVED BY THE ENGINEER.
THE EXISTING GROUND LINE SHALL BE THE UPPER LIMIT FOR EXCAVATION FOR STRUCTURES.
THE EXISTING STRUCTURE, P-70-702, TO BE REMOVED, IS A SINGLE SPAN CONCRETE DECK GIRDER BRIDGE, 33.0 FT. LONG WITH A 19.0 FT. CLEAR ROADWAY WIDTH.
AT BACKFACE OF ABUTMENTS ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.
PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED AS SHOWN IN DETAIL ON THIS SHEET.
THE QUANTITY OF BACKFILL STRUCTURE, BID ITEM 210.0100, IS CALCULATED BASED ON APPLICABLE FIGURES 12.6-1 AND 12.6-2 IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL.



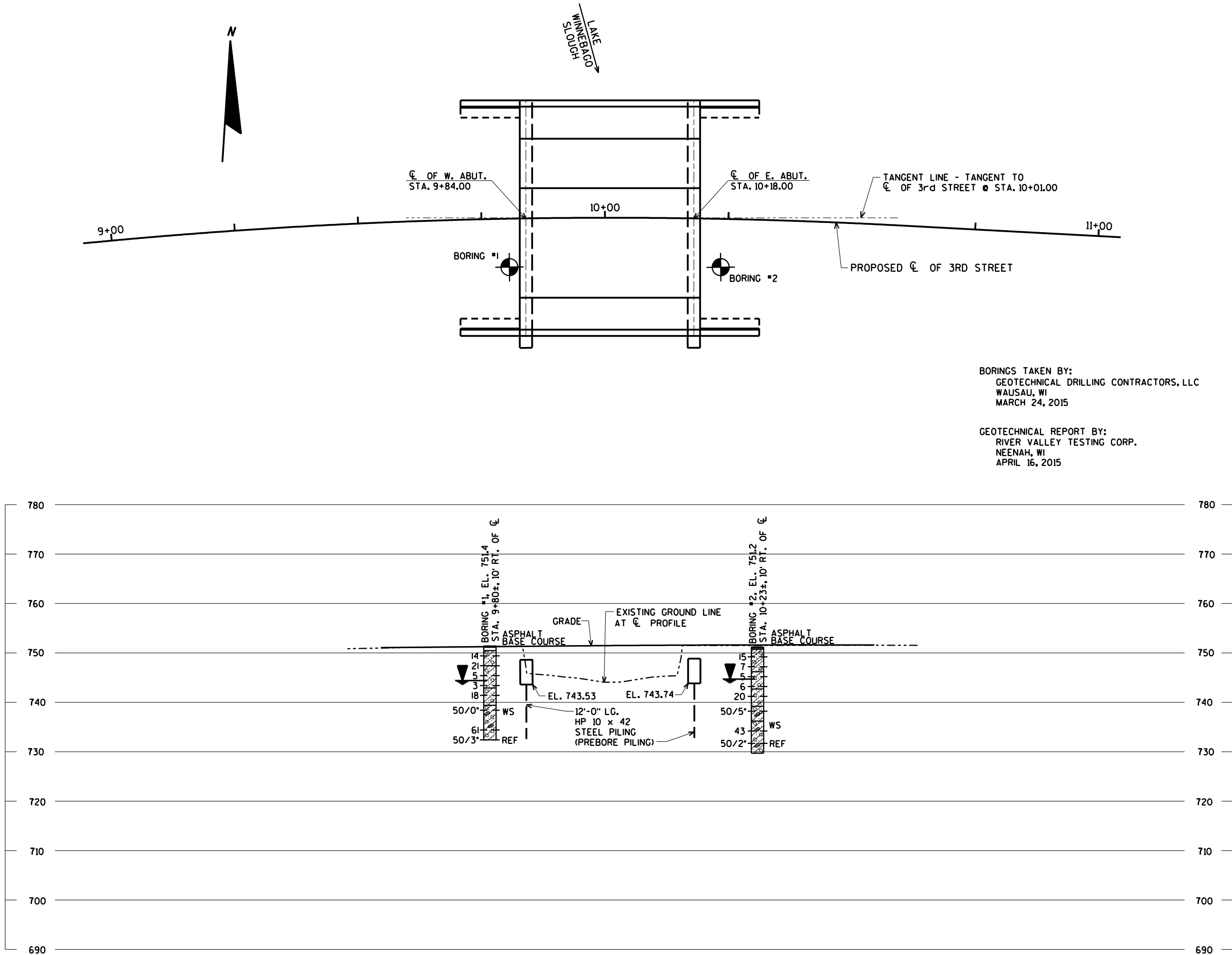
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-323			
DRAWN BY JCK		PLANS CK'D. AEB	
QUANTITIES AND NOTES		SHEET 3 OF 14	

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STATE PROJECT NUMBER

4992-01-71

ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL SILT SANDSTONE
SAND PEAT LIMESTONE
GRAVEL CLAY IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

LEGEND OF BORING

BORING NO.
STA.
ELEV.
UNCONFINED STRENGTH 7.7
BLOWS PER FT. USING 140 lb. WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

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STRUCTURE B-70-323			
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SUBSURFACE EXPLORATION			SHEET 4 OF 14

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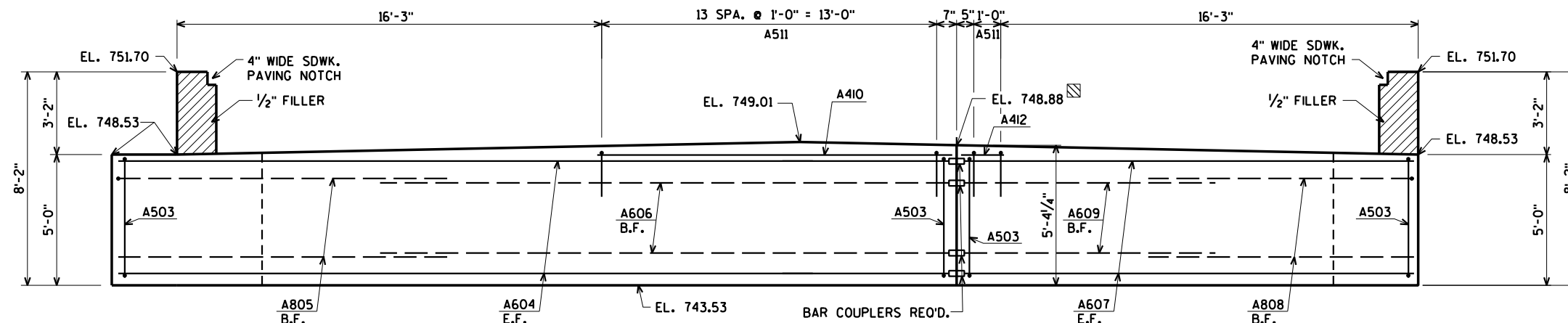
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NOTE: SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF
1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT
SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.)

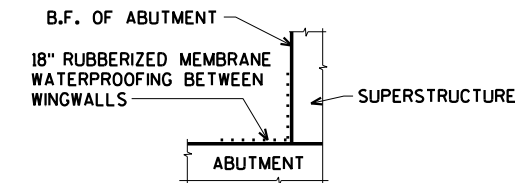
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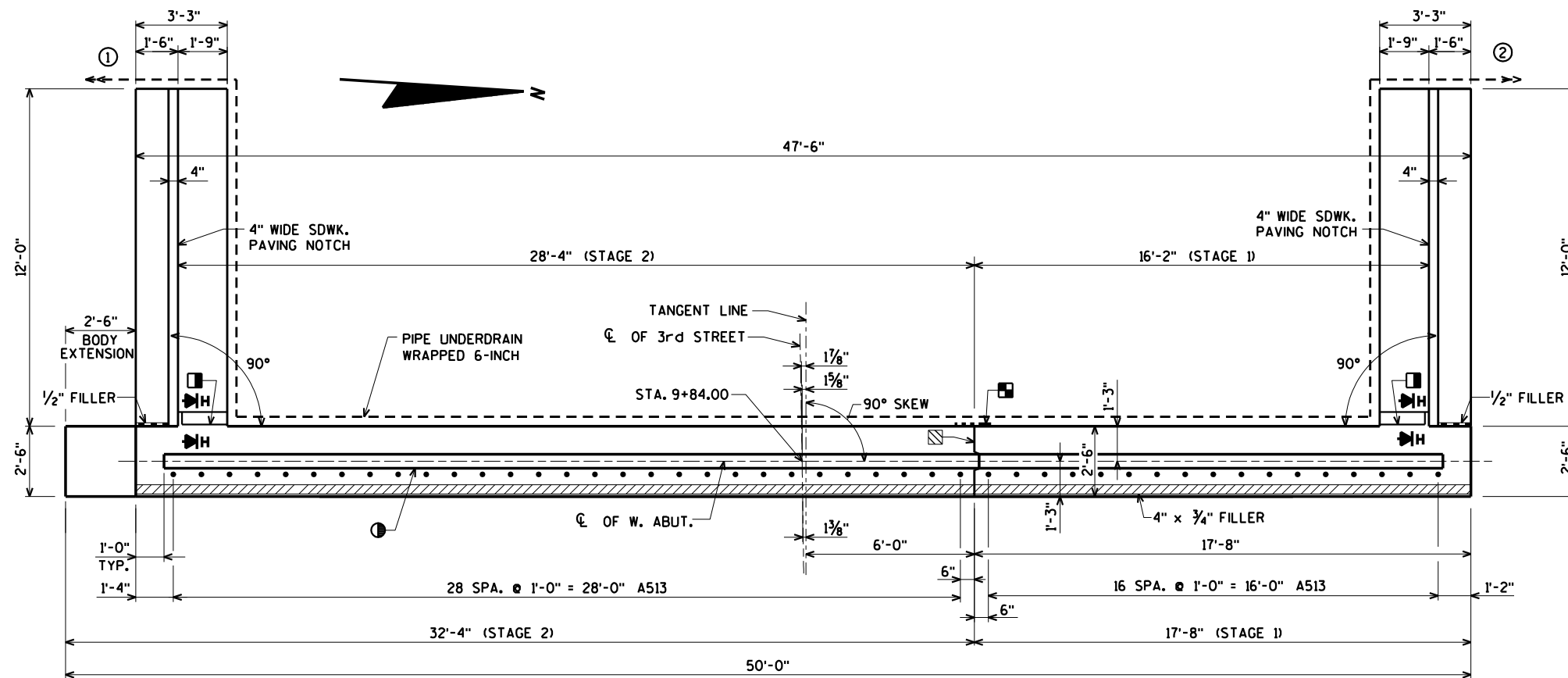


ELEVATION
(LOOKING WEST)

FOR SECTION THRU BODY
SEE SHEET 7



SECTION H



PLAN

- 18" RUBBERIZED MEMBRANE WATERPROOFING FROM BOTTOM OF ABUT. TO TOP OF SUPERSTRUCTURE
 - ▨ VERT. CONST. JT. - KEYWAY FORMED BY A BEVELED 2" x 8". BEVEL EXPOSED EDGES 3/4". SEAL JOINT AT BACK FACE WITH 18" RUBBERIZED MEMBRANE WATERPROOFING
 - ⊙ KEYED CONST. JOINT - FORMED BY A BEVELED 2" x 6"
 - ▨ VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WING WAL
- B.F. DENOTES BACK FACE
E.F. DENOTES EACH FACE

8

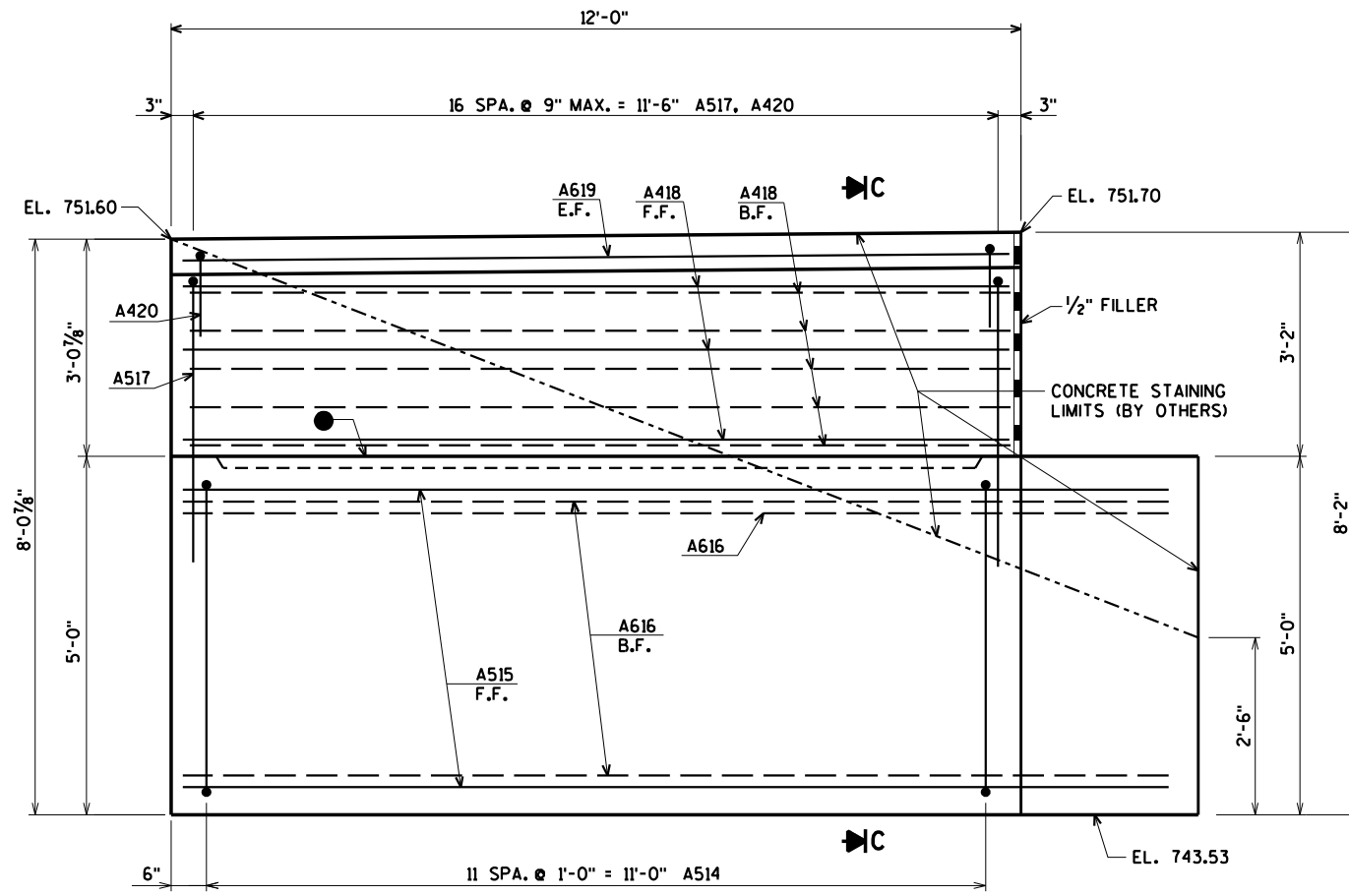
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STRUCTURE B-70-323			
DRAWN BY		CLS	PLANS CK'D. AEB
WEST ABUTMENT			SHEET 5 OF 14

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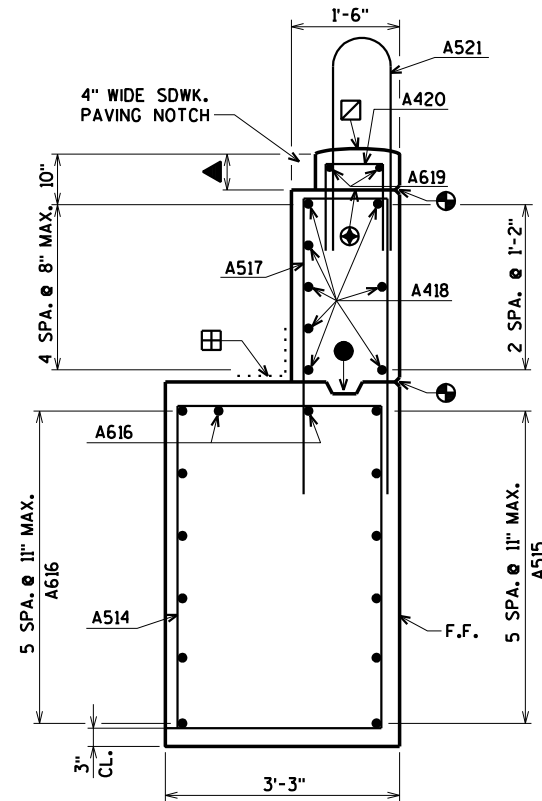
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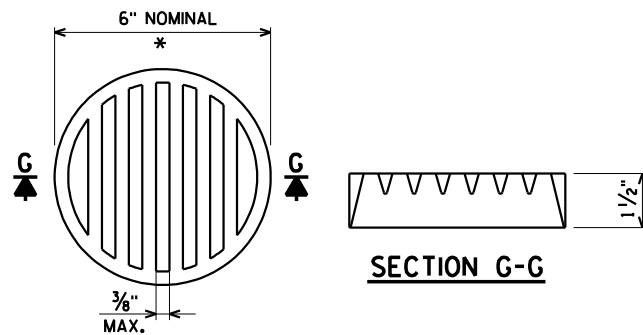
ELEVATION - WING 1
WING 2 SIMILAR



SECTION C

PARAPET NOT SHOWN.
FOR DETAILS SEE SHEET 14

- ◀ MATCH SIDEWALK DEPTH
AT END OF BRIDGE DECK
 - ☐ CONST. JOINT - STRIKE OFF AS SHOWN
AND LEAVE ROUGH.
 - ⊕ 3/4" "V" GROOVE ON FRONT
FACE OF WINGWALL.
 - OPT. KEYED CONST. JOINT - FORMED
BY A SURFACED BEVELED 2" x 6".
 - ☒ 18" RUBBERIZED MEMBRANE WATERPROOFING
ON BACK FACE. NOT REQUIRED IF CONST.
JT. IS NOT USED.
 - ⊕ OPT. CONST. JT. LEAVE ROUGH. IF USED,
UTILIZE RUBBERIZED MEMBRANE WATERPROOFING
(COST INCIDENTAL TO BID ITEM "CONCRETE
MASONRY BRIDGES").
- B.F. DENOTES BACK FACE.
F.F. DENOTES FRONT FACE.
E.F. DENOTES EACH FACE.



SECTION G-G

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

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

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL.
THE GRATE IS COMMERCIALY 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.

RODENT SHIELD DETAIL

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WEST ABUTMENT WING DETAILS			SHEET 6 OF 14

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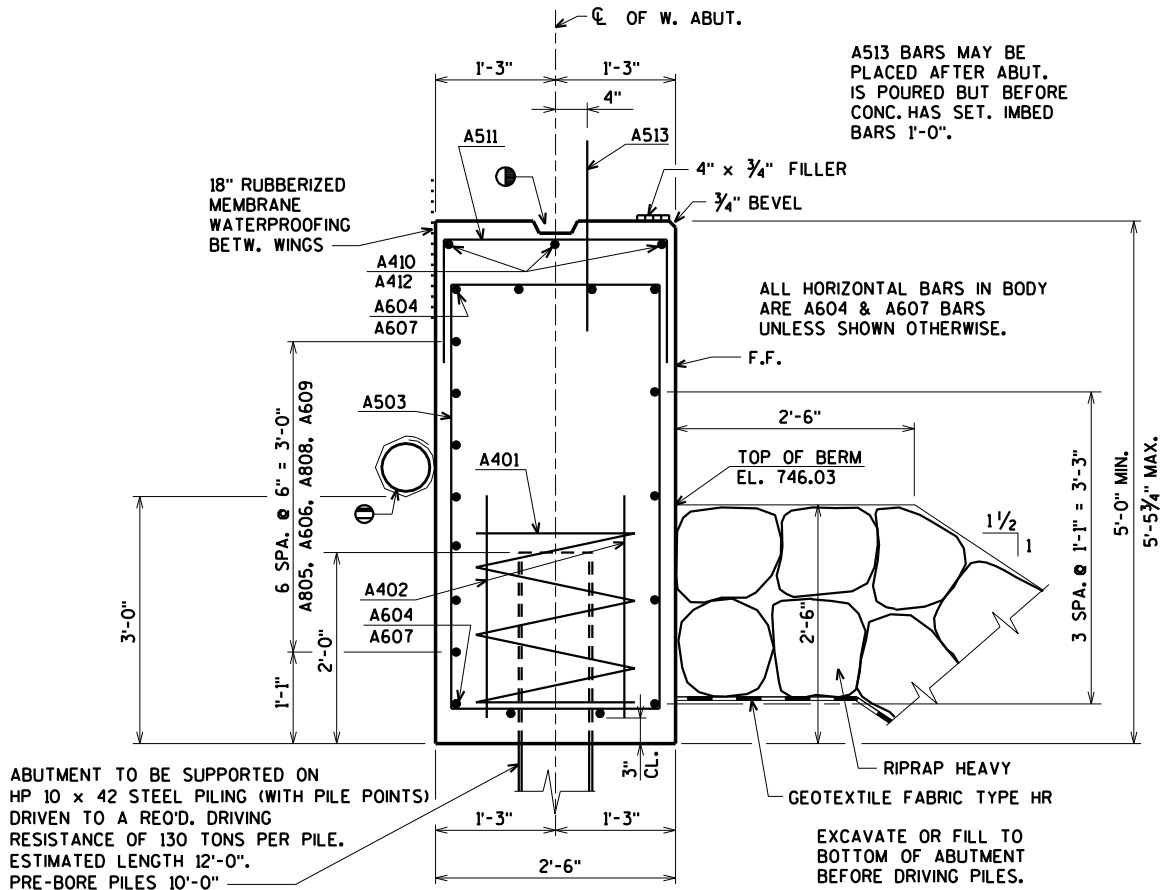
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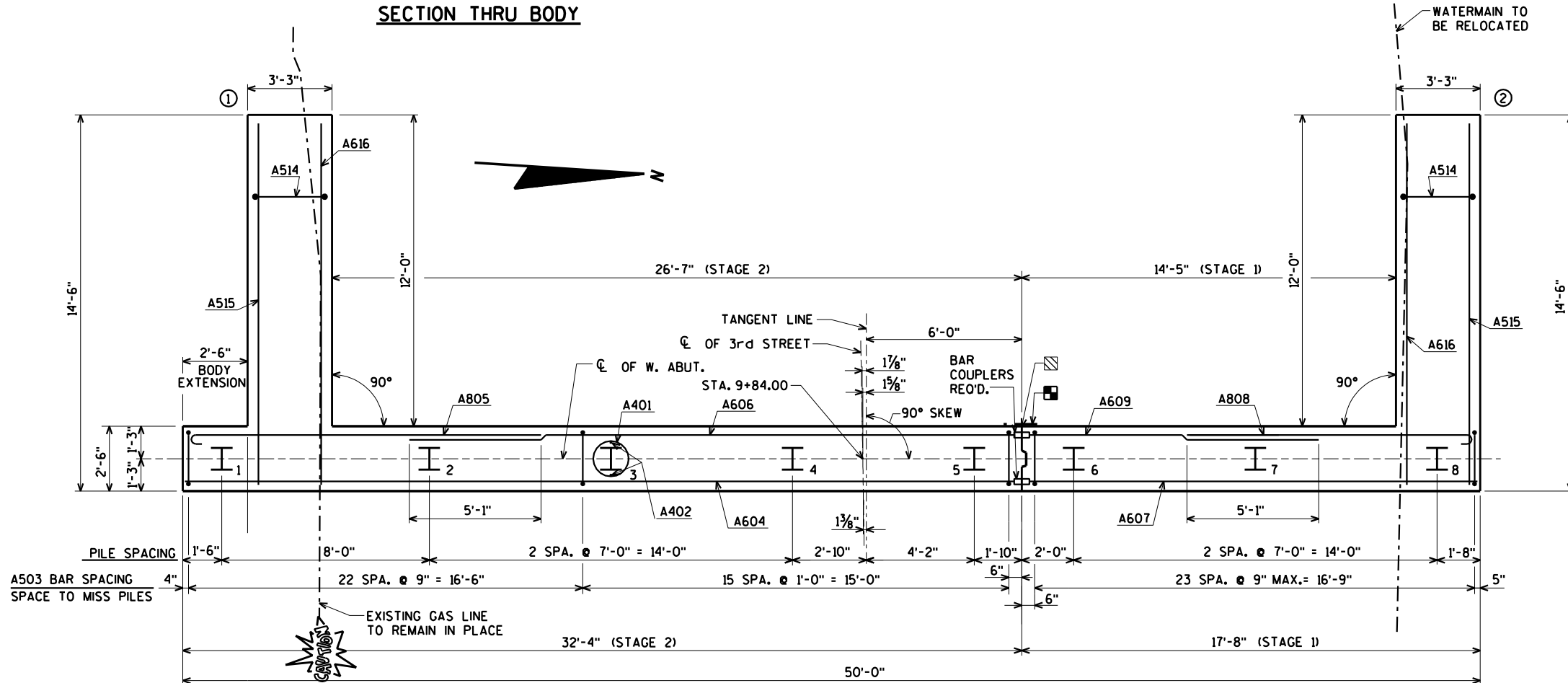
BILL OF BARS

BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLE	BAR SERIES	2,900* UNCOATED 2,240* COATED
							LOCATION
A401		8	28-0	X			BODY @ PILES
A402		16	2-3				BODY @ PILES
A503		62	13-10	X			BODY VERT.
A604		11	32-2				BODY HORIZ. STAGE 2
A805		7	15-8	X			BODY HORIZ. @ WING 1 B.F. STAGE 2
A606		7	22-9				BODY HORIZ. BETW. WINGS B.F. STAGE 2
A607		11	17-6				BODY HORIZ. STAGE 1
A808		7	13-2	X			BODY HORIZ. @ WING 2 B.F. STAGE 1
A609		7	10-7				BODY HORIZ. BETW. WINGS B.F. STAGE 1
A410		3	13-7				BODY HORIZ. TOP STAGE 2
A511		16	5-4	X			BODY VERT. TOP
A412		3	1-5				BODY HORIZ. TOP STAGE 1
A513	X	46	2-0				BODY DOWELS
A514	X	24	15-6	X			WINGS VERT.
A515	X	12	14-2				WINGS HORIZ. F.F.
A616	X	16	14-2				WINGS HORIZ.
A517	X	34	9-11	X			WINGS VERT.
A418	X	16	11-8				WINGS HORIZ. E.F.
A619	X	4	11-8				WINGS HORIZ. E.F.
A420	X	34	4-0	X			WINGS VERT.
A521	X	34	4-4	X			PARAPET VERT.
A522	X	4	11-8				PARAPET HORIZ. BOT.
A523	X	34	8-6	X			PARAPET VERT.
A724	X	4	11-8				PARAPET HORIZ. TOP

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



SECTION THRU BODY



PILE LAYOUT

- 18" RUBBERIZED MEMBRANE WATERPROOFING FROM BOTTOM OF ABUT. TO TOP OF SUPERSTRUCTURE
- VERT. CONST. JT. - KEYWAY FORMED BY A BEVELED 2" x 8". BEVEL EXPOSED EDGES 3/4". SEAL JOINT AT BACK FACE WITH 18" RUBBERIZED MEMBRANE WATERPROOFING
- BAR COUPLER REQUIRED. BAR LENGTHS ARE COMPUTED TO CL OF CONSTRUCTION JOINT AND SHALL BE MODIFIED TO THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.
- KEYED CONST. JOINT - FORMED BY A BEVELED 2" x 6"
- PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. FOR RODENT SHIELD DETAIL SEE SHEET 6.
- FOR PILE SPlice DETAIL SEE SHEET 3
- B.F. DENOTES BACK FACE
- E.F. DENOTES EACH FACE
- F.F. DENOTES FRONT FACE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-323			
DRAWN BY		CLS	PLANS CK'D. AEB
WEST ABUTMENT		SHEET 7 OF 14	
BILL OF BARS			

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www.AyresAssociates.com

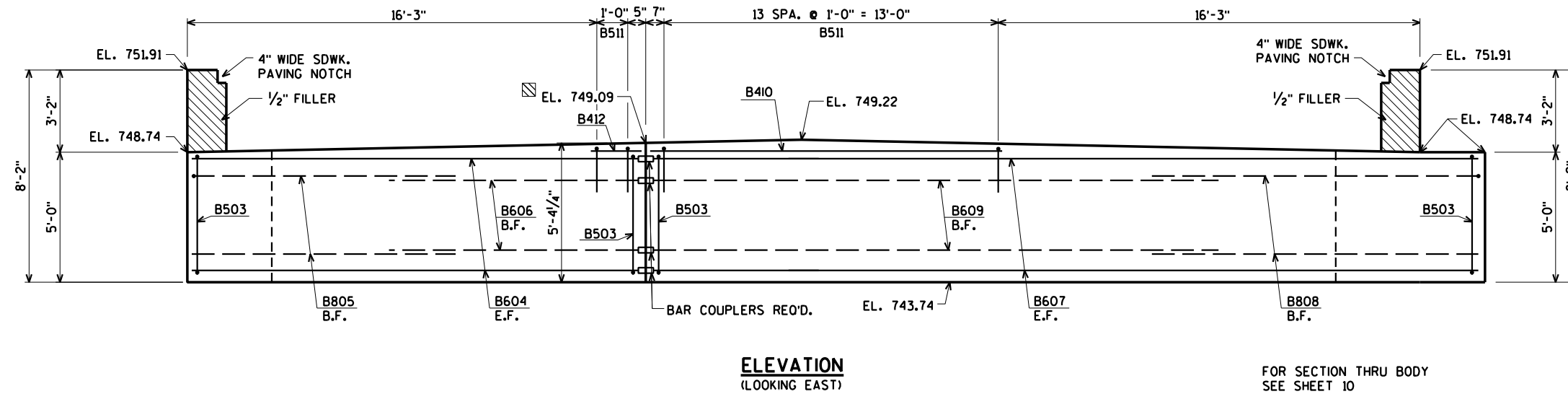
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8

NOTE: SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF
1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT
SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.)

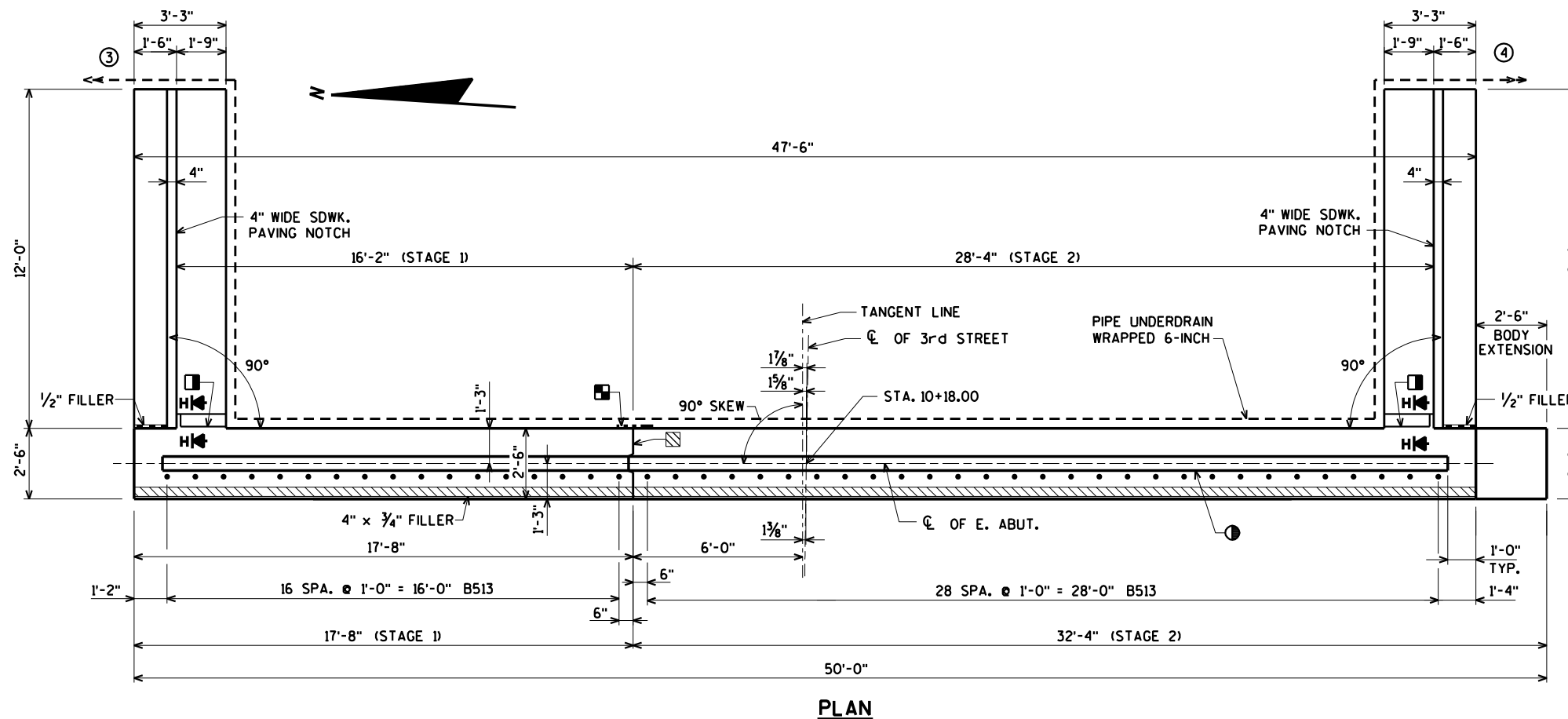
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B.F. OF ABUTMENT
18" RUBBERIZED MEMBRANE
WATERPROOFING BETWEEN
WINGWALLS
SUPERSTRUCTURE
ABUTMENT

SECTION H



PLAN

- 18" RUBBERIZED MEMBRANE WATERPROOFING FROM BOTTOM OF ABUT. TO TOP OF SUPERSTRUCTURE
 - VERT. CONST. JT. - KEYWAY FORMED BY A BEVELED 2" x 8". BEVEL EXPOSED EDGES 3/4". SEAL JOINT AT BACK FACE WITH 18" RUBBERIZED MEMBRANE WATERPROOFING
 - KEYED CONST. JOINT - FORMED BY A BEVELED 2" x 6"
 - VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WING WAL
- B.F. DENOTES BACK FACE
E.F. DENOTES EACH FACE

8

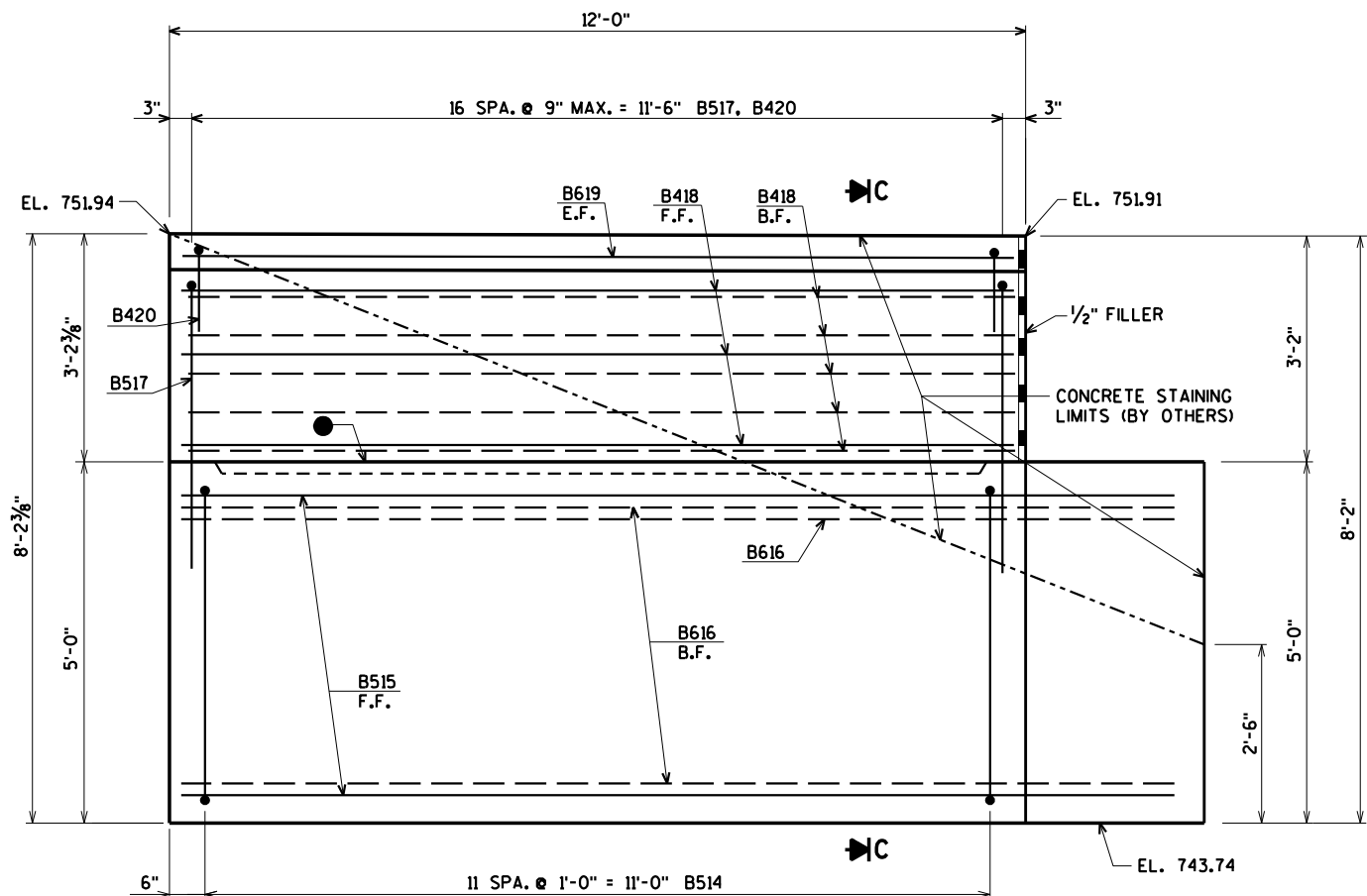
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STRUCTURE B-70-323			
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EAST ABUTMENT			SHEET 8 OF 14

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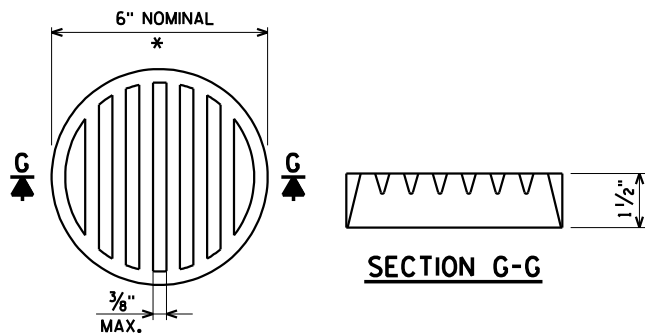
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ELEVATION - WING 3
WING 4 SIMILAR

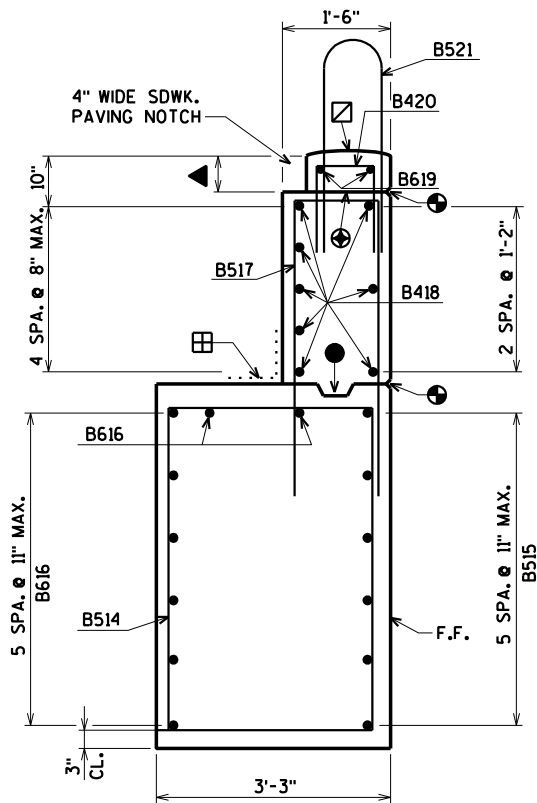


* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

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

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY 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.

RODENT SHIELD DETAIL



PARAPET NOT SHOWN.
FOR DETAILS SEE SHEET 14

SECTION C

- ◀ MATCH SIDEWALK DEPTH AT END OF BRIDGE DECK
 - ☑ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.
 - ⊕ 3/4" "V" GROOVE ON FRONT FACE OF WINGWALL.
 - OPT. KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" x 6".
 - ⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING ON BACK FACE. NOT REQUIRED IF CONST. JT. IS NOT USED.
 - ⊕ OPT. CONST. JT. LEAVE ROUGH. IF USED, UTILIZE RUBBERIZED MEMBRANE WATERPROOFING (COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES").
- B.F. DENOTES BACK FACE.
- F.F. DENOTES FRONT FACE.
- E.F. DENOTES EACH FACE.

8

8

NO.	DATE	REVISION	BY
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STRUCTURE B-70-323			
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EAST ABUTMENT WING DETAILS			SHEET 9 OF 14

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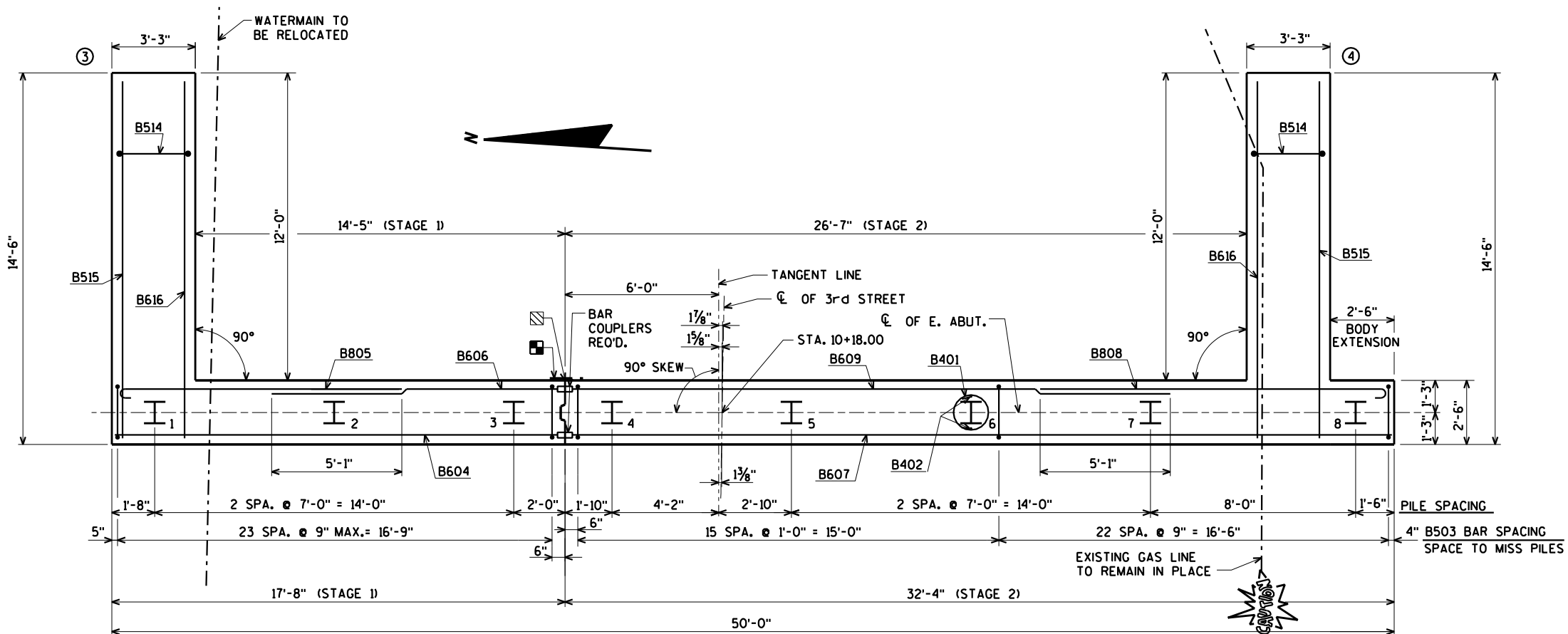
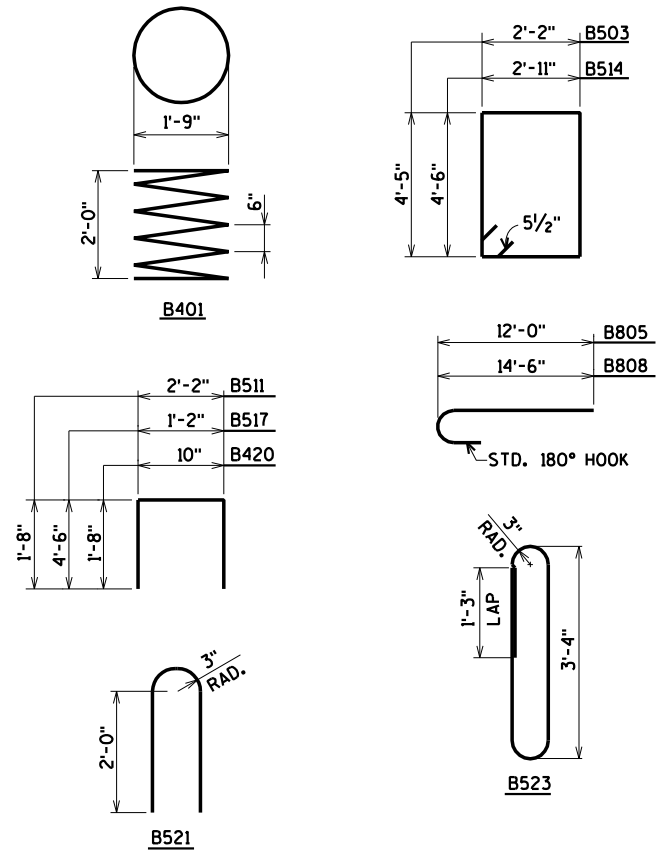
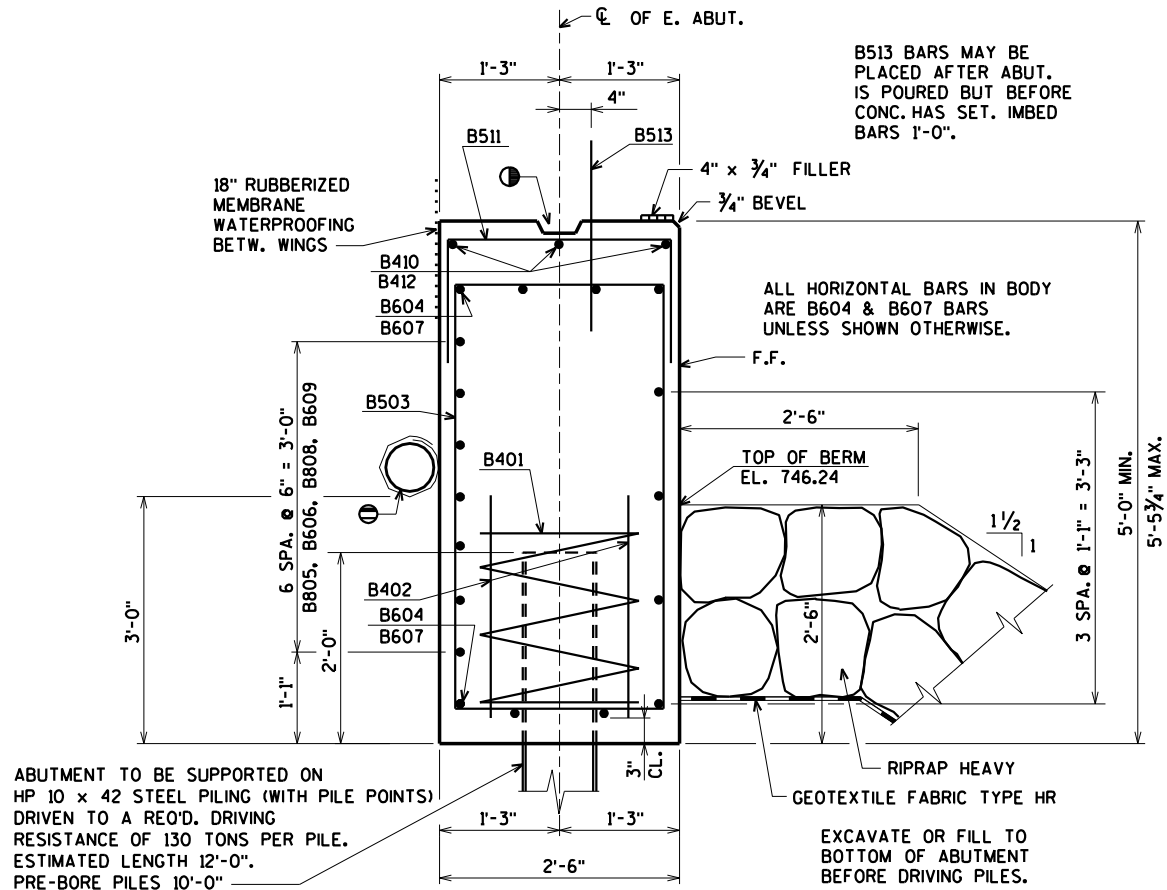
STATE PROJECT NUMBER

4992-01-71

BILL OF BARS

BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	2,900* UNCOATED 2,240* COATED
							LOCATION
B401		8	28-0	X			BODY @ PILES
B402		16	2-3				BODY @ PILES
B503		62	13-10	X			BODY VERT.
B604		11	17-6				BODY HORIZ. STAGE 1
B805		7	13-2	X			BODY HORIZ. @ WING 3 B.F. STAGE 1
B606		7	10-7				BODY HORIZ. BETW. WINGS B.F. STAGE 1
B607		11	32-2				BODY HORIZ. STAGE 2
B808		7	15-8	X			BODY HORIZ. @ WING 4 B.F. STAGE 2
B609		7	22-9				BODY HORIZ. BETW. WINGS B.F. STAGE 2
B410		3	13-7				BODY HORIZ. TOP STAGE 2
B511		16	5-4	X			BODY VERT. TOP
B412		3	1-5				BODY HORIZ. TOP STAGE 1
B513	X	46	2-0				BODY DOWELS
B514	X	24	15-6	X			WINGS VERT.
B515	X	12	14-2				WINGS HORIZ. F.F.
B616	X	16	14-2				WINGS HORIZ.
B517	X	34	9-11	X			WINGS VERT.
B418	X	16	11-8				WINGS HORIZ. E.F.
B619	X	4	11-8				WINGS HORIZ. E.F.
B420	X	34	4-0	X			WINGS VERT.
B521	X	34	4-4	X			PARAPET VERT.
B522	X	4	11-8				PARAPET HORIZ. BOT.
B523	X	34	8-6	X			PARAPET VERT.
B724	X	4	11-8				PARAPET HORIZ. TOP

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



18" RUBBERIZED MEMBRANE WATERPROOFING FROM BOTTOM OF ABUT. TO TOP OF SUPERSTRUCTURE

VERT. CONST. JT. - KEYWAY FORMED BY A BEVELED 2" x 8". BEVEL EXPOSED EDGES 3/4". SEAL JOINT AT BACK FACE WITH 18" RUBBERIZED MEMBRANE WATERPROOFING

BAR COUPLER REQUIRED. BAR LENGTHS ARE COMPUTED TO CL OF CONSTRUCTION JOINT AND SHALL BE MODIFIED TO THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.

KEYED CONST. JOINT - FORMED BY A BEVELED 2" x 6"

PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. FOR RODENT SHIELD DETAIL SEE SHEET 9.

FOR PILE SPlice DETAIL SEE SHEET 3

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

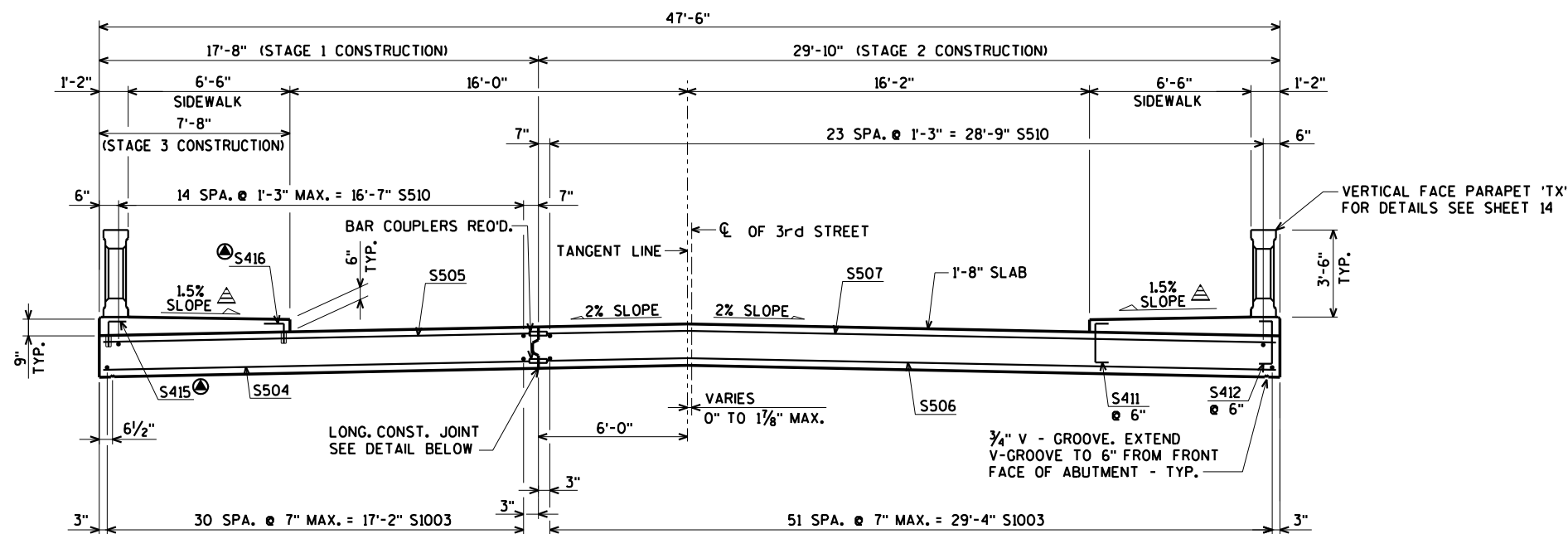
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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-323			
DRAWN BY		CLS	PLANS CK'D. AEB
EAST ABUTMENT BILL OF BARS			SHEET 10 OF 14

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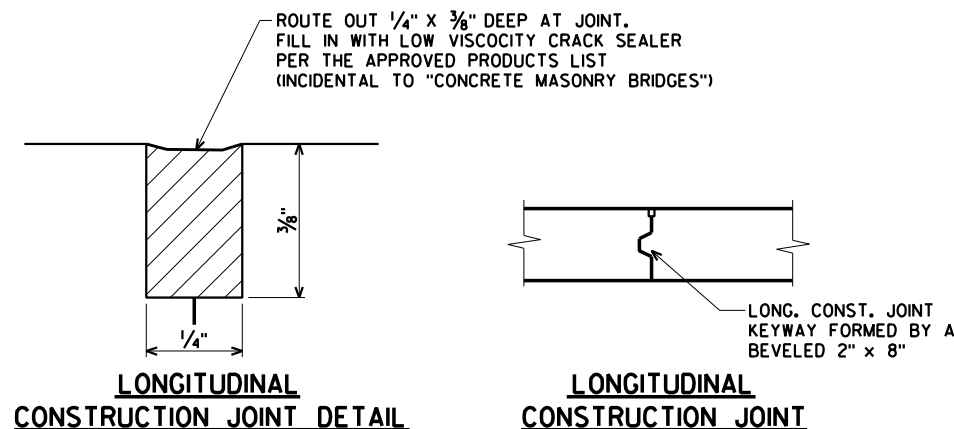
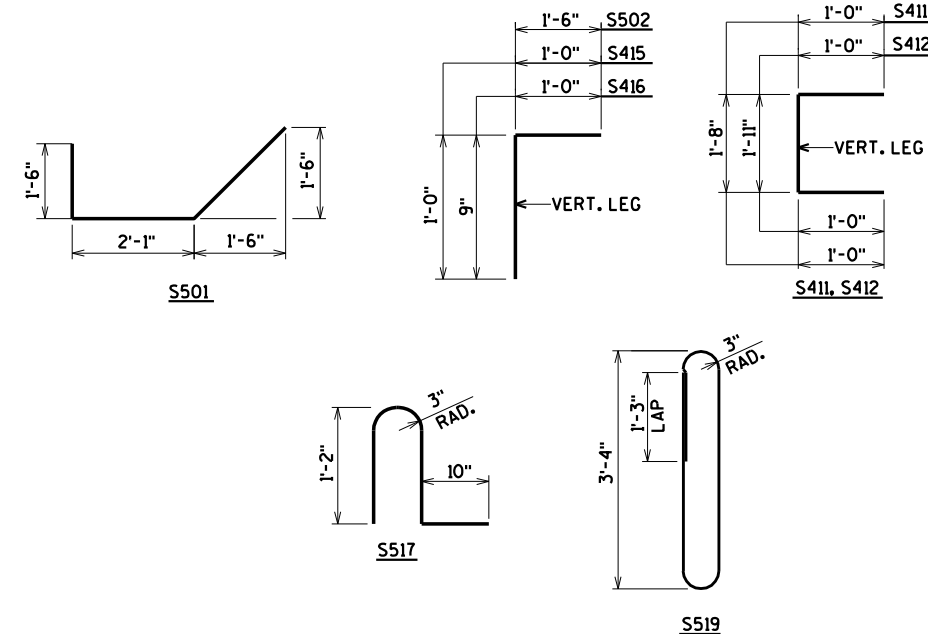
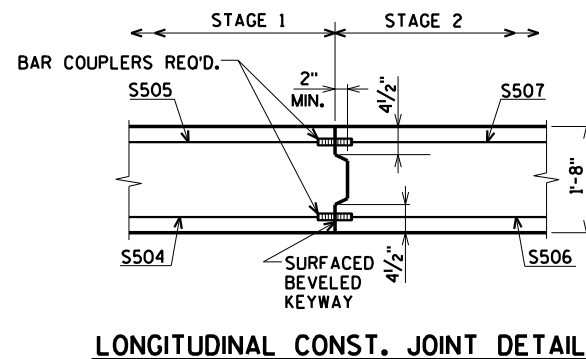
4992-01-71



BILL OF BARS

BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLE	BAR SERIES	22,330# COATED
							LOCATION
S501	X	98	5-7	X			SLAB @ ABUT.
S502	X	98	3-4	X			SLAB @ ABUT.
S1003	X	83	31-4				SLAB LONG. BOT.
S504	X	52	17-6				SLAB TRANS. BOT. STAGE 1
S505	X	48	17-6				SLAB TRANS. TOP STAGE 1
S506	X	52	29-8				SLAB TRANS. BOT. STAGE 2
S507	X	48	29-8				SLAB TRANS. TOP STAGE 2
S510	X	39	36-2				SLAB LONG. TOP
S411	X	73	3-6	X			SLAB @ SDWK. STAGE 2
S412	X	73	3-9	X			SLAB @ SDWK. STAGE 2
S513	X	146	7-3	X			SDWK. TRANS. TOP
S414	X	22	36-2				SDWK. LONG. TOP
S415	X	73	1-11	X			SLAB @ SDWK. STAGE 3
S416	X	73	1-8	X			SLAB @ SDWK. STAGE 3
S517	X	98	3-4	X			PARAPET VERT. @ SDWK.
S518	X	4	36-2	X			PARAPET HORIZ. BOT.
S519	X	100	8-6				PARAPET VERT.
ST20	X	4	36-2				PARAPET HORIZ. TOP

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



- ⊗ BAR COUPLER REQUIRED. BAR LENGTHS ARE COMPUTED TO CL OF CONSTRUCTION JOINT AND SHALL BE MODIFIED TO THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.
- ⊙ MASONRY ANCHORS TYPE S 1/2-INCH.
- ± 0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 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 (+).

PARAPETS AND SIDEWALKS SHOWN PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

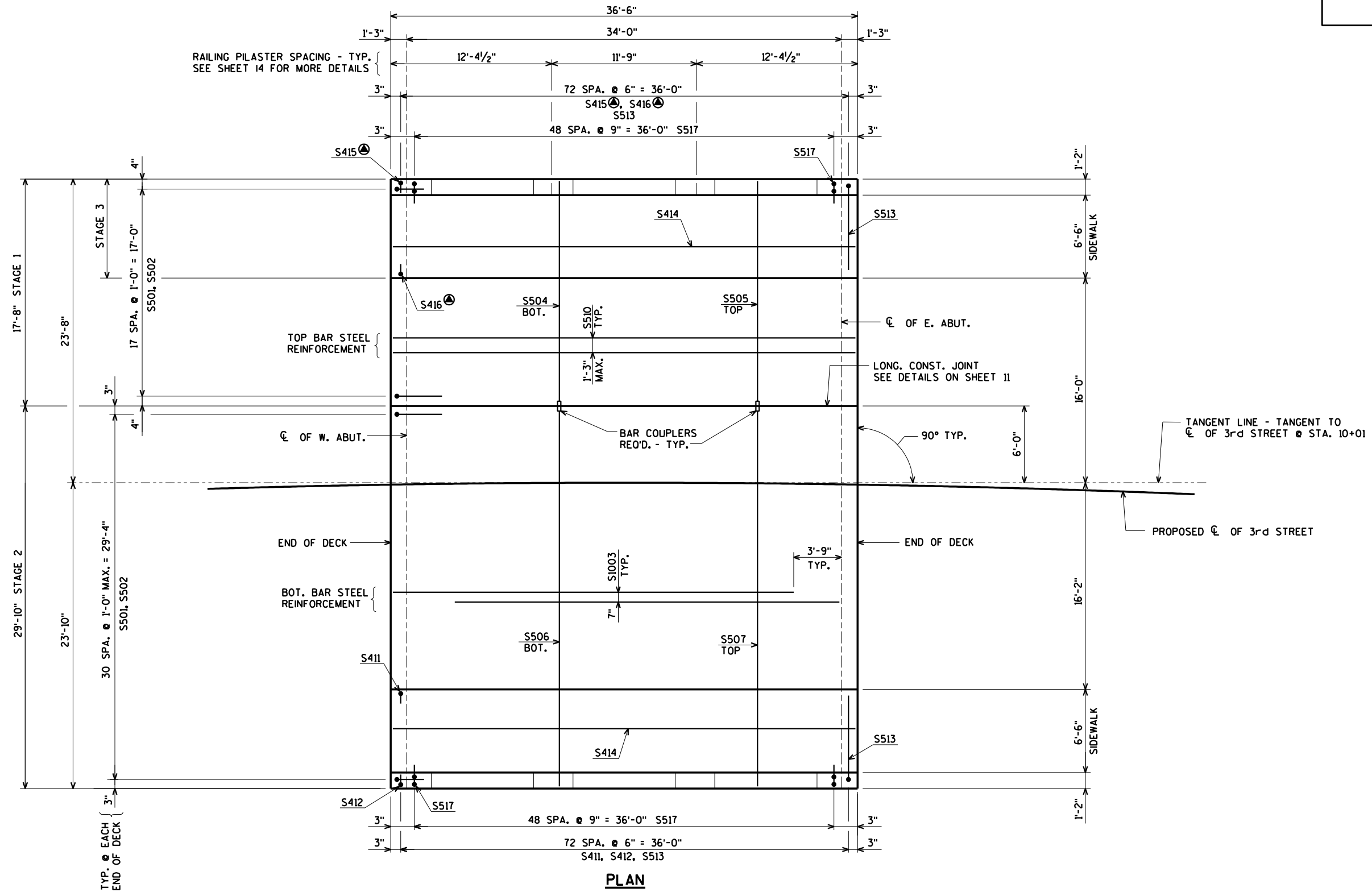
ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-323			
DRAWN BY		CLS	PLANS CK'D. AEB
SUPERSTRUCTURE			SHEET 11 OF 14

\$PRNAME\$
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STATE PROJECT NUMBER

4992-01-71



TOP OF DECK ELEVATIONS

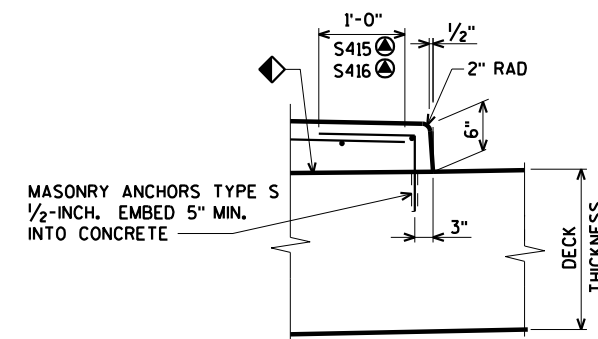
LOCATION	CL OF W. ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	CL OF E. ABUT.
N. EDGE OF SLAB	750.95	750.98	751.00	751.03	751.05	751.08	751.10	751.11	751.13	751.15	751.16
LONG. CONST. JOINT	751.31	751.33	751.36	751.38	751.41	751.43	751.45	751.47	751.49	751.50	751.51
CL OF STRUCTURE	751.43	751.45	751.48	751.50	751.53	751.55	751.57	751.59	751.61	751.62	751.63
S. EDGE OF SLAB	750.95	750.98	751.00	751.03	751.05	751.08	751.10	751.11	751.13	751.15	751.16

ELEVATIONS SHOWN ARE FINISHED DECK AND DO NOT INCLUDE
ALLOWANCES OF DEAD LOAD DEFLECTION AND FUTURE CREEP.

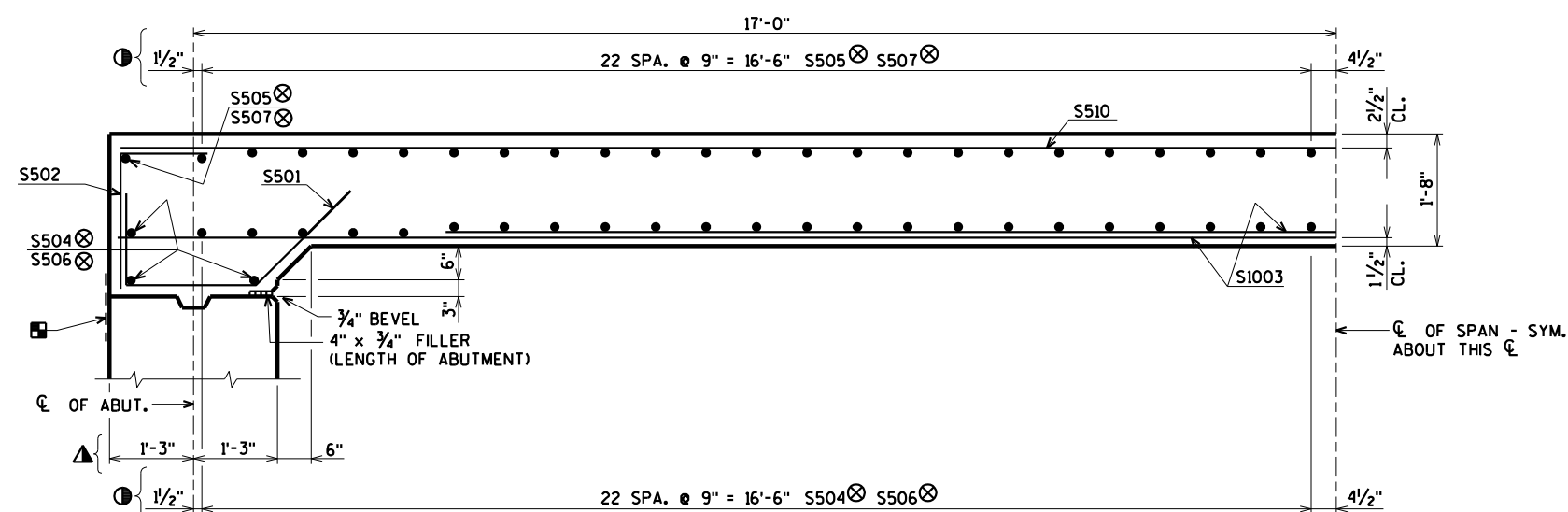
MASONRY ANCHORS TYPE S 1/2-INCH

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

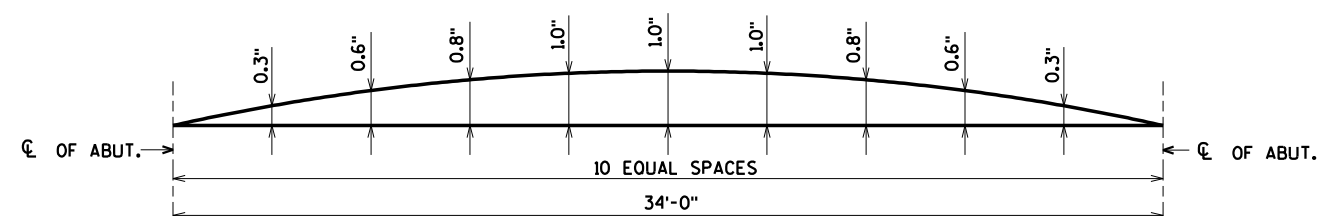
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-323			
DRAWN BY		CLS	PLANS CK'D. AEB
SUPERSTRUCTURE PLAN			SHEET 12 OF 14



ANCHOR DETAIL - STAGE 3



PART LONGITUDINAL SECTION



CAMBER DIAGRAM

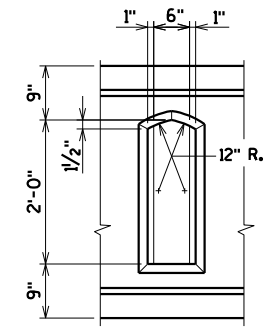
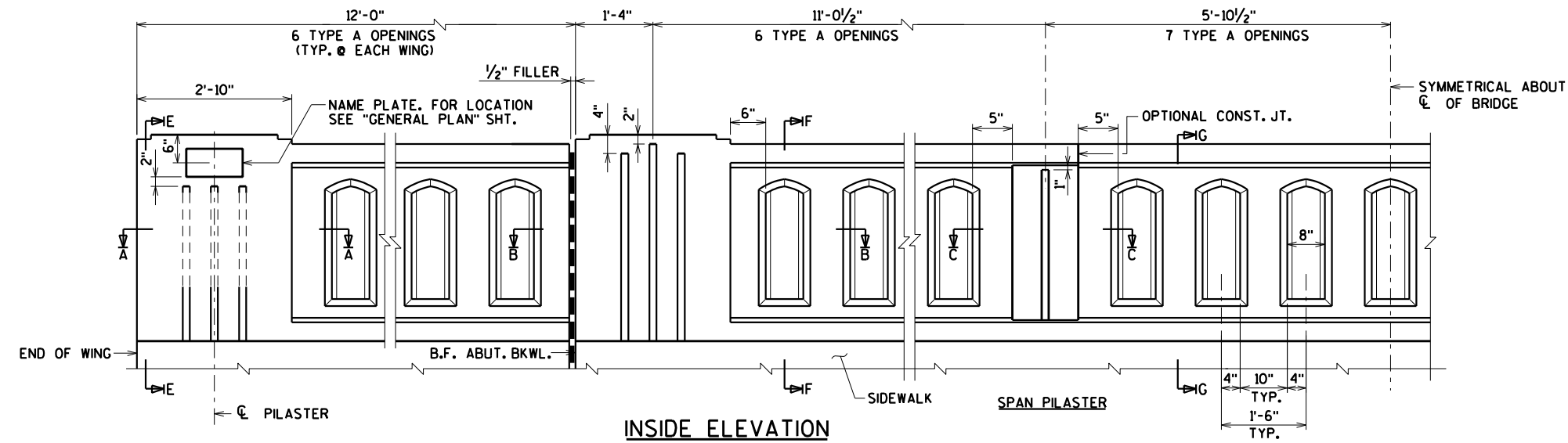
PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C OF ABUTMENTS AND 5/10 POINTS TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND CROWN OR C.

- △ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ☑ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE X-SLOPE.
- ◀ CONST. JOINT - STRIKE OFF AS SHOWN AND KEEP SMOOTH. FOR DECK POUR, MATCH BRIDGE X-SLOPE.
- ⊙ MASONRY ANCHORS TYPE S 1/2-INCH
- ⊗ BAR COUPLER REQUIRED. BAR LENGTHS ARE COMPUTED TO ℄ OF CONSTRUCTION JOINT AND SHALL BE MODIFIED TO THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.
- 18" RUBBERIZED MEMBRANE WATERPROOFING
- ① DIMENSIONS MEASURED ALONG TANGENT LINE.
- ▲ DIMENSIONS MEASURED NORMAL TO ℄ OF SUBSTRUCTURE.

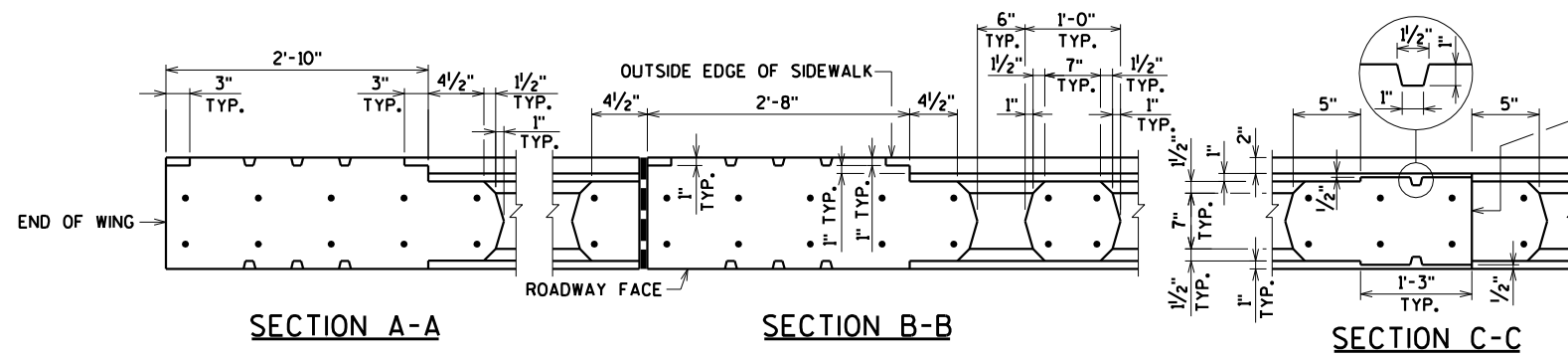
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-323			
		DRAWN BY	CLS PLANS CK'D. AEB
SUPERSTRUCTURE DETAILS		SHEET 13 OF 14	

\$PRNAME\$
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8



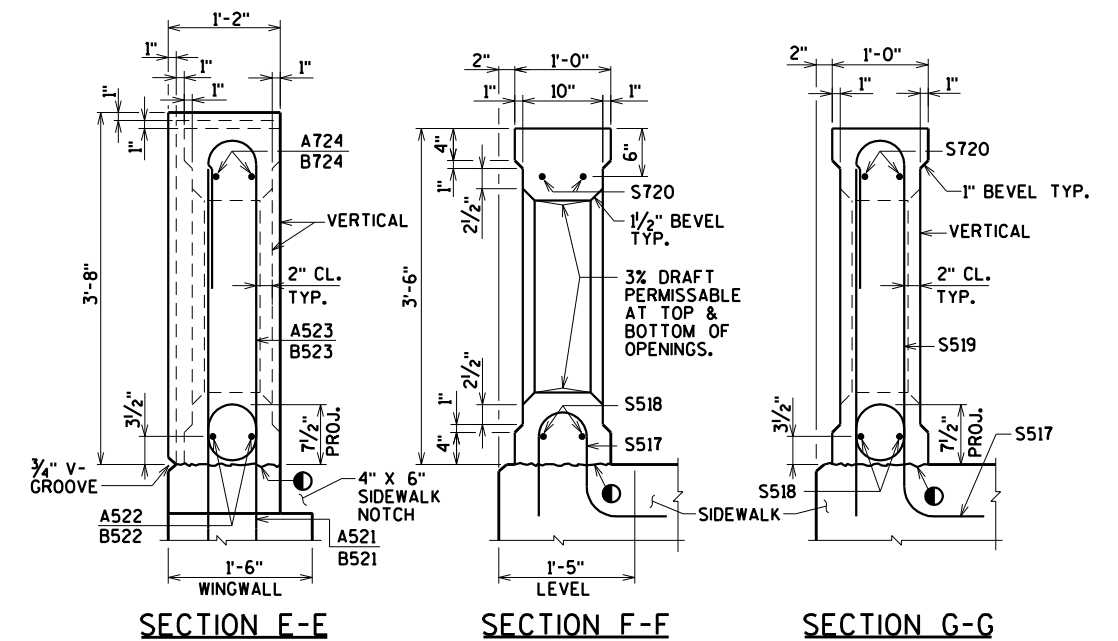
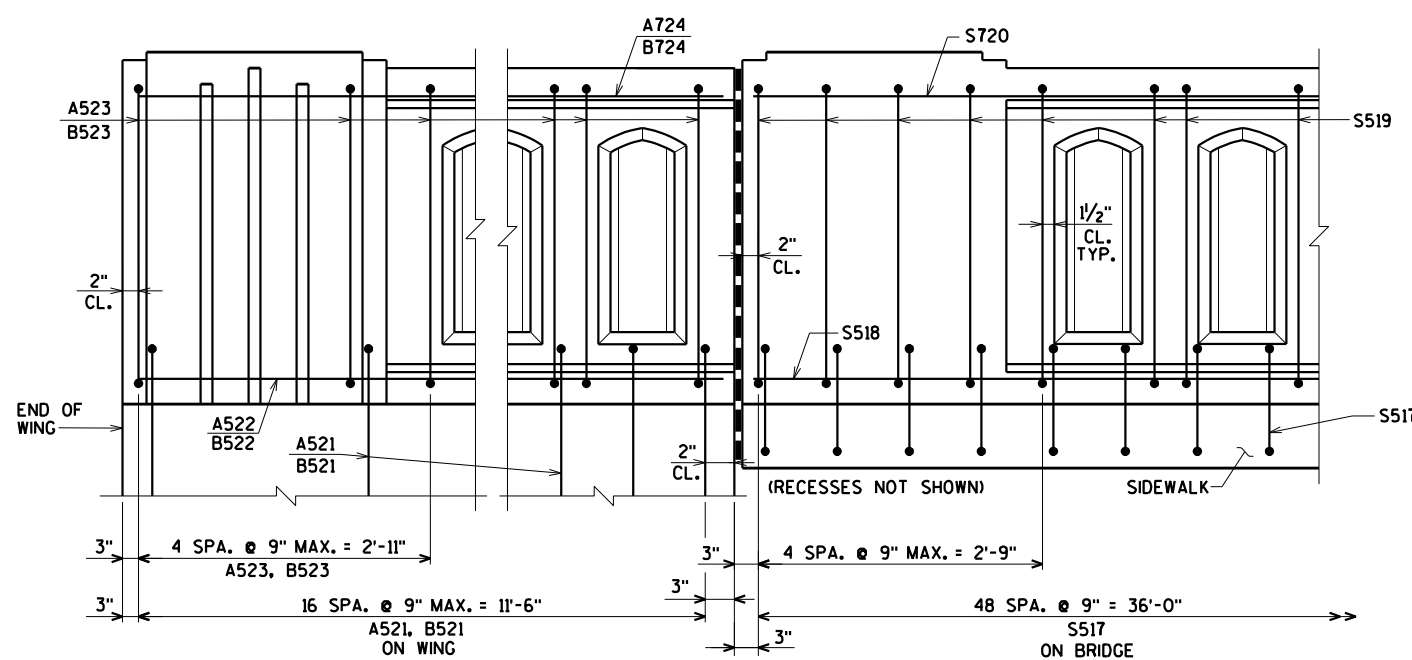
TYPE A OPENING



NOTES:

BID ITEM SHALL BE "PARAPET CONCRETE TYPE TX", WHICH SHALL INCLUDE ALL ITEMS SHOWN

1 CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH



8

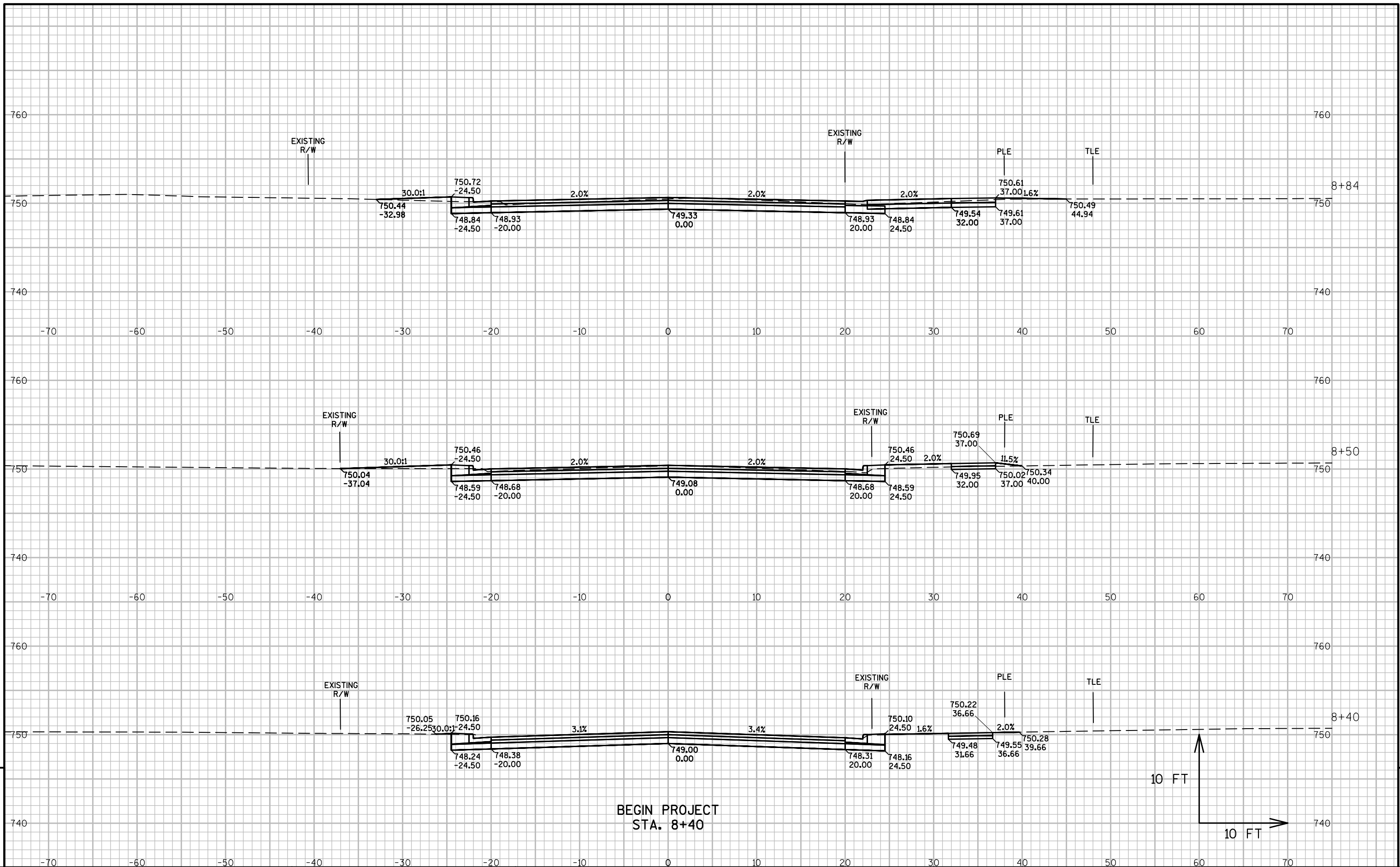
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-323			
DRAWN BY		CLS	PLANS CK'D. AEB
VERTICAL FACE PARAPET 'TX'			SHEET 14 OF 14

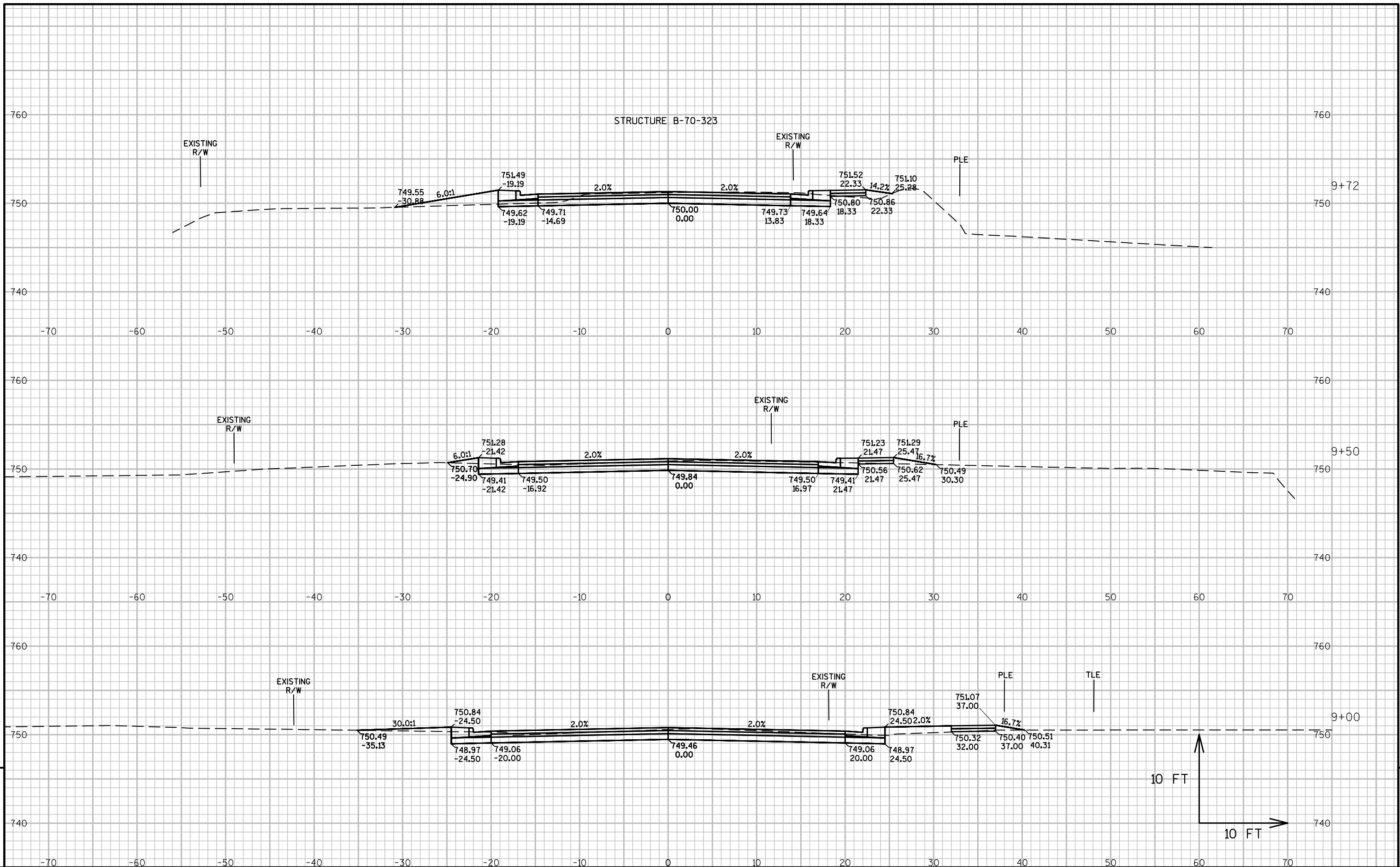
EARTHWORK - THIRD STREET

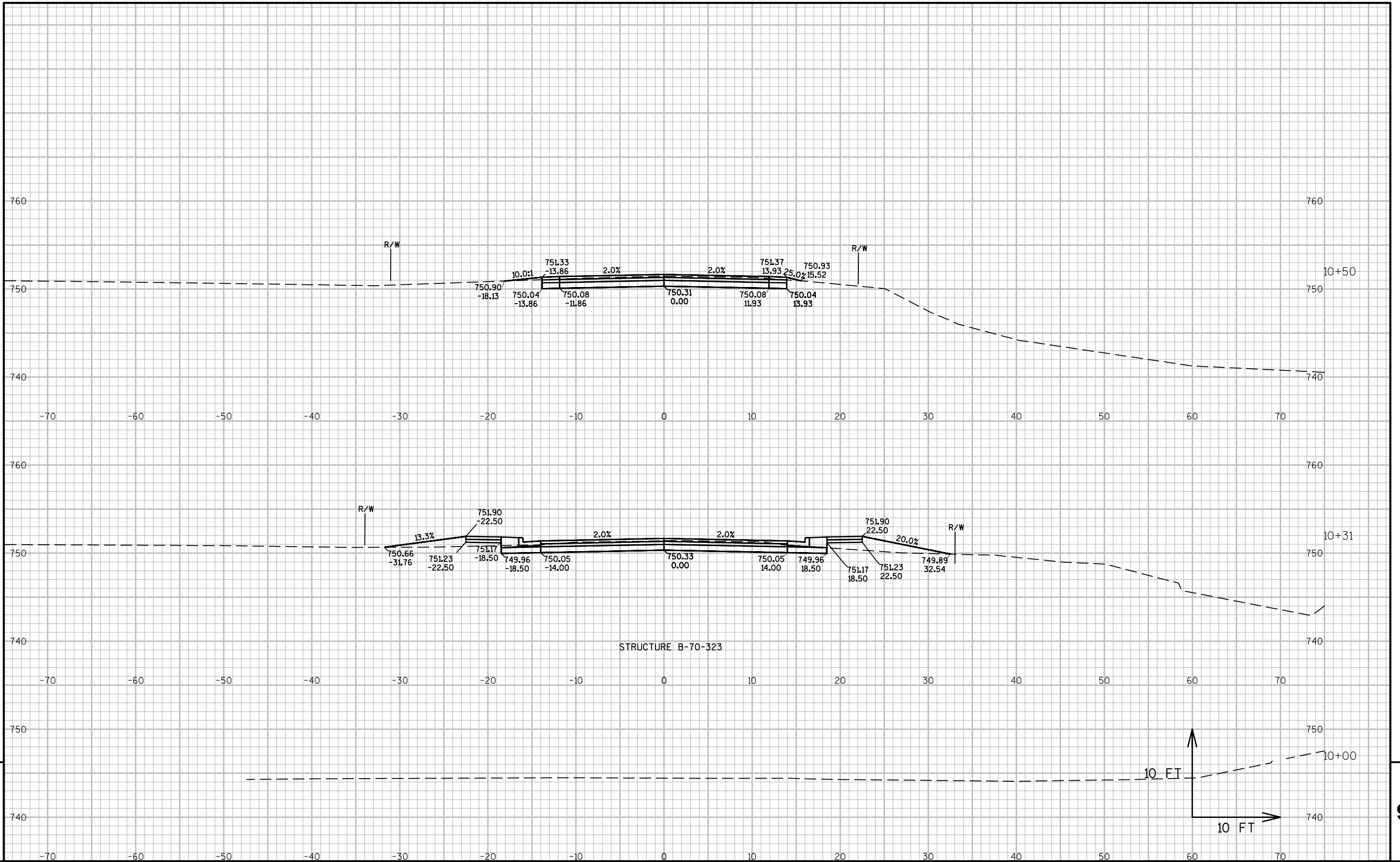
STATION	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate Note 7
	Cut	Unusable Pavement Material	Fill	Cut	Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.30	
	Note 1	Note 2	Note 3	Note 1	Note 2	Note 3	Note 1	Note 1	
8+40.00	70.8	10.0	0.1						
8+50.00	63.0	10.0	7.2	25	4	1	25	2	19
8+84.00	62.5	10.0	3.1	79	13	6	104	10	77
9+00.00	54.2	10.0	11.8	35	6	4	138	16	100
9+50.00	47.1	10.5	4.0	94	19	15	232	35	156
9+72.00	40.9	9.0	12.9	36	8	7	268	44	175
9+82.75	40.9	9.0	12.9	16	4	5	284	51	181
10+19.25	36.6	9.0	2.1						
10+30.00	36.6	9.0	2.1	15	4	1	299	52	191
10+50.00	31.2	9.5	0.9	25	7	1	324	53	208
11+00.00	28.7	6.0	0.4	55	14	1	379	55	247
11+20.00	26.6	5.0	0.0	20	4	0	400	55	263

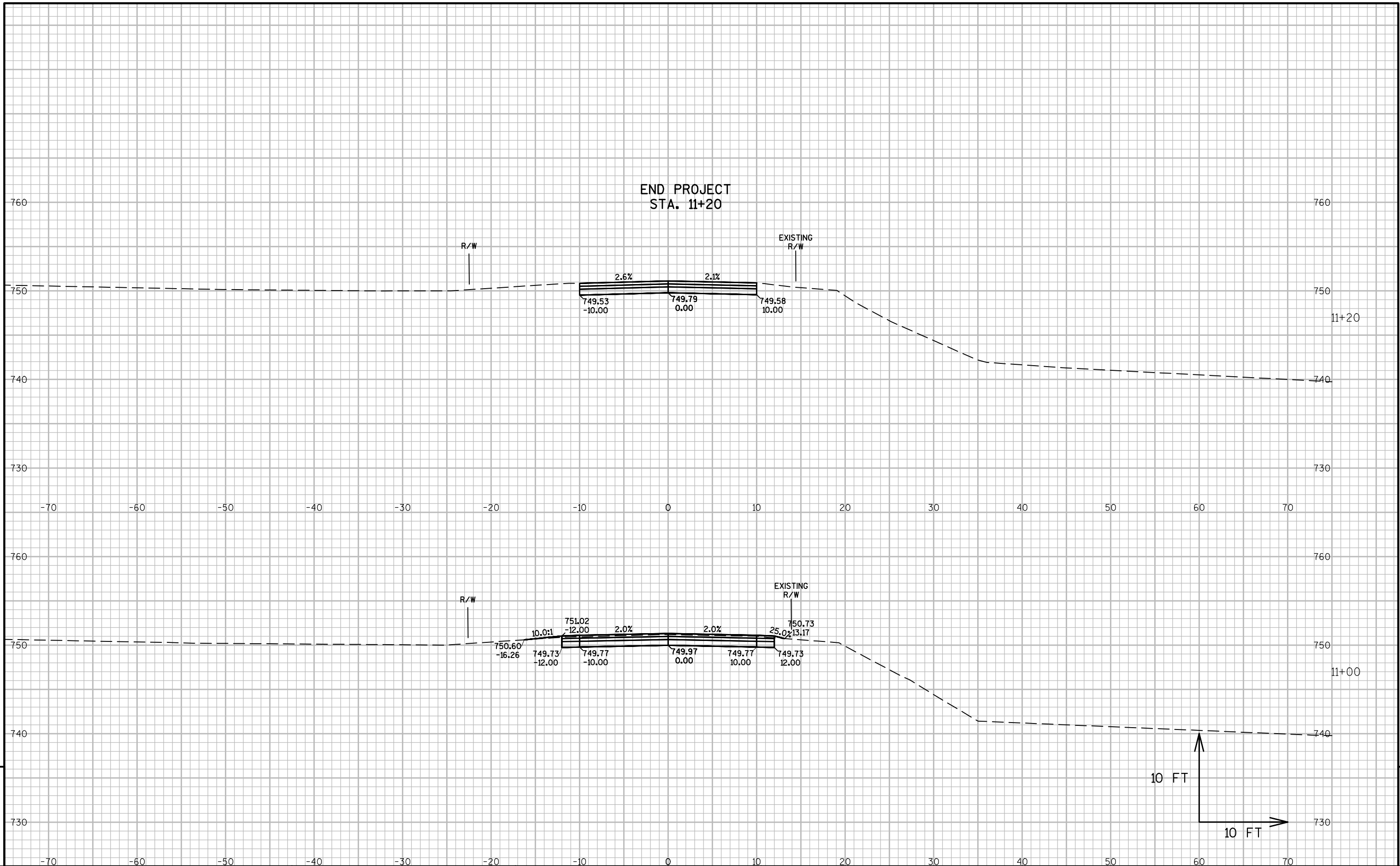
TOTALS: 400 82 42

Notes:	
1 - Cut	Cut includes existing asphalt and base material.
2 - Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Material volume
7 - Mass Ordinate	Cut - (Unusable Pavement Material)-(Fill * Fill Factor)

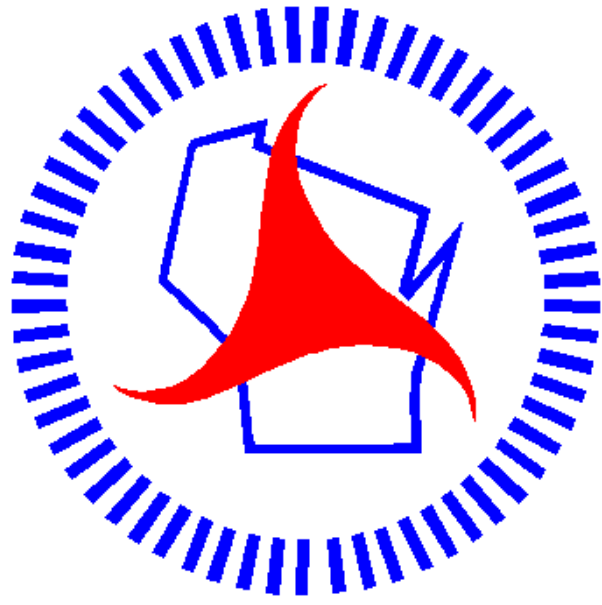








Notes



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