

ORDER OF SHEETS

Section No. 1	Title
Section No. 2	Typical Sections and Details (Includes Erosion Control Plans)
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 = 78

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C EAU CLAIRE, DEWEY STREET

EAU CLAIRE RIVER BRIDGE B180093

LOC STR

EAU CLAIRE COUNTY

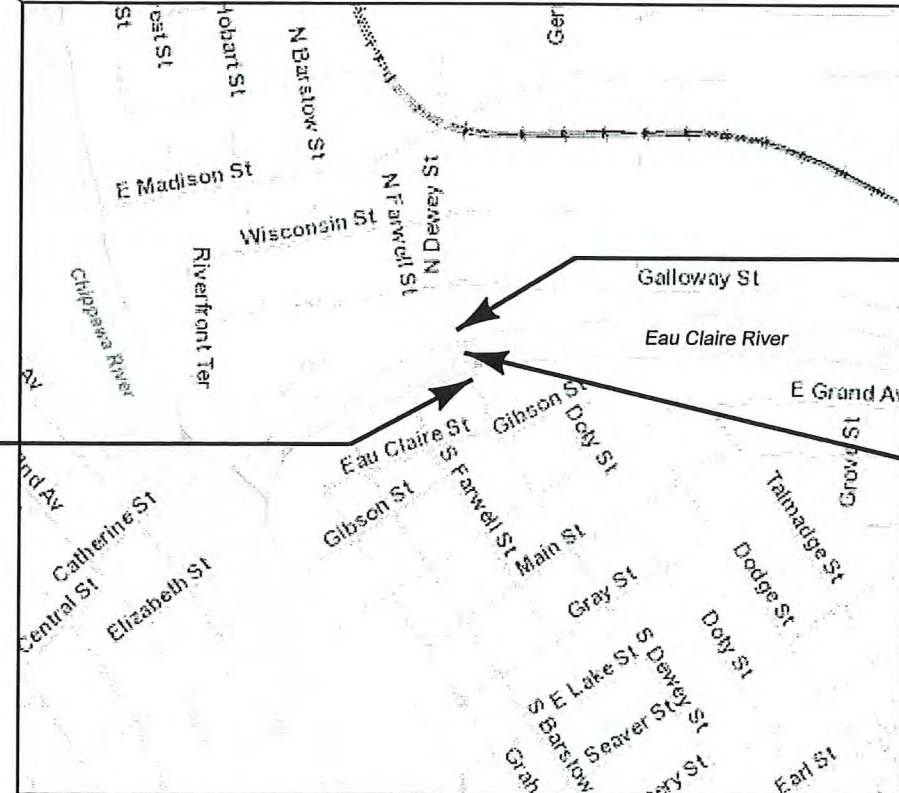
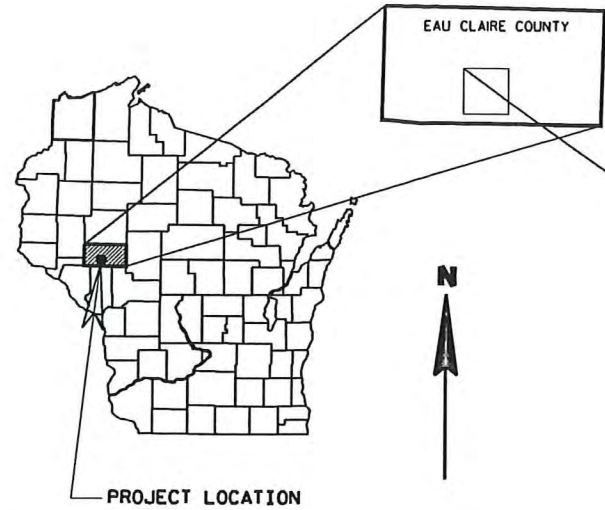
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7995-02-48	WISC 2019815	1

STATE PROJECT NUMBER  
**7995-02-48**

PROJECT ID: 7995-02-48

COUNTY: EAU CLAIRE

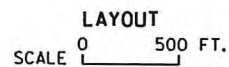
EAU CLAIRE



**BEGIN PROJECT**  
STA. 9+75.78  
Y = 279446.84  
X = 339585.43

**END PROJECT**  
STA. 12+92.22  
Y = 279745.88  
X = 339481.94

STRUCTURE B-18-93



TOTAL NET LENGTH OF CENTERLINE = 0.060 MI.

DESIGN DESIGNATION

A.A.D.T. (2020)	=	2,600
A.A.D.T. (2040)	=	2,850
D.H.V.	=	260
D.	=	50/50
T.	=	5%
DESIGN SPEED	=	30 MPH
ESALS	=	N/A

CONVENTIONAL SYMBOLS

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	
HIGH VOLTAGE	
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	
OVERHEAD	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

ACCEPTED FOR

City of Eau Claire

Date: 8/28/2019

City Engineer: *D. Holberg*

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ORIGINAL PLANS PREPARED BY

**AYRES ASSOCIATES** 3433 Oakwood Hills Parkway  
Eau Claire, WI 54701  
www.AyresAssociates.com

**PROFESSIONAL ENGINEER**

CHRISTOPHER B. McMAHON  
E-29454  
EAU CLAIRE, WI

DATE: 8/28/19

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STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CITY OF EAU CLAIRE
Designer	AYRES ASSOCIATES INC
Project Manager	MATTHEW THORNSEN
Regional Examiner	NORTHWEST REGION
Regional Supervisor	ANDREW STENSLAND

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APPROVED FOR THE DEPARTMENT

DATE: 9/13/19

(Signature)

**GENERAL NOTES**

EROSION CONTROL ITEMS TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

NO TREES (AND/OR SHRUBS) ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

EXCAVATION FOR STRUCTURES SHALL INCLUDE FURNISHING, PLACEMENT AND COMPACTION OF ANY FILL MATERIAL REQUIRED TO PROVIDE A SUITABLE FOUNDATION FOR SUBSTRUCTURE UNITS.

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

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCLUSIVE OF THE ROADBED, SHALL BE FERTILIZED AND SODDED AS DIRECTED BY THE ENGINEER.

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

ASPHALTIC REMOVAL IS INCLUDED IN THE ITEM EXCAVATION COMMON.

TOPSOIL SHALL BE PLACED ON THE SLOPES, TO THE POINT OF INTERCEPT WITH THE ORIGINAL GROUND SHOWN ON THE CROSS SECTIONS.

THE DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR WITH A MONUMENT TO BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE DATUM NAVD88 (2012).

ASPHALT SURFACE SHALL USE 1/2" NOMINAL AGGREGATE SIZE.

**UTILITIES**

CHARTER COMMUNICATIONS  
1201 McCANN DR.  
ALTOONA, WI 54720  
ATTN: SHANE YODER  
715-831-8940 ext. 51113  
Shane.Yoder@charter.com

AT&T  
304 S. DEWEY STREET  
EAU CLAIRE, WI 54701  
ATTN: RICK PODOLAK  
715-839-5565  
rp4514@att.com

CITY OF EAU CLAIRE - UTILITIES  
1040 FOREST STREET  
EAU CLAIRE, WI 54703  
ATTN: LANE BERG  
715-839-5045  
Lane.Berg@EauClaireWi.Gov

\* \* DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

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

**CITY**

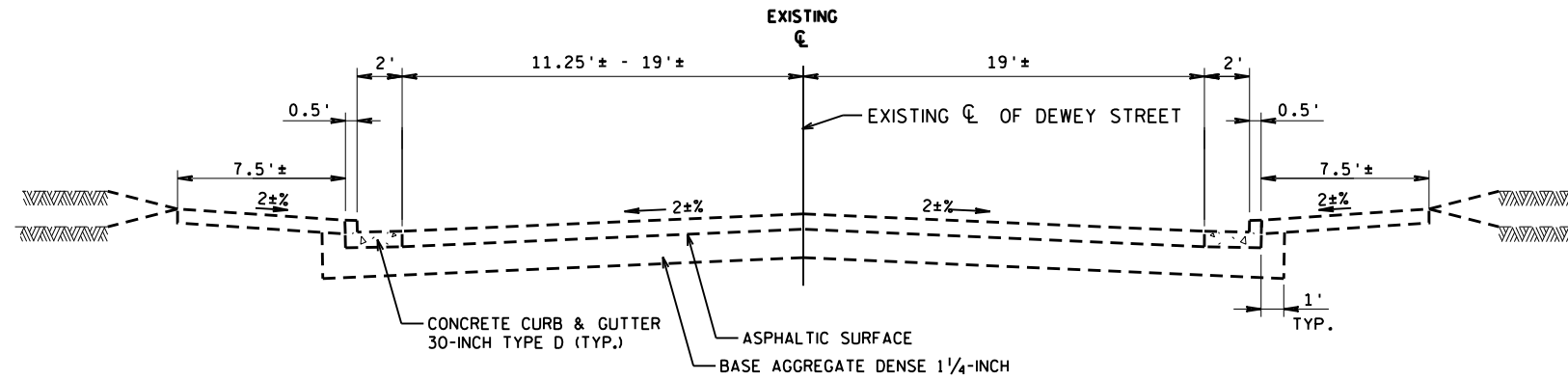
CITY OF EAU CLAIRE  
2020 PRAIRIE LANE  
EAU CLAIRE, WI 54703  
ATTN: DAVID SOLBERG, CITY ENGINEER  
715-839-4939  
Dave.Solberg@EauClaireWi.Gov

**DESIGNER**

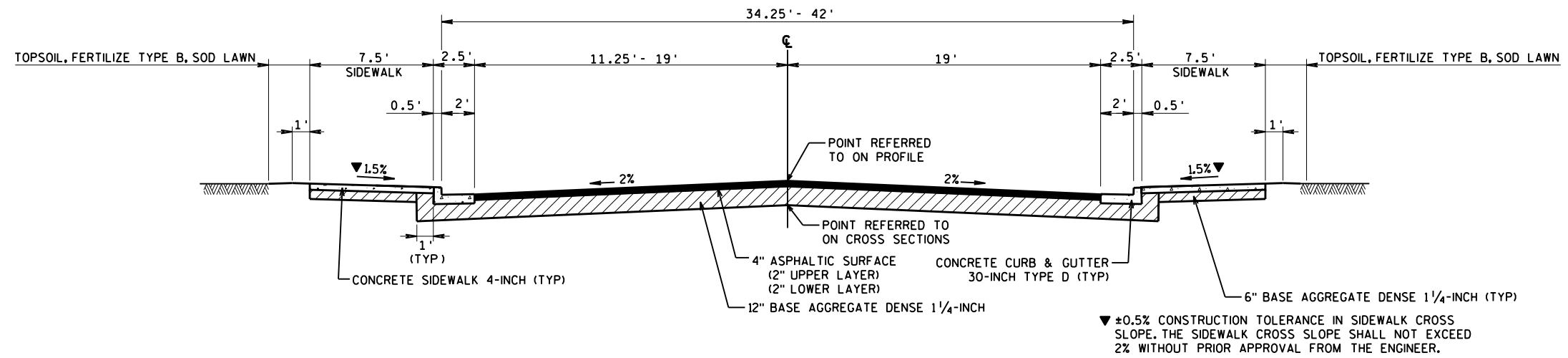
AYRES ASSOCIATES  
3433 OAKWOOD HILLS PARKWAY  
EAU CLAIRE, WI 54701  
ATTN: CHRIS McMAHON, PE  
715-834-3161  
mcmahonc@ayresassociates.com

**WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONTACT:**

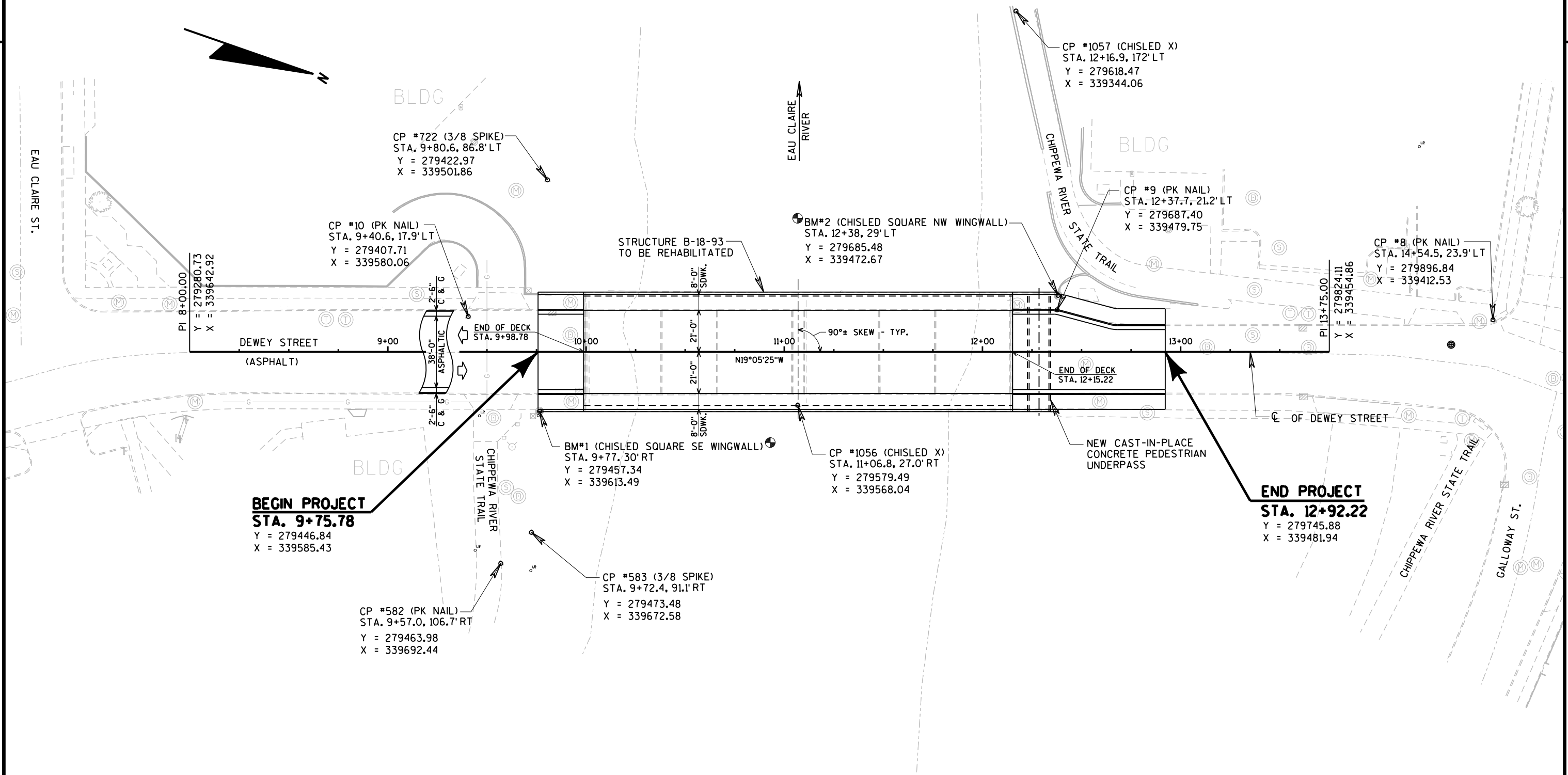
LEAH NICOL  
1300 WEST CLAIREMONT AVENUE  
EAU CLAIRE, WI 54701  
715-934-9014  
leah.nicol@wisconsin.gov

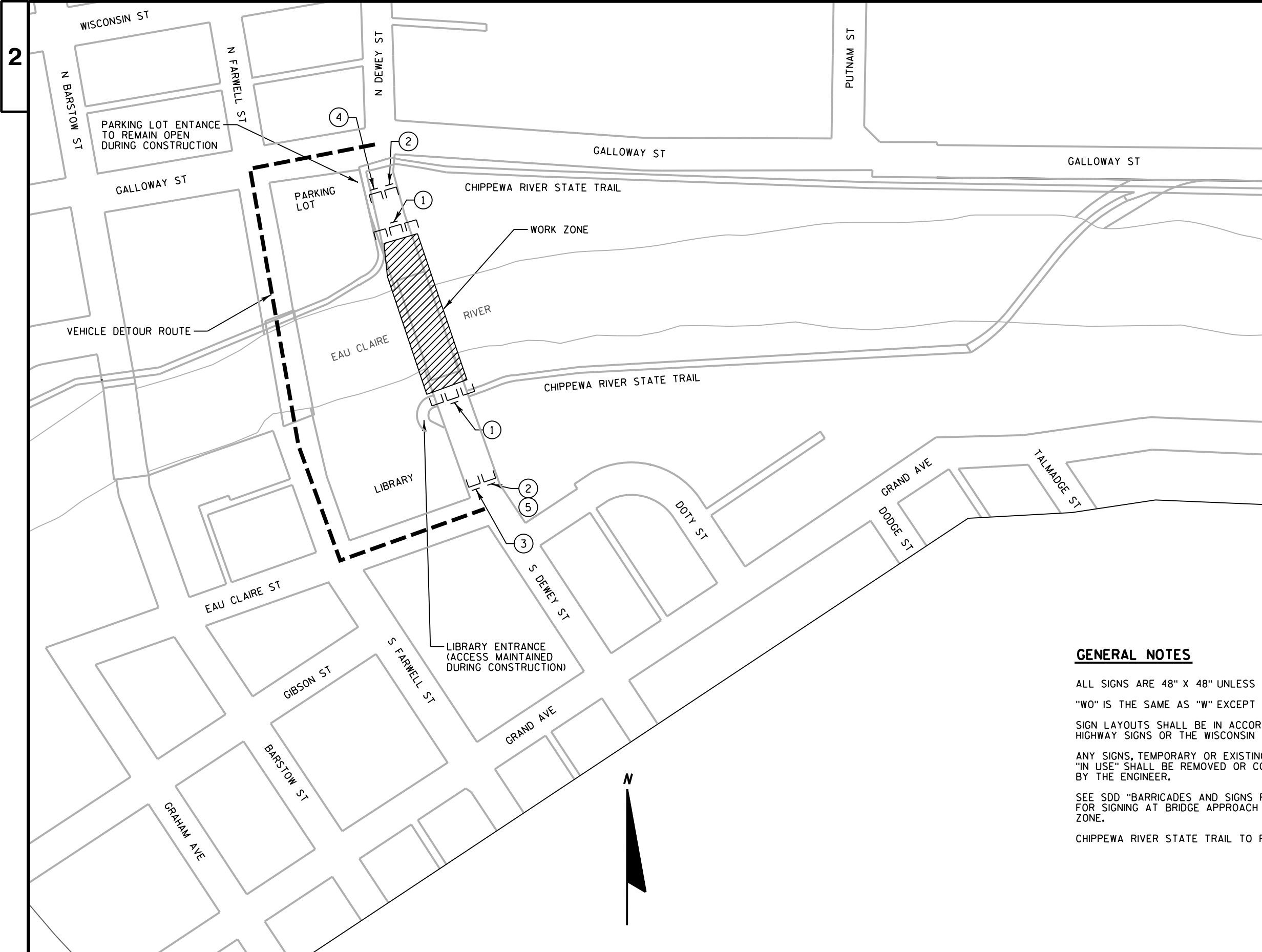


**EXISTING TYPICAL SECTION**  
 STA. 9+75.78 TO STA. 12+92.22



**FINISHED TYPICAL SECTION**  
 STA. 9+75.78 TO STA. 12+92.22





- ① **BRIDGE OUT**  
R11-2B  
48" X 30"
- ② **ROAD CLOSED TO THRU TRAFFIC**  
R11-4  
60" X 30"
- ③ **DETOUR** (Left Arrow)  
M4-9L  
30" X 24"
- ④ **DETOUR** (Right Arrow)  
M4-9R  
30" X 24"
- ⑤ **ROAD OPEN TO LIBRARY**  
R10-61  
60" X 30"

**LEGEND**

- ⊥ SIGN ON PERMANENT SUPPORT
- ⌈ TYPE III BARRICADE WITH TWO (2) TYPE "A" FLASHING LIGHTS WITH SIGN
- ⌋ TYPE III BARRICADE WITH ONE (1) TYPE "A" FLASHING LIGHT

**GENERAL NOTES**

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

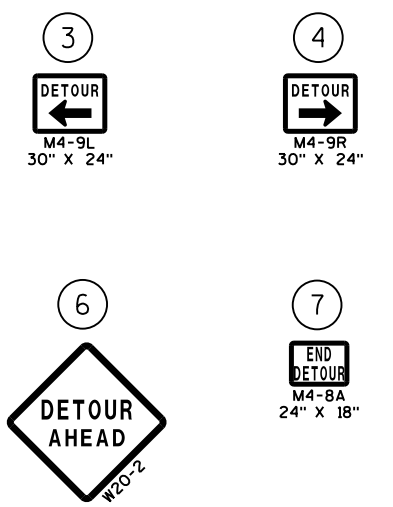
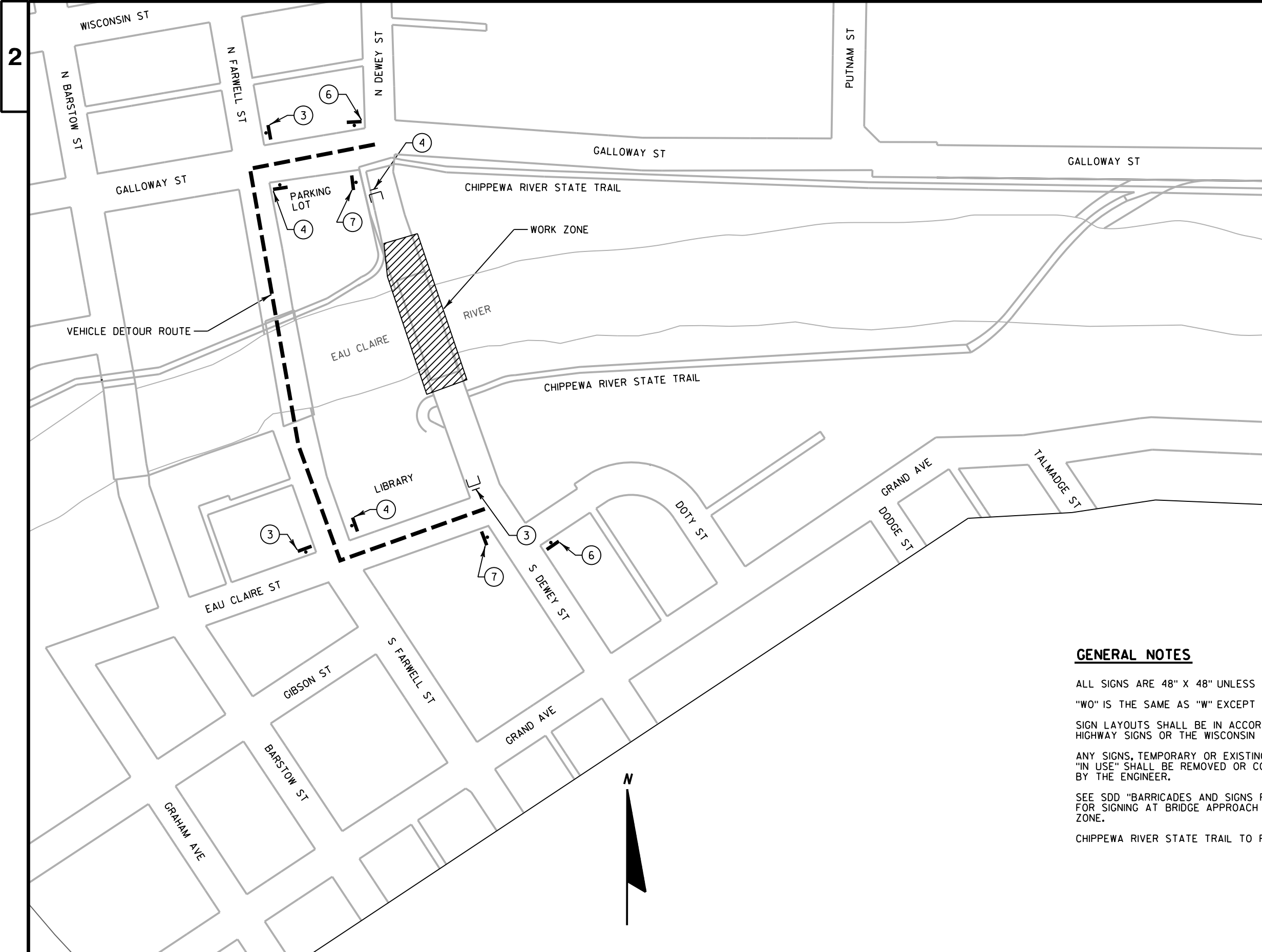
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH 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.

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL B FOR SIGNING AT BRIDGE APPROACH AND ADVANCED AREAS LEADING TO THE WORK ZONE.

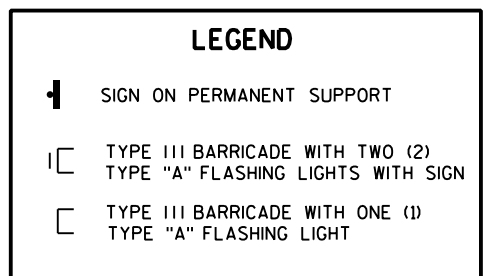
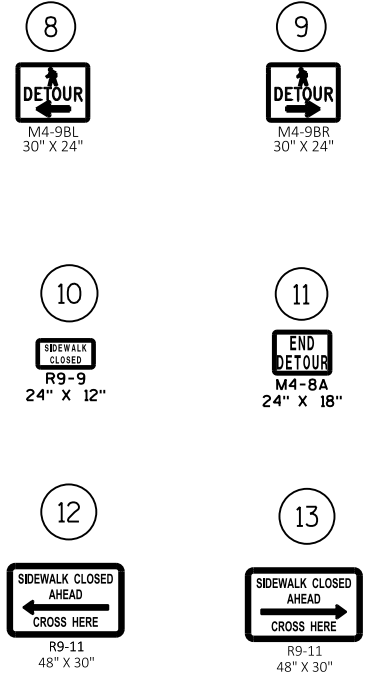
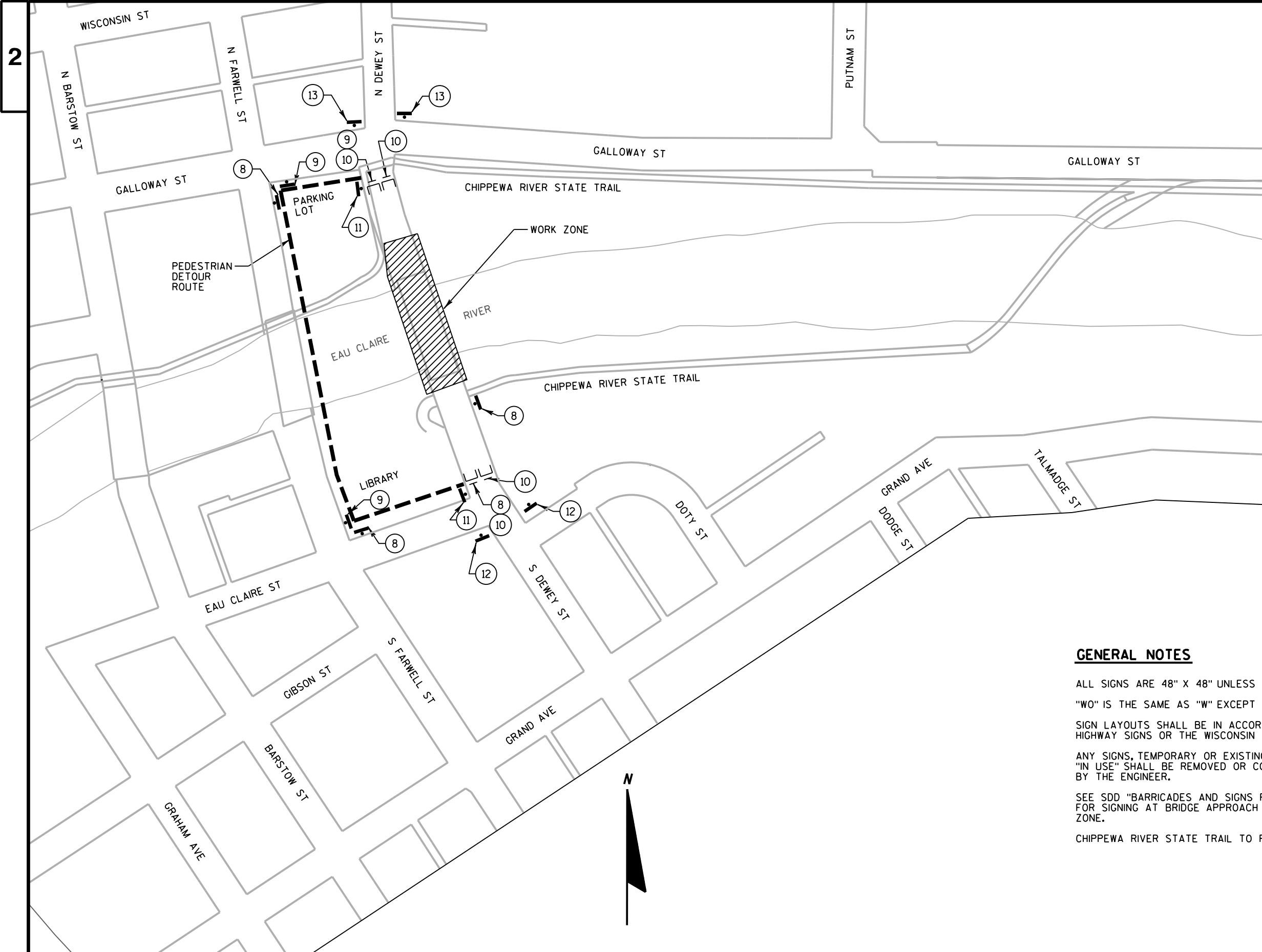
CHIPPEWA RIVER STATE TRAIL TO REMAIN OPEN DURING CONSTRUCTION.



LEGEND	
	SIGN ON PERMANENT SUPPORT
	TYPE III BARRICADE WITH TWO (2) TYPE "A" FLASHING LIGHTS WITH SIGN
	TYPE III BARRICADE WITH ONE (1) TYPE "A" FLASHING LIGHT

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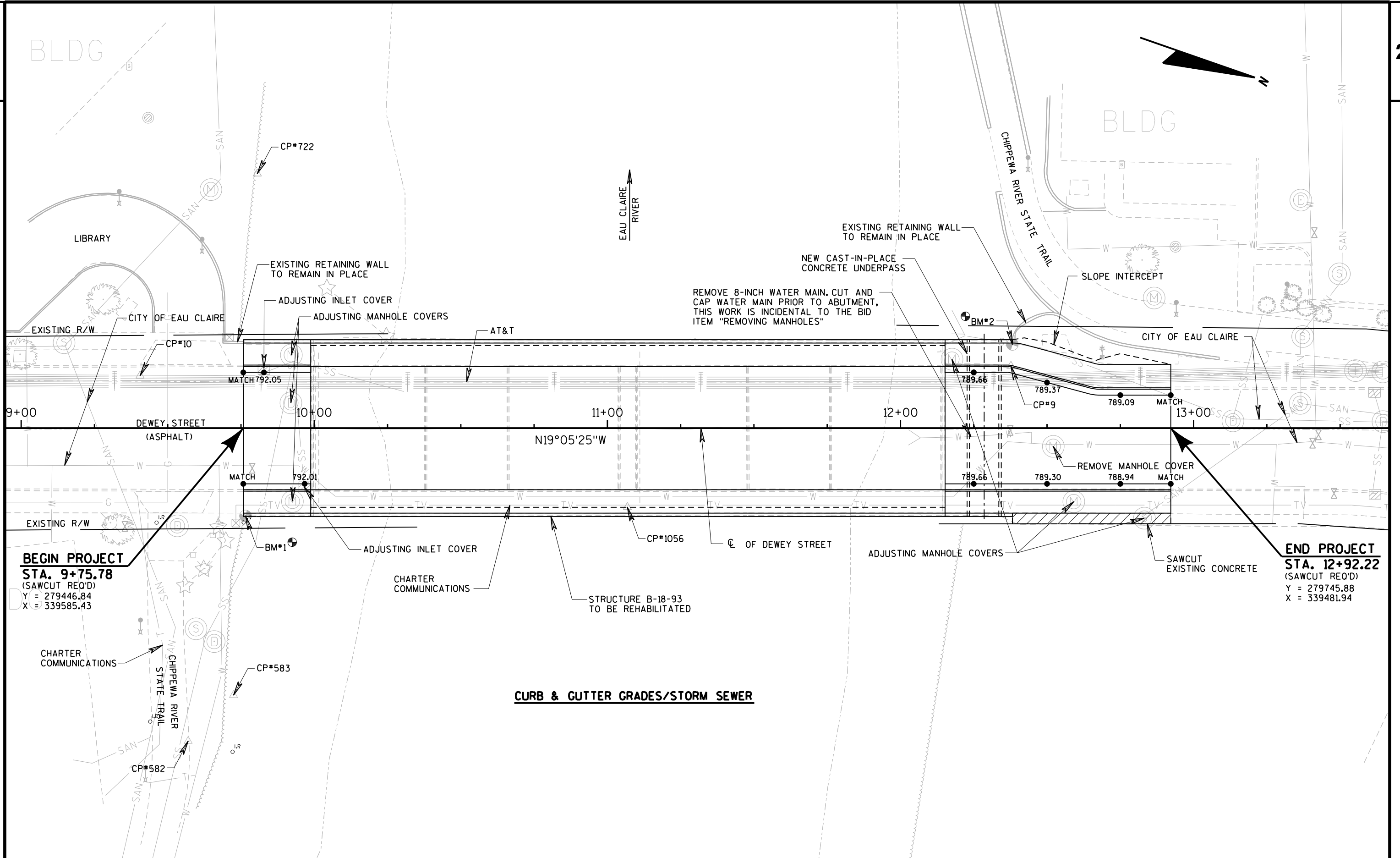
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CHIPPEWA RIVER STATE TRAIL TO REMAIN OPEN DURING CONSTRUCTION.



**BEGIN PROJECT**  
**STA. 9+75.78**  
 (SAWCUT REQ'D)  
 Y = 279446.84  
 X = 339585.43

**END PROJECT**  
**STA. 12+92.22**  
 (SAWCUT REQ'D)  
 Y = 279745.88  
 X = 339481.94

**CURB & GUTTER GRADES/STORM SEWER**

PROJECT NO: 7995-02-48	HWY: DEWEY STREET	COUNTY: EAU CLAIRE	CONSTRUCTION DETAILS	SCALE, FEET	SHEET	E
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**GENERAL NOTES**

PIPE HANGERS SHALL BE PLACED TWO (2) HANGERS PER PIPE WITH ONE (1) HANGER PLACED ADJACENT TO EVERY JOINT AND ONE (1) PLACED AT THE MIDPOINT OF THE PIPE. SPACING NOT TO EXCEED 10 FT.

HANGER LAYOUT AND PIPE LENGTHS TO BE DETERMINED BY CONTRACTOR AND ILLUSTRATED ON SHOP DRAWINGS.

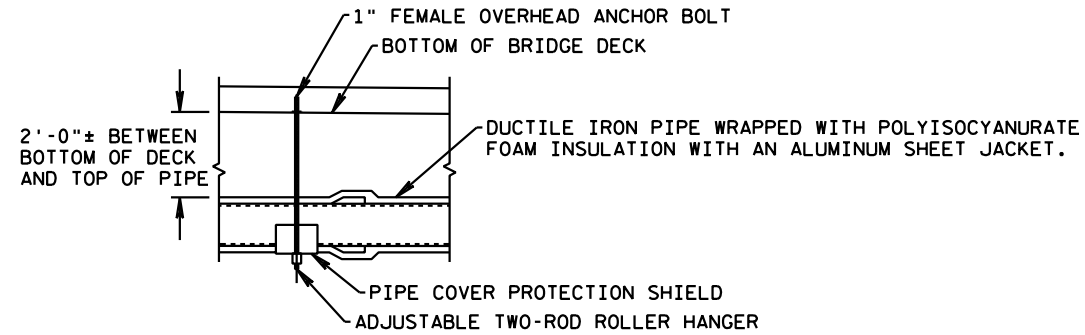
HANGERS SHALL BE ADJUSTABLE TWO-ROD ROLLER HANGER, FIGURE 260, PIPE SIZE 24 AS MANUFACTURED BY NATIONAL PIPE HANGER CORPORATION OR APPROVED EQUAL.

THERE SHALL BE A PIPE COVERING PROTECTION SHIELD, FIGURE 307 SHIELD SIZE NO. 25, AS MANUFACTURED BY NATIONAL PIPE HANGER CORPORATION OR APPROVED EQUAL.

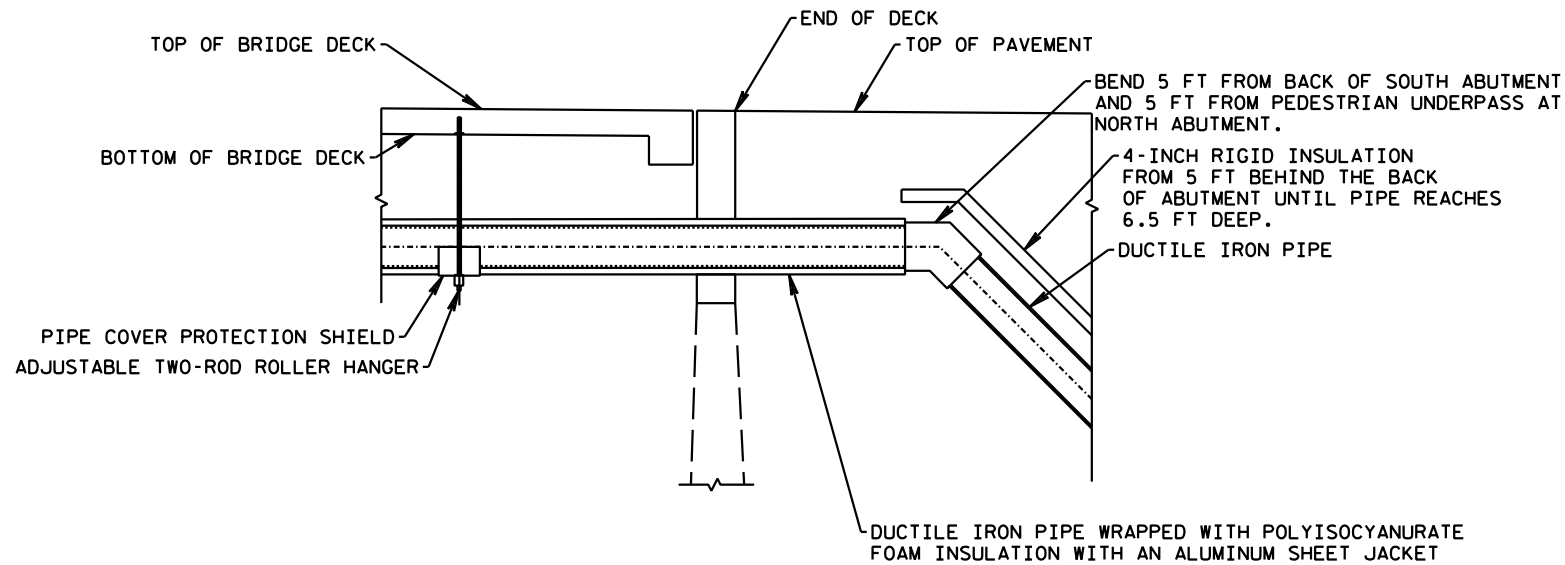
ANCHOR BOLTS SHALL BE 1" DIA. FEMALE OVERHEAD ANCHOR BOLTS, FIGURE 561 AS MANUFACTURED BY NATIONAL PIPE HANGER CORPORATION OR AN APPROVED EQUAL.

ALL PIPE HANGERS, RODS, BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED FINISH.

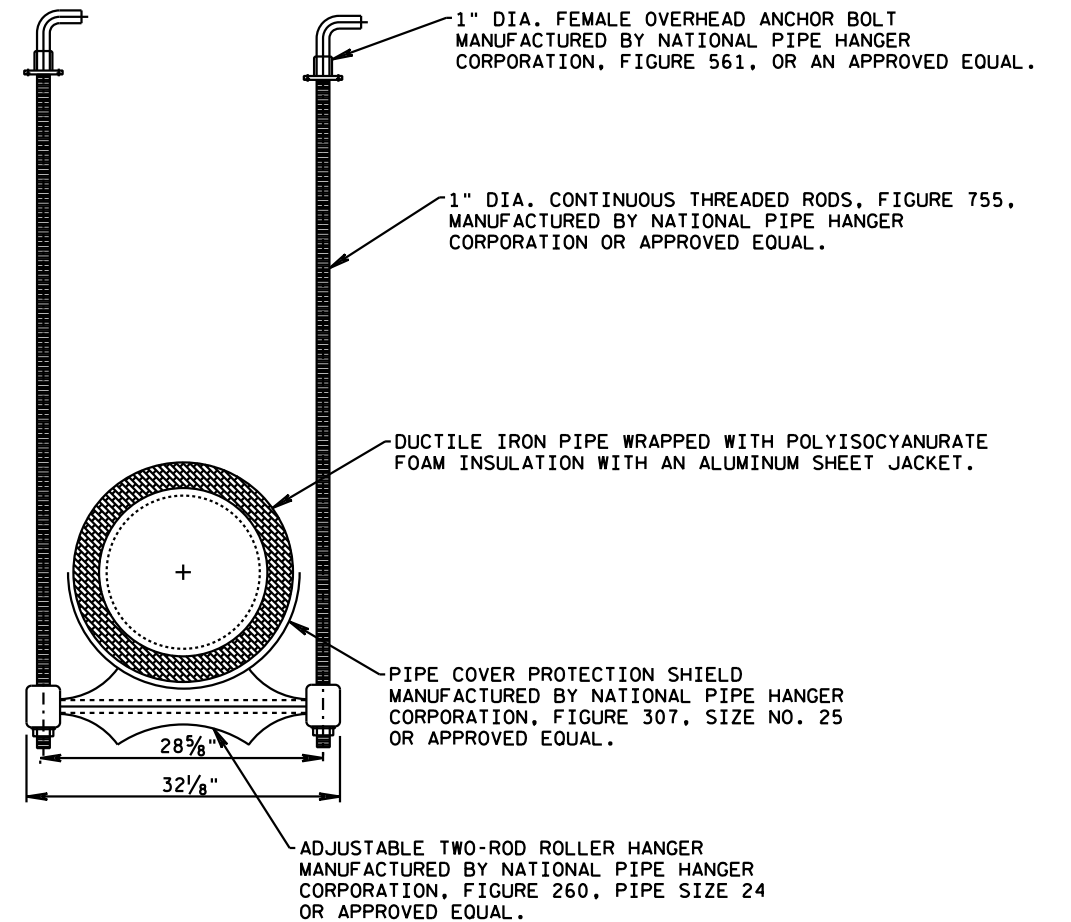
ADDITIONAL DETAIL SHOWING CROSS SECTION OF PIPE HANGER CAN BE REFERENCED ON SHEET 2 OF STRUCTURE DESIGN.



**DETAIL A**  
PROFILE VIEW OF PIPE HANGER



**DETAIL B**  
CROSS SECTION AT ABUTMENT



**DETAIL C**  
PIPE HANGER

EAU CLAIRE RIVER

DEWEY ST BRIDGE

EX. 24" RCP

269'-16" DI WM

EX. 16" CI WM 1934

CONNECT TO EX. 16" V&B

REMOVE WATER MAIN

REMOVE MANHOLE

10' CONNECT TO EX. 16" WM W/ SLEEVE

16" V&B

14'

11'

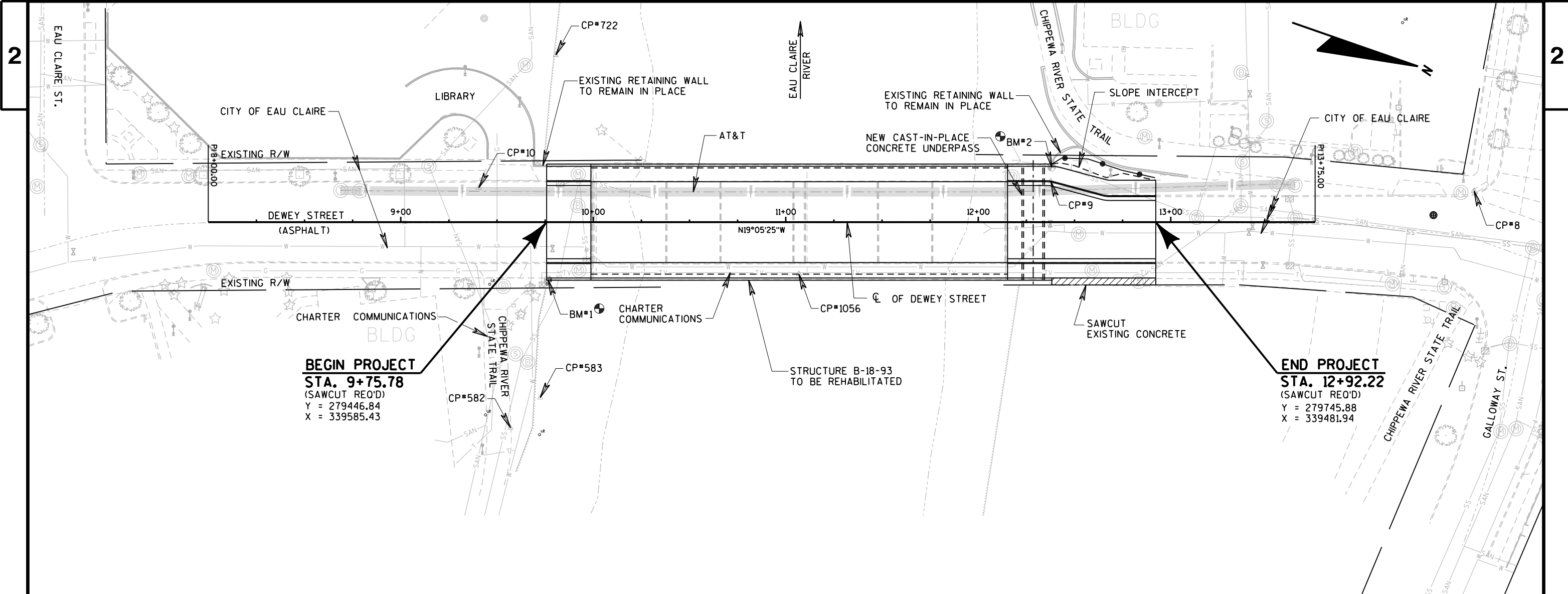
45°-16" BEND

EX. 16" CI WM 1934

BURY WATER MAIN 7.5' BELOW T.C.

ALL WATERMAIN CL52 D.I.P.

EA

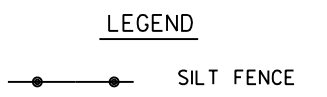


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	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .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
<b>PAVEMENT:</b>												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

HIGH WATER 2 EL. 762.1



TOTAL PROJECT AREA = 0.48 ACRES  
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.44 ACRES

## Estimate Of Quantities

7995-02-48

Line	Item	Item Description	Unit	Total	Qty
0002	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 11+07	LS	1.000	1.000
0004	204.0150	Removing Curb & Gutter	LF	201.000	201.000
0006	204.0155	Removing Concrete Sidewalk	SY	192.000	192.000
0008	204.0210	Removing Manholes	EACH	1.000	1.000
0010	205.0100	Excavation Common	CY	220.000	220.000
0012	206.1000	Excavation for Structures Bridges (structure) 01. B-18-93	LS	1.000	1.000
0014	206.1000	Excavation for Structures Bridges (structure) 02. B-18-93	LS	1.000	1.000
0016	210.1500	Backfill Structure Type A	TON	2,070.000	2,070.000
0018	213.0100	Finishing Roadway (project) 01. 7995-02-48	EACH	1.000	1.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	375.000	375.000
0022	311.0110	Breaker Run	TON	75.000	75.000
0024	455.0605	Tack Coat	GAL	28.000	28.000
0026	465.0105	Asphaltic Surface	TON	90.000	90.000
0028	502.0100	Concrete Masonry Bridges	CY	1,301.000	1,301.000
0030	502.3101	Expansion Device (structure) 01. B-18-93	LF	460.000	460.000
0032	502.3200	Protective Surface Treatment	SY	1,420.000	1,420.000
0034	502.3210	Pigmented Surface Sealer	SY	275.000	275.000
0036	502.4205	Adhesive Anchors No. 5 Bar	EACH	2,264.000	2,264.000
0038	505.0400	Bar Steel Reinforcement HS Structures	LB	15,760.000	15,760.000
0040	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	222,490.000	222,490.000
0042	509.1500	Concrete Surface Repair	SF	3,700.000	3,700.000
0044	516.0500	Rubberized Membrane Waterproofing	SY	85.000	85.000
0046	516.0610.S	Sheet Membrane Waterproofing for Top Slab (structure) 01. B-18-93	SY	225.000	225.000
0048	517.1010.S	Concrete Staining (structure) 01. B-18-93	SF	30,700.000	30,700.000
0050	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	201.000	201.000
0052	602.0405	Concrete Sidewalk 4-Inch	SF	1,516.000	1,516.000
0054	606.0300	Riprap Heavy	CY	10.000	10.000
0056	611.8110	Adjusting Manhole Covers	EACH	6.000	6.000
0058	611.8115	Adjusting Inlet Covers	EACH	2.000	2.000
0060	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7995-02-48	EACH	1.000	1.000
0062	619.1000	Mobilization	EACH	1.000	1.000
0064	624.0100	Water	MGAL	12.000	12.000
0066	625.0100	Topsoil	SY	220.000	220.000
0068	628.1504	Silt Fence	LF	75.000	75.000
0070	628.1520	Silt Fence Maintenance	LF	525.000	525.000
0072	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000

## Estimate Of Quantities

7995-02-48

Line	Item	Item Description	Unit	Total	Qty
0074	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0076	628.7504	Temporary Ditch Checks	LF	50.000	50.000
0078	629.0210	Fertilizer Type B	CWT	0.100	0.100
0080	631.0300	Sod Water	MGAL	5.000	5.000
0082	631.1000	Sod Lawn	SY	220.000	220.000
0084	638.2602	Removing Signs Type II	EACH	13.000	13.000
0086	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0088	642.5001	Field Office Type B	EACH	1.000	1.000
0090	643.0420	Traffic Control Barricades Type III	DAY	3,600.000	3,600.000
0092	643.0705	Traffic Control Warning Lights Type A	DAY	5,600.000	5,600.000
0094	643.0900	Traffic Control Signs	DAY	6,200.000	6,200.000
0096	643.5000	Traffic Control	EACH	1.000	1.000
0098	645.0105	Geotextile Type C	SY	130.000	130.000
0100	645.0111	Geotextile Type DF Schedule A	SY	100.000	100.000
0102	646.1020	Marking Line Epoxy 4-Inch	LF	668.000	668.000
0104	650.4500	Construction Staking Subgrade	LF	100.000	100.000
0106	650.5000	Construction Staking Base	LF	100.000	100.000
0108	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	201.000	201.000
0110	650.6500	Construction Staking Structure Layout (structure) 01. B-18-93	LS	1.000	1.000
0112	650.9910	Construction Staking Supplemental Control (project) 01. 7995-02-48	LS	1.000	1.000
0114	650.9920	Construction Staking Slope Stakes	LF	100.000	100.000
0116	652.0125	Conduit Rigid Metallic 2-Inch	LF	50.000	50.000
0118	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	220.000	220.000
0120	653.0222	Junction Boxes 18x12x6-Inch	EACH	2.000	2.000
0122	690.0150	Sawing Asphalt	LF	68.000	68.000
0124	690.0250	Sawing Concrete	LF	101.500	101.500
0126	715.0502	Incentive Strength Concrete Structures	DOL	7,806.000	7,806.000
0128	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	600.000	600.000
0130	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000
0132	SPV.0090	Special 01. Parapet Concrete Type 'TX	LF	525.000	525.000
0134	SPV.0090	Special 02. 16-Inch Ductile Iron Water Main Class 52	LF	304.000	304.000
0136	SPV.0105	Special 01. Temporary Support and Protection of Conduit Pack	LS	1.000	1.000
0138	SPV.0105	Special 02. Attachment of Hangers for Conduit Pack	LS	1.000	1.000
0140	SPV.0165	Special 01. Overhead Concrete Surface Repair	SF	1,760.000	1,760.000

DEWEY STREET EARTHWORK SUMMARY

From/To Station	Location	Excavation Common (1) (item # 205.0100)	Salvaged / Unuseable Pavement Material (5)	Unexpanded Fill	Expanded Fill (2)	Mass Ordinate +/- (3)	Waste	Borrow  (item #208.0100)	Comment:
		Cut			Factor 1.30				
9+75.78 - 12+92.22	DEWEY STREET	220	110	2	3	107	107	0	

- 1) Excavation Common is the Cut. Item number 205.0100.
- 2) Expanded Fill. Factor = 1.30; Expanded Fill = Unexpanded Fill \* Fill Factor
- 3) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material on the project.
- 4) All quantities shown in CY.
- 5) Existing existing salvaged/unuseable asphalt pavement.

REMOVALS

STATION	TO	STATION	LOC	204.0150 REMOVING CURB & GUTTER	LF	204.0155 REMOVING CONCRETE SIDEWALK	SY
9+75.78	-	9+98.78	LT		23		19
9+75.78	-	9+98.78	RT		23		19
12+15.22	-	12+92.22	LT		78		68
12+15.22	-	12+92.22	RT		77		86
TOTALS					201		192

PAVING AND BASE QUANTITIES

STA	TO	STA	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	TON	455.0605 TACK COAT	GAL	465.0105 ASPHALTIC SURFACE	TON
9+75.78	-	9+98.78		90		7		20
12+15.22	-	12+92.22		265		20		65
UNDISTRIBUTED						1		5
TOTALS						28		90

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

CONCRETE

STATION	TO	STATION	LOC	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	602.0405 CONCRETE SIDEWALK 4-INCH SF
9+75.78	-	9+98.78	LT	23	173
9+75.78	-	9+98.78	RT	23	173
12+15.22	-	12+92.22	LT	78	612
12+15.22	-	12+92.22	RT	77	558
TOTALS				201	1,516

MISCELLANEOUS STORM SEWER

CATEGORY	STATION	LOC	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH	204.0210 REMOVING MANHOLES* EACH
0010	9+83	LT	--	1	--
0010	9+97	RT	--	1	--
0010	9+92	LT	2	--	--
0010	9+93	RT	1	--	--
0010	12+18	LT	1	--	--
0030	12+52	RT	--	--	1
0010	12+59	RT	1	--	--
0010	12+83	RT	1	--	--
TOTALS			6	2	1
CATEGORY 0010 TOTALS			6	2	--
CATEGORY 0030 TOTALS			--	--	1

\* THE WORK REQUIRED TO REMOVE THE EXISTING 8-INCH WATER MAIN, CUT AND CAP THE WATER MAIN PRIOR TO ABUTMENT IS INCIDENTAL TO THE BID ITEM "REMOVING MANHOLES".

EROSION CONTROL ITEMS

<u>WATER</u>		625.0100 TOPSOIL	628.1504 SILT FENCE	628.1520 SILT FENCE MAINTENANCE	629.0210 FERTILIZER TYPE B	631.1000 SOD LAWN	631.0300 SOD WATER				
PURPOSE	624.0100 WATER MGAL	STA	TO	STA	LOCATION	SY	LF	LF	CWT	SY	MGAL
COMPACTION	6	12+15.22	--	12+92.22	LT	45	60	420	0.0	45	1
DUST CONTROL	6	12+15.22	--	12+92.22	RT	130	--	--	0.1	130	3
		UNDISTRIBUTED				45	15	105	0.0	45	1
TOTAL	12	TOTALS				220	75	525	0.1	220	5

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

EROSION CONTROL MOBILIZATION ITEMS

	628.1905 MOBILIZATIONS EROSION CONTROL	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL
LOCATION	EACH	EACH
ID 7995-02-48	4	4
TOTALS	4	4

TEMPORARY DITCH CHECKS

	628.7504 LF
LOCATION	LF
UNDISTRIBUTED	50
TOTAL	50

SIGNS

		638.2602 REMOVING SIGNS TYPE II	638.3000 REMOVING SMALL SIGN SUPPORTS	SIGNAGE TYPE
STATION	LOCATION	EACH	EACH	
9+95	RT	2	1	NO PARKING 2AM - 6PM THIS BLOCK, 2 HR PARKING 6AM-6PM EXCEPT WEEKDAYS
10+10	LT	2	--	NO PARKING 2AM - 6PM THIS BLOCK, 2 HR PARKING 6AM-6PM EXCEPT WEEKDAYS
11+10	RT	2	1	NO PARKING 2AM - 6PM THIS BLOCK, 2 HR PARKING 6AM-6PM EXCEPT WEEKDAYS
11+29	LT	2	--	NO PARKING 2AM - 6PM THIS BLOCK, 2 HR PARKING 6AM-6PM EXCEPT WEEKDAYS
11+89	RT	2	1	NO PARKING 2AM - 6PM THIS BLOCK, 2 HR PARKING 6AM-6PM EXCEPT WEEKDAYS
12+16	LT	3	1	NO PARKING 2AM - 6PM THIS BLOCK, 2 HR PARKING 6AM-6PM EXCEPT WEEKDAYS, NO PARKING HERE TO CORNER
TOTALS		13	4	

NOTE: SALVAGE SIGNS TO THE CITY OF EAU CLAIRE

TRAFFIC CONTROL ITEMS

	DURATION DAYS	643.0420 BARRICADES TYPE III NO.	643.0705 WARNING LIGHTS TYPE A NO.	643.0900 SIGNS NO.
LOCATION	DAYS	NO.	DAY	DAY
PER SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"	200	18	3,600	28
PER DETOUR PLAN	200	--	--	10
PER PEDESTRIAN DETOUR PLAN	200	--	--	17
DEWEY STREET	--	--	--	--
TOTALS			3,600	5,600

TRAFFIC CONTROL PLACEMENT SUBJECT TO ENGINEER APPROVAL

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED



STAKING ITEMS

		650.4500 CONSTRUCTION STAKING SUBGRADE	650.5000 CONSTRUCTION STAKING BASE	650.5500 CURB GUTTER AND CURB & GUTTER	650.9920 CONSTRUCTION STAKING SLOPE STAKES
CATEGORY	LOCATION	LF	LF	LF	LF
0010	9+75.78 - 12+92.22	100	100	201	100
TOTALS		100	100	201	100

MARKING LINE EPOXY 4-INCH

STA	TO	STA	DESCRIPTION	646.1020 YELLOW LF
9+75.78	-	12+92.22	DOUBLE CENTERLINE	633
			UNDISTRIBUTED	35
TOTAL				668

16-INCH DUCTILE IRON WATER MAIN CLASS 52

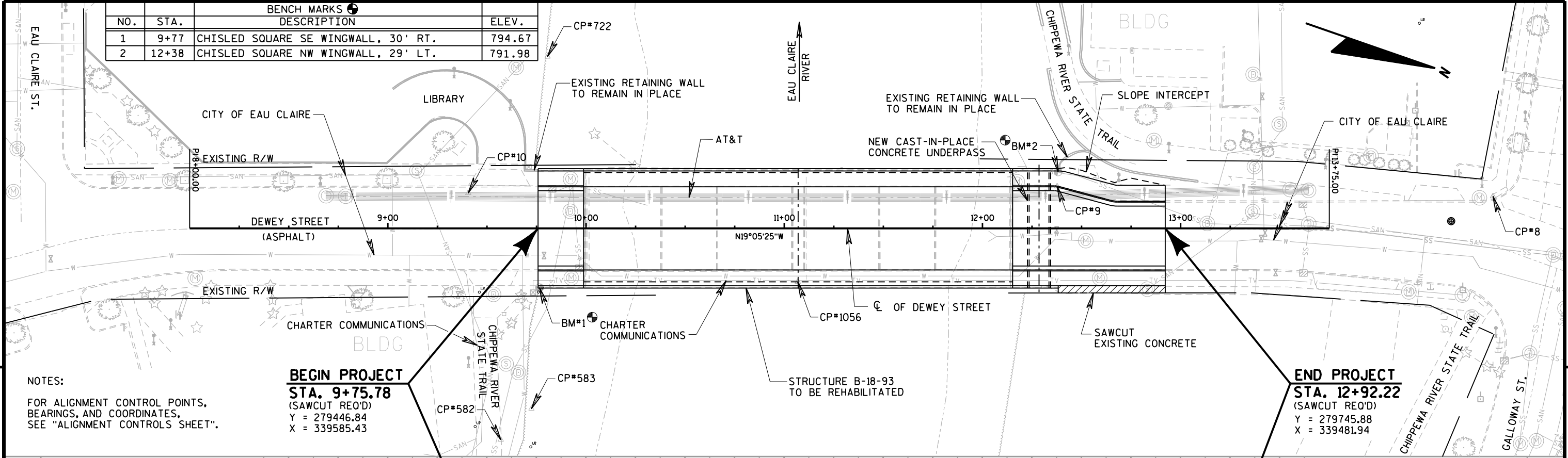
CATEGORY	LOCATION	SPV.0090.02 LF
0030	DEWEY STREET	304
TOTAL		304

SAWING

STA	TO	STA	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF	NOTES
9+75.78			LT & RT	38	--	ROADWAY
9+75.78			RT	--	2.5	CURB & GUTTER
9+75.78			LT	--	2.5	CURB & GUTTER
9+75.78			RT	--	7.5	SIDEWALK
9+75.78			LT	--	7.5	SIDEWALK
12+92.22			LT & RT	30	--	ROADWAY
12+92.22			RT	--	2.5	CURB & GUTTER
12+92.22			LT	--	2.5	CURB & GUTTER
12+92.22			RT	--	7.5	SIDEWALK
12+92.22			LT	--	8	SIDEWALK
12+38.22		12+92.22	RT	--	61	SIDEWALK
TOTAL				68	101.5	

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
1	9+77	CHISLED SQUARE SE WINGWALL, 30' RT.	794.67
2	12+38	CHISLED SQUARE NW WINGWALL, 29' LT.	791.98



NOTES:  
FOR ALIGNMENT CONTROL POINTS,  
BEARINGS, AND COORDINATES,  
SEE "ALIGNMENT CONTROLS SHEET".

**BEGIN PROJECT**  
**STA. 9+75.78**  
(SAWCUT REQ'D)  
Y = 279446.84  
X = 339585.43

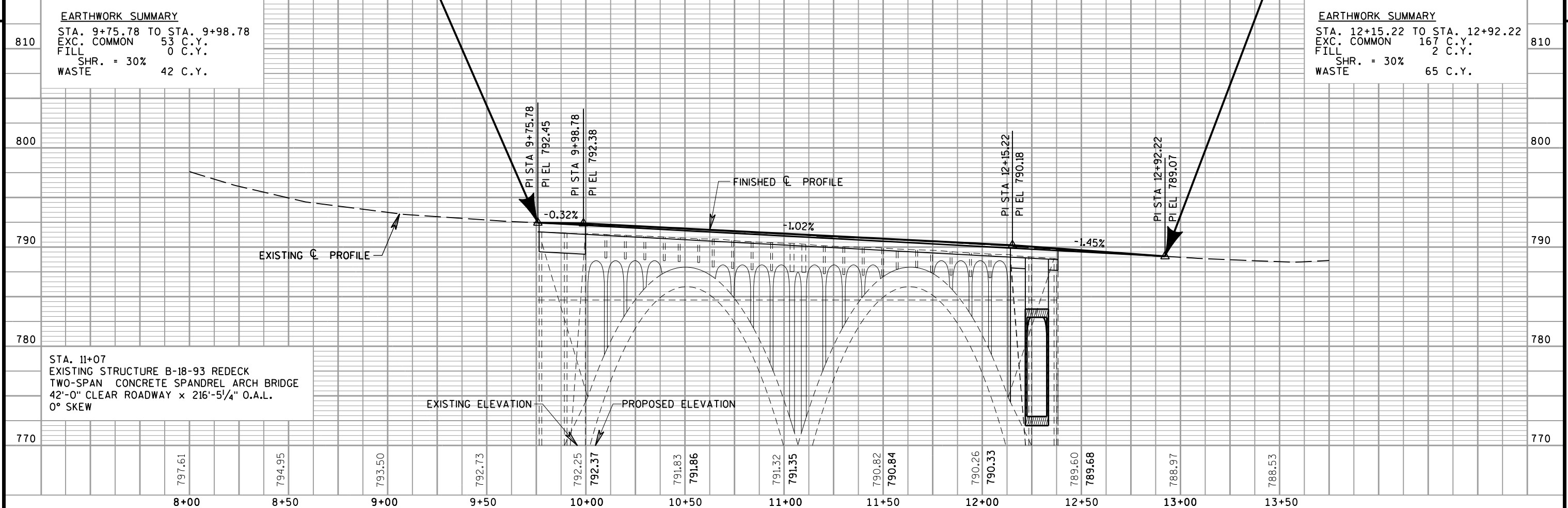
**END PROJECT**  
**STA. 12+92.22**  
(SAWCUT REQ'D)  
Y = 279745.88  
X = 339481.94

**EARTHWORK SUMMARY**  
STA. 9+75.78 TO STA. 9+98.78

EXC. COMMON	53 C.Y.
FILL	0 C.Y.
SHR. = 30%	
WASTE	42 C.Y.

**EARTHWORK SUMMARY**  
STA. 12+15.22 TO STA. 12+92.22

EXC. COMMON	167 C.Y.
FILL	2 C.Y.
SHR. = 30%	
WASTE	65 C.Y.

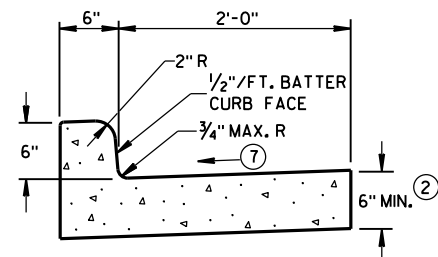


STA. 11+07  
EXISTING STRUCTURE B-18-93 REDECK  
TWO-SPAN CONCRETE SPANDREL ARCH BRIDGE  
42'-0" CLEAR ROADWAY x 216'-5 1/4" O.A.L.  
0° SKEW

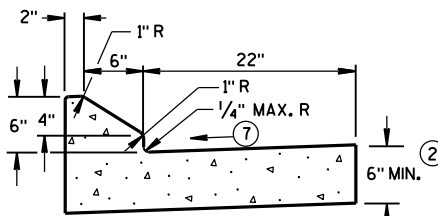
PROJECT NO: 7995-02-48	HWY: DEWEY STREET	COUNTY: EAU CLAIRE	PLAN AND PROFILE	SCALE, FEET 0 25 50	SHEET	E
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## Standard Detail Drawing List

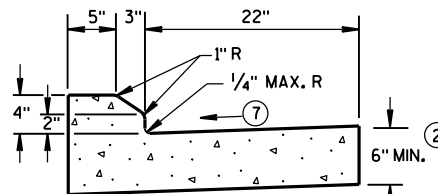
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
12A03-10	NAME PLATE (STRUCTURES)
15C02-07A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-07B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-07C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



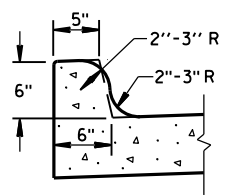
TYPES A<sup>①</sup> & D



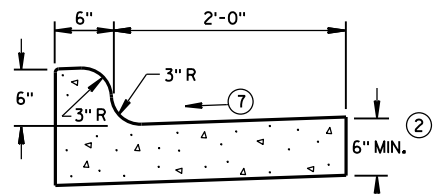
6" SLOPED CURB TYPES G<sup>①</sup> & J



4" SLOPED CURB TYPES G<sup>①</sup> & J

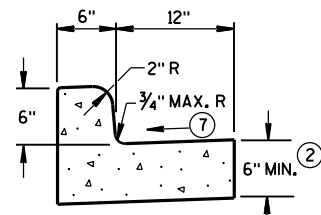


TYPES K<sup>①</sup> & L  
(OPTIONAL CURB SHAPE)



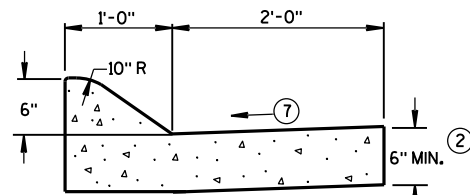
TYPES K<sup>①</sup> & L

CONCRETE CURB & GUTTER 30"

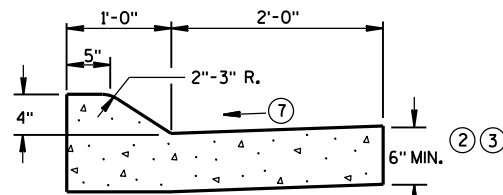


TYPES A<sup>①</sup> & D

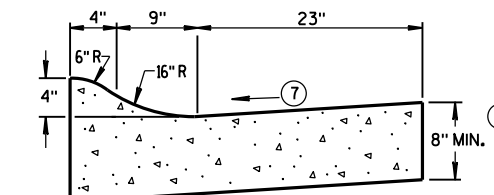
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A<sup>①</sup> & D

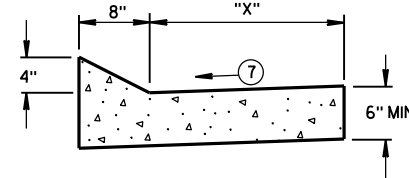


4" SLOPED CURB TYPES A<sup>①</sup> & D



4" SLOPED CURB TYPES R<sup>①</sup> & T<sup>⑤</sup>

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT<sup>①</sup>

CONCRETE CURB & GUTTER

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

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.

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.

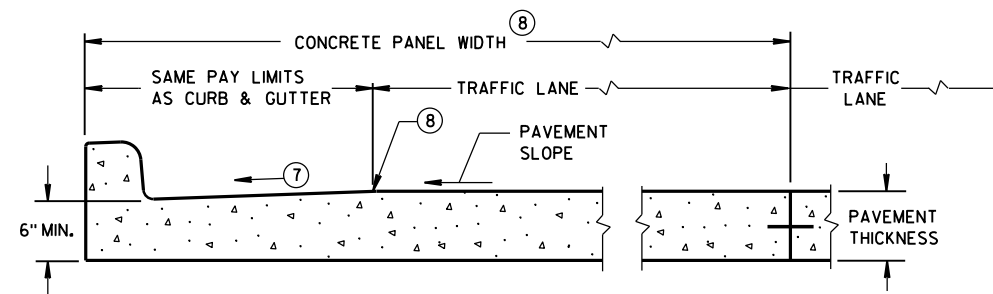
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

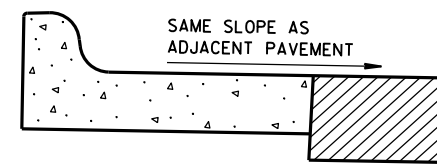
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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

\* BIKE LANE IS NOT SHOWN.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

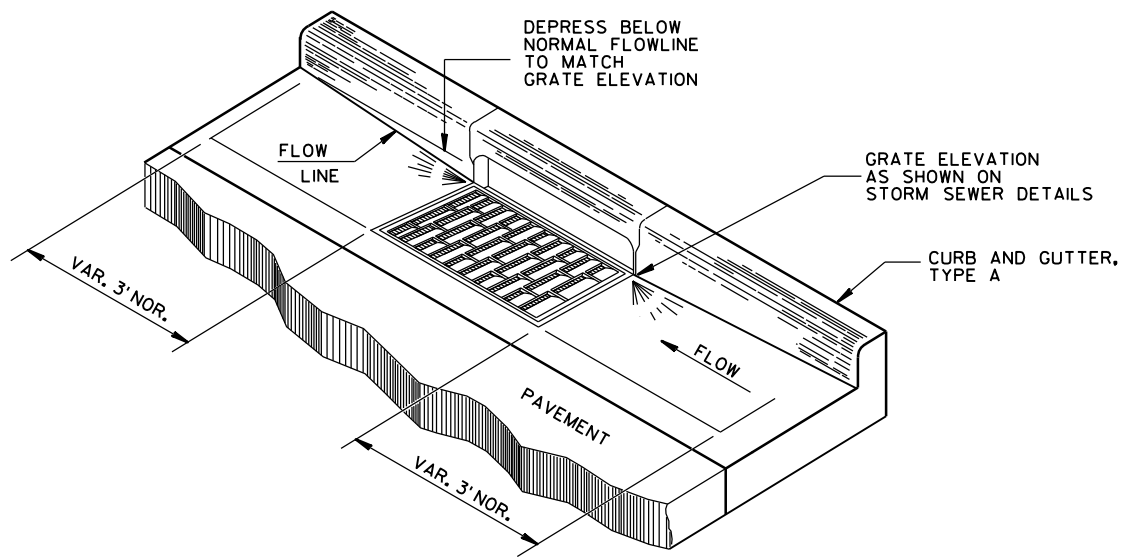


REVERSE SLOPE GUTTER<sup>⑥</sup>

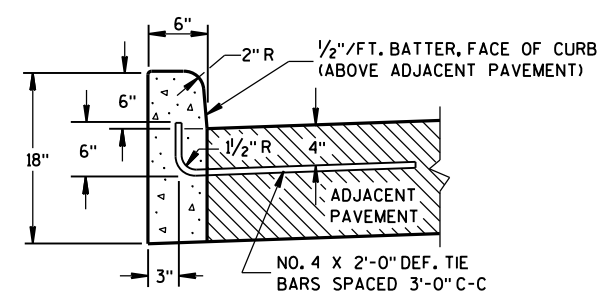
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

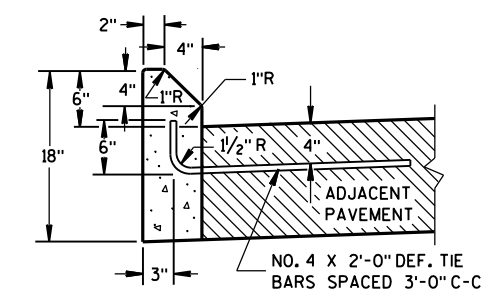
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**DETAIL OF CURB AND GUTTER AT INLETS**  
(TYPE H INLET COVER SHOWN)



TYPES A<sup>①</sup> & D

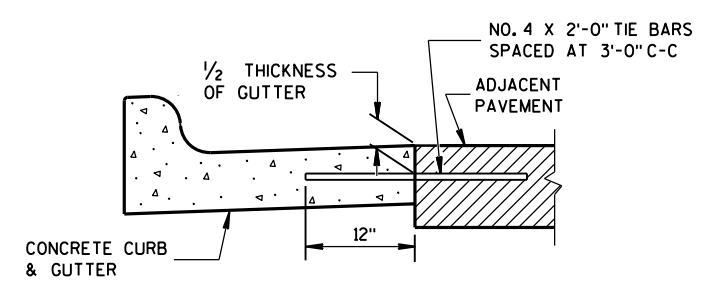


TYPES G<sup>①</sup> & J

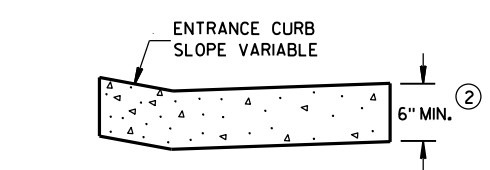
**GENERAL NOTES**

- 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.
- 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 TBTT.
  - ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
  - ③ REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

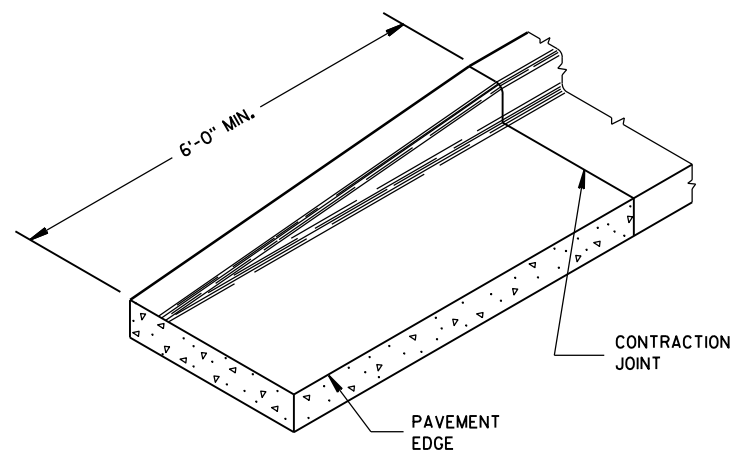
**CONCRETE CURB**



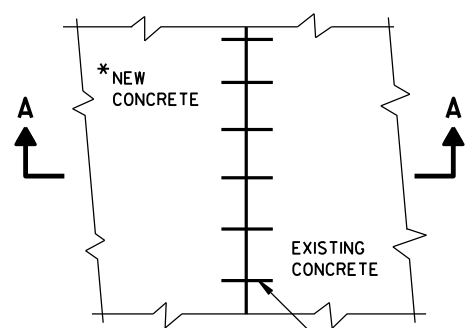
TYPICAL TIE BAR LOCATION<sup>①</sup>



DRIVEWAY ENTRANCE CURB<sup>⑨</sup>  
(WHEN DIRECTED BY THE ENGINEER)

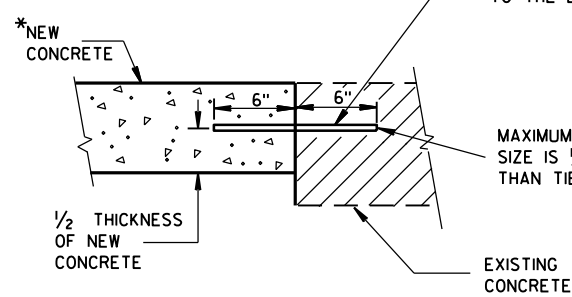


**END SECTION CURB & GUTTER**



PLAN VIEW

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

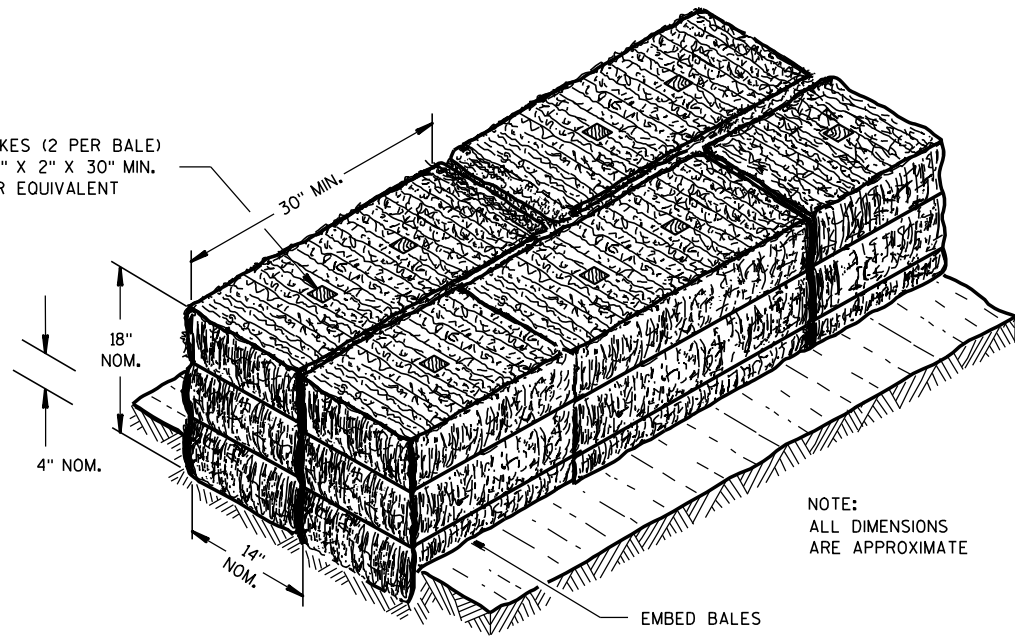


SECTION A-A  
**TIE BARS DRILLED INTO EXISTING PAVEMENT**

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

<b>CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June, 2017 DATE	/s/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA	

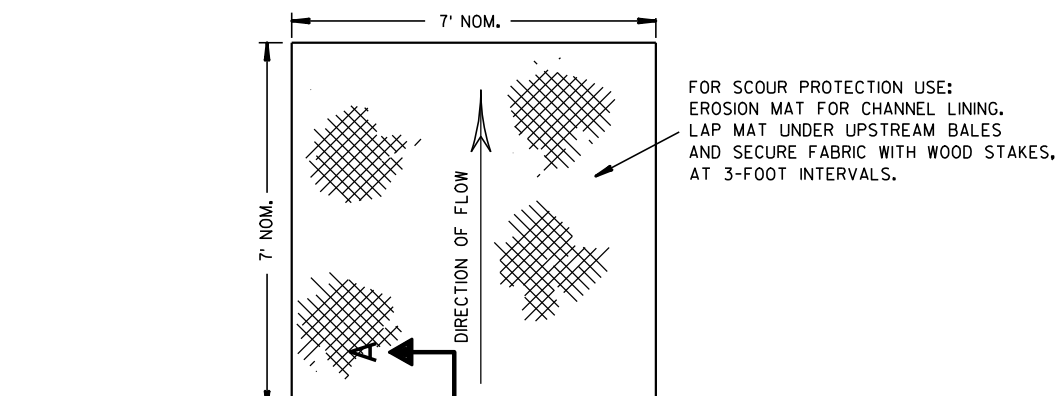
WOOD STAKES (2 PER BALE)  
NOMINAL 2" X 2" X 30" MIN.  
LENGTH OR EQUIVALENT



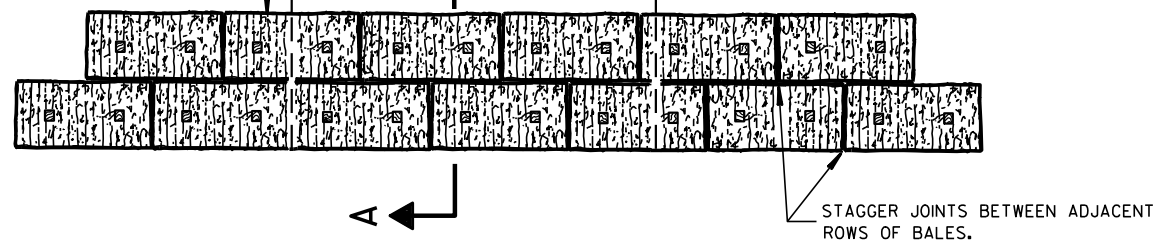
NOTE:  
ALL DIMENSIONS  
ARE APPROXIMATE

EMBED BALES

SECTION A-A



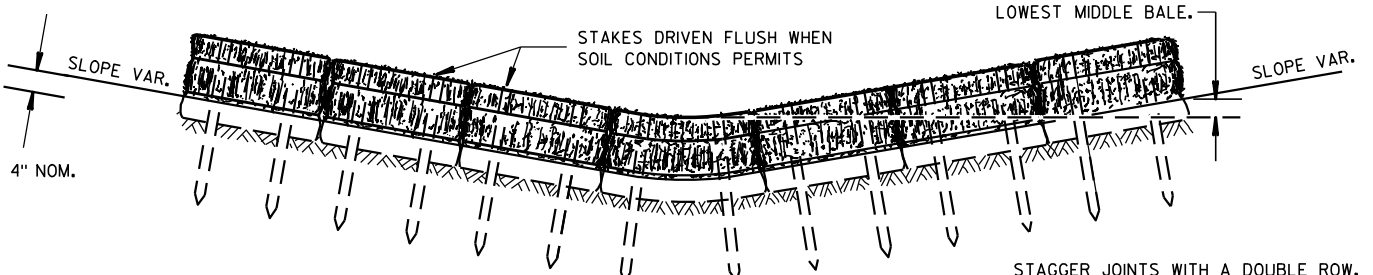
FOR SCOUR PROTECTION USE:  
EROSION MAT FOR CHANNEL LINING.  
LAP MAT UNDER UPSTREAM BALES  
AND SECURE FABRIC WITH WOOD STAKES,  
AT 3-FOOT INTERVALS.



STAGGER JOINTS BETWEEN ADJACENT  
ROWS OF BALES.

PLAN VIEW

BOTTOM ELEVATION OF END BALE SHALL  
BE EQUAL TO OR GREATER THAN TOP OF  
LOWEST MIDDLE BALE.



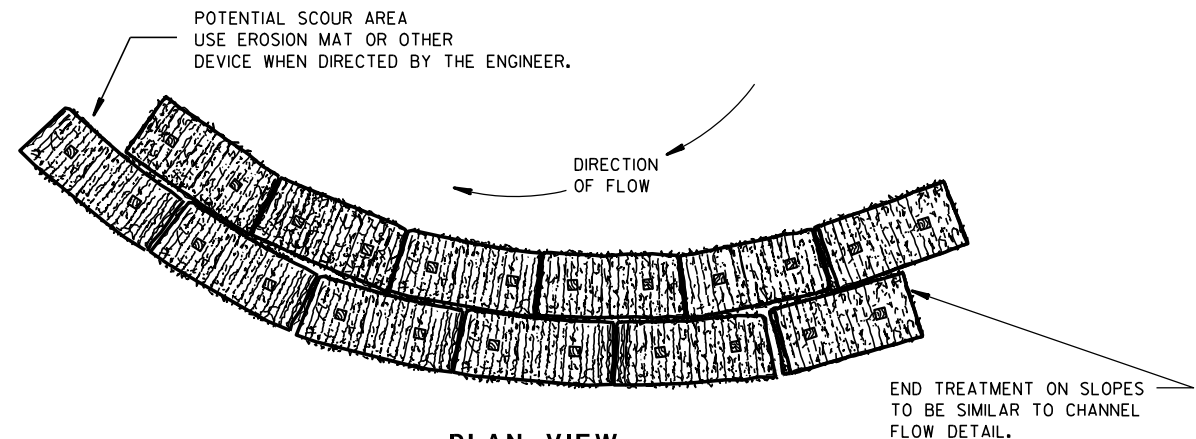
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

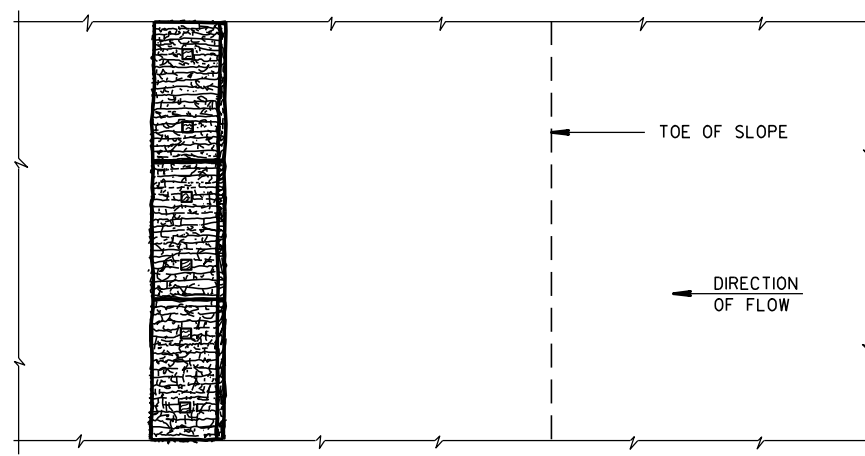
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

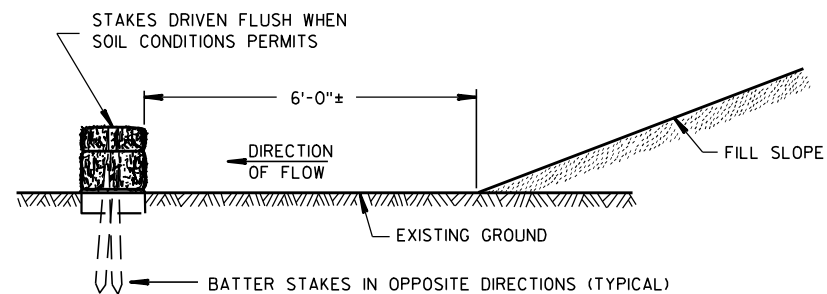


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

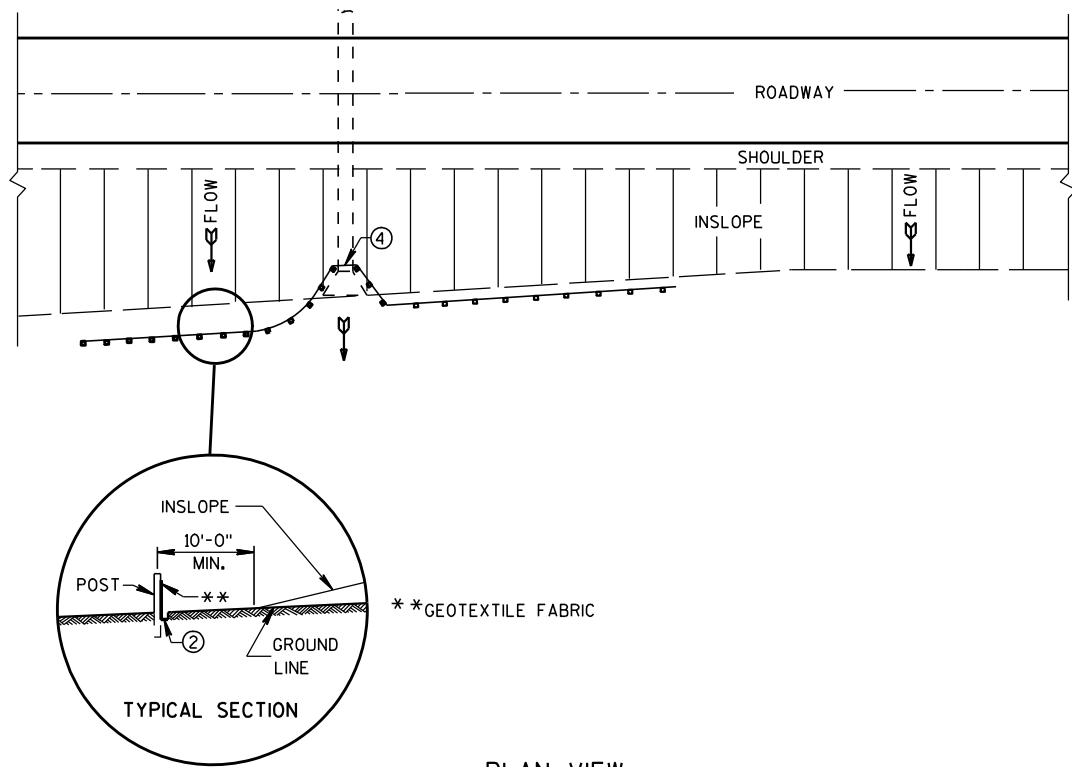
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

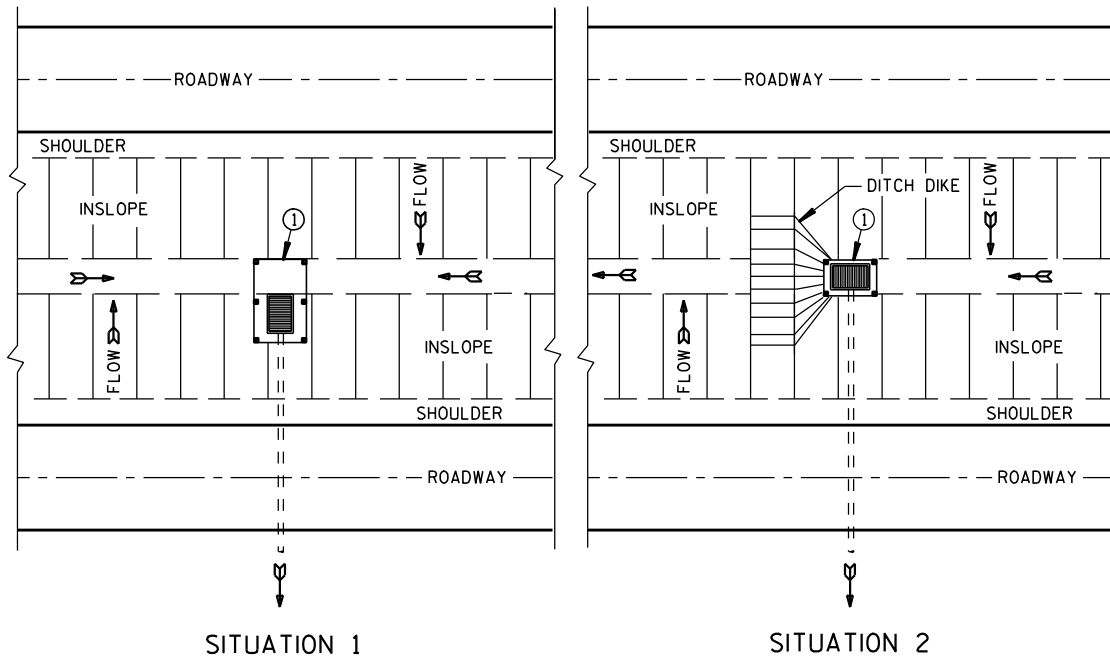
TYPICAL INSTALLATIONS OF  
EROSION BALES / TEMPORARY  
DITCH CHECKS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



PLAN VIEW  
TYPICAL APPLICATION OF SILT FENCE

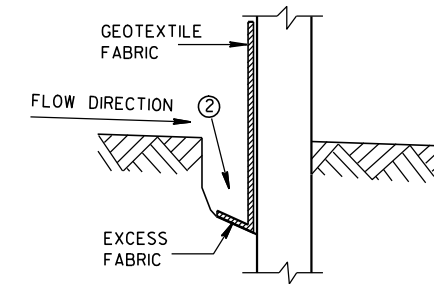


SITUATION 1 SITUATION 2  
PLAN VIEW  
SILT FENCE AT MEDIAN SURFACE DRAINS

**GENERAL NOTES**

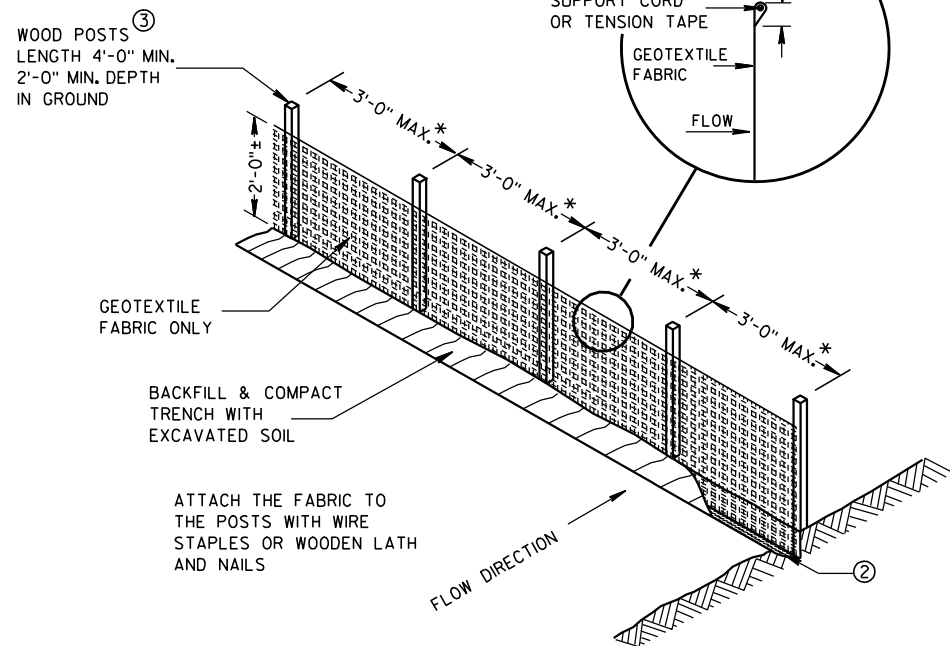
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 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.



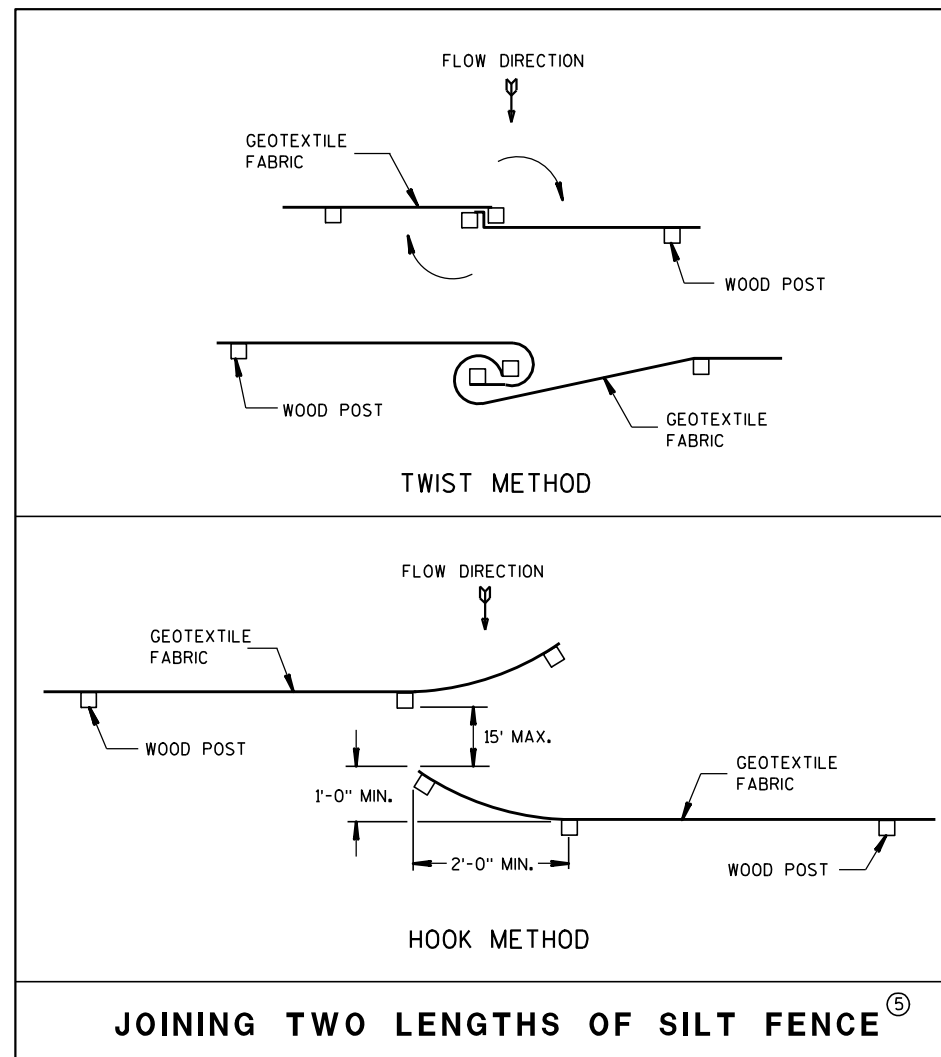
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

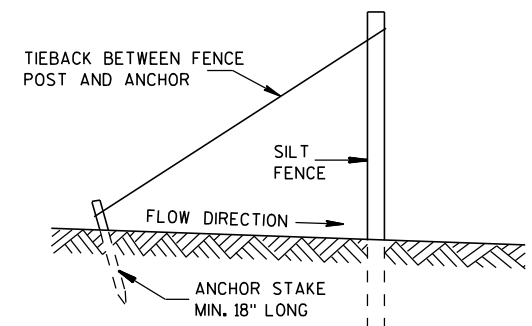


SILT FENCE

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



JOINING TWO LENGTHS OF SILT FENCE ⑤

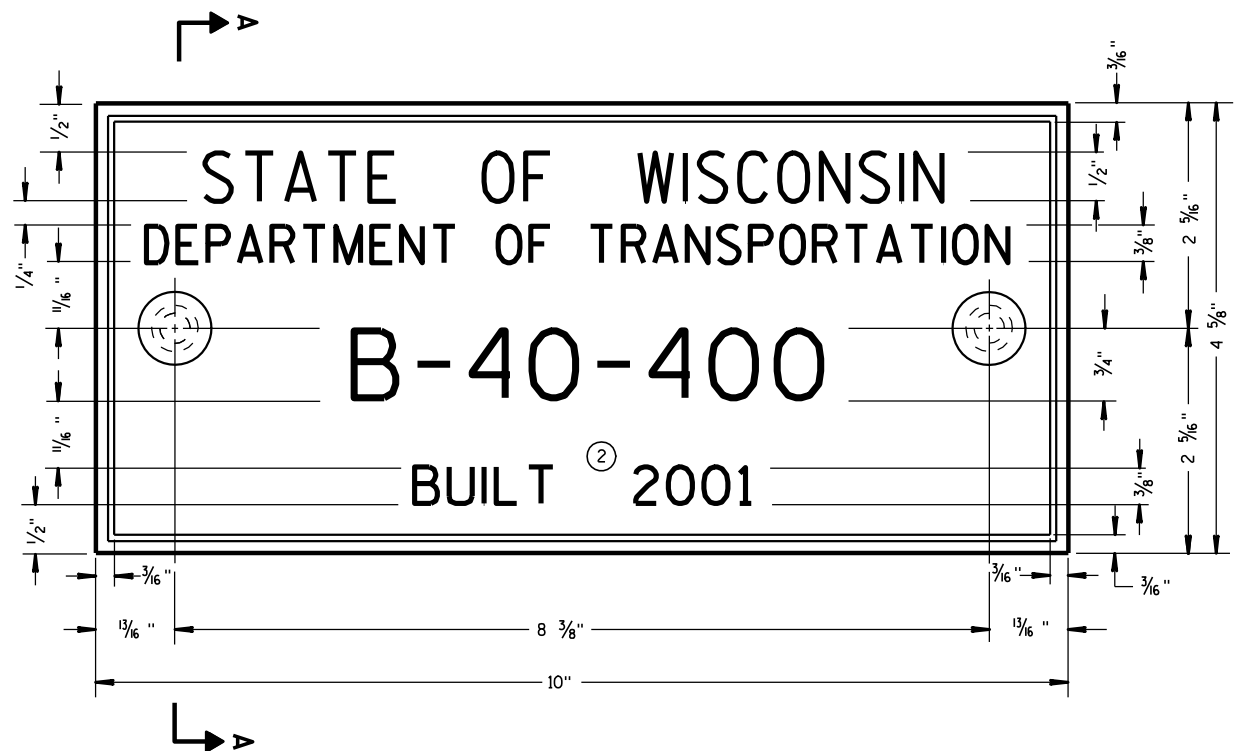


SILT FENCE TIE BACK  
(WHEN REQUIRED BY THE ENGINEER)

**SILT FENCE**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



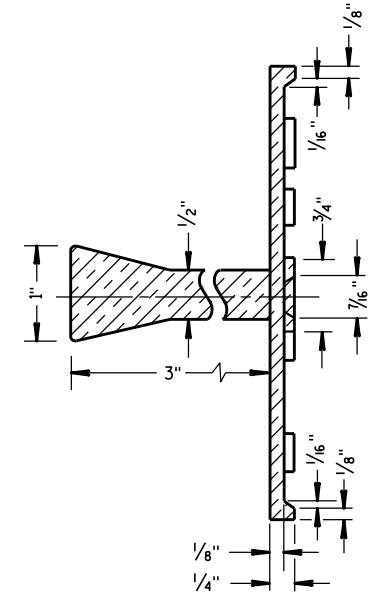
**TYPICAL NAME PLATE**  
(BRIDGES, CULVERTS, AND RETAINING WALLS)

**GENERAL NOTES**

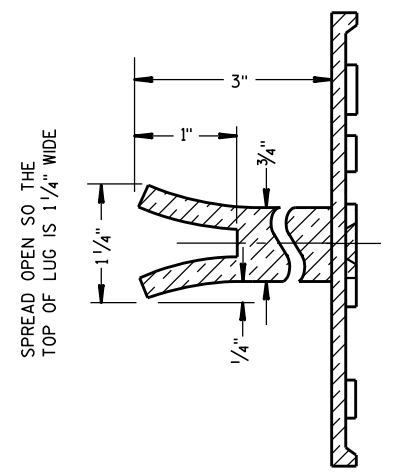
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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

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



**SECTION A-A**



**ALTERNATE LUG**

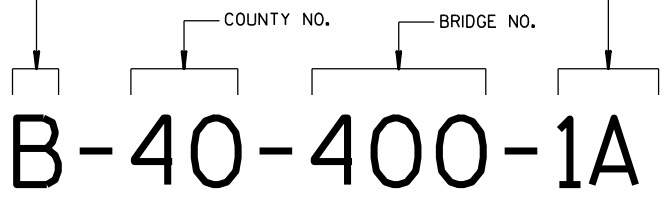
6

6

FOR MULTI-UNIT STRUCTURES  
LINE 3 ABOVE SHALL READ

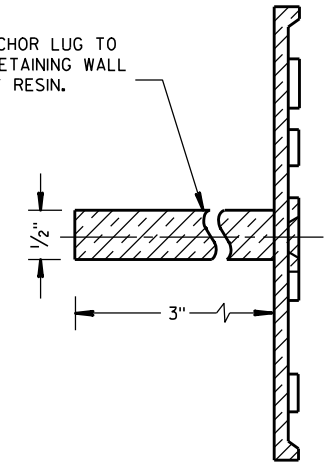
B = BRIDGE  
C = CULVERT  
R = RETAINING WALL

UNIT NO. FOR MULTIPLE  
UNIT BRIDGE



**NUMBERING DESIGNATION  
MULTI-UNIT STRUCTURES**

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



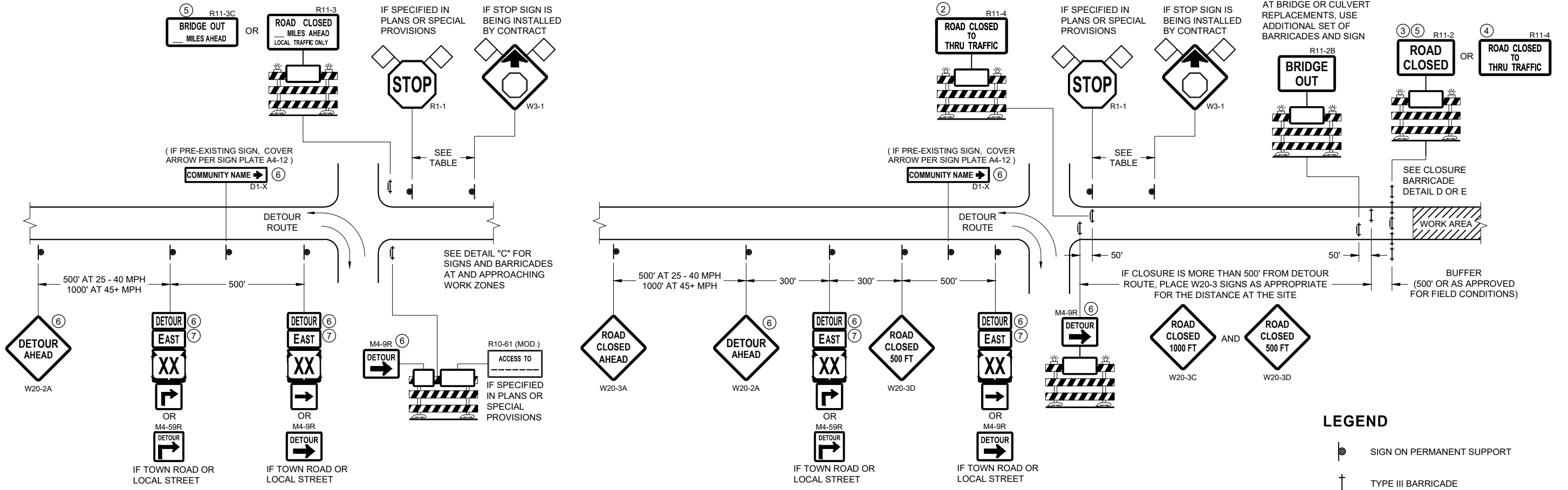
**ALTERNATE LUG**  
(FOR ATTACHMENT TO PRECAST STRUCTURES)

S.D.D. 12 A 3-10

S.D.D. 12 A 3-10

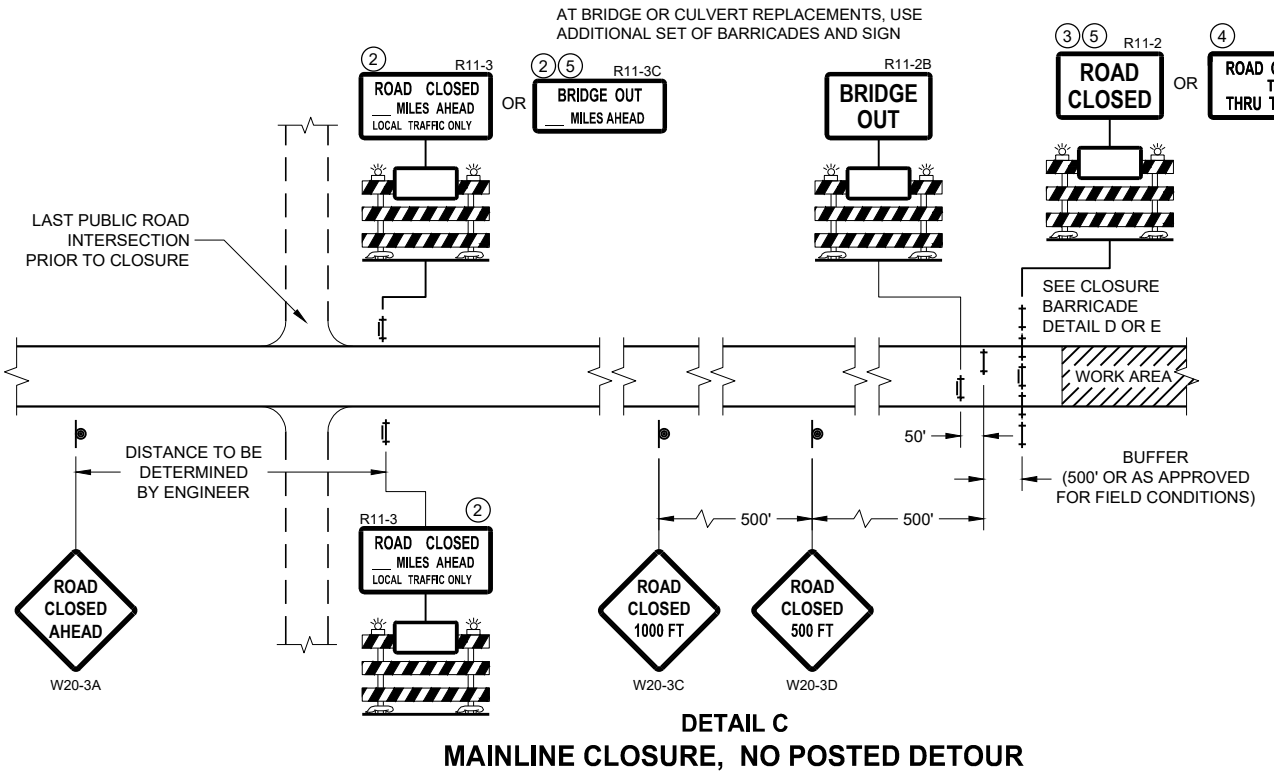
<b>NAME PLATE (STRUCTURES)</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 3/26/10	/S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA	





**DETAIL A**  
**MAINLINE CLOSURE WITH POSTED DETOUR**  
 WORK ZONE GREATER THAN OR EQUAL TO 1/2 MILE FROM  
 DETOUR ROUTE ( 1000 FEET IF URBAN )

**DETAIL B**  
**MAINLINE CLOSURE WITH POSTED DETOUR**  
 WORK ZONE LESS THAN 1/2 MILE FROM  
 DETOUR ROUTE ( 1000 FEET IF URBAN )



**DETAIL C**  
**MAINLINE CLOSURE, NO POSTED DETOUR**

**LEGEND**

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR M4 - 8
- EAST M3 - X
- XX OR XX OR COUNTY M1 - 4 M1 - 6 M1 - 5A
- M05 - 1 OR M06 - 1

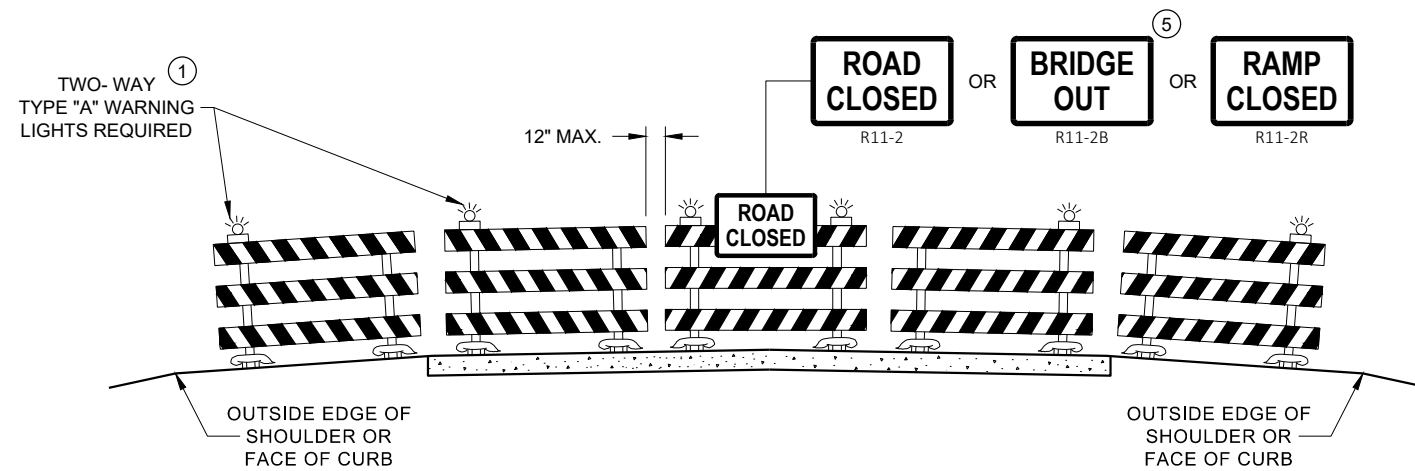
SEE SDD 15C2-SHEET "b"  
 FOR GENERAL NOTES  
 AND FOOTNOTES ① THROUGH ⑦

**BARRICADES AND SIGNS  
 FOR MAINLINE CLOSURES**

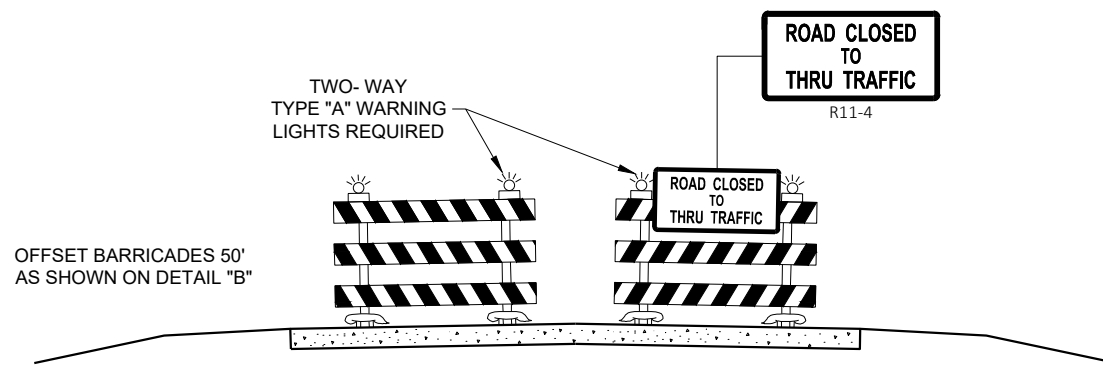
STATE OF WISCONSIN  
 DEPARTMENT OF TRANSPORTATION

APPROVED  
 November 2018 /S/ Andrew Heidtke  
 DATE WORK ZONE ENGINEER

FHWA



**DETAIL D  
ROAD CLOSURE BARRICADE DETAIL  
APPROACH VIEW**



**DETAIL E  
LANE CLOSURE BARRICADE DETAIL  
APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

**GENERAL NOTES**

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60" X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

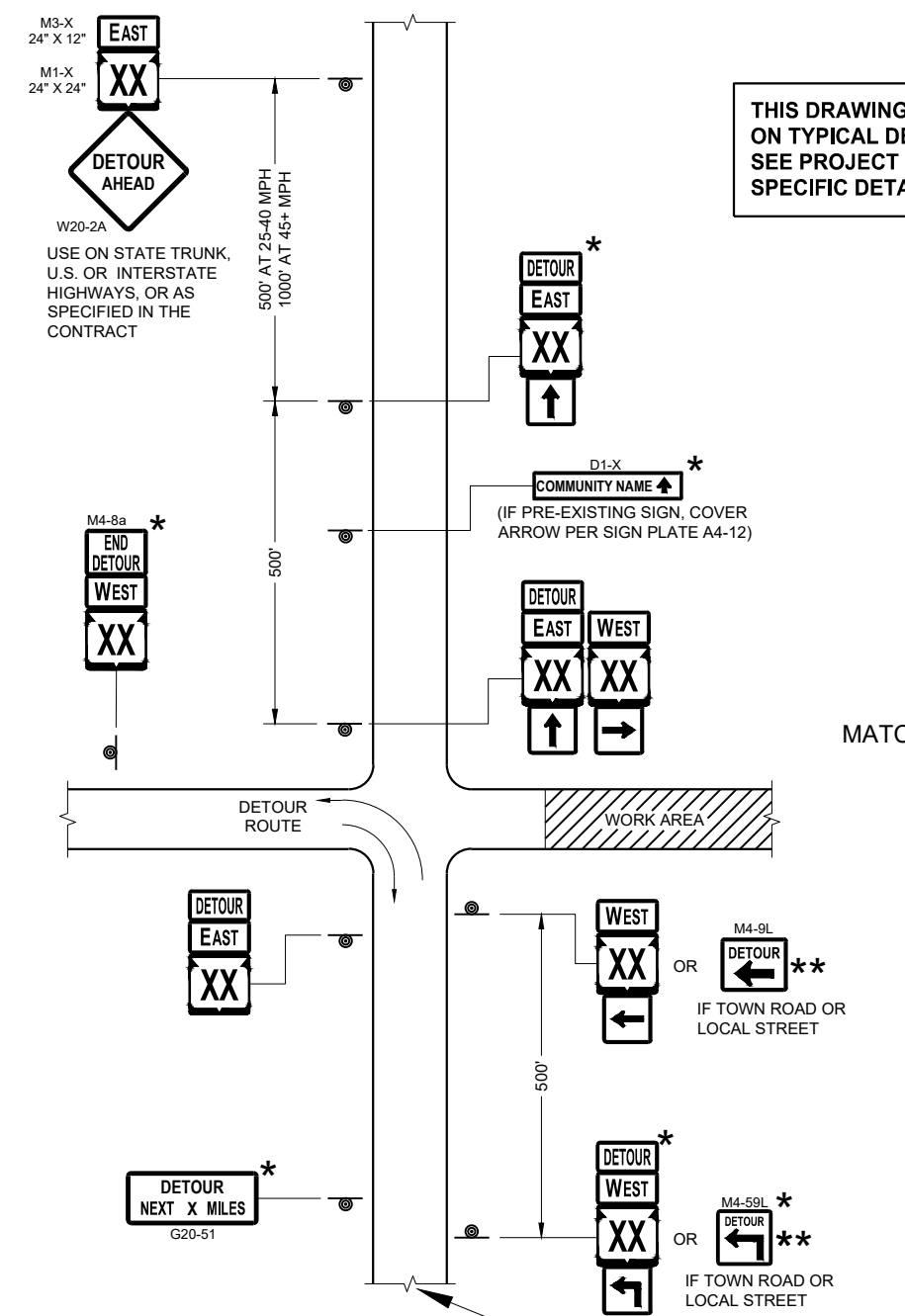
- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS  
FOR  
VARIOUS CLOSURES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
November 2018 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER

FHWA



**THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.**

**LEGEND**

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- M4 - 8
- M3 - X
- M1 - 4
- M1 - 6
- M1 - 5A
- M05 - 1
- M06 - 1
- M06 - 1

**GENERAL NOTES**

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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.

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

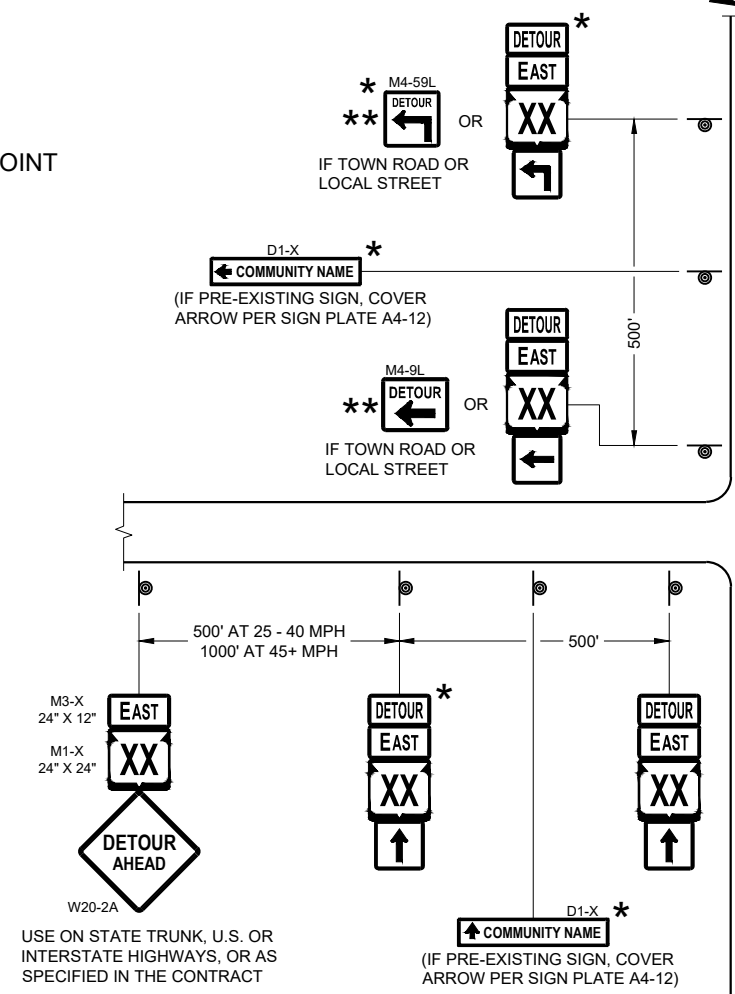
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

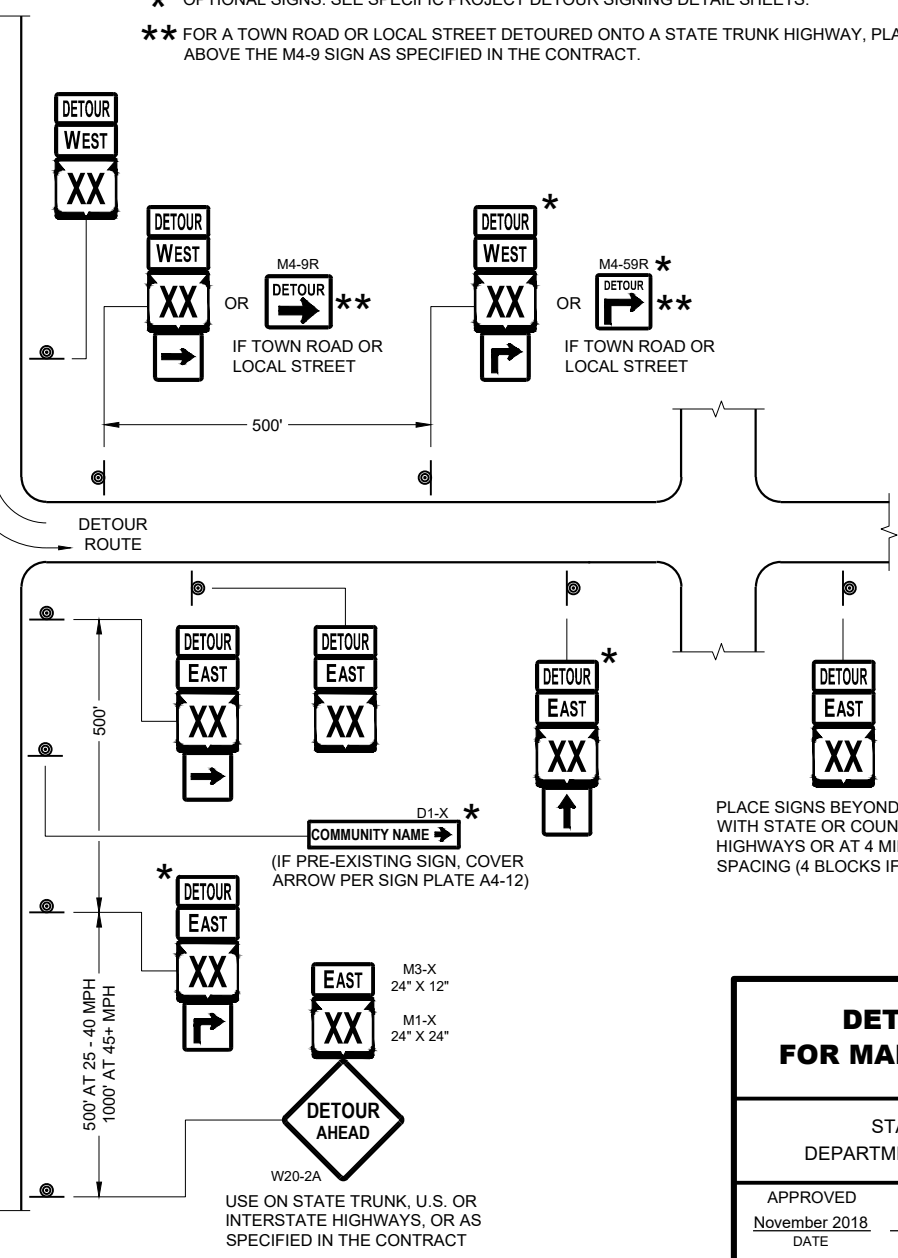
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

- \* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- \*\* FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

MATCH POINT



**DETAIL F  
DETOUR SIGNING**



<b>DETOUR SIGNING FOR MAINLINE CLOSURES</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2018 DATE	/s/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

**GENERAL NOTES**

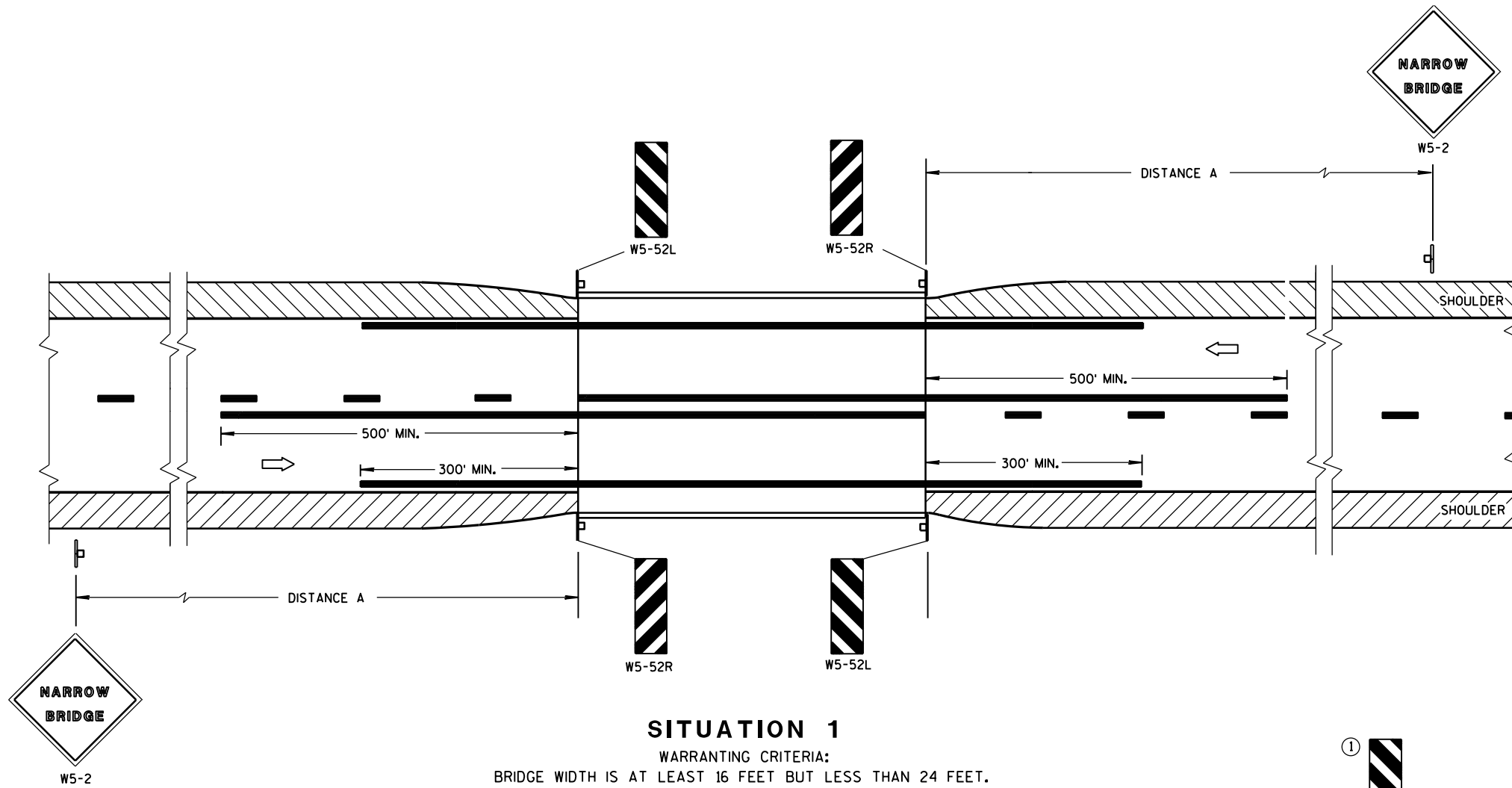
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

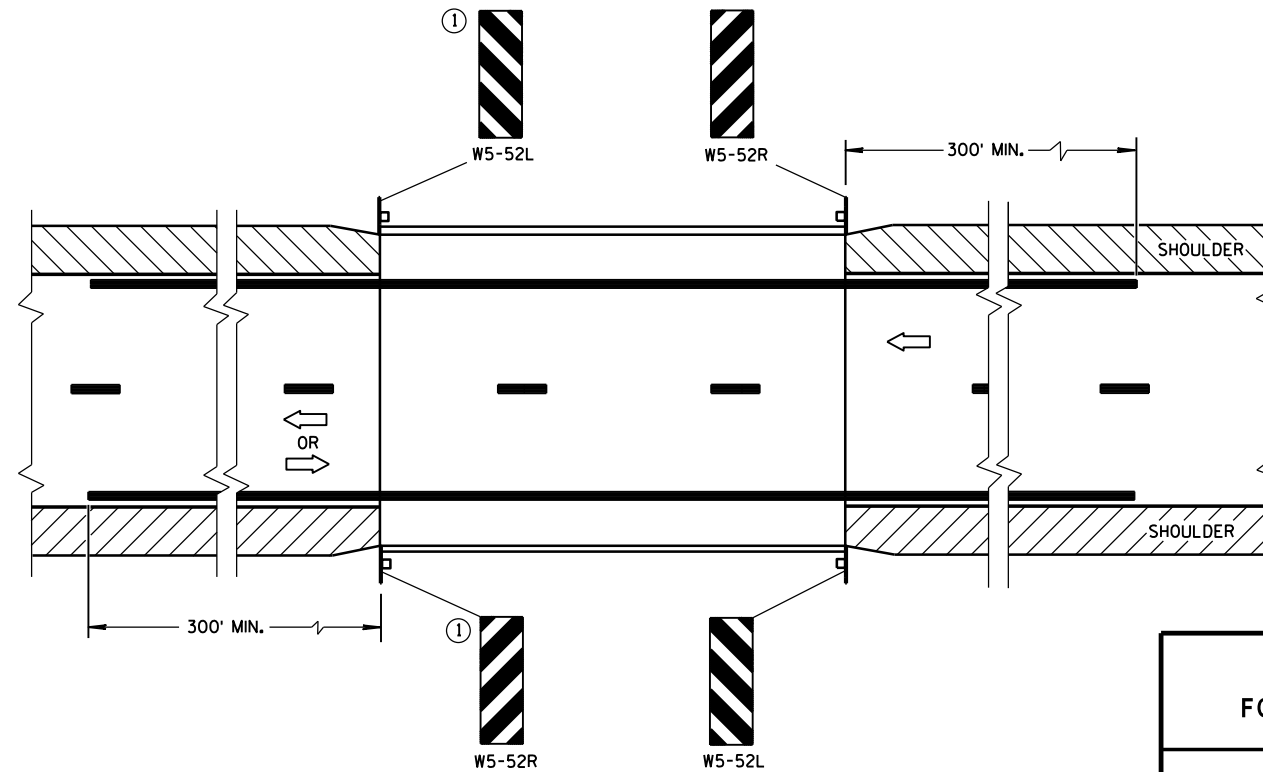
PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

① OMIT ON ONE-WAY TRAVELLED WAYS.

➡ DIRECTION OF TRAFFIC



**SITUATION 1**  
WARRANTING CRITERIA:  
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.



**SITUATION 2**  
WARRANTING CRITERIA:  
1. BRIDGE WIDTH IS AT LEAST 24 FEET AND  
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET.

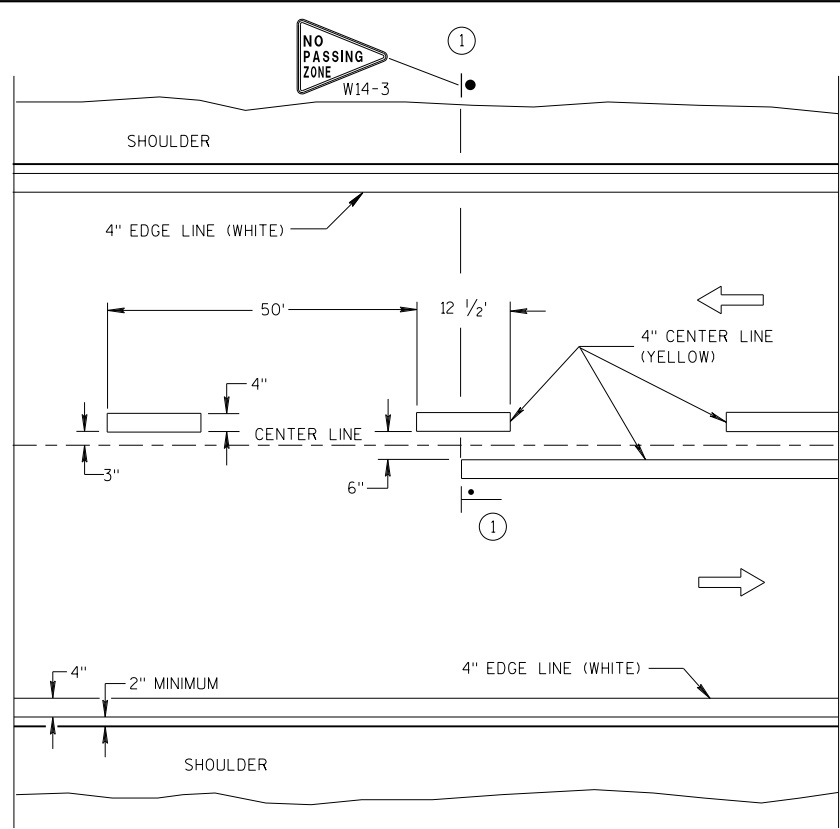
**DISTANCE TABLE**

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

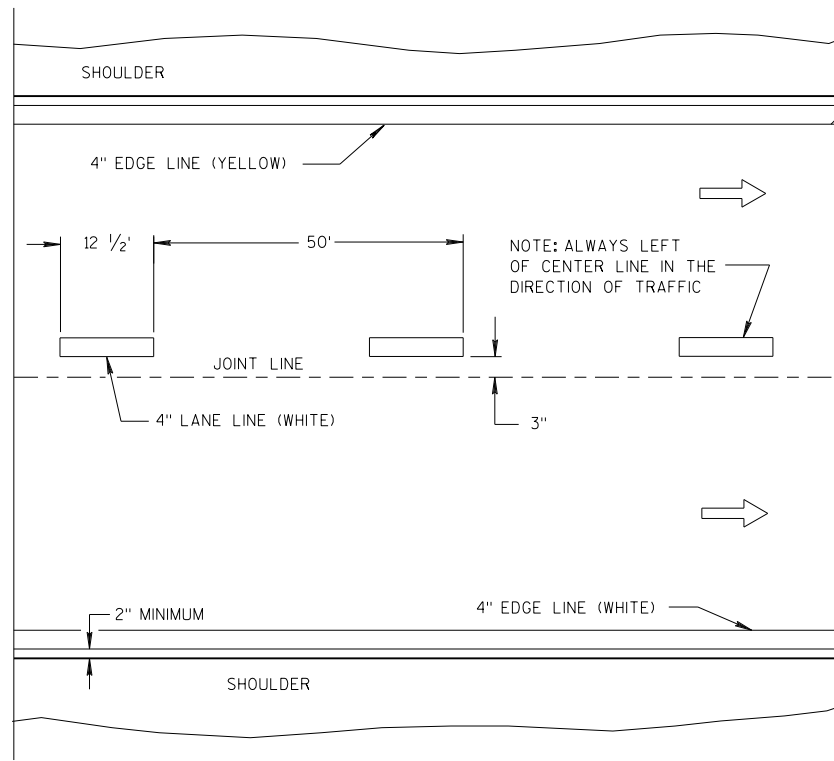
**SIGNING & MARKING FOR TWO LANE BRIDGES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2017 /S/ Matthew R. Rauch  
DATE STATE SIGNING AND MARKING ENGINEER  
FHWA

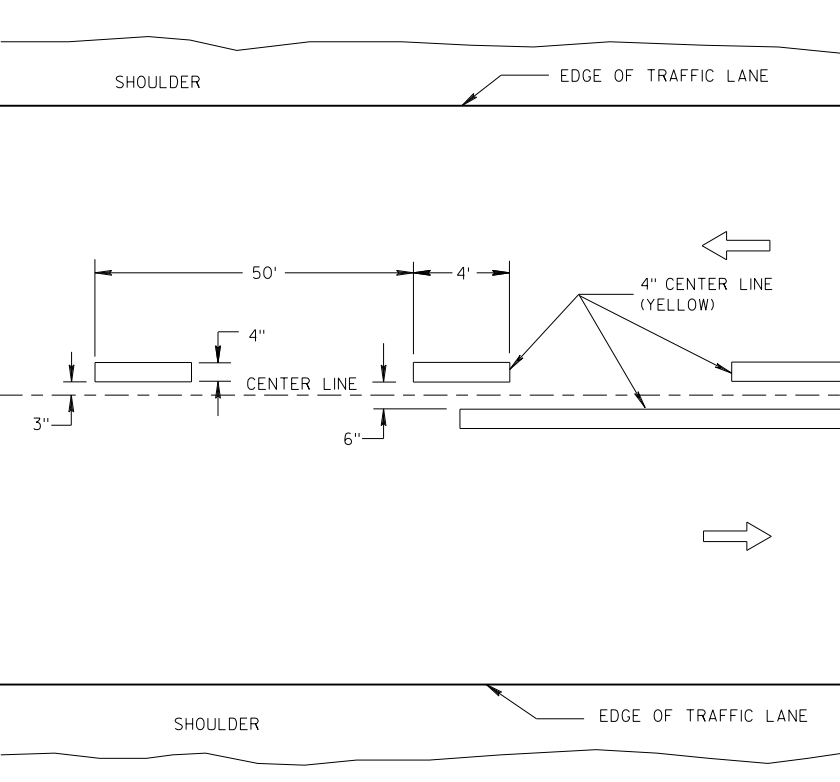


TWO WAY TRAFFIC

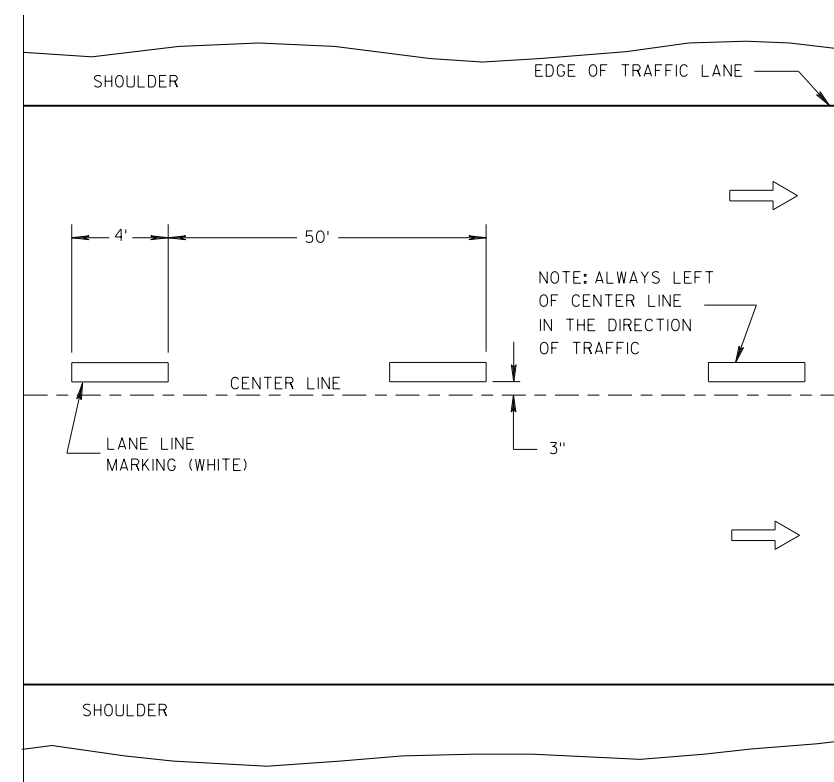


ONE WAY TRAFFIC

**PERMANENT PAVEMENT MARKING**



TWO WAY TRAFFIC



ONE WAY TRAFFIC

**TEMPORARY PAVEMENT MARKING**

**GENERAL NOTES**

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

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

**NOTE**

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

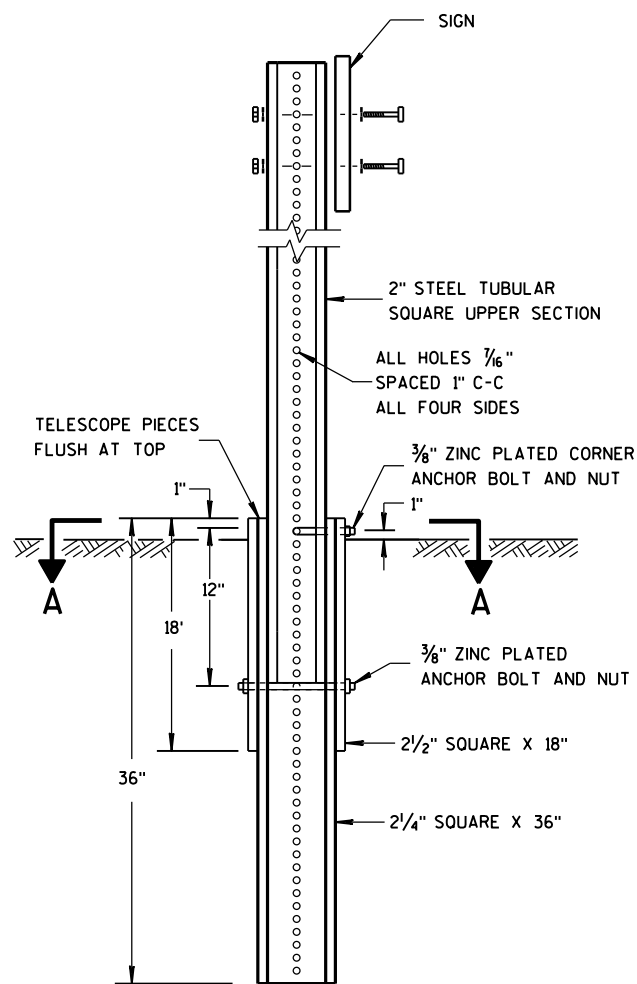
**LEGEND**

- "T" MARKING
- POST MOUNTED SIGN

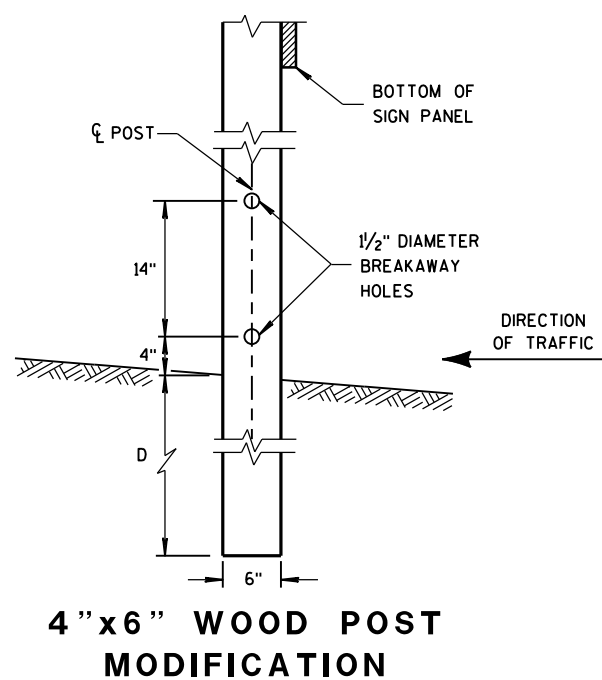
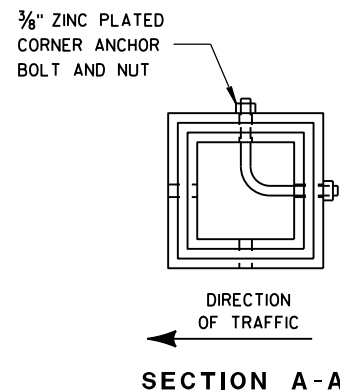
**LONGITUDINAL MARKING (MAINLINE)**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
DATE 7/2018 /S/ Matthew R. Rauch  
STATE SIGNING AND MARKING ENGINEER  
FHWA



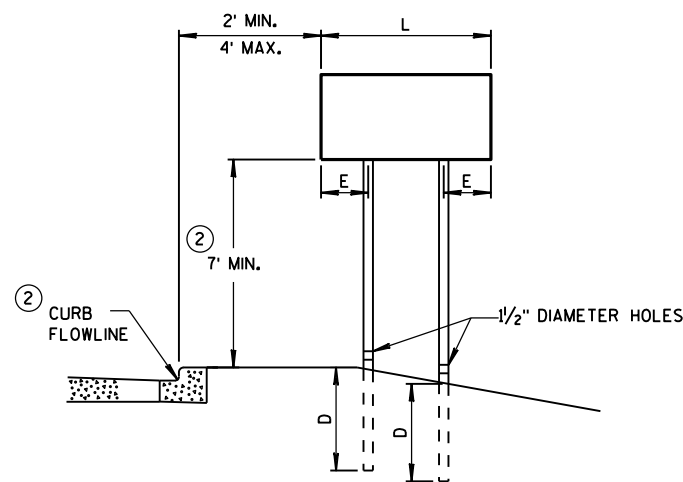
**DETAIL OF TUBULAR STEEL SIGN POST**



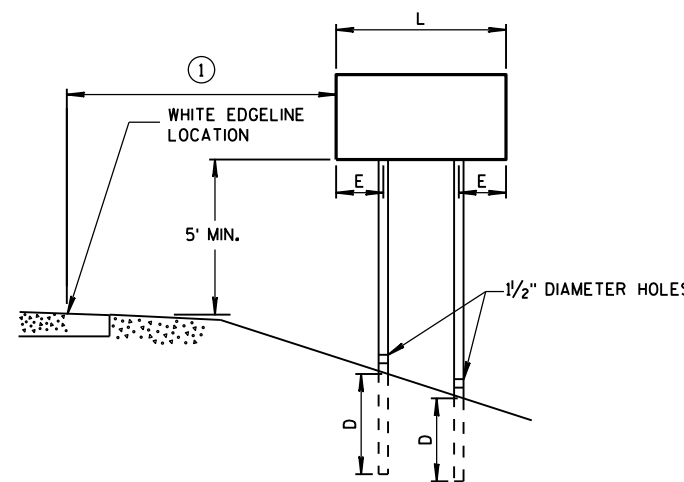
**4" X 6" WOOD POST MODIFICATION**

**GENERAL NOTES**

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



**URBAN AREA**



**RURAL AREA**

**POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS**

**TUBULAR STEEL POSTS**

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

**WOOD POST EMBEDMENT DEPTH**

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

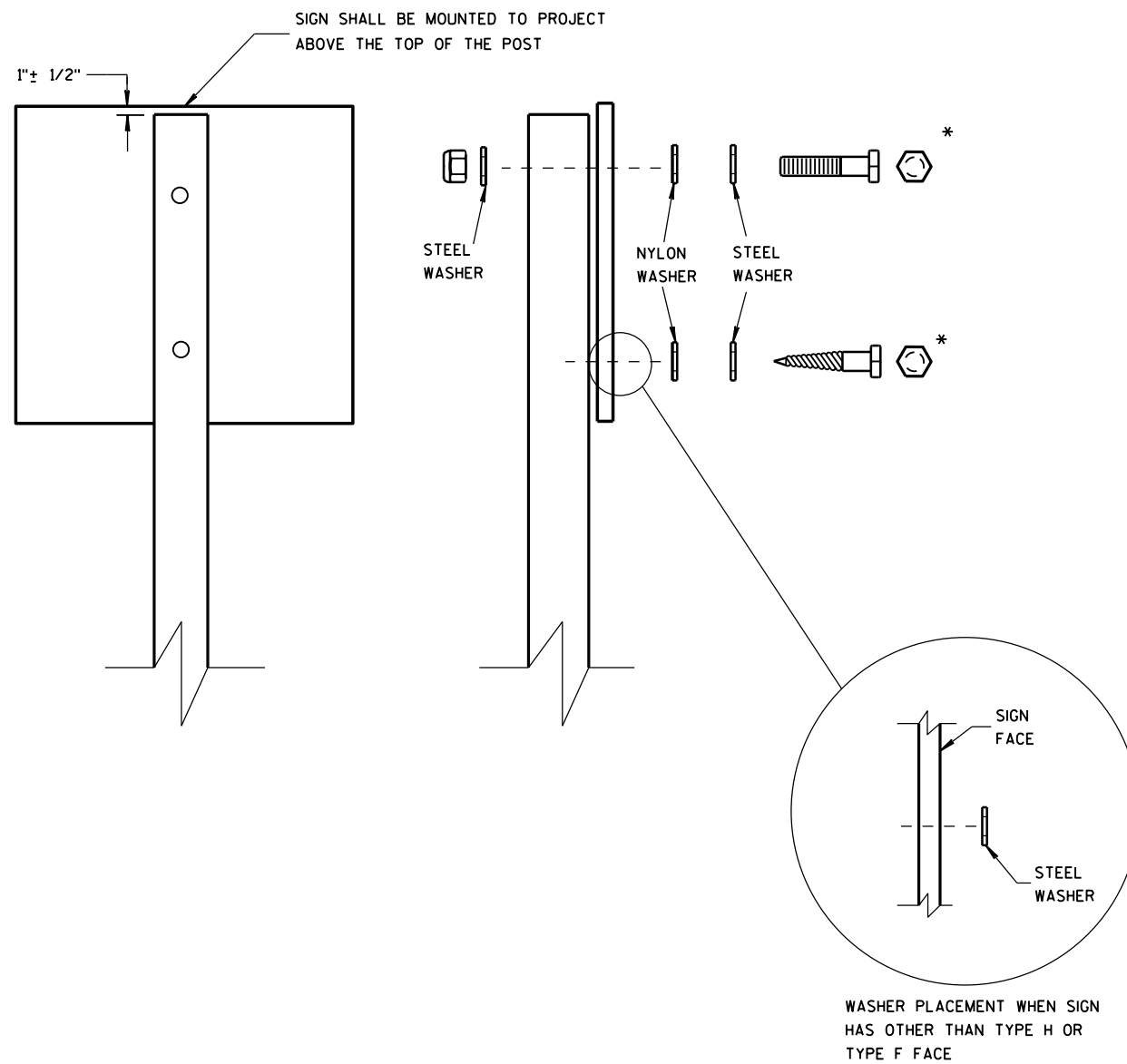
**4" X 6" WOOD POST**

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE ③

**TEMPORARY TRAFFIC CONTROL SIGN MOUNTING**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 3/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

\* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

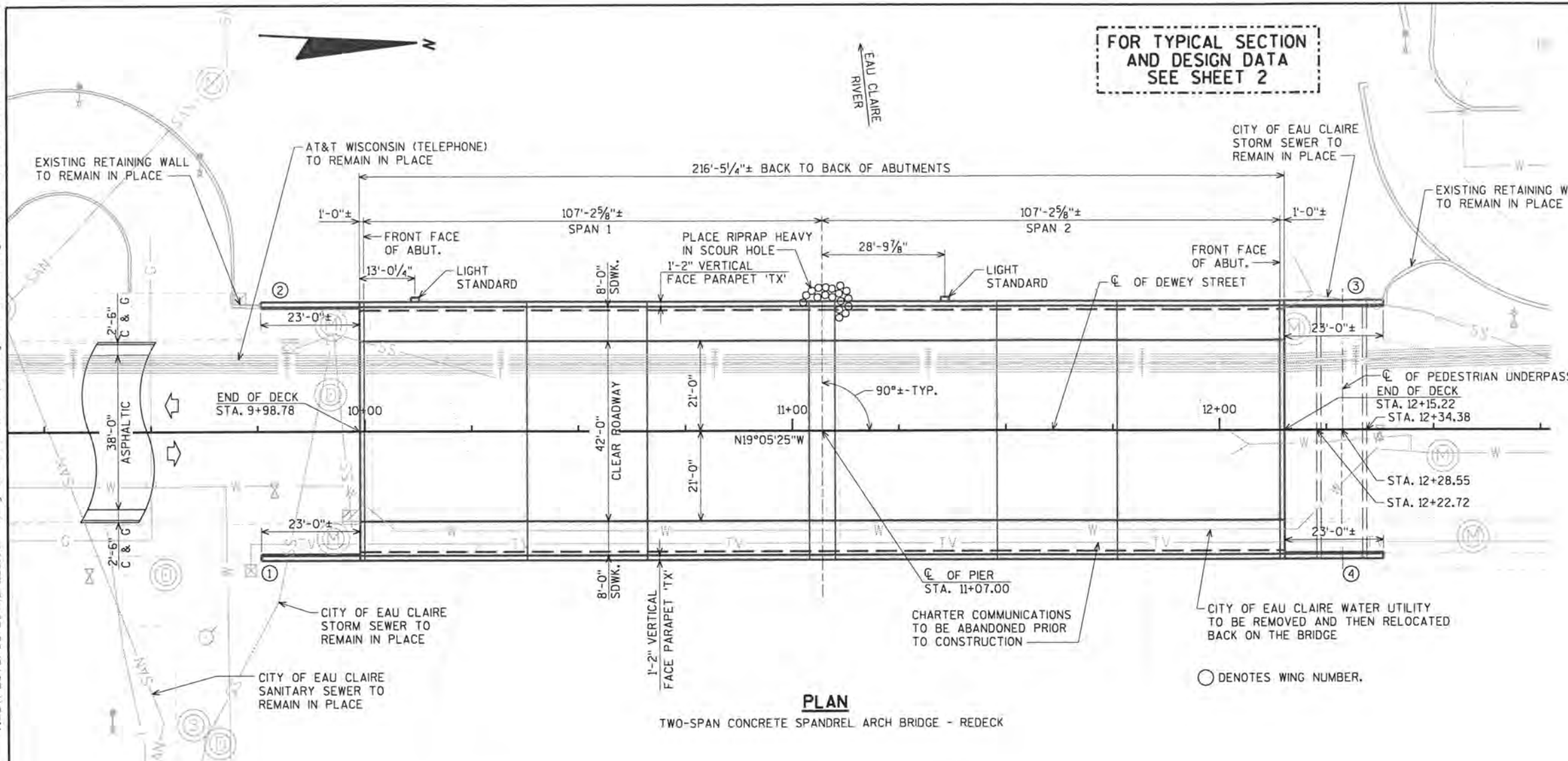
ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/s/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

FOR TYPICAL SECTION AND DESIGN DATA SEE SHEET 2

LIST OF DRAWINGS

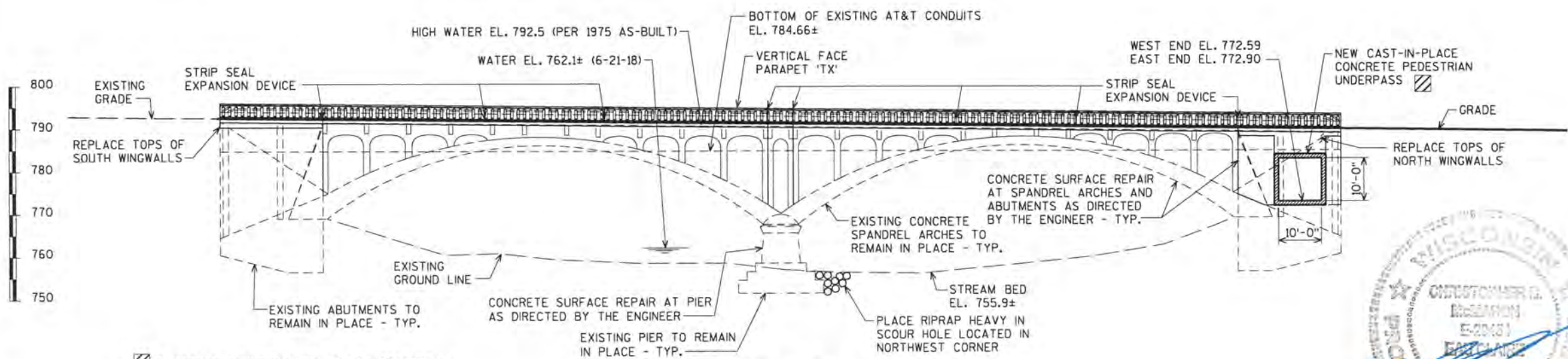
1. GENERAL PLAN
2. TYPICAL SECTION AND DESIGN DATA
3. QUANTITIES AND NOTES
4. SPANDREL ARCH DETAILS
5. ARCH COLUMNS LAYOUT
6. ARCH COLUMNS 1 THRU 5 DETAILS
7. ARCH COLUMNS 6 THRU 9 SPAN 1 DETAILS
8. ARCH COLUMNS 6 THRU 9 SPAN 2 DETAILS
9. ARCH COLUMNS 10 THRU 15 DETAILS
10. ARCH COLUMN DETAILS
11. ARCH COLUMNS BILL OF BARS AND DETAILS
12. FLOOR BEAM LAYOUT
13. FLOOR BEAM A DETAILS
14. FLOOR BEAM B DETAILS
15. FLOOR BEAM C DETAILS
16. FLOOR BEAM D DETAILS
17. FLOOR BEAM BILL OF BARS
18. SUPERSTRUCTURE
19. SUPERSTRUCTURE SPAN 1 PLAN
20. SUPERSTRUCTURE SPAN 2 PLAN
21. EXTERIOR ARCH WALL DETAILS
22. STRIP SEAL EXPANSION JOINT DETAILS
23. STRIP SEAL EXPANSION JOINT DETAILS
24. STRIP SEAL EXPANSION JOINT PLAN
25. SIDEWALK COVER PLATE DETAILS
26. VERTICAL FACE PARAPET 'TX' EAST LAYOUT
27. VERTICAL FACE PARAPET 'TX' WEST LAYOUT
28. VERTICAL FACE PARAPET 'TX' DETAILS
29. CONDUIT DETAILS
30. SUPERSTRUCTURE BILL OF BARS
31. SOUTH ABUTMENT PLAN
32. VERTICAL FACE PARAPET 'TX' ON SOUTH WINGS
33. SOUTH ABUTMENT DETAILS AND BILL OF BARS
34. NORTH ABUTMENT PLAN
35. NORTH ABUTMENT PEDESTRIAN UNDERPASS LAYOUT
36. PEDESTRIAN UNDERPASS TYPICAL SECTION
37. PEDESTRIAN UNDERPASS STEEL LAYOUTS
38. VERTICAL FACE PARAPET 'TX' ON NORTH WINGS
39. NORTH ABUTMENT DETAILS AND BILL OF BARS
40. CONDUIT PACK DETAILS

Project Name: City of Eau Claire, Dewey Street Bridge Rehabilitation Final Structure



○ DENOTES WING NUMBER.

DATE: DATE: DATE:  
CHECKED BY: BACK CHECKED BY: CORRECTED BY:



TEMPORARILY BLOCK ENDS OF NEW PEDESTRIAN UNDERPASS AS NEEDED IN ORDER TO MAINTAIN EXISTING SLOPES ALONG WINGWALLS. PEDESTRIAN UNDERPASS WILL BE CONNECTED TO TRAIL SYSTEM IN THE FUTURE UNDER A SEPRATE CONTRACT. COST TO TEMPORARILY BLOCK THE ENDS IS INCINTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".



11/6/19

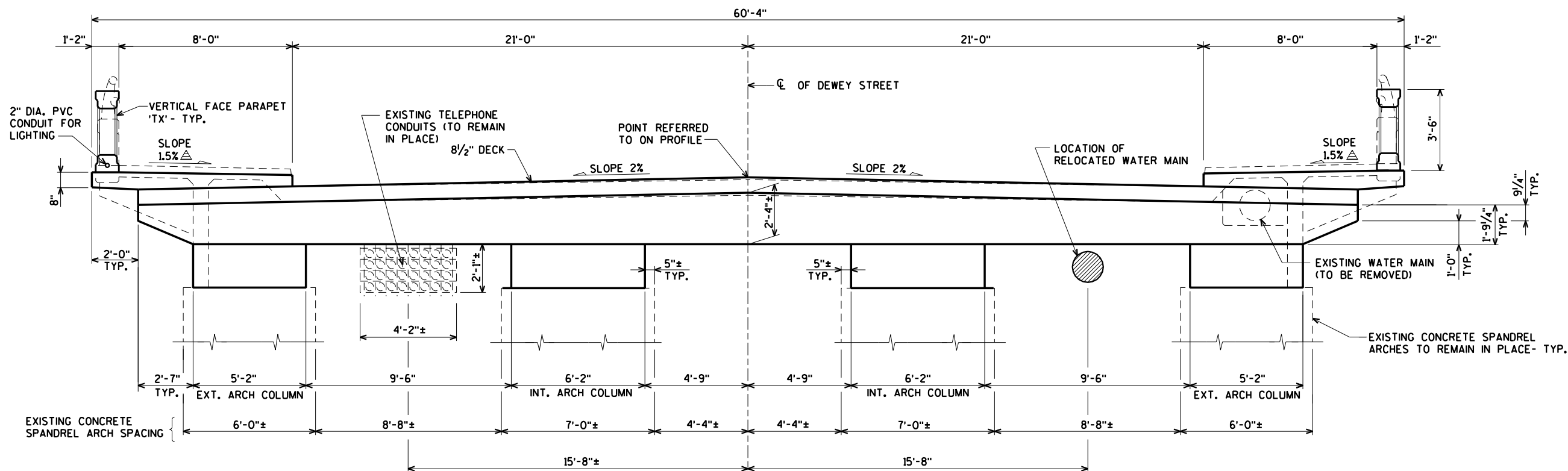
BRIDGE OFFICE CONTACT:  
WILLIAM DREHER  
(608)-266-8489

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

NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY <b>AYRES ASSOCIATES</b> 3433 Oakwood Hills Parkway Eau Claire, WI 54701 www.AyresAssociates.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED <i>William C. Decker</i> 11/07/19 CHIEF STRUCTURES DESIGN ENGINEER DATE			8
<b>STRUCTURE B-18-93</b>			
DEWEY STREET OVER THE EAU CLAIRE RIVER			
COUNTY	EQUA CLAIRE	TOWNSHIP/CITY/VILLAGE	EQUA CLAIRE
DESIGN SPEC.	REHABILITATION	N/A	
DESIGNED BY	DESIGN CKD	DRAWN BY	PLANS CKD
AEB/JLB	JWZ/ZSS	CJM/CLP	CBM
<b>GENERAL PLAN</b>			SHEET 1 OF 40



\$PRFNAME\$ U:\42-1123.00 - City of Eau Claire, Dewey Street Bridge Rehab\Structures\Final Structures\421123 ty qn.DGN



**TYPICAL CROSS SECTION THRU BRIDGE**

(LOOKING NORTH)

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

**WATER MAIN GENERAL NOTES**

EXISTING WATER MAIN TO BE REPLACED WITH NEW 16" DIA. WATER MAIN AS PART OF THIS CONTRACT, INCLUDED UNDER ROADWAY BID ITEMS.

THE EXACT SIZE, LOCATION, AND ELEVATION OF THE OPENINGS THROUGH THE ABUTMENTS FOR THE NEW 16" DIA. WATER MAIN SHALL BE DETERMINED AND AGREED UPON BY BOTH THE UTILITY OWNER (CITY OF EAU CLAIRE) AND THE FIELD ENGINEER PRIOR TO INSTALLATION.

AFTER THE NEW 16" DIA. WATER MAIN HAS BEEN INSTALLED, THE OPENINGS NEED TO BE GROUTED CLOSED AT THE ABUTMENTS. A PIECE OF 18" RUBBERIZED MEMBRANE WATERPROOFING SHALL BE APPLIED TO THE BACK FACE OF THE ABUTMENT AT THE OPENING LOCATIONS.

THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER (CITY OF EAU CLAIRE) TO DETERMINE THE NUMBER AND SPACING OF THE DECK INSERTS, HANGERS, AND ALL THE NECESSARY HARDWARE REQUIRED TO INSTALL AND SECURE THE 16" DIA. WATER MAIN.

THE CONTRACTOR SHALL SUPPLY DECK INSERTS AND HANGERS, AND ALL THE NECESSARY HARDWARE REQUIRED TO INSTALL THE DECK INSERTS FOR THEIR HANGERS. THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "16-INCH DUCTILE WATER MAIN CLASS 52".

THE CONTRACTOR SHALL INSTALL THE INSERTS, HANGERS, AND ALL ASSOCIATED HARDWARE REQUIRED TO INSTALL THE NEW 16" DIA. WATER MAIN HANGER ASSEMBLIES/SUPPORT SYSTEM. THE INSTALLATION OF THE INSERTS, HANGERS, AND ALL ASSOCIATED HARDWARE SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "16-INCH DUCTILE WATER MAIN CLASS 52".

**DESIGN DATA**

**LIVE LOAD:**

**SPANDREL ARCH**

DESIGN LOADING: HS-20  
 INVENTORY RATING: HS-17  
 OPERATING RATING: HS-28  
 WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 190 KIPS

**COLUMNS, FLOOR BEAMS, AND DECK**

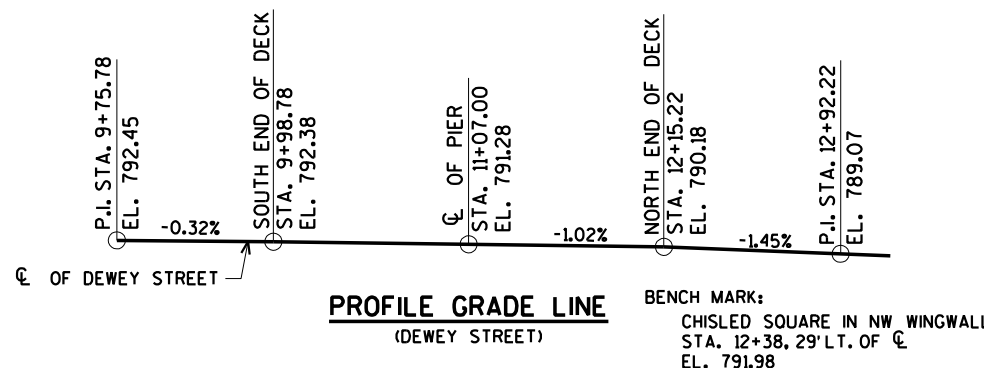
DESIGN LOADING: HL-93  
 INVENTORY RATING FACTOR: 1.30  
 OPERATING RATING FACTOR: 1.69  
 WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 200 KIPS

**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.

**TRAFFIC DATA:**

A.A.D.T. = 2,600 (2020)  
 A.A.D.T. = 2,850 (2040)  
 R.D.S. = 30 M.P.H.



**PROFILE GRADE LINE**

(DEWEY STREET)

**BENCH MARK:**

CHISLED SQUARE IN NW WINGWALL  
 STA. 12+38, 29' LT. OF C.L.  
 EL. 791.98

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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY C/JM/CLP		PLANS CK'D. CBM	
<b>TYPICAL SECTION AND DESIGN DATA</b>			SHEET 2 OF 40

ORIGINAL PLANS PREPARED BY  
**AYRES ASSOCIATES**  
 3433 Oakwood Hills Parkway  
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 www.AyresAssociates.com

**TOTAL ESTIMATED QUANTITIES**

BID ITEM NUMBER	BID ITEMS	UNIT	S. ABUT.	PIER	N. ABUT.	SUPER.	TOTAL	CATEGORY 0020	CATEGORY 0030
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 11+07	LS	-----	-----	-----	-----	1	1	-----
*** 206.1000.01	EXCAVATION FOR STRUCTURES BRIDGES B-18-93	LS	-----	-----	-----	-----	1	1	-----
**** 206.1000.02	EXCAVATION FOR STRUCTURES BRIDGES B-18-93	LS	-----	-----	-----	-----	1	-----	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	40	-----	2,030	-----	2,070	80	1,990
311.0110	BREAKER RUN	TON	-----	-----	75	-----	75	-----	75
502.0100	CONCRETE MASONRY BRIDGES	CY	17	-----	112	1,172	1,301	1,205	96
502.3101	EXPANSION DEVICE B-18-93	LF	-----	-----	-----	-----	460	460	-----
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-----	-----	-----	1,420	1,420	1,420	-----
502.3210	PIGMENTED SURFACE SEALER	SY	25	-----	25	275	275	275	-----
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	308	-----	244	1,712	2,264	2,216	48
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	-----	-----	9,210	6,550	15,760	6,550	9,210
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	3,850	-----	4,600	214,040	222,490	221,160	1,330
* 509.1500	CONCRETE SURFACE REPAIR	SF	-----	-----	-----	-----	3,700	3,700	-----
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	20	-----	65	-----	85	40	45
516.0610.S	SHEET MEMBRANE WATERPROOFING FOR TOP SLAB B-18-93	SY	-----	-----	225	-----	225	-----	225
517.1010.S	CONCRETE STAINING B-18-93	SF	1,700	1,500	1,600	25,900	30,700	30,700	-----
606.0300	RIPRAP HEAVY	CY	-----	10	-----	-----	10	10	-----
645.0105	GEOTEXTILE TYPE C	SY	-----	-----	130	-----	130	-----	130
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	100	-----	-----	-----	100	100	-----
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	4	-----	4	42	50	50	-----
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	25	-----	25	170	220	220	-----
653.0222	JUNCTION BOXES 18x12x6-INCH	EACH	-----	-----	-----	2	2	2	-----
SPV.0090.01	PARAPET CONCRETE TYPE 'TX'	LF	48	-----	48	429	525	525	-----
SPV.0150.01	TEMPORARY SUPPORT AND PROTECTION OF CONDUIT PACK	LS	-----	-----	-----	-----	1	-----	1
SPV.0150.02	ATTACHMENT OF HANGERS FOR CONDUIT PACK	LS	-----	-----	-----	-----	1	-----	1
** SPV.0165.02	OVERHEAD CONCRETE SURFACE REPAIR	SF	-----	-----	-----	1,760	1,760	1,760	-----
	NON-BID ITEMS								
	FILLER	SIZE	-----	-----	-----	-----	1/2"	-----	1/2"

\* UNDISTRIBUTED FOR ABUTMENTS, PIER, AND SPANDREL ARCHES AS DIRECTED BY THE ENGINEER.

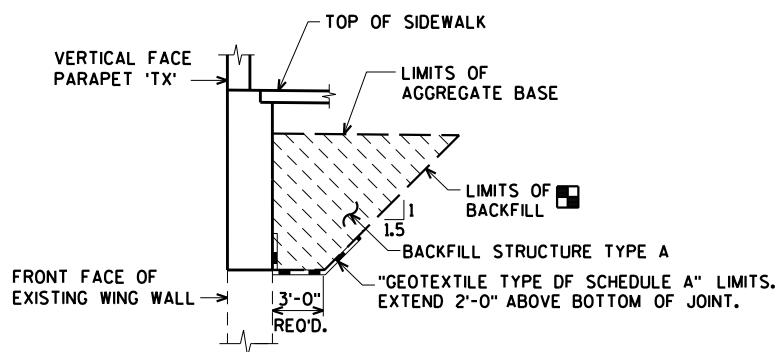
\*\* UNDISTRIBUTED FOR BOTTOM OF SPANDREL ARCHES AS DIRECTED BY THE ENGINEER.

\*\*\* AT SOUTH ABUTMENT.

\*\*\*\* AT NORTH ABUTMENT AND UNDERPASS.

**GENERAL NOTES**

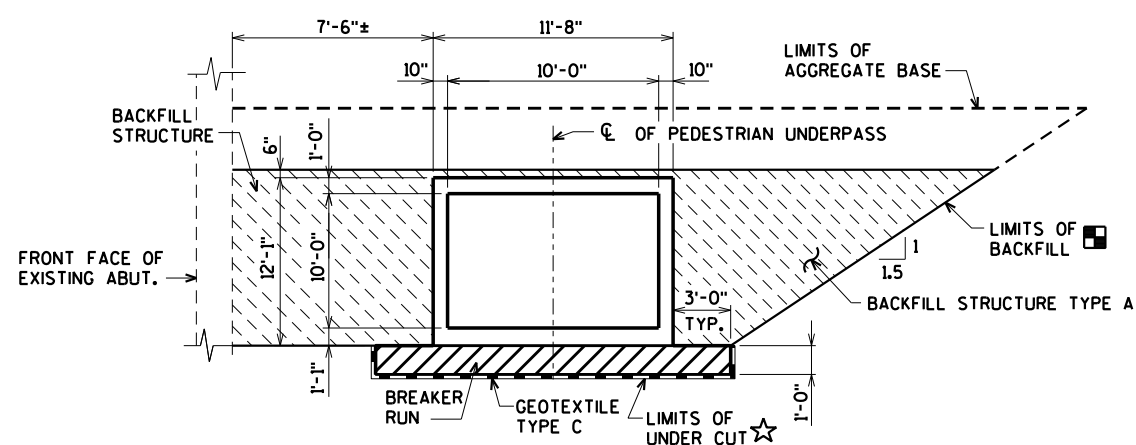
DRAWINGS SHALL NOT BE SCALED.  
 DIMENSIONS ARE BASED ON ORIGINAL STRUCTURE PLANS.  
 BAR STEEL SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS SHOWN OR NOTED OTHERWISE.  
 THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.  
 ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT UNLESS SHOWN OR NOTED OTHERWISE.  
 AT ABUTMENTS ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE A.  
 THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW THE ORIGINAL CONSTRUCTION YEAR OF 1931.  
 UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.  
 THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT FOR EXCAVATION FOR STRUCTURES.  
 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.  
 ALL CONCRETE WILL BE STAINED WHITE, AMS STANDARD COLOR NUMBER 37886 EXCEPT INSIDE FACE AND TOP OF PARAPET, SIDEWALK, UNDERSIDE & TOP OF DECK.  
 BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS NOTED OTHERWISE.  
 PROTECTIVE SURFACE TREATMENT AND PIGMENTED SURFACE SEALER ARE TO BE APPLIED AS SHOWN IN THE DETAILS ON THIS SHEET.  
 THE EXISTING STRUCTURE, B-18-93, TO BE REHABILITATED, IS A TWO SPAN CONCRETE SPANDREL ARCH BRIDGE, 216.44- FEET LONG WITH A 42-FOOT CLEAR ROADWAY WIDTH, WITH 8-FOOT CLEAR SIDEWALKS ON EACH SIDE.  
 PRECAST CONCRETE CULVERT IS NOT ALLOWED AS A SUBSTITUTE FOR THE PEDESTRAIN UNDERPASS.



**BACKFILL STRUCTURE LIMITS**

AT SOUTH ABUTMENT WINGWALLS, SOUTH ABUTMENT BODY SIMILAR

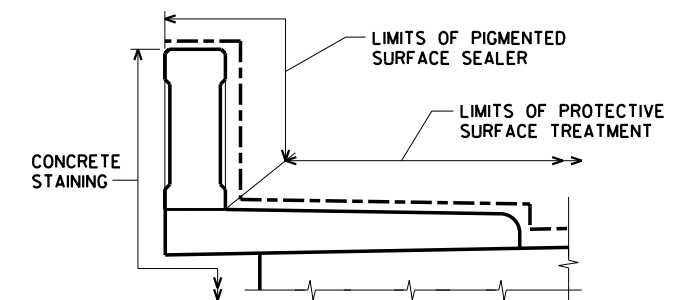
☐ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.



**BACKFILL STRUCTURE LIMITS**

AT NORTH ABUTMENT AND PEDESTRIAN UNDERPASS (LOOKING WEST)

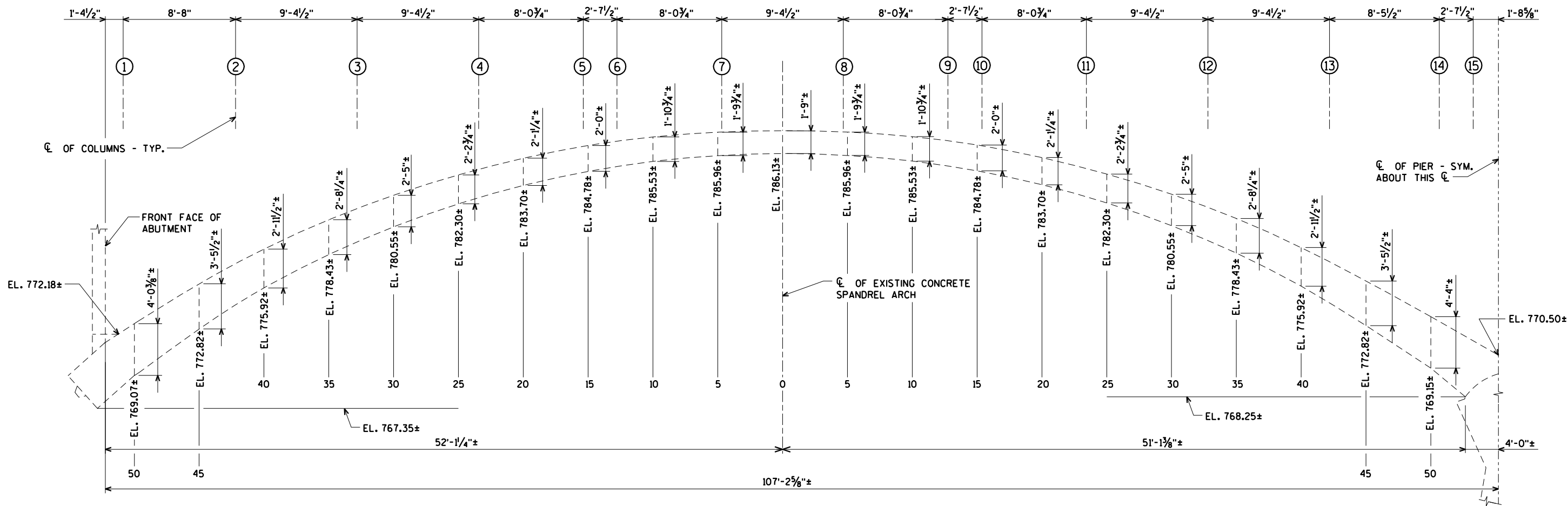
★ UNDER CUT 1'-0". EXCAVATION FOR UNDER CUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE TYPE C" AND BACKFILL WITH "BREAKER RUN".



**PROTECTIVE SURFACE TREATMENT AND PIGMENTED SURFACE SEALER DETAILS**

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY C/JM/CLP		PLANS CK'D. CBM	
<b>QUANTITIES AND NOTES</b>			SHEET 3 OF 40

ORIGINAL PLANS PREPARED BY  
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 Eau Claire, WI 54701  
 www.AyresAssociates.com



**ELEVATION OF EXISTING SPANDREL ARCH**  
(SPAN 1 SHOWN, SPAN 2 SIMILAR)

**NOTES:**

REMOVE EXISTING BRIDGE TO TOP OF EXISTING CONCRETE SPANDREL ARCHES.

DEMOLITION AND POURING SEQUENCE SHALL BE SUCH THAT LOADING ABOUT THE CENTERLINE OF THE PIER WILL NOT BE UNBALANCED BY MORE THAN ONE PANEL. THE DISTANCE BETWEEN TWO DECK JOINTS CONSTITUTES A PANEL.

SEE SHEETS 19 & 20 FOR DEMOLITION SEQUENCE.

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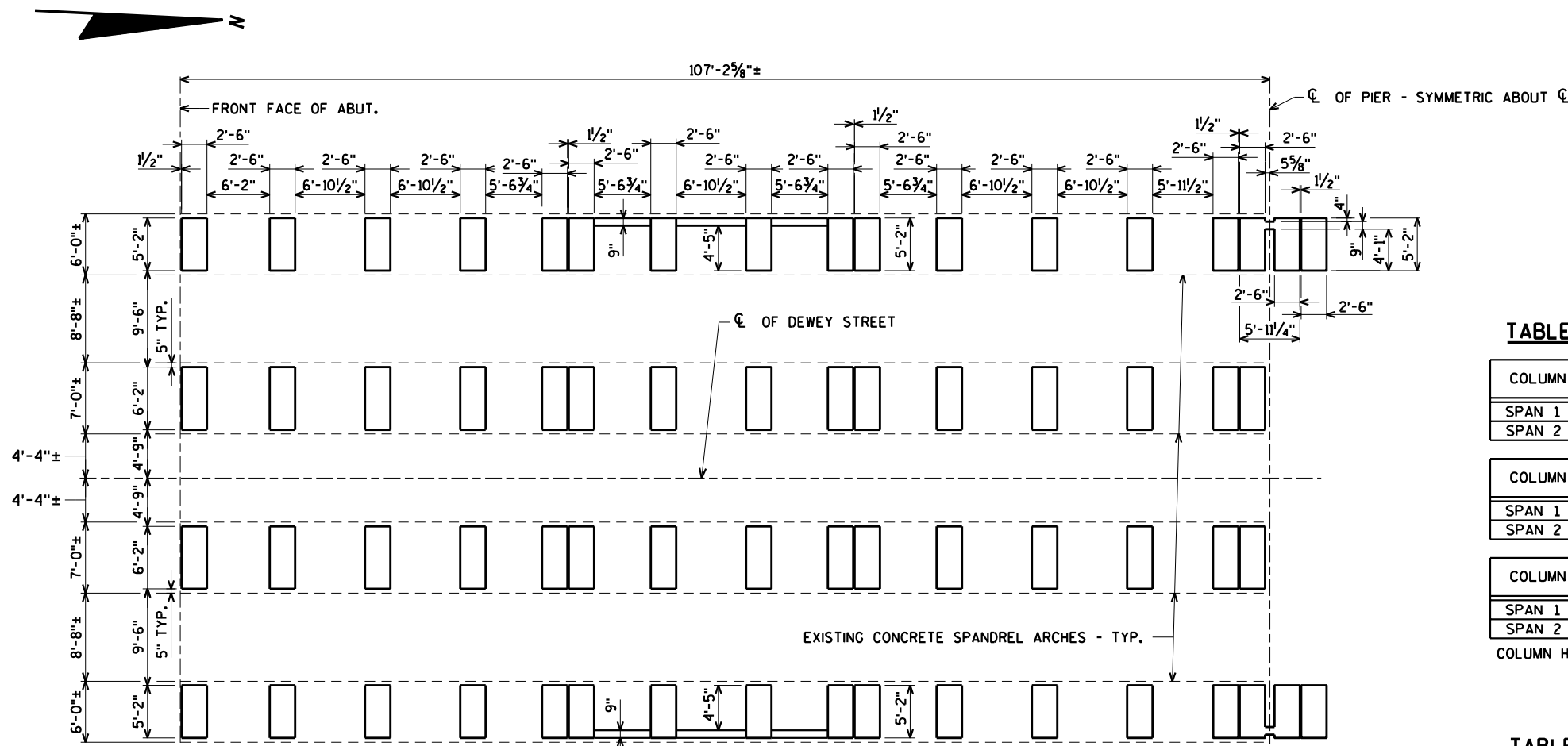
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>SPANDREL ARCH DETAILS</b>			SHEET 4 OF 40

ORIGINAL PLANS PREPARED BY  
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**COLUMN LAYOUT**  
(SPAN 1 SHOWN, SPAN 2 SIMILAR)

**TABLE OF COLUMN HEIGHTS**

COLUMN	1		2		3		4		5	
	'HS'	'HN'	'HS'	'HN'	'HS'	'HN'	'HS'	'HN'	'HS'	'HN'
SPAN 1	17'-1 3/8"	16'-5 1/2"	12'-10 1/8"	11'-6 1/2"	8'-2 3/8"	7'-2 1/8"	4'-9 1/8"	4'-1 1/2"	2'-8 1/8"	2'-3"
SPAN 2	14'-3 3/4"	14'-11 1/2"	9'-6 1/8"	10'-10 1/2"	5'-5 1/2"	6'-5"	2'-6 3/8"	3'-2 3/4"	9 1/8"	1'-3 3/4"

COLUMN	6		7		8		9		10	
	'HS'	'HN'	'HS'	'HN'	'HS'	'HN'	'HS'	'HN'	'HS'	'HN'
SPAN 1	2'-2 1/4"	1'-10 1/4"	1'-2 1/2"	1'-0 5/8"	10 3/4"	11 3/8"	1'-2 1/8"	1'-6 3/4"	1'-6 5/8"	1'-10 5/8"
SPAN 2	5 3/4"	9 1/8"	-1 1/8"	0"	-0 1/8"	-1 1/2"	8 1/2"	4 3/8"	1'-1 1/8"	9"

COLUMN	11		12		13		14		15	
	'HS'	'HN'	'HS'	'HN'	'HS'	'HN'	'HS'	'HN'	'HS'	'HN'
SPAN 1	2'-11 3/8"	3'-7 1/8"	5'-6 5/8"	6'-5 5/8"	9'-3 1/4"	10'-6 1/2"	13'-10 1/8"	16'-1 1/8"	16'-2"	17'-5 1/2"
SPAN 2	2'-11 3/8"	2'-3 3/4"	6'-0 1/4"	5'-1 1/4"	10'-3 1/2"	9'-0 1/4"	16'-0 1/8"	13'-9 1/8"	17'-5 1/2"	16'-2"

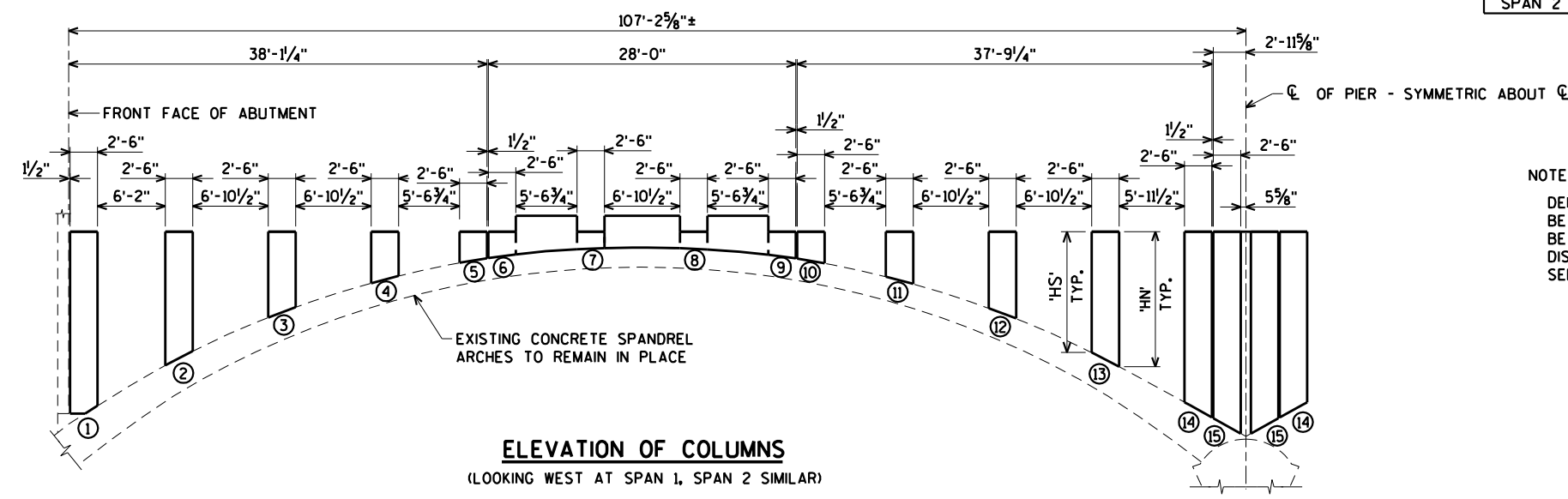
COLUMN HEIGHT DIMENSIONS ARE APPROXIMATE.

**TABLE OF TOP OF COLUMN ELEVATIONS**

COLUMN	1	2	3	4	5	6	7	8
SPAN 1	789.29	789.20	789.11	789.01	788.93	788.90	788.82	788.73
SPAN 2	787.14	787.23	787.33	787.42	787.50	787.53	787.61	787.71

COLUMN	9	10	11	12	13	14	15
SPAN 1	788.64	788.62	788.54	788.44	788.34	788.26	788.23
SPAN 2	787.79	787.82	787.90	787.99	788.09	788.17	788.20

NOTE:  
DEMOLITION AND POURING SEQUENCE OF THE ARCH COLUMNS SHALL BE SUCH THAT LOADING ABOUT THE CENTERLINE OF THE PIER WILL NOT BE UNBALANCED BY MORE THAN ONE DECK PANEL LENGTH. THE DISTANCE BETWEEN TWO DECK JOINTS CONSTITUTES A PANEL. SEE SHEETS 19 AND 20 FOR MORE INFORMATION.



**ELEVATION OF COLUMNS**  
(LOOKING WEST AT SPAN 1, SPAN 2 SIMILAR)

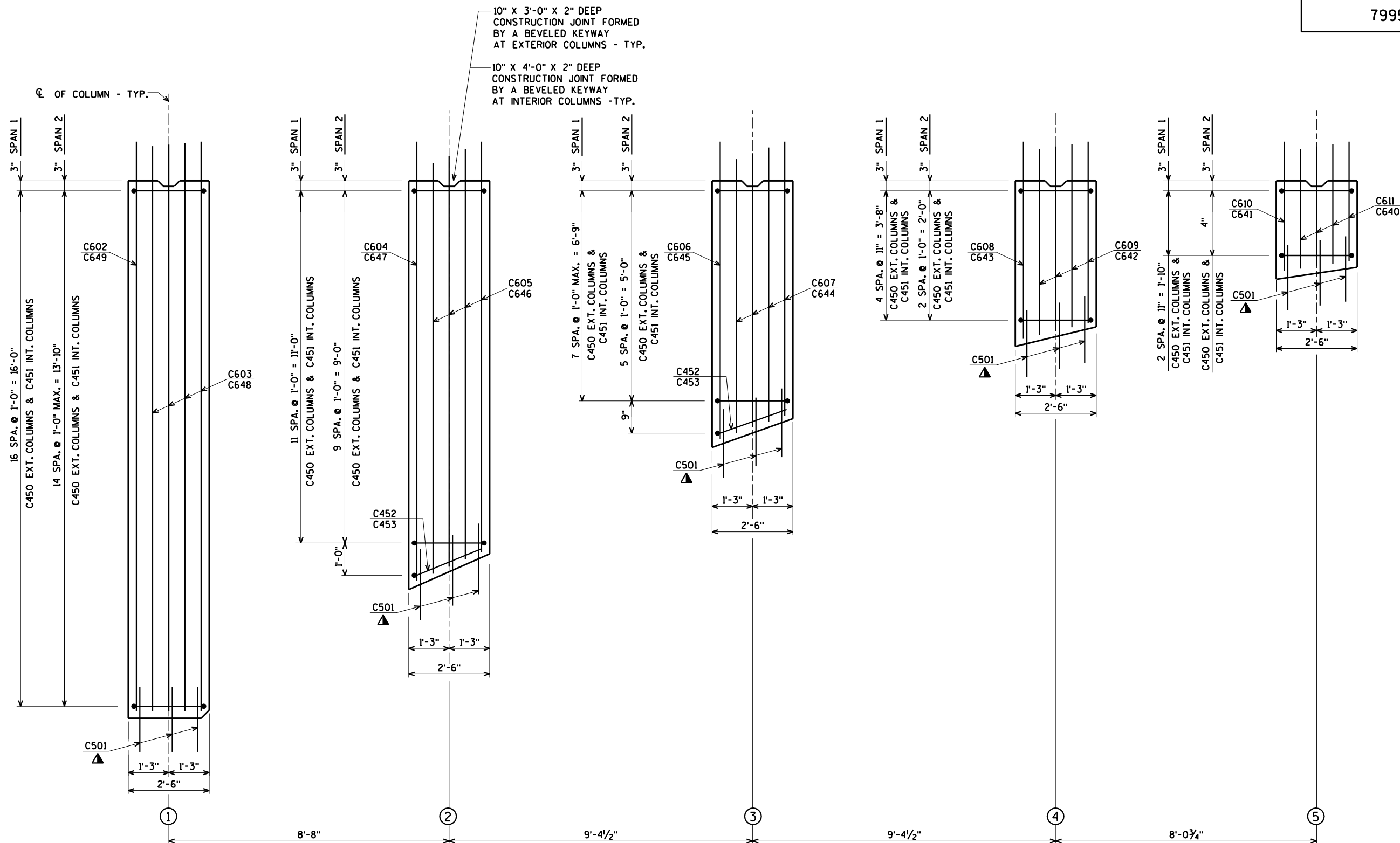
○ DENOTES COLUMN NUMBER

WORK THIS SHEET WITH SHEETS 6 THRU 11.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY CLP/CJM		PLANS CK'D. CBM	
<b>ARCH COLUMNS LAYOUT</b>			SHEET 5 OF 40

ORIGINAL PLANS PREPARED BY  
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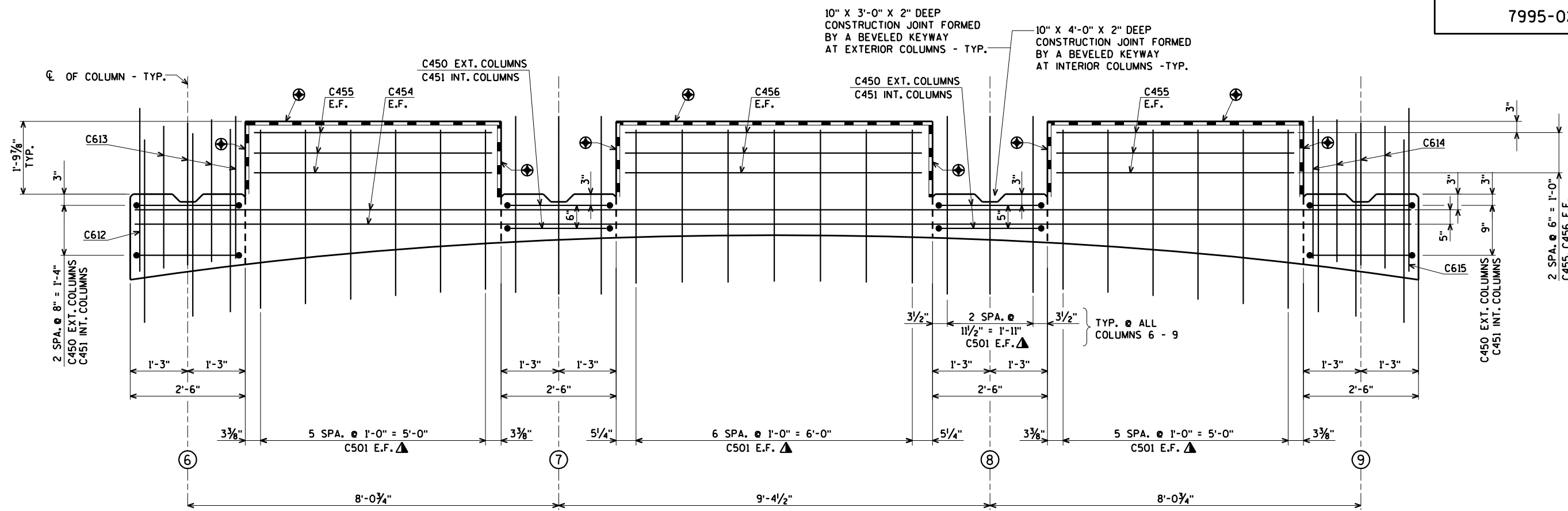
**ELEVATION OF ARCH COLUMNS 1 THRU 5**  
(LOOKING WEST AT SPAN 1, LOOKING EAST AT SPAN 2 SIMILAR)

▲ ADHESIVE ANCHORS NO. 5 BAR.  
EMBED 1'-0 1/2" MIN.

WORK THIS SHEET WITH SHEETS 5 AND 10 THRU 11

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>ARCH COLUMNS 1 THRU 5</b>		SHEET 6 OF 40	
<b>DETAILS</b>			

ORIGINAL PLANS PREPARED BY  
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**ELEVATION OF EXTERIOR ARCH COLUMNS 6 THRU 9**

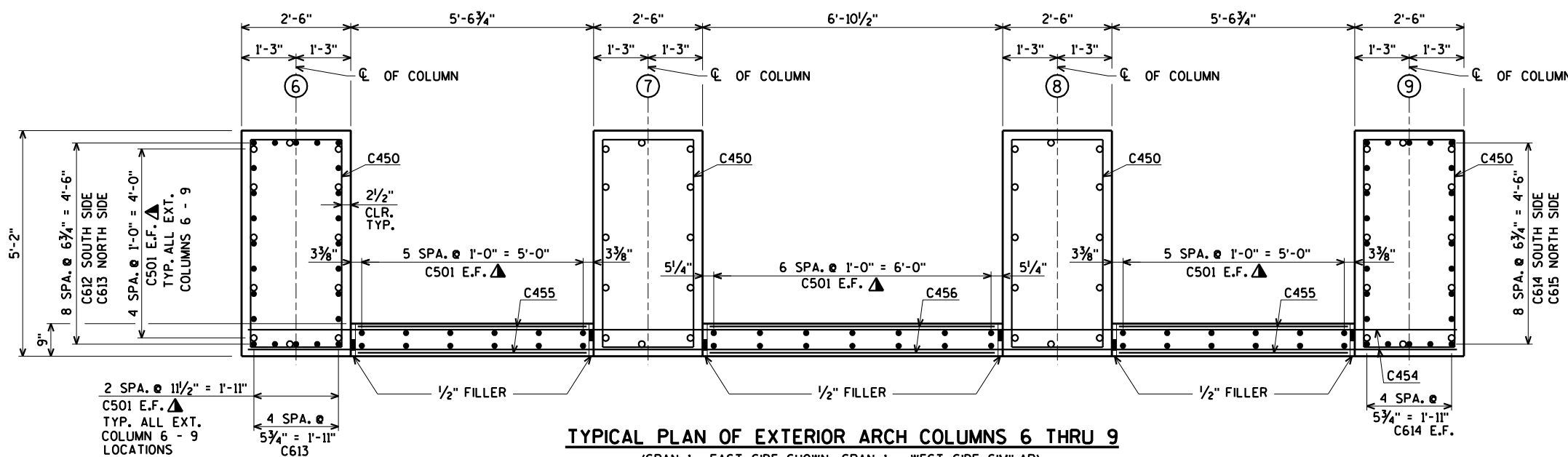
(SPAN 1 - LOOKING WEST AT EAST SIDE, SPAN 1 WEST SIDE SIMILAR)

NOTE:  
FIELD CUT TOP OF C501 ADHESIVE ANCHORS AS REQUIRED TO PROVIDE 2" CLEAR. COST TO FIELD CUT BARS IS INCLUDED IN THE COST FOR BID ITEM "BAR STEEL REINFORCEMENT HS STRUCTURES".

⊕ 1/2" FILLER

▲ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0 1/2" MIN.

E.F. DENOTES EACH FACE.



**TYPICAL PLAN OF EXTERIOR ARCH COLUMNS 6 THRU 9**

(SPAN 1 - EAST SIDE SHOWN, SPAN 1 - WEST SIDE SIMILAR)

WORK THIS SHEET WITH SHEETS 5 AND 10 THRU 11

NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-18-93**

DRAWN BY CLP PLANS CK'D. CBM

**ARCH COLUMNS  
6 THRU 9  
SPAN 1 DETAILS**

SHEET 7 OF 40

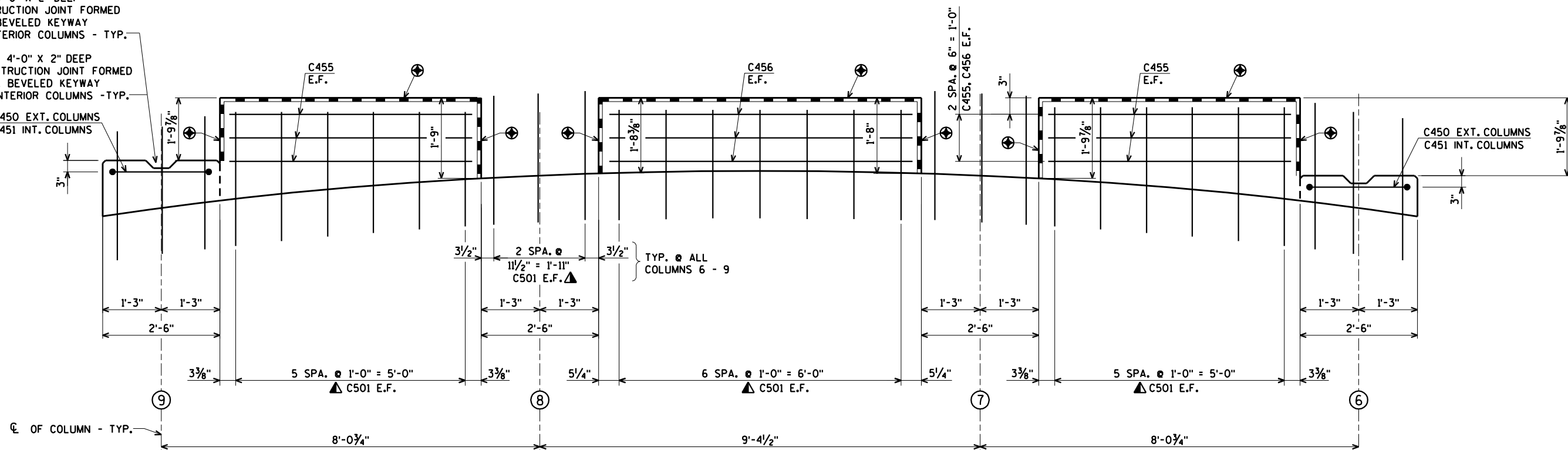
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10" X 3'-0" X 2" DEEP  
CONSTRUCTION JOINT FORMED  
BY A BEVELED KEYWAY  
AT EXTERIOR COLUMNS - TYP.

10" X 4'-0" X 2" DEEP  
CONSTRUCTION JOINT FORMED  
BY A BEVELED KEYWAY  
AT INTERIOR COLUMNS - TYP.

C450 EXT. COLUMNS  
C451 INT. COLUMNS



**ELEVATION OF EXTERIOR ARCH COLUMNS 6 THRU 9**

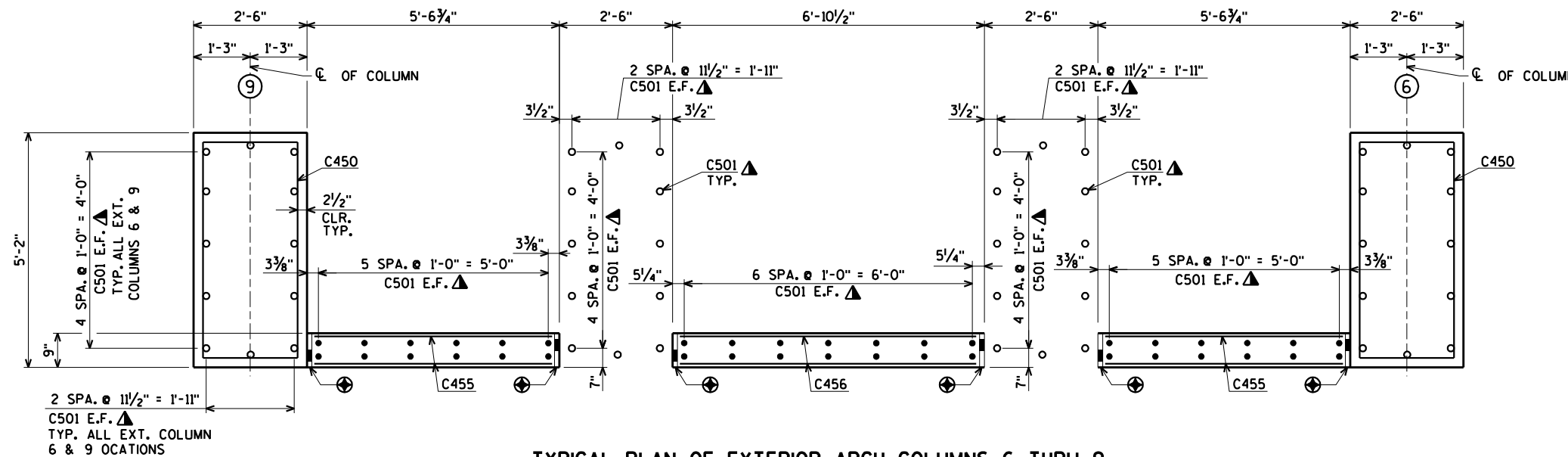
(SPAN 2 - LOOKING WEST AT EAST SIDE, SPAN 2 WEST SIDE SIMILAR)

NOTE:  
FIELD CUT TOP OF C501 ADHESIVE ANCHORS  
AS REQUIRED TO PROVIDE 2" CLEAR. COST  
TO FIELD CUT BARS IS INCLUDED IN THE COST  
FOR BID ITEM "BAR STEEL REINFORCEMENT  
HS STRUCTURES".

⊕ 1/2" FILLER

▲ ADHESIVE ANCHORS NO. 5 BAR.  
EMBED 1'-0 1/2" MIN.

E.F. DENOTES EACH FACE.



**TYPICAL PLAN OF EXTERIOR ARCH COLUMNS 6 THRU 9**

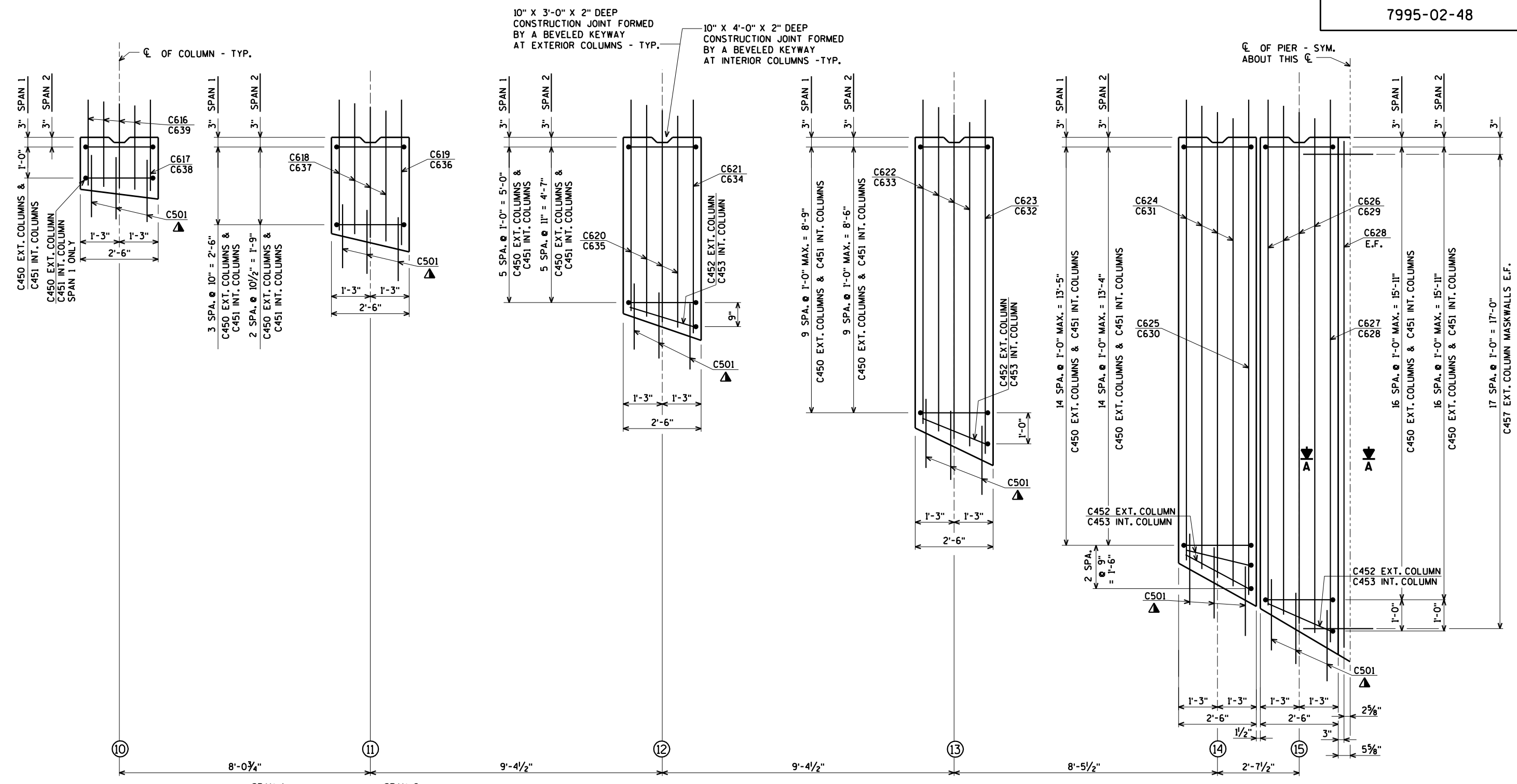
(SPAN 2 - EAST SIDE SHOWN, SPAN 2 - WEST SIDE SIMILAR)

WORK THIS SHEET WITH SHEETS 5 AND 10 THRU 11

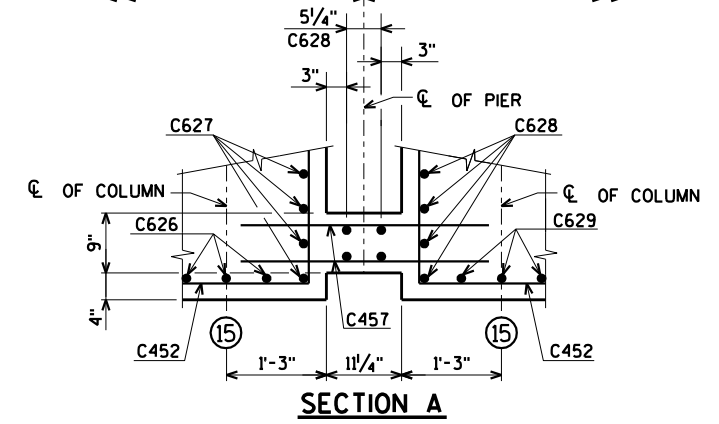
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY CLP		PLANS CK'D. CBM	
<b>ARCH COLUMNS 6 THRU 9 SPAN 2 DETAILS</b>			SHEET 8 OF 40

ORIGINAL PLANS PREPARED BY  
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**ELEVATION OF ARCH COLUMNS 10 THRU 15**  
(LOOKING WEST AT SPAN 1, LOOKING EAST AT SPAN 2 SIMILAR)



**SECTION A**

▲ ADHESIVE ANCHORS NO. 5 BAR.  
EMBED 1'-0 1/2" MIN.

E.F. DENOTES EACH FACE.

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WORK THIS SHEET WITH SHEETS 5 AND 10 THRU 11

NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

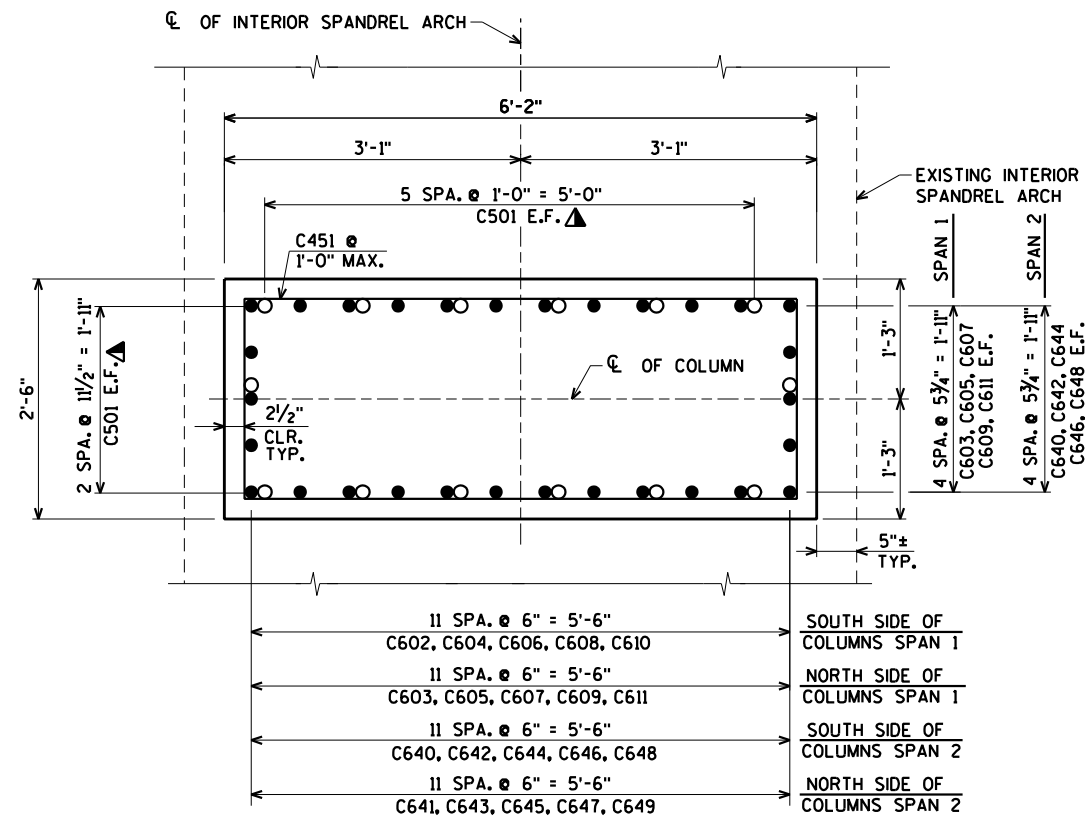
**STRUCTURE B-18-93**

DRAWN BY CLP PLANS CK'D. CBM

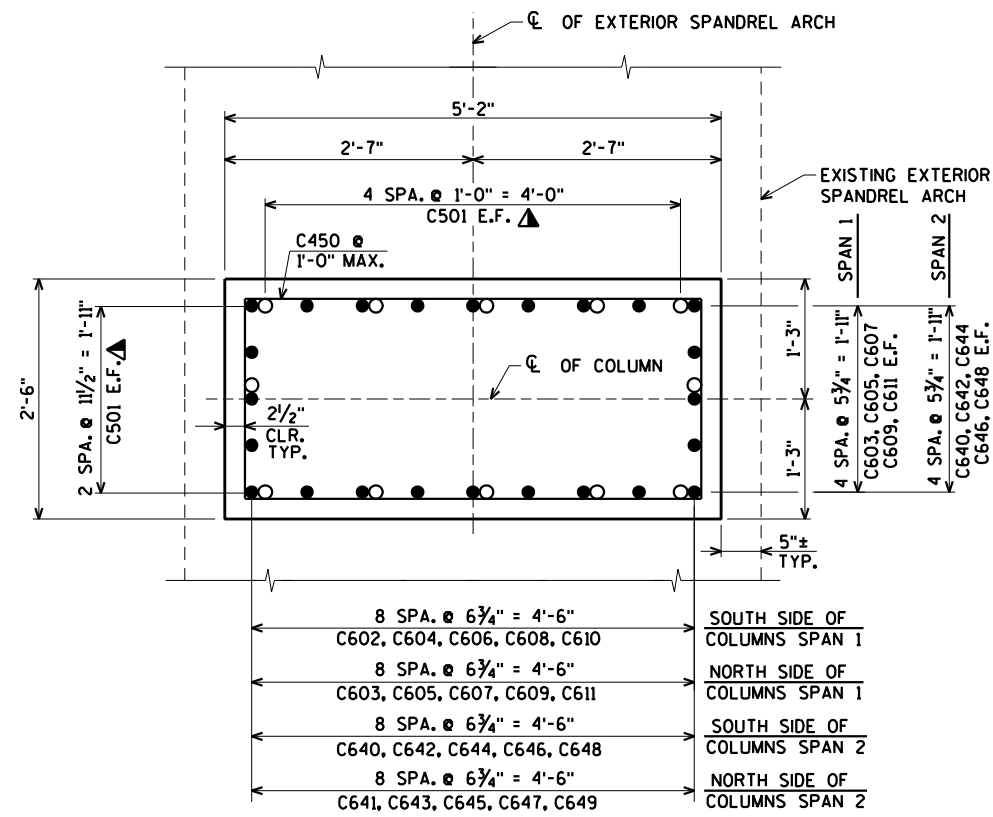
**ARCH COLUMNS  
10 THRU 15  
DETAILS**

SHEET 9 OF 40

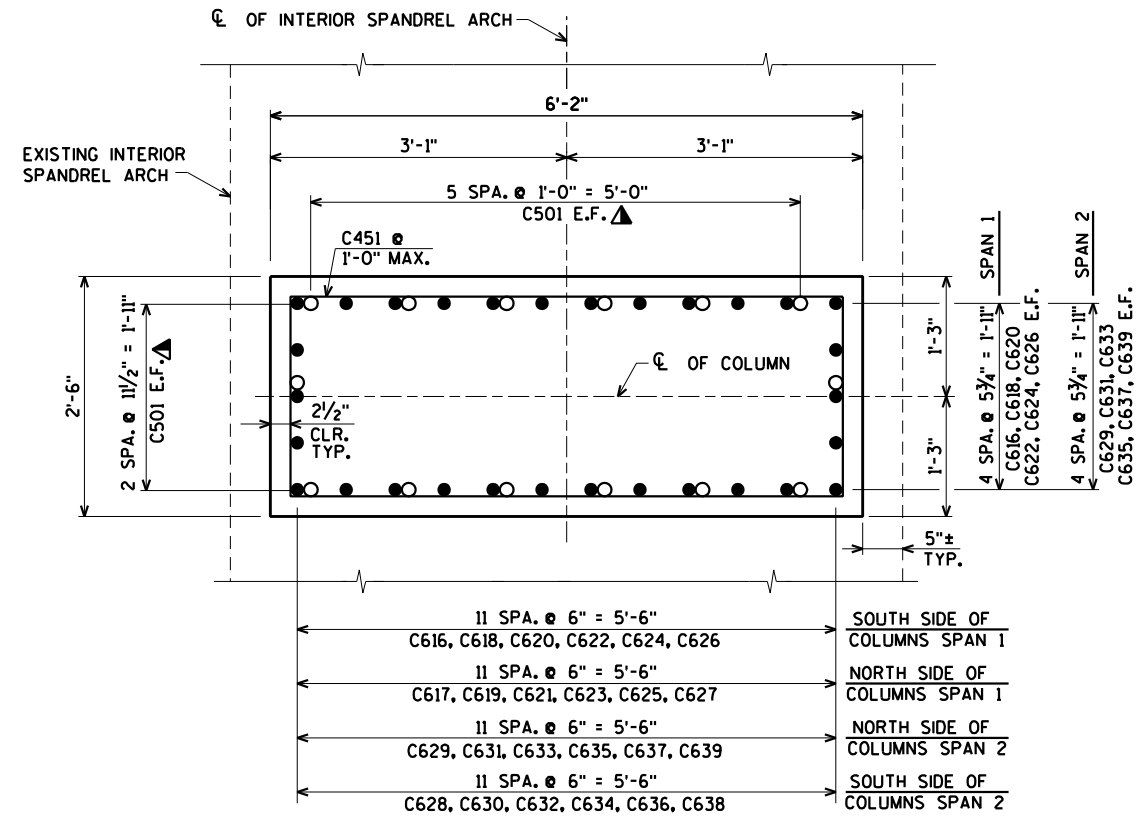




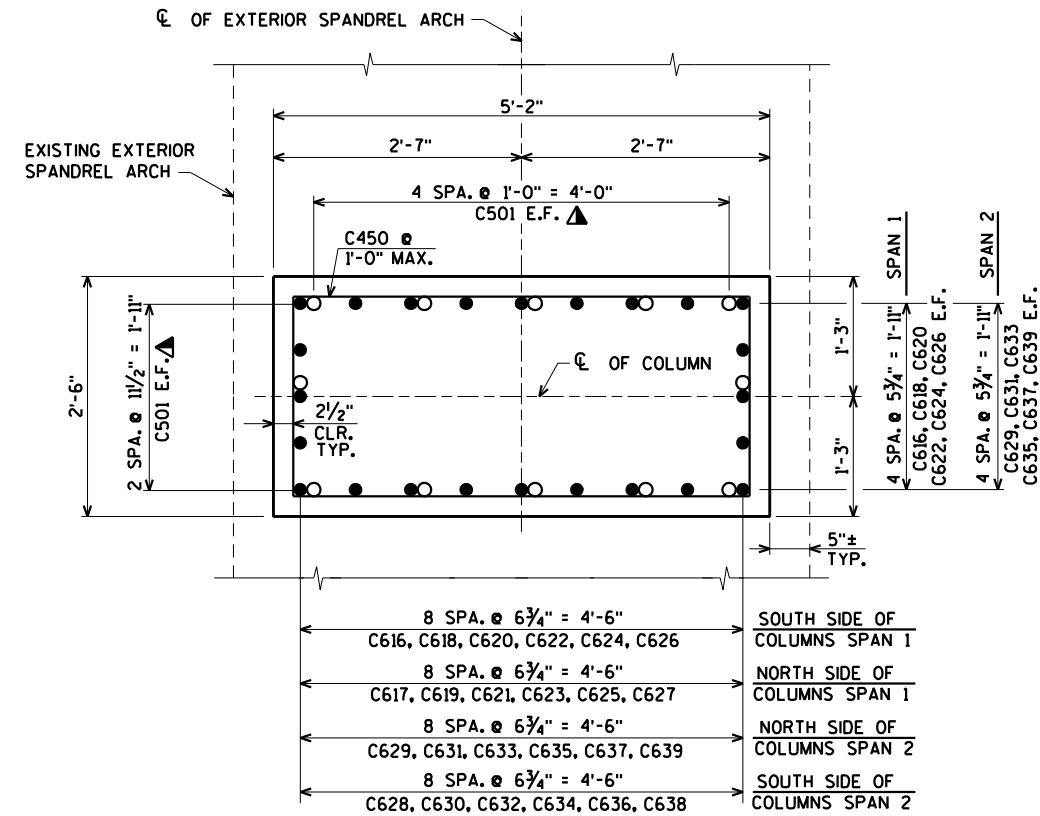
TYPICAL PLAN OF INTERIOR ARCH COLUMN 1 THRU 5



TYPICAL PLAN OF EXTERIOR ARCH COLUMN 1 THRU 5



TYPICAL PLAN OF INTERIOR ARCH COLUMN 10 THRU 15



TYPICAL PLAN OF EXTERIOR ARCH COLUMN 10 THRU 15

▲ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0 1/2" MIN.

E.F. DENOTES EACH FACE.

WORK THIS SHEET WITH SHEETS 5 THRU 9 AND 11

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY	CLP	PLANS CK'D.	CBM
<b>ARCH COLUMN DETAILS</b>			SHEET 10 OF 40

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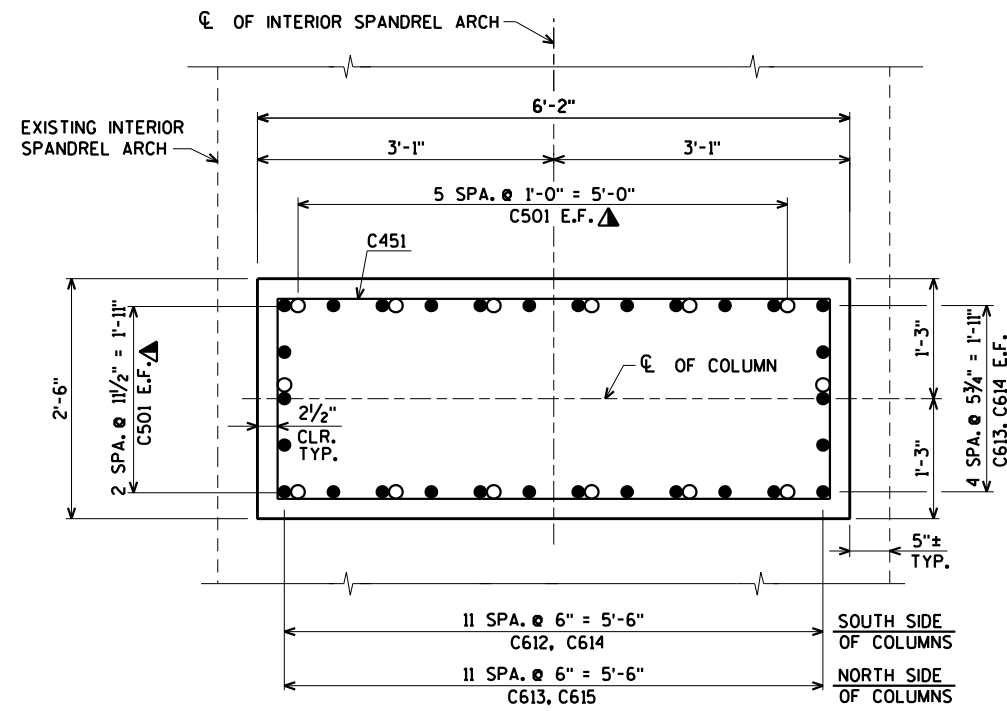
**BILL OF BARS**

BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	6,550# UNCOATED 44,720# COATED	LOCATION
C501	X	1,712	3-8					COLUMN DOWELS
C602	X	42	18-6					COLUMNS 1 SPAN 1 S. SIDE VERT.
C603	X	66	17-10					COLUMNS 1 SPAN 1 VERT.
C604	X	42	14-3					COLUMNS 2 SPAN 1 S. SIDE VERT.
C605	X	66	12-11					COLUMNS 2 SPAN 1 VERT.
C606	X	42	9-7					COLUMNS 3 SPAN 1 S. SIDE VERT.
C607	X	66	8-8					COLUMNS 3 SPAN 1 VERT.
C608	X	42	6-2					COLUMNS 4 SPAN 1 S. SIDE VERT.
C609	X	66	5-6					COLUMNS 4 SPAN 1 VERT.
C610	X	42	4-2					COLUMNS 5 SPAN 1 S. SIDE VERT.
C611	X	66	3-8					COLUMNS 5 SPAN 1 VERT.
C612	X	42	3-7					COLUMNS 6 SPAN 1 S. SIDE VERT.
C613	X	66	3-3					COLUMNS 6 SPAN 1 VERT.
C614	X	66	2-8					COLUMNS 9 SPAN 1 VERT.
C615	X	42	2-11					COLUMNS 9 SPAN 1 N. SIDE VERT.
C616	X	66	2-11					COLUMNS 10 SPAN 1 VERT.
C617	X	42	3-3					COLUMNS 10 SPAN 1 N. SIDE VERT.
C618	X	66	4-4					COLUMNS 11 SPAN 1 VERT.
C619	X	42	5-0					COLUMNS 11 SPAN 1 N. SIDE VERT.
C620	X	66	6-11					COLUMNS 12 SPAN 1 VERT.
C621	X	42	7-10					COLUMNS 12 SPAN 1 N. SIDE VERT.
C622	X	66	10-8					COLUMNS 13 SPAN 1 VERT.
C623	X	42	11-11					COLUMNS 13 SPAN 1 N. SIDE VERT.
C624	X	66	15-4					COLUMNS 14 SPAN 1 VERT.
C625	X	42	17-6					COLUMNS 14 SPAN 1 N. SIDE VERT.
C626	X	66	17-7					COLUMNS 15 SPAN 1 VERT.
C627	X	42	18-11					COLUMNS 15 SPAN 1 N. SIDE VERT.
C628	X	50	18-10					COLUMNS 15 SPAN 2 S. SIDE VERT. AND MASKWALL
C629	X	66	17-7					COLUMNS 15 SPAN 2 VERT.
C630	X	42	17-5					COLUMNS 14 SPAN 2 S. SIDE VERT.
C631	X	66	15-3					COLUMNS 14 SPAN 2 VERT.
C632	X	42	11-8					COLUMNS 13 SPAN 2 S. SIDE VERT.
C633	X	66	10-5					COLUMNS 13 SPAN 2 VERT.
C634	X	42	7-5					COLUMNS 12 SPAN 2 S. SIDE VERT.
C635	X	66	6-6					COLUMNS 12 SPAN 2 VERT.
C636	X	42	4-4					COLUMNS 11 SPAN 2 S. SIDE VERT.
C637	X	66	3-8					COLUMNS 11 SPAN 2 VERT.
C638	X	42	2-6					COLUMNS 10 SPAN 2 S. SIDE VERT.
C639	X	66	2-2					COLUMNS 10 SPAN 2 VERT.
C640	X	66	2-3					COLUMNS 5 SPAN 2 VERT.
C641	X	42	2-8					COLUMNS 5 SPAN 2 S. SIDE VERT.
C642	X	66	3-11					COLUMNS 4 SPAN 2 VERT.
C643	X	42	4-7					COLUMNS 4 SPAN 2 S. SIDE VERT.
C644	X	66	6-10					COLUMNS 3 SPAN 2 VERT.
C645	X	42	7-10					COLUMNS 3 SPAN 2 S. SIDE VERT.
C646	X	66	11-0					COLUMNS 2 SPAN 2 VERT.
C647	X	42	12-3					COLUMNS 2 SPAN 2 S. SIDE VERT.
C648	X	66	15-8					COLUMNS 1 SPAN 2 VERT.
C649	X	42	16-4					COLUMNS 1 SPAN 2 S. SIDE VERT.
C450	X	420	14-2	X				EXTERIOR COLUMNS HORIZ.
C451	X	420	16-2	X				INTERIOR COLUMNS HORIZ.
C452	X	28	8-9	X				EXTERIOR COLUMNS HORIZ. BOT.
C453	X	28	10-9	X				INTERIOR COLUMNS HORIZ. BOT.
C454	X	8	27-6					EXTERIOR COLUMN MASKWALLS SPAN 1 AT COLUMNS 6 THRU 9
C455	X	48	5-2					EXTERIOR COLUMN MASKWALLS BTWN COLUMNS 6 & 7 AND 8 & 9
C456	X	24	6-6					EXTERIOR COLUMN MASKWALLS BTWN COLUMNS 7 & 8
C457	X	72	3-5					COLUMNS 15 MASKWALL HORIZ. E.F.

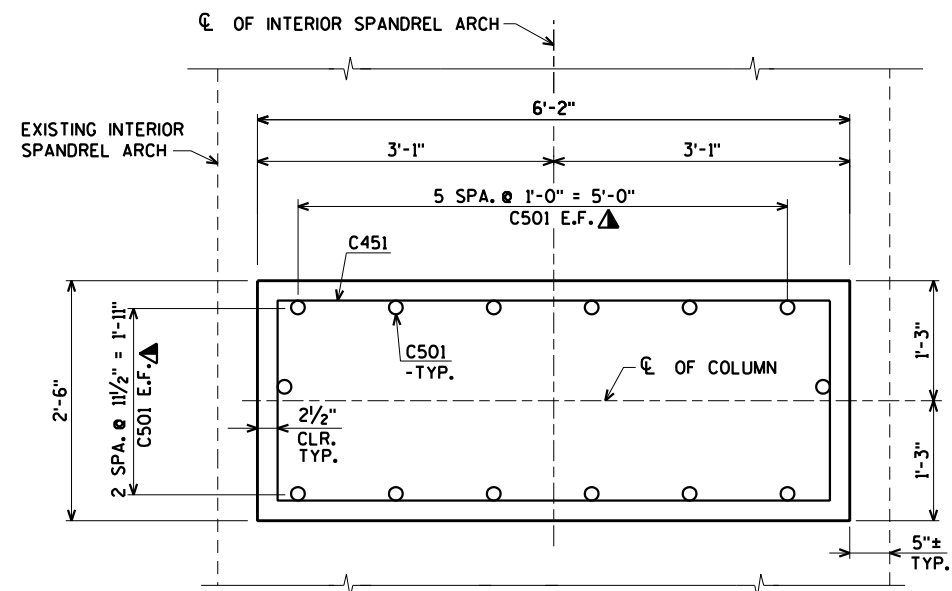
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

▲ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0 1/2" MIN.

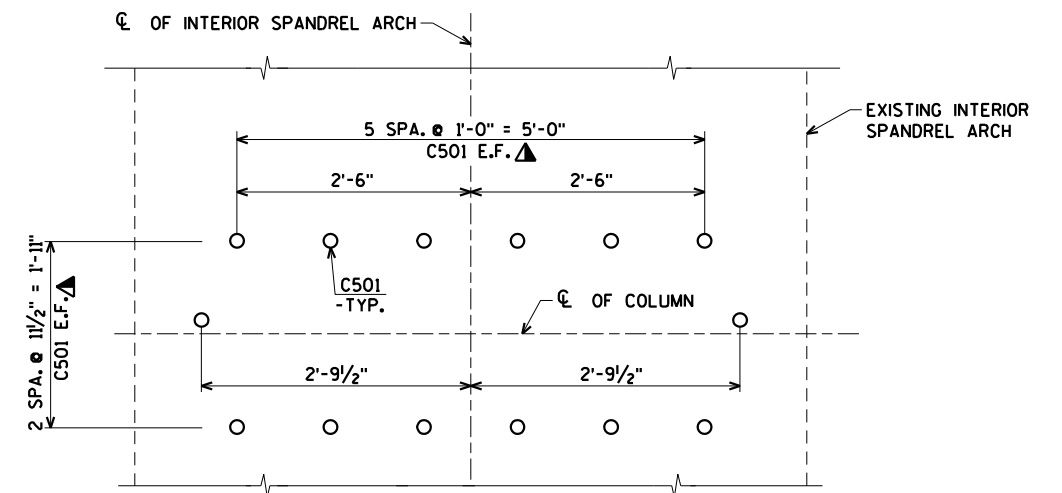
E.F. DENOTES EACH FACE



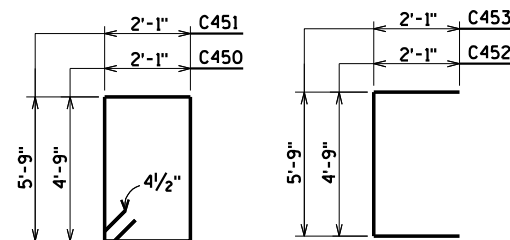
**TYPICAL PLAN OF SPAN 1 INTERIOR ARCH COLUMNS 6 AND 9**



**TYPICAL PLAN OF SPAN 1 INTERIOR ARCH COLUMNS 7 AND 8 AND SPAN 2 INTERIOR ARCH COLUMNS 6 AND 9**



**TYPICAL PLAN OF SPAN 2 INTERIOR ARCH COLUMNS 7 AND 8**



NOTE:  
FIELD CUT TOP OF C501 ADHESIVE ANCHORS AS REQUIRED TO PROVIDE 2" CLEAR. COST TO FIELD CUT BARS IS INCLUDED IN THE COST FOR BID ITEM "BAR STEEL REINFORCEMENT HS STRUCTURES".

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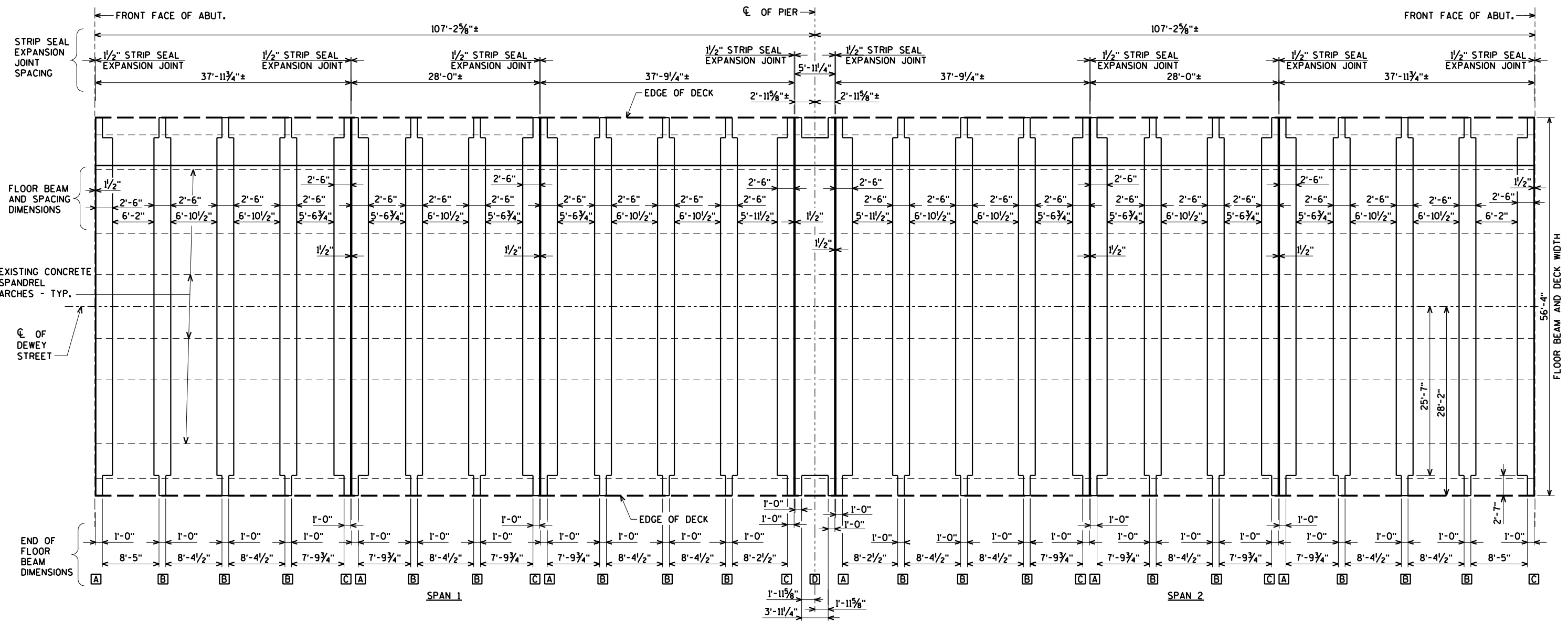
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8

WORK THIS SHEET WITH SHEETS 5 THRU 10

NO.	DATE	REVISION	BY
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<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>ARCH COLUMNS BILL OF BARS AND DETAILS</b>			SHEET 11 OF 40

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**FLOOR BEAM LAYOUT**

□ FLOOR BEAM DESIGNATION

**NOTE:**

DEMOLITION AND POURING SEQUENCE OF THE FLOOR BEAMS SHALL BE SUCH THAT LOADING ABOUT THE CENTERLINE OF THE PIER WILL NOT BE UNBALANCED BY MORE THAN ONE DECK PANEL LENGTH. THE DISTANCE BETWEEN TWO DECK JOINTS CONSTITUTES A PANEL. SEE SHEETS 19 AND 20 FOR MORE INFORMATION.

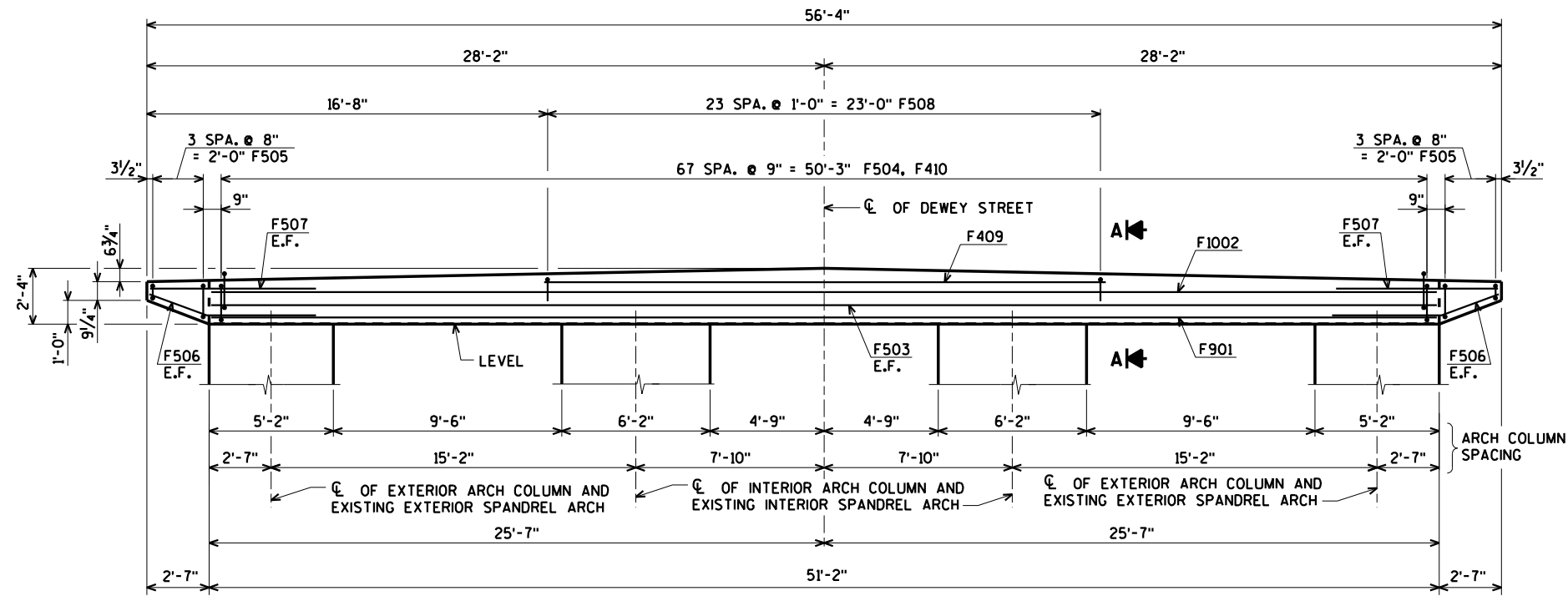
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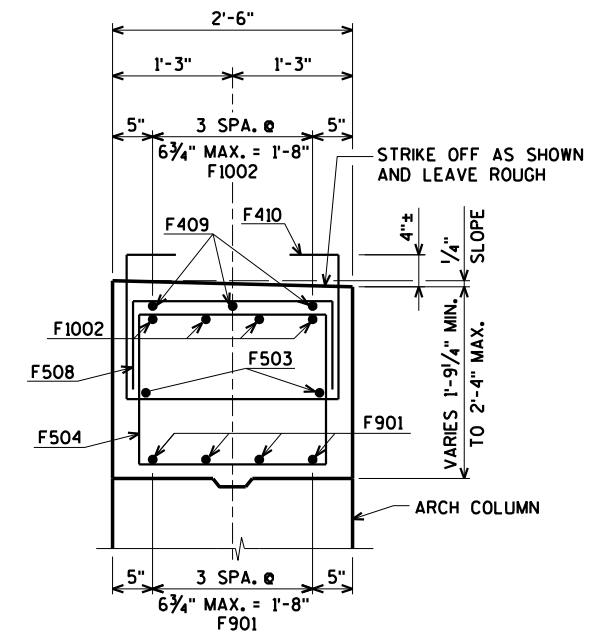
WORK THIS SHEET WITH SHEETS 13 THRU 17

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY	CLP	PLANS CK'D.	CBM
<b>FLOOR BEAM LAYOUT</b>			SHEET 12 OF 40

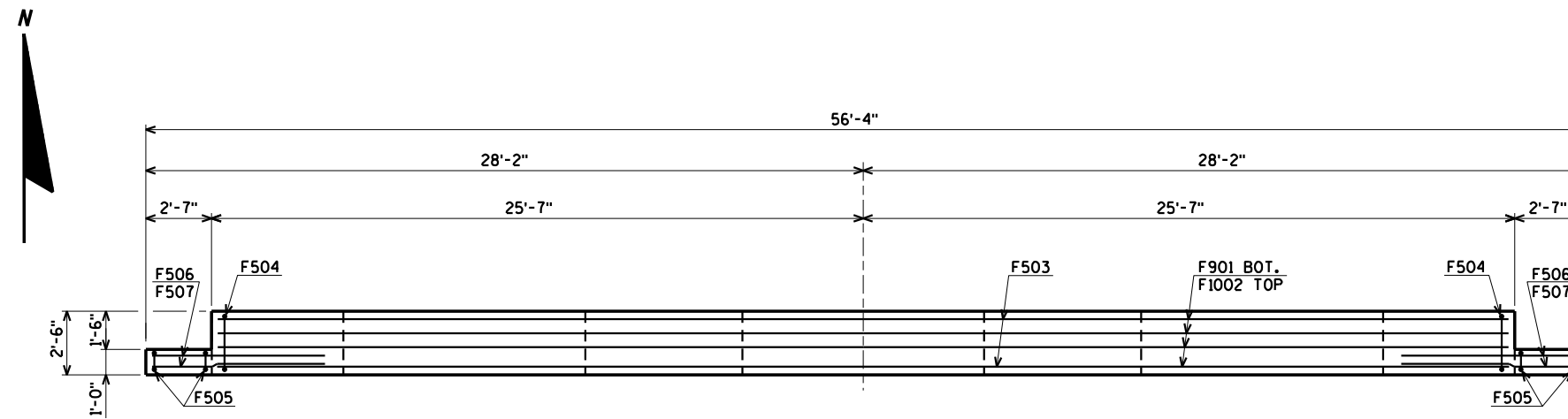
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**FLOOR BEAM A ELEVATION**  
(LOOKING NORTH)



**SECTION A**  
(LOOKING WEST)



**FLOOR BEAM A PLAN**

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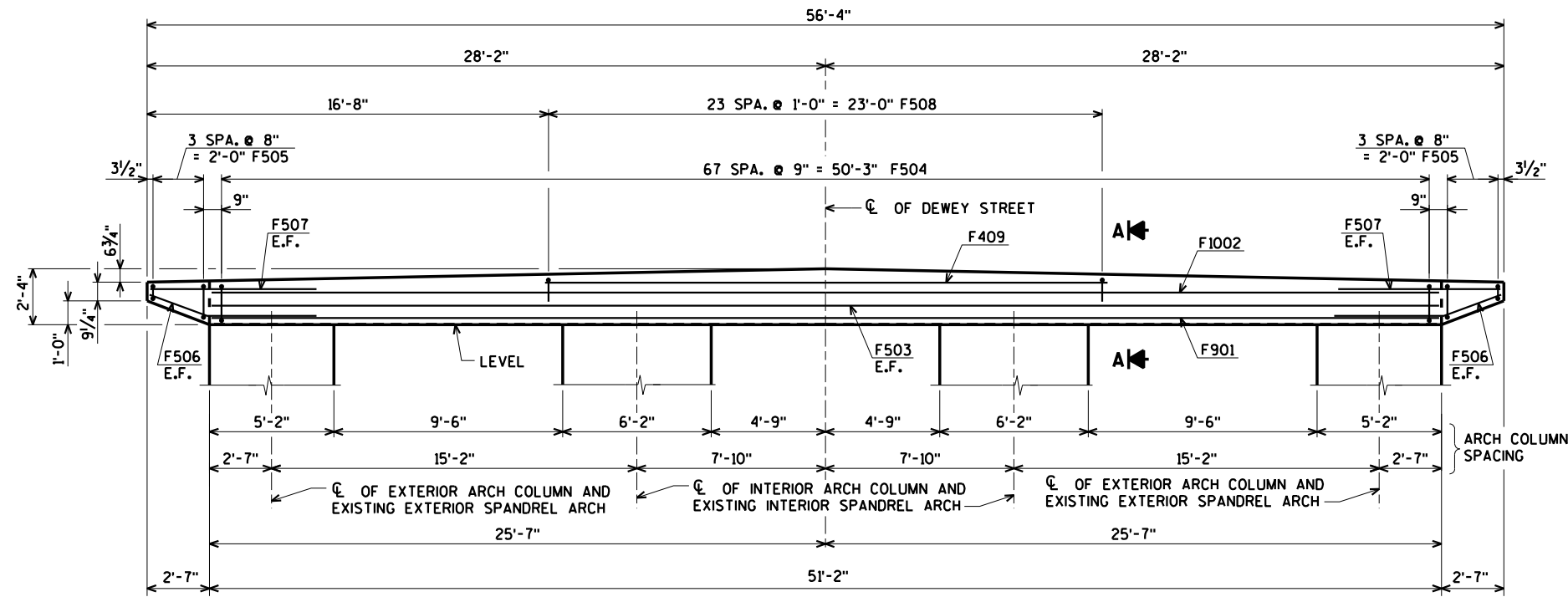
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E.F. DENOTES EACH FACE

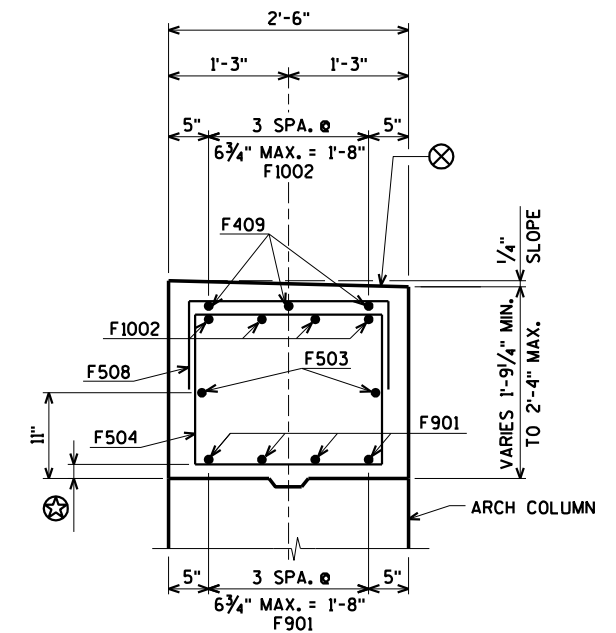
WORK THIS SHEET WITH SHEETS 12 AND 17

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY	CLP	PLANS CK'D.	CBM
<b>FLOOR BEAM A DETAILS</b>			SHEET 13 OF 40

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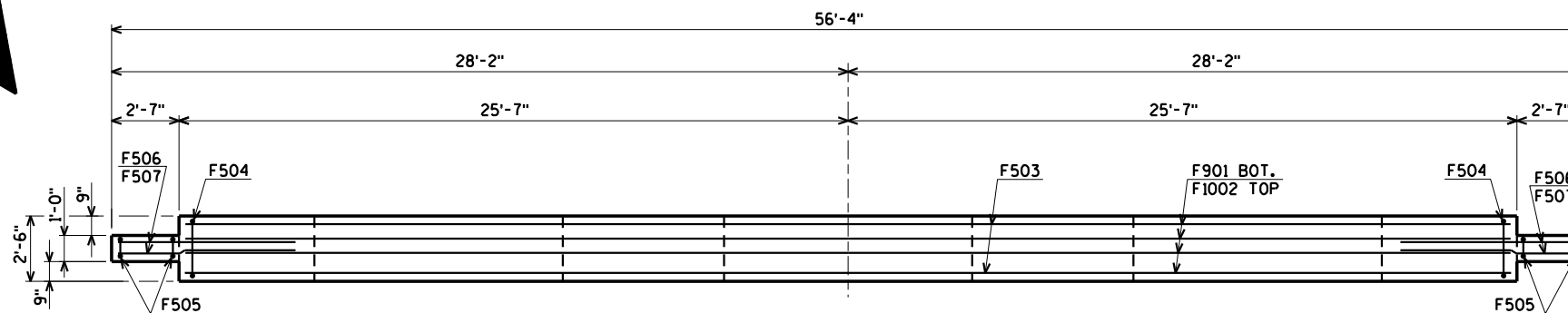
**FLOOR BEAM B ELEVATION**  
(LOOKING NORTH)



**SECTION A**  
(LOOKING WEST)

⊗ STEEL TROWEL TOP SURFACE OF FLOOR BEAM. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE FLOOR BEAM BEFORE PLACING DECK. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

⊗ USE 1/2" CLEAR AND TILT F504 BARS AT COLUMN 7 & 8 OVER CONCRETE SPANDREL ARCHES IN SPAN 2.



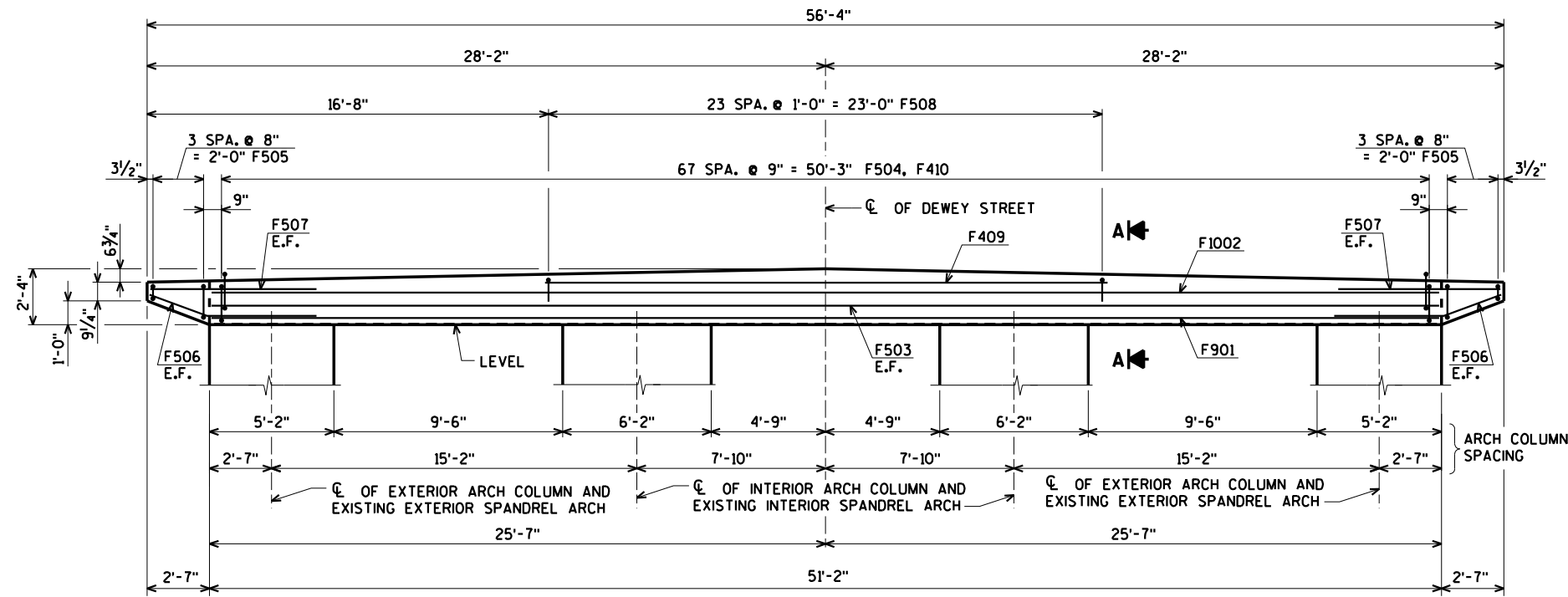
**FLOOR BEAM B PLAN**

E.F. DENOTES EACH FACE

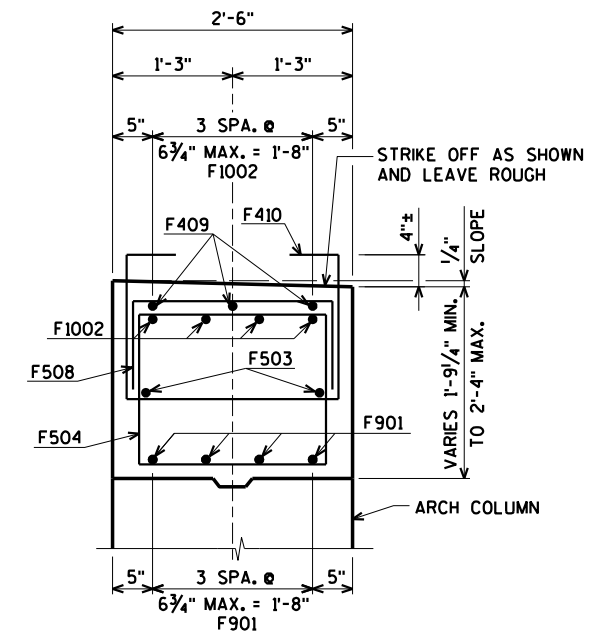
WORK THIS SHEET WITH SHEETS 12 AND 17

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<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>FLOOR BEAM B DETAILS</b>			SHEET 14 OF 40

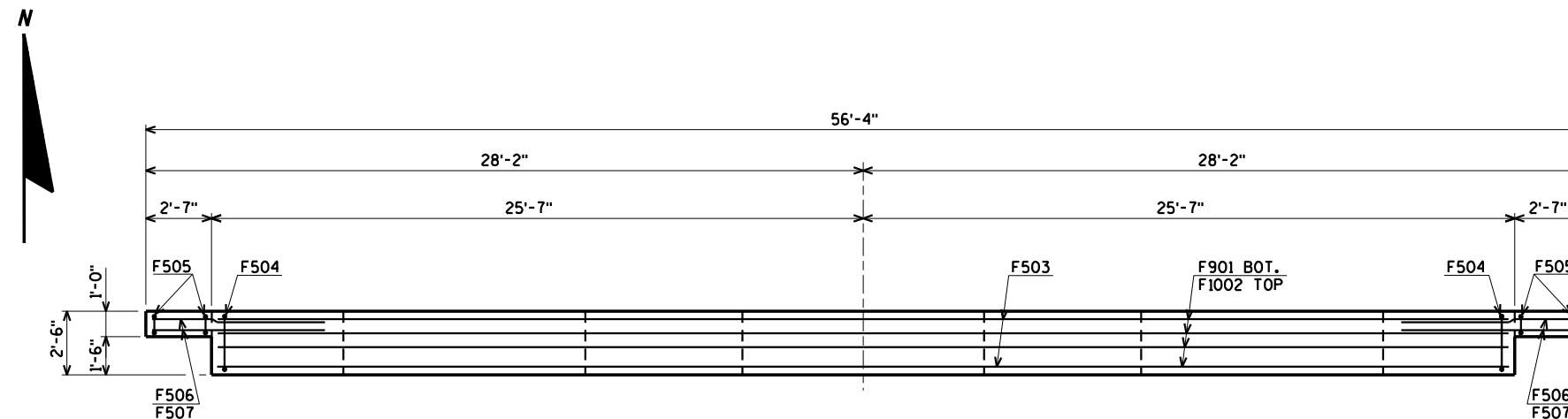
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**FLOOR BEAM C ELEVATION**  
(LOOKING NORTH)



**SECTION A**  
(LOOKING WEST)



**FLOOR BEAM C PLAN**

E.F. DENOTES EACH FACE

WORK THIS SHEET WITH SHEETS 12 AND 17

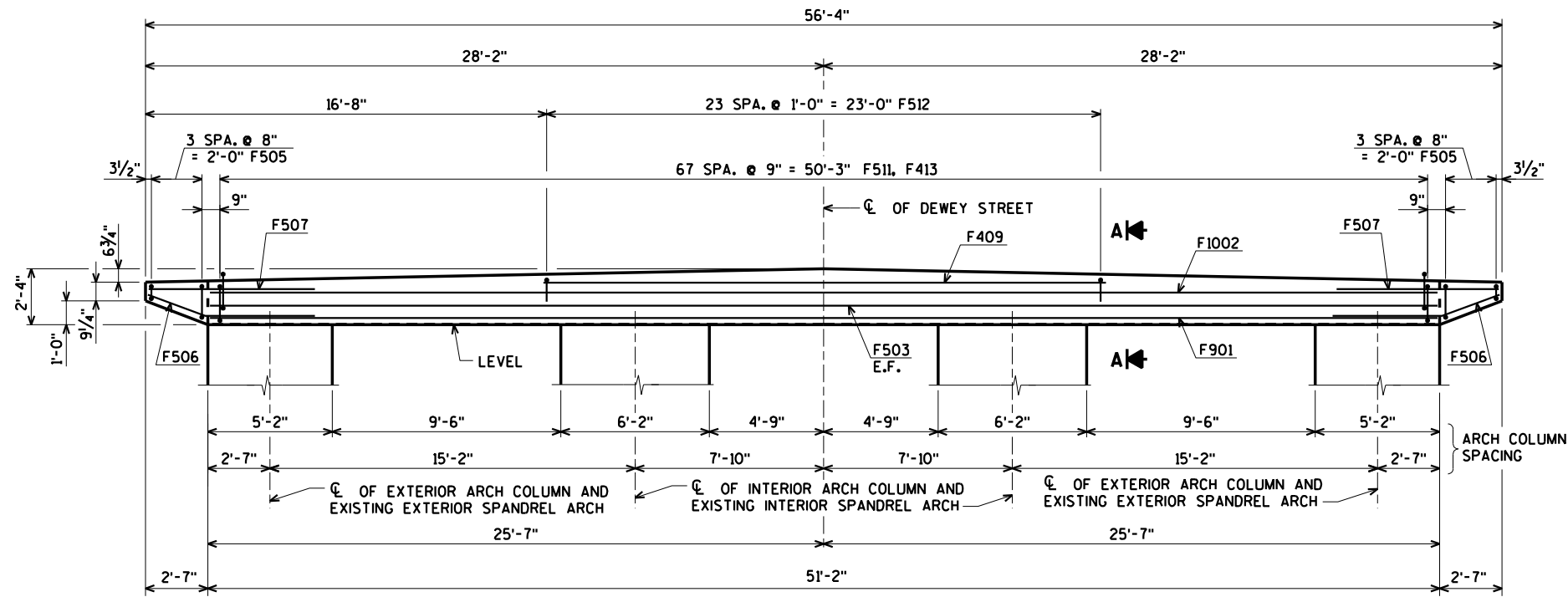
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>FLOOR BEAM C DETAILS</b>			SHEET 15 OF 40

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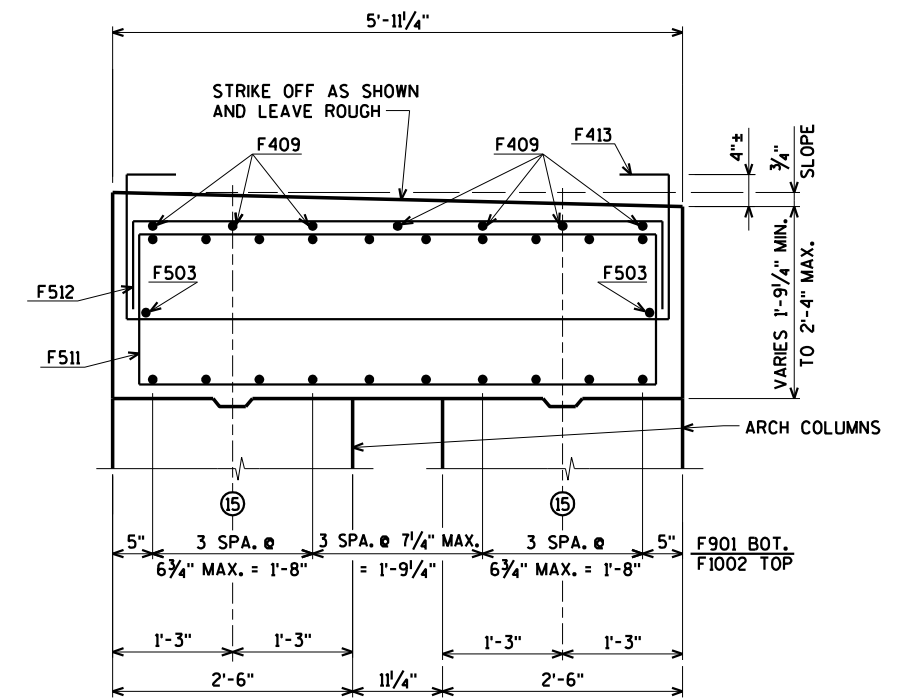
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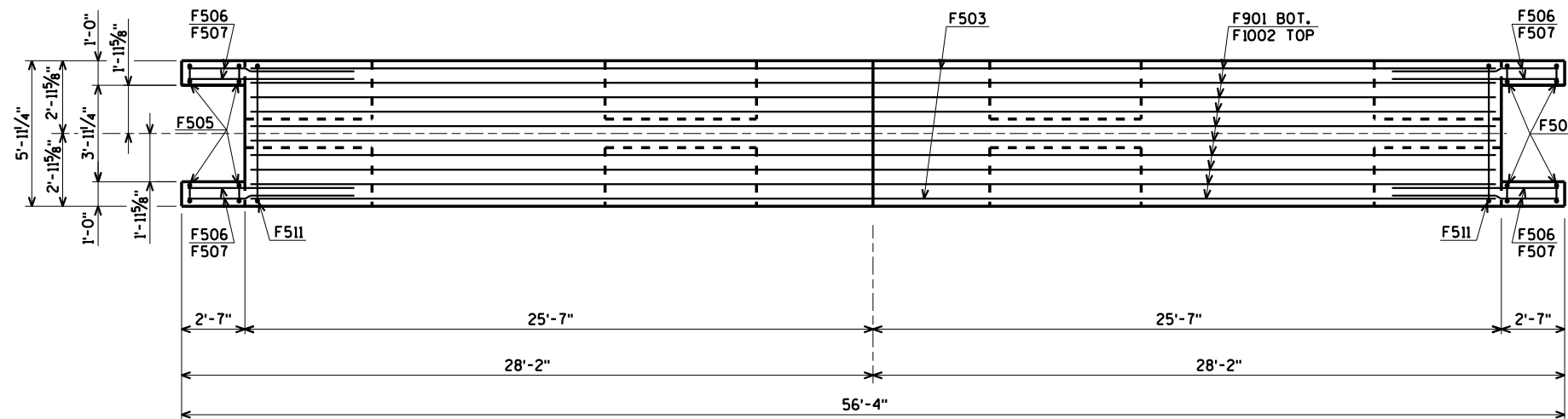
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**FLOOR BEAM D ELEVATION**  
(LOOKING NORTH)



**SECTION A**  
(LOOKING WEST)



**FLOOR BEAM D PLAN**

E.F. DENOTES EACH FACE

WORK THIS SHEET WITH SHEETS 12 AND 17

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>FLOOR BEAM D DETAILS</b>			SHEET 16 OF 40

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**BILL OF BARS**

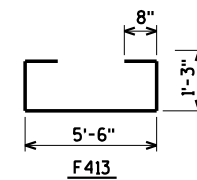
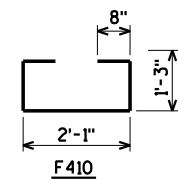
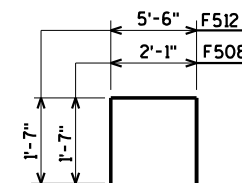
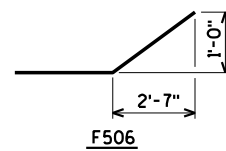
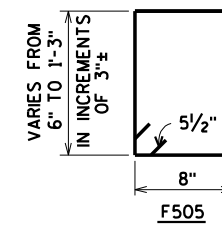
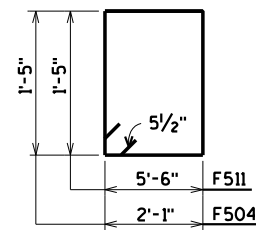
BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	77,750# COATED
							LOCATION
F901	X	122	50-10				FLOOR BEAM HORIZ. BOT.
F1002	X	122	50-10				FLOOR BEAM HORIZ. TOP
F503	X	58	50-10				FLOOR BEAM HORIZ. SIDES
F504	X	1,904	7-7	X			FLOOR BEAM STIRRUP VERT.
F505	X	240	3-8	X	⊗		FLOOR BEAM ENDS VERT.
F506	X	120	5-5	X			FLOOR BEAM ENDS HORIZ. BOT.
F507	X	120	5-0				FLOOR BEAM ENDS HORIZ. TOP
F508	X	672	5-0	X			FLOOR BEAM VERT. TOP
F409	X	91	23-6				FLOOR BEAM HORIZ. TOP
F410	X	816	5-7	X			FLOOR BEAMS A & C VERT. TOP
F511	X	68	14-5	X			FLOOR BEAM D STIRRUP VERT.
F512	X	24	8-5	X			FLOOR BEAM D VERT. TOP
F413	X	68	9-0	X			FLOOR BEAM D VERT. TOP

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.  
 ⊗ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

**BAR SERIES TABLE**

BAR MARK	NO REQ'D.	LENGTH
F505	60 SERIES OF 4	2'-11 TO 4'-5"

BUNDLE AND TAG EACH SERIES SEPARATELY.



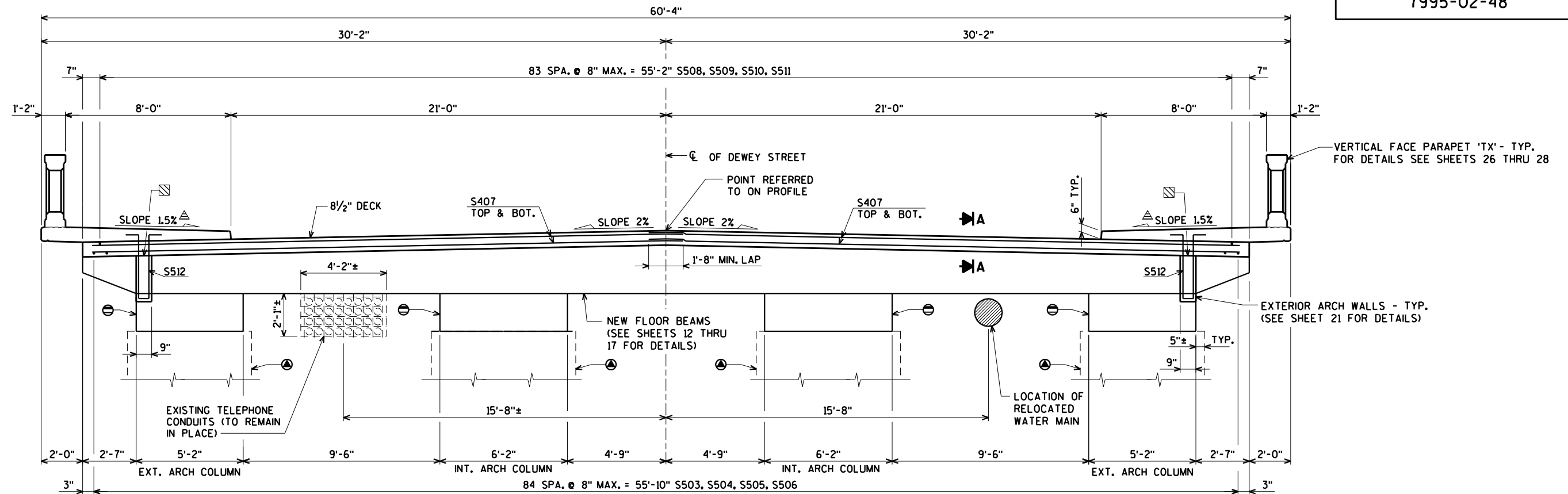
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WORK THIS SHEET WITH SHEETS 12 THRU 16.

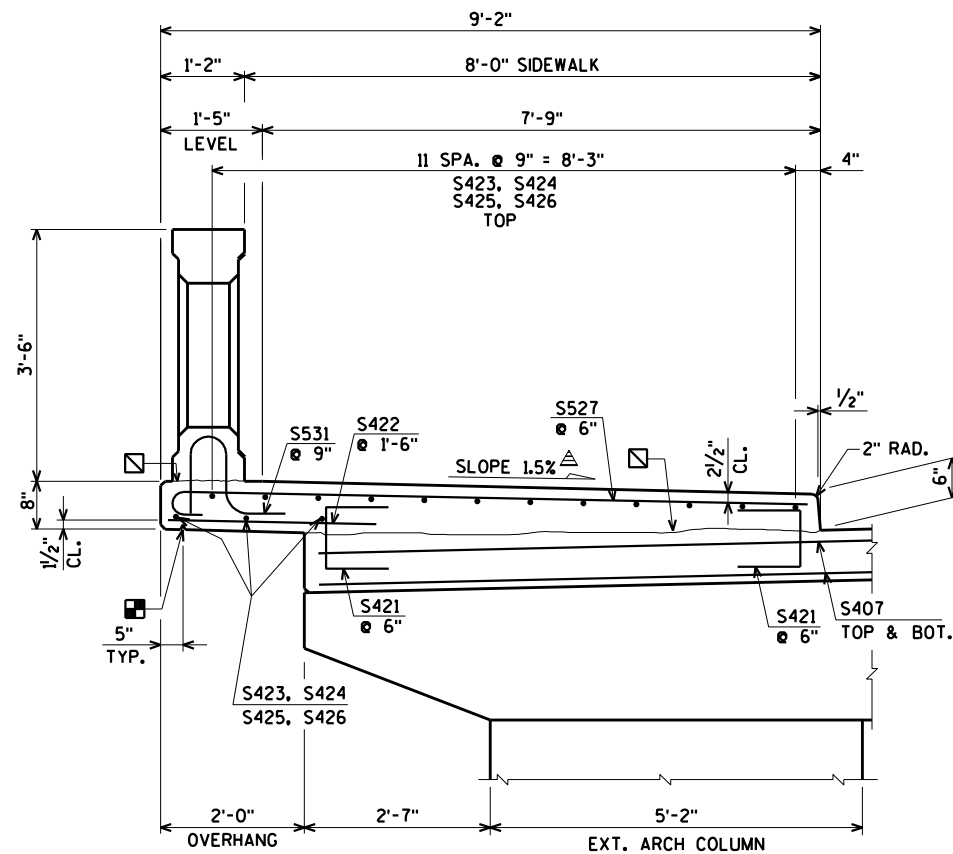
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>FLOOR BEAM BILL OF BARS</b>			SHEET 17 OF 40

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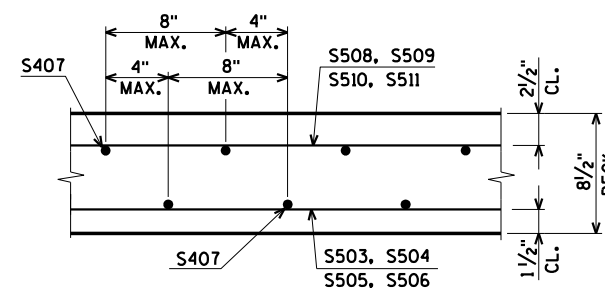




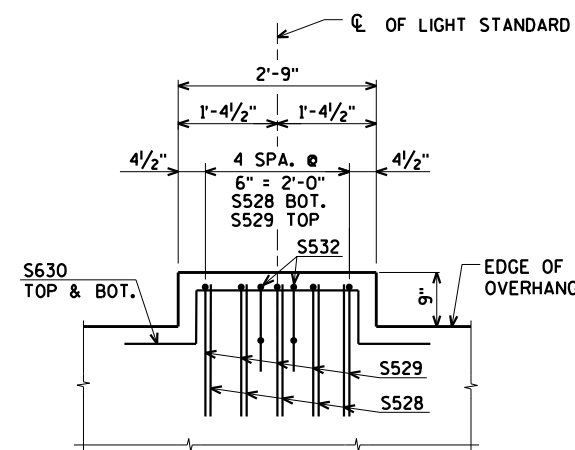
**TYPICAL CROSS SECTION THRU DECK**  
(LOOKING NORTH)



**TYPICAL CROSS SECTION THRU SIDEWALK**



**SECTION A**



**PLAN OF LIGHT STANDARD DETAIL AT SIDEWALK**

- ⊙ EXISTING CONCRETE SPANDEL ARCHES TO REMAIN IN PLACE (SEE SHEET 4 FOR DETAILS)
- ⊙ NEW ARCH COLUMNS (SEE SHEETS 5 THRU 11 FOR DETAILS)
- ⊠ OPTIONAL CONSTRUCTION JOINT STRIKE OFF AND LEAVE ROUGH
- △ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 3/4" V - GROOVE. EXTEND V - GROOVE TO 6" FROM FRONT FACE OF ABUTMENTS - TYP.
- ⊠ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE X-SLOPE.

NO.	DATE	REVISION	BY
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<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>SUPERSTRUCTURE</b>			SHEET 18 OF 40

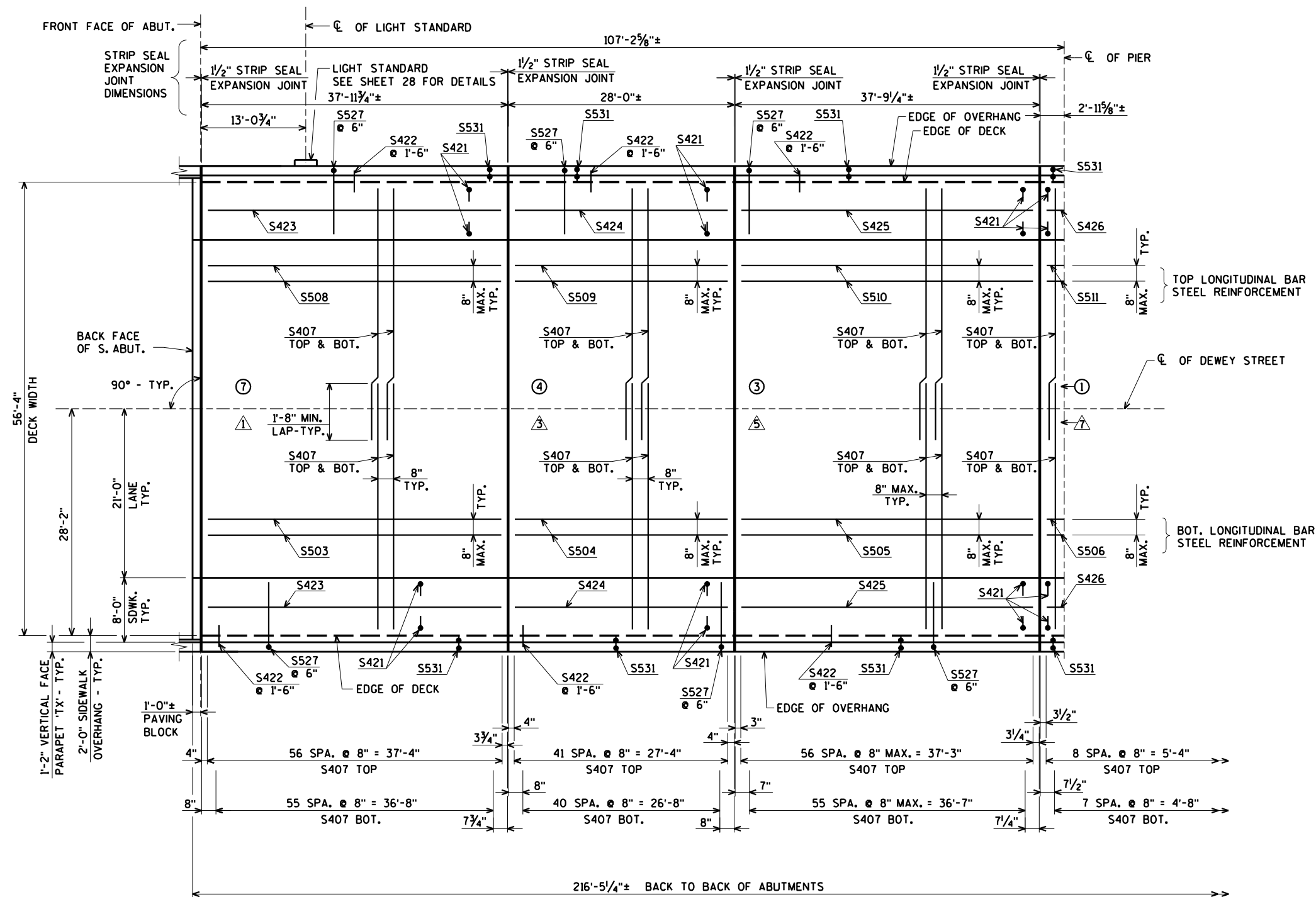
ORIGINAL PLANS PREPARED BY  
**AYRES ASSOCIATES**  
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NOTE: DEMOLITION AND POURING SEQUENCE SHALL BE SUCH THAT LOADING ABOUT THE CENTERLINE OF THE PIER WILL NOT BE UNBALANCED BY MORE THAN ONE PANEL. THE DISTANCE BETWEEN TWO DECK JOINTS CONSTITUTES A PANEL.

○ INDICATES POSSIBLE DEMOLITION SEQUENCE

△ INDICATES POSSIBLE POURING SEQUENCE.

THE CONTRACTOR MAY SUBMIT HIS OWN SEQUENCE OF DEMOLITION AND POURING TO THE ENGINEER FOR APPROVAL.



PARTIAL PLAN - SPAN 1

9/4/2019 PENTABLE:BRou-shd\_util.tbl

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8

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>SUPERSTRUCTURE SPAN 1 PLAN</b>			SHEET 19 OF 40

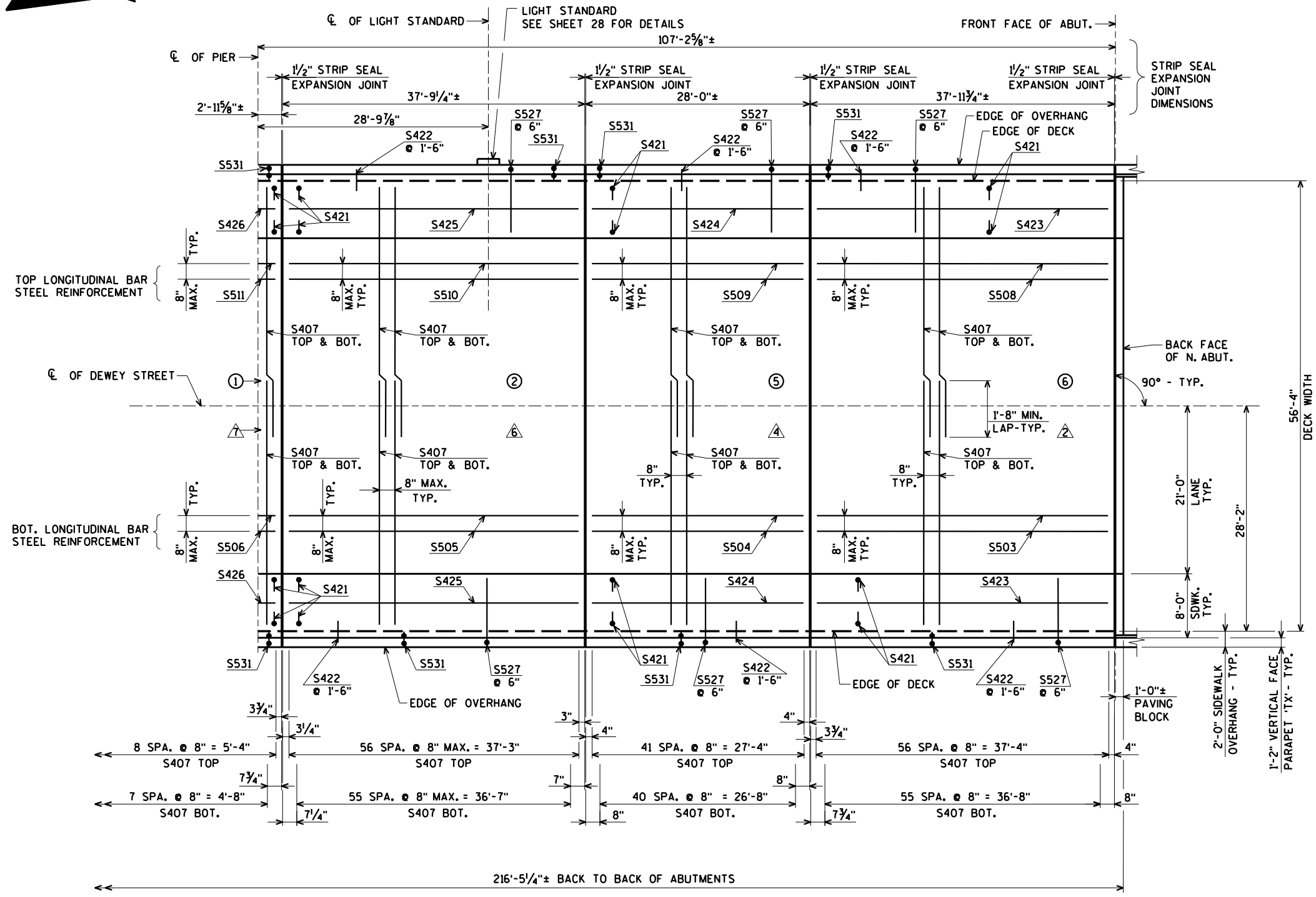
ORIGINAL PLANS PREPARED BY  
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 Eau Claire, WI 54701  
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NOTE: DEMOLITION AND POURING SEQUENCE SHALL BE SUCH THAT LOADING ABOUT THE CENTERLINE OF THE PIER WILL NOT BE UNBALANCED BY MORE THAN ONE PANEL. THE DISTANCE BETWEEN TWO DECK JOINTS CONSTITUTES A PANEL.

○ INDICATES POSSIBLE DEMOLITION SEQUENCE

△ INDICATES POSSIBLE POURING SEQUENCE.

THE CONTRACTOR MAY SUBMIT HIS OWN SEQUENCE OF DEMOLITION AND POURING TO THE ENGINEER FOR APPROVAL.



**PARTIAL PLAN - SPAN 2**

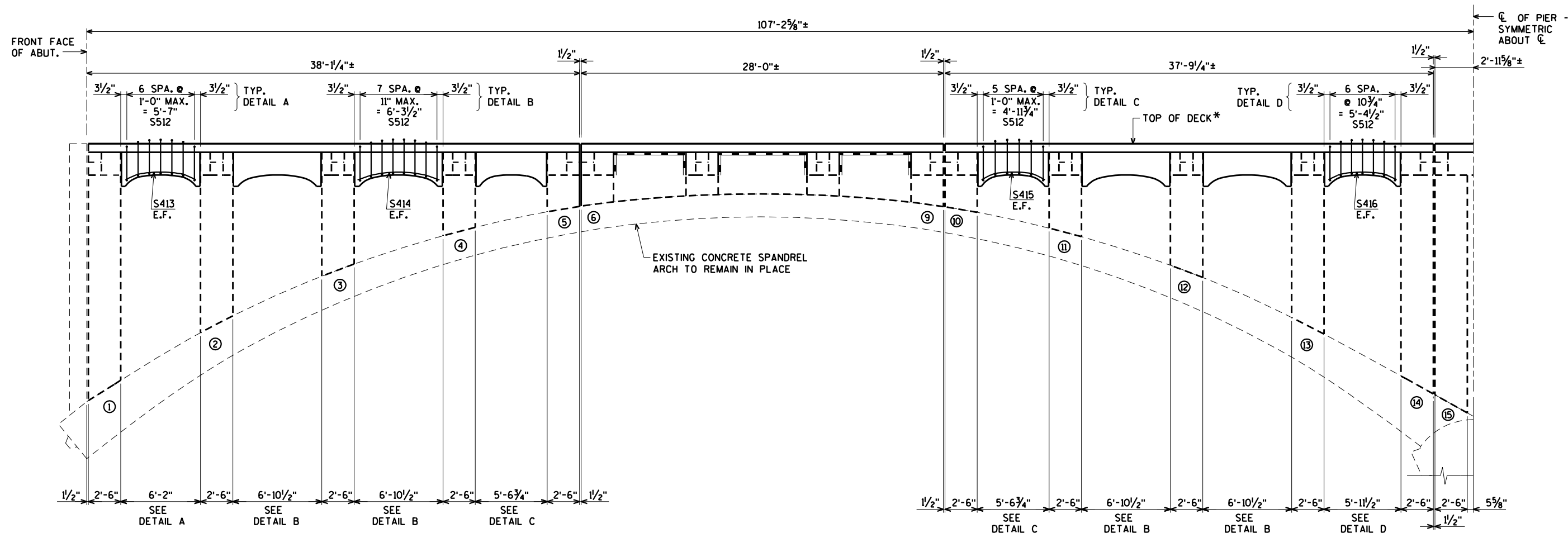
9/4/2019 PENTABLE:BRou-shd\_util.tbl

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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>SUPERSTRUCTURE SPAN 2 PLAN</b>			SHEET 20 OF 40

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**ELEVATION OF EXTERIOR ARCH WALL**

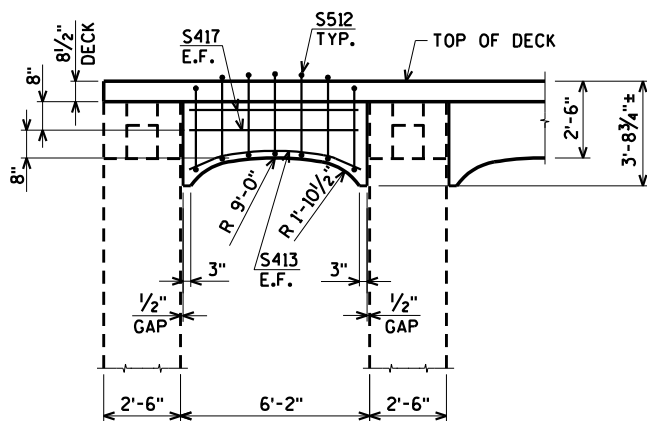
(LOOKING WEST AT SPAN 1, SPAN 2 SIMILAR)

NOTE: FOR COLUMN HEIGHTS, SEE SHEET 5

\*SIDEWALK NOT SHOWN

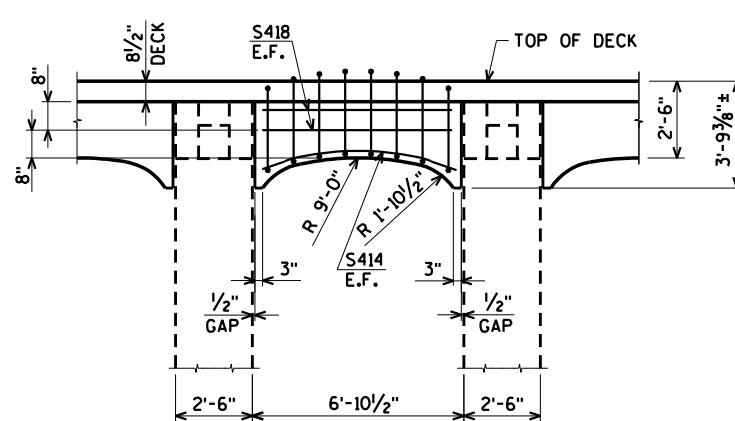
○ DENOTES COLUMN NUMBER

E.F. DENOTES EACH FACE



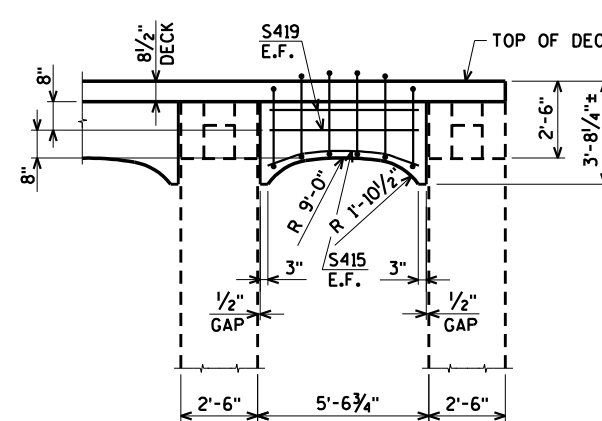
**DETAIL A**

(LOOKING WEST AT SPAN 1, OTHER LOCATIONS SIMILAR)



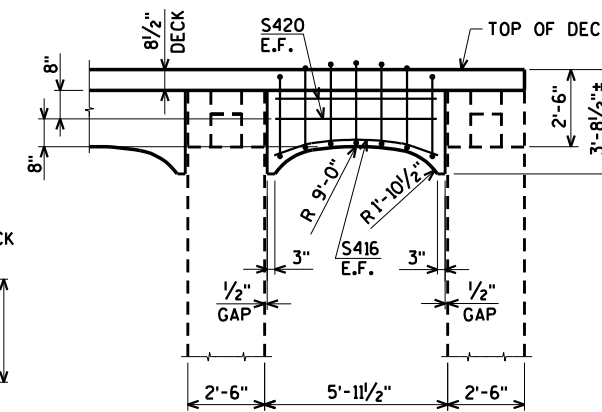
**DETAIL B**

(LOOKING WEST AT SPAN 1, OTHER LOCATIONS SIMILAR)



**DETAIL C**

(LOOKING WEST AT SPAN 1, OTHER LOCATIONS SIMILAR)

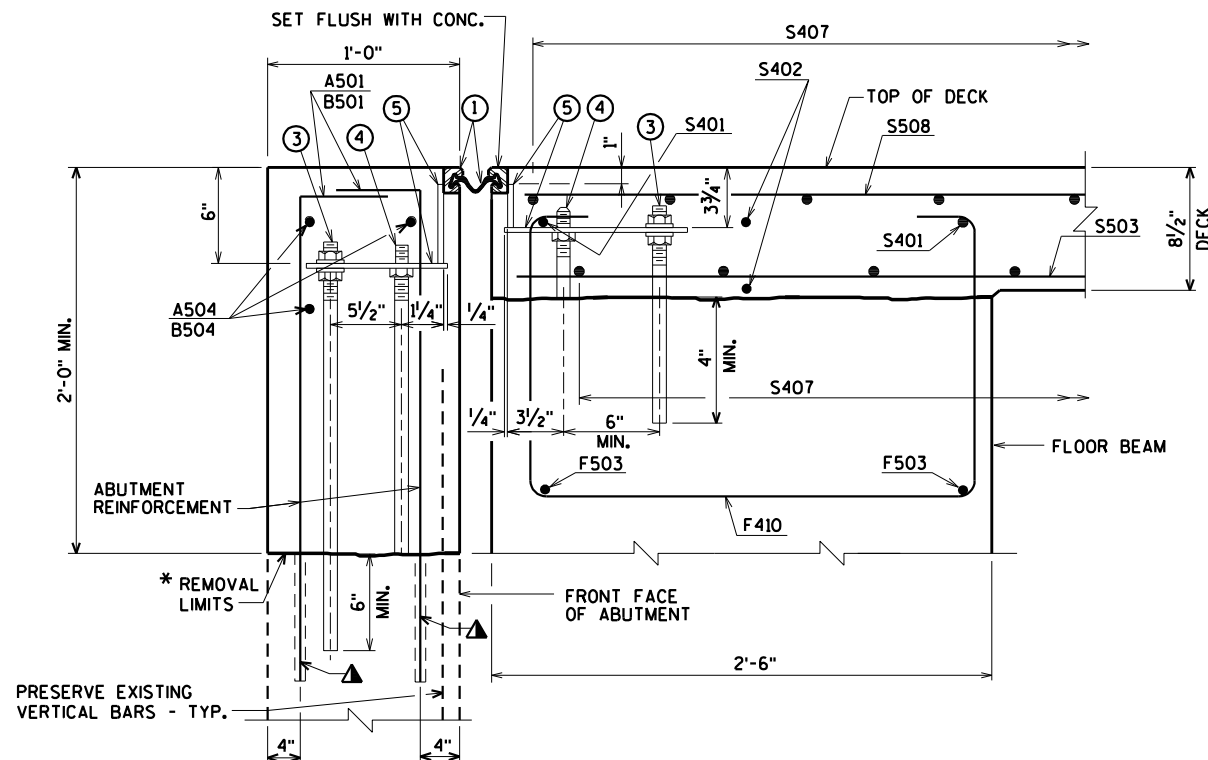


**DETAIL D**

(LOOKING WEST AT SPAN 1, OTHER LOCATIONS SIMILAR)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY CLP		PLANS CK'D. CBM	
<b>EXTERIOR ARCH WALL DETAILS</b>			SHEET 21 OF 40

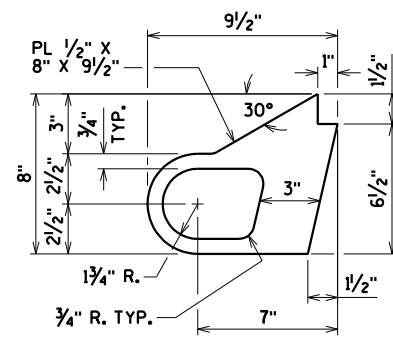
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SECTION THRU JOINT AT ABUTMENT

\* POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE.

▲ ADHESIVE ANCHORS NO. 5 BAR, EMBED 1'-0 1/2" MIN.



ALTERNATE STRIP SEAL ANCHOR

**LEGEND**

- ① NEOPRENE STRIP SEAL ( 4 - INCH) AND STEEL EXTRUSIONS.
- ② STUDS 5/8" φ X 6 3/8" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
- 2A 1/2" THICK ANCHOR PLATE WITH 5/8" φ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE. WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN FABRICATED SUPPORTS NO. 5.
- ③ 3/4" φ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT WALL AS SHOWN.
- ④ 3/4" φ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
- ⑤ FABRICATE SUPPORT FROM 3" X 1/2" BAR AS SHOWN OR EQUIVALENT, ONE PER 6'-0" SPACING PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1 1/2" φ HOLE FOR NO. 3 AND 1" φ HOLE FOR NO. 4.
- ⑦ 3/4" φ X 1 1/2" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS 1/16" BELOW PLATE SURFACE.
- ⑧ 3/4" φ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
- ⑨ 3/4" φ X 2 1/4" GALVANIZED THREADED COUPLING.
- ⑩ 1" X 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.
- ⑪ SIDEWALK COVER PLATE 3/4" X 2'-0" WIDE X LIMITS SHOWN WITH HOLES FOR NO. 7. BEND DOWN FACE OF SIDEWALK. GALVANIZE PLATE AFTER SLIP-RESISTANT SURFACE IS APPLIED.

**NOTES**

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS, UNLESS MORE ARE REQUIRED FOR STAGED CONSTRUCTION, HANDLING OR GALVANIZING REQUIREMENTS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

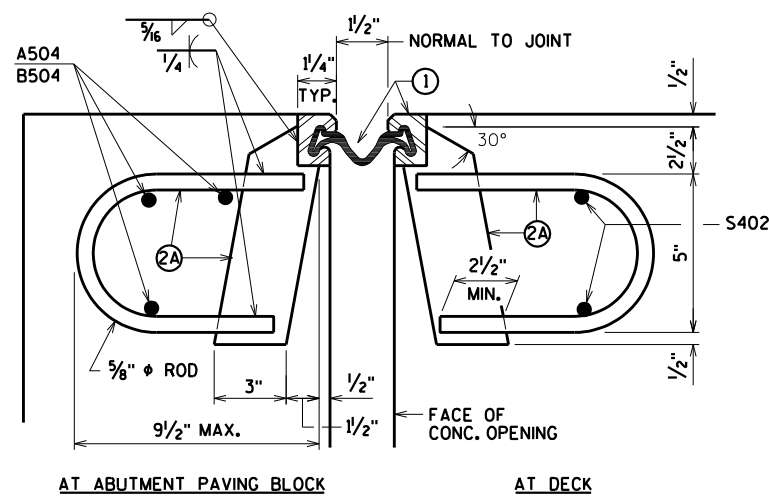
AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST AND SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN AND SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

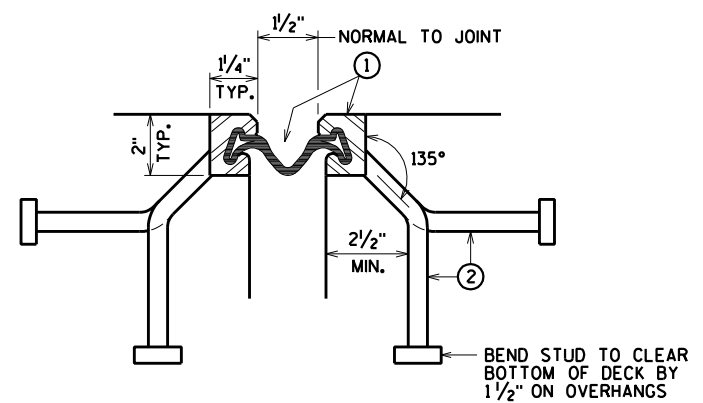
SANDBLAST PLATES, SUPPORTS AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED. SLIP-RESISTANT SURFACE IS APPLIED TO SIDEWALK COVER PLATES BY THE MANUFACTURER AND THEN HOT DIPPED GALVANIZED TO THEIR RECOMMENDATIONS TO MAINTAIN THE INTEGRITY OF THIS SURFACE.

ANCHOR SYSTEM NO. 8 AND NO. 9 SHALL CONFORM TO ASTM A307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C AND D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-18-93".



SECTION THRU JOINT ROADWAY TRAFFIC AREA BETWEEN FABRICATED SUPPORTS.



SECTION THRU JOINT EXTERIOR FABRICATED SUPPORT TO EDGE OF DECK AND AT SIDEWALKS

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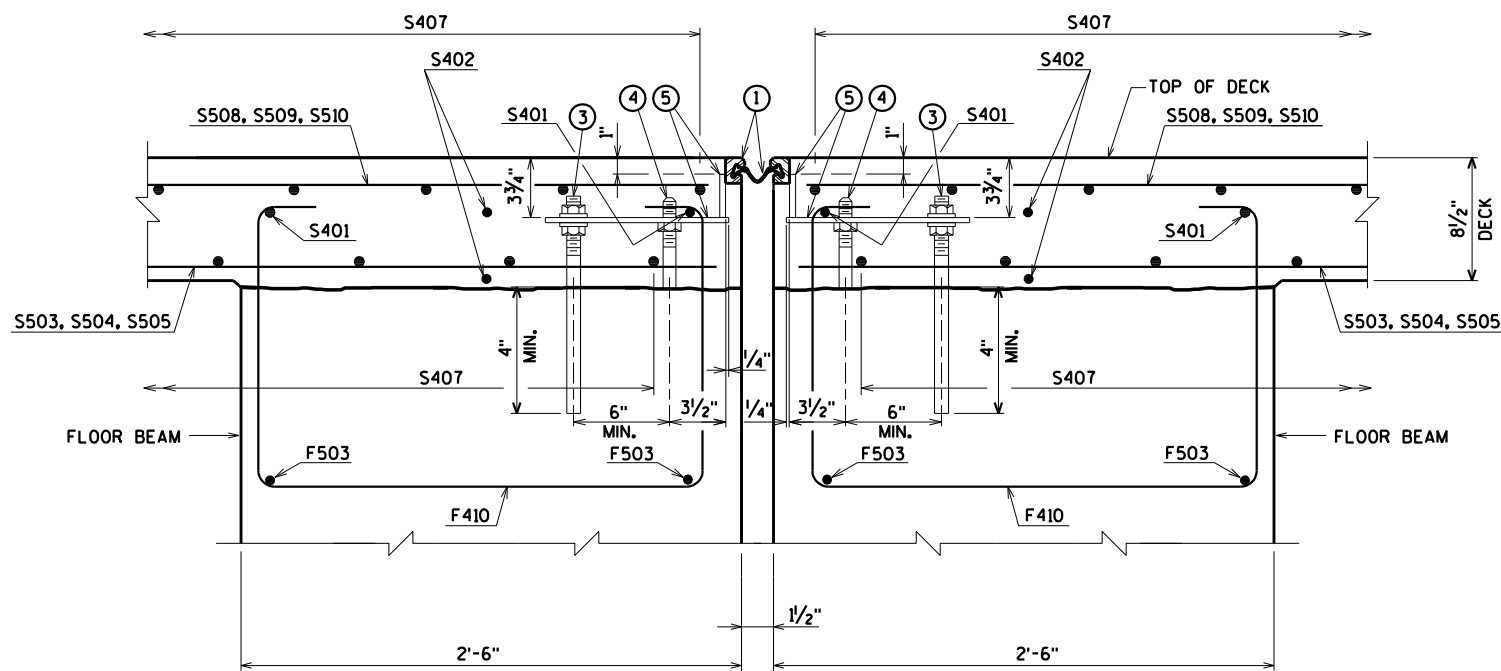
8

WORK THIS SHEET WITH SHEETS 23 THRU 25

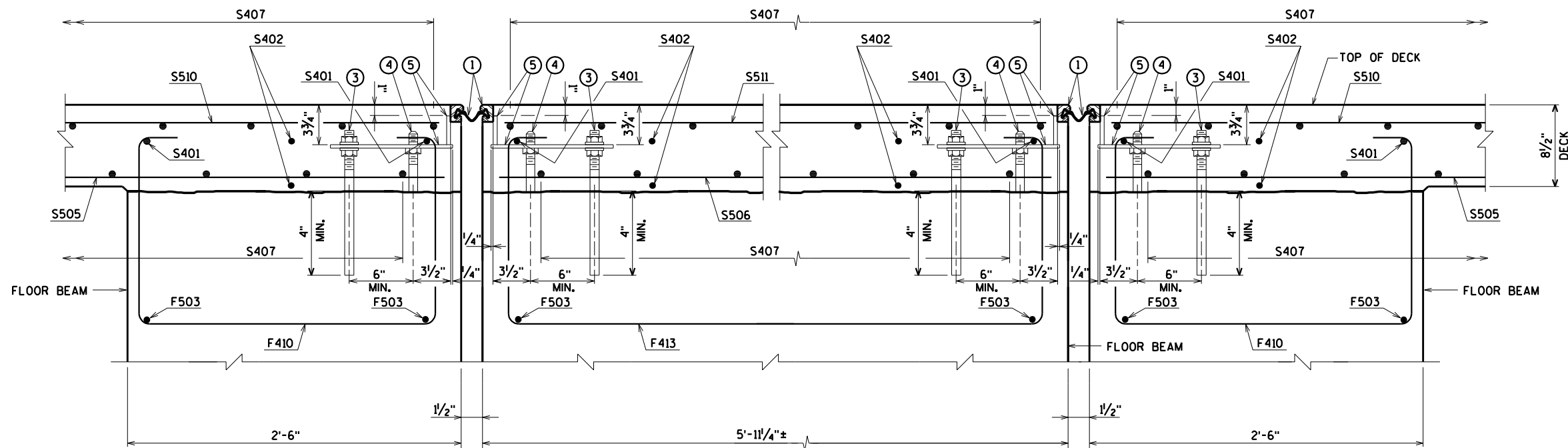
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>STRIP SEAL EXPANSION JOINT DETAILS</b>			SHEET 22 OF 40

ORIGINAL PLANS PREPARED BY  
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 3433 Oakwood Hills Parkway  
 Eau Claire, WI 54701  
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\$PRNAME\$ U:\42-1123.00 - City of Eau Claire, Dewey Street Bridge Rehab\Structures\Final Structure\421123\_exp.jt.DGN



**SECTION THRU JOINT IN SPAN**



**SECTION THRU JOINTS AT PIER**

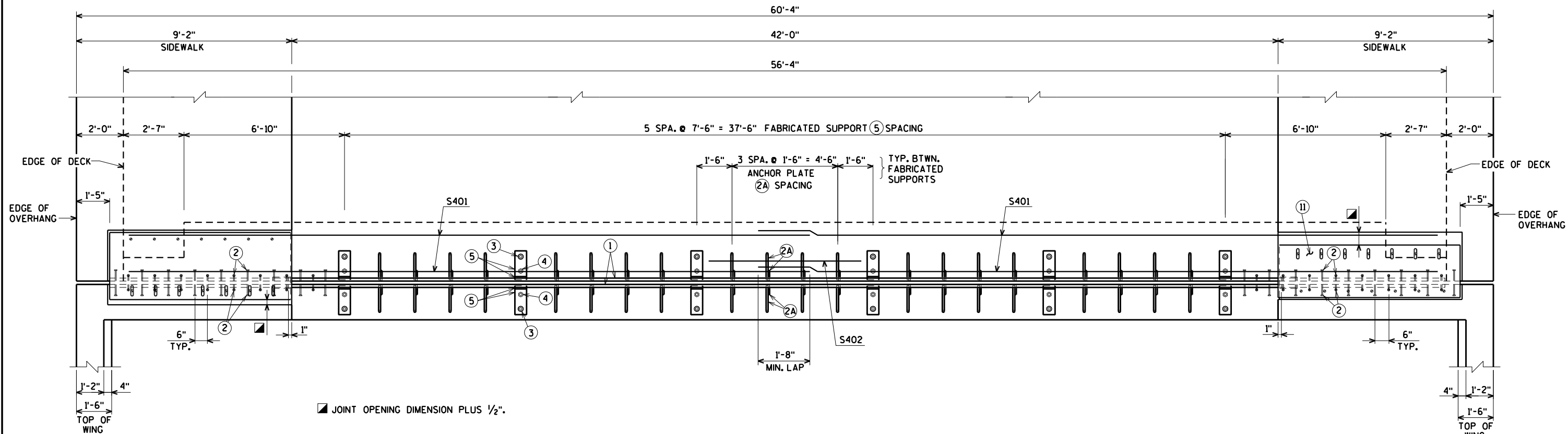
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WORK THIS SHEET WITH SHEETS 22, 24, AND 25

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>STRIP SEAL EXPANSION JOINT DETAILS</b>			SHEET 23 OF 40

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**PART PLAN OF JOINT**  
 (JOINT AT ABUTMENT SHOWN, JOINTS IN SPAN AND AT PIER SIMILAR)

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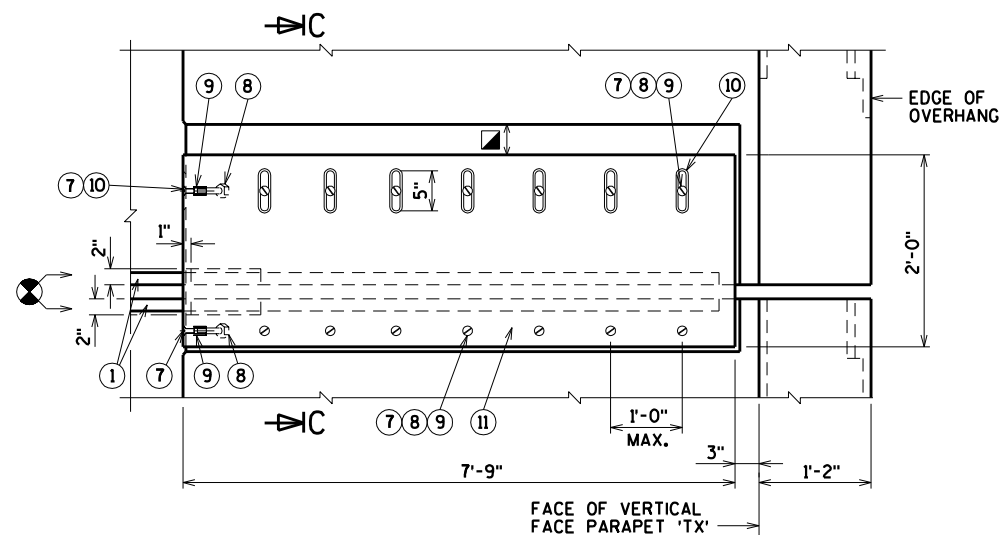
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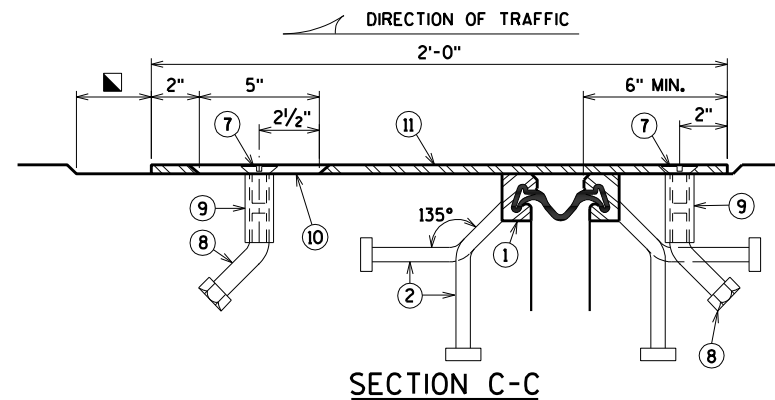
WORK THIS SHEET WITH SHEETS 22, 23, AND 25

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY	CLP	PLANS CK'D.	CBM
<b>STRIP SEAL EXPANSION JOINT PLAN</b>			SHEET 24 OF 40

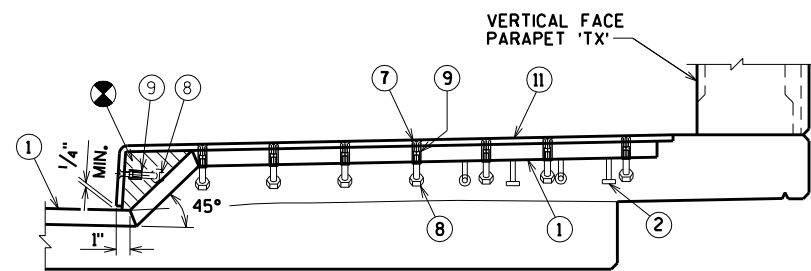
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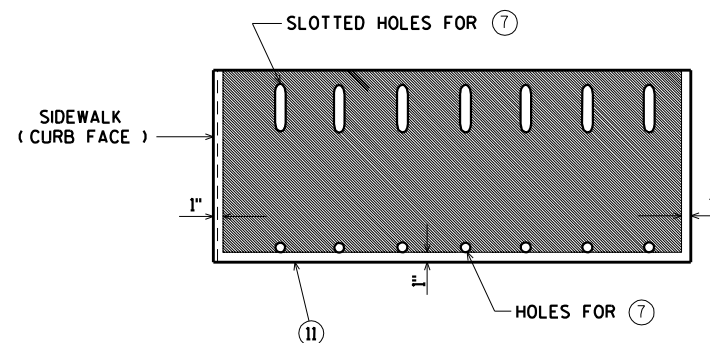
PLAN AT SIDEWALK



SECTION C-C



SECTION AT SIDEWALK



PLAN OF SIDEWALK COVER PLATE WITH SLIP-RESISTANT SURFACE

PLACE SLIP-RESISTANT SURFACE ON TOP WALKING SURFACE IN SHADED AREA ONLY (NOT ON CURB FACE).

APPROVED SLIP-RESISTANT APPLIED SURFACES FOR STEEL PLATES		
PRODUCT	MANUFACTURER	CONTACT AT
SLIPNOT GRADE 2, STEEL	W. S. MOLNAR COMPANY	1-800-SLIPNOT
ALGRIP, STEEL	ROSS TECHNOLOGY CORP.	1-800-345-8170

⊗ BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

▣ JOINT OPENING DIMENSION PLUS 1/2".

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WORK THIS SHEET WITH SHEETS 22 THRU 24

NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
 DEPARTMENT OF TRANSPORTATION

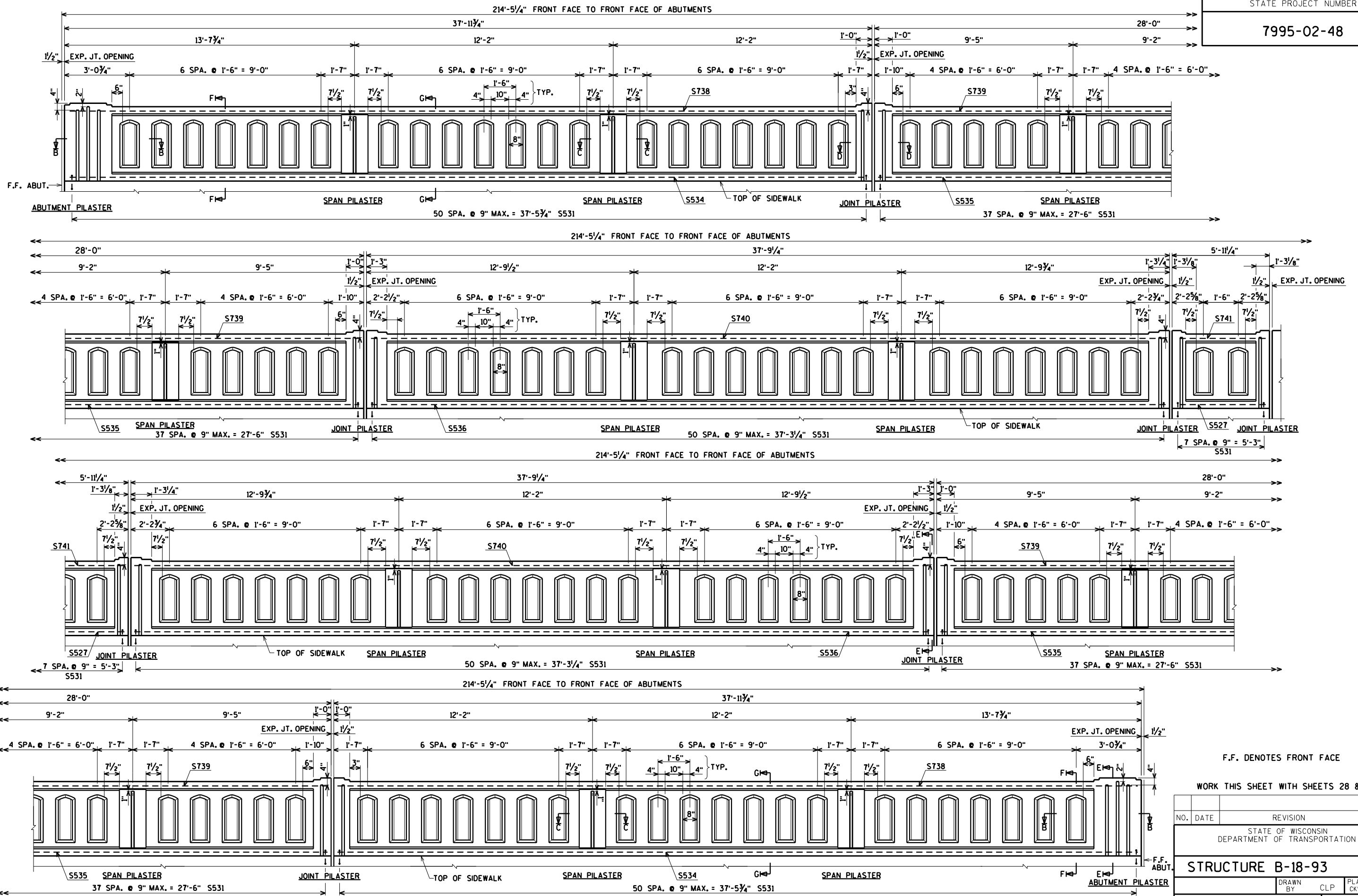
STRUCTURE B-18-93

DRAWN BY	CLP	PLANS CK'D.	CBM

SIDEWALK COVER PLATE DETAILS

SHEET 25 OF 40





**EAST SIDE RAIL SPACING**  
(LOOKING WEST)

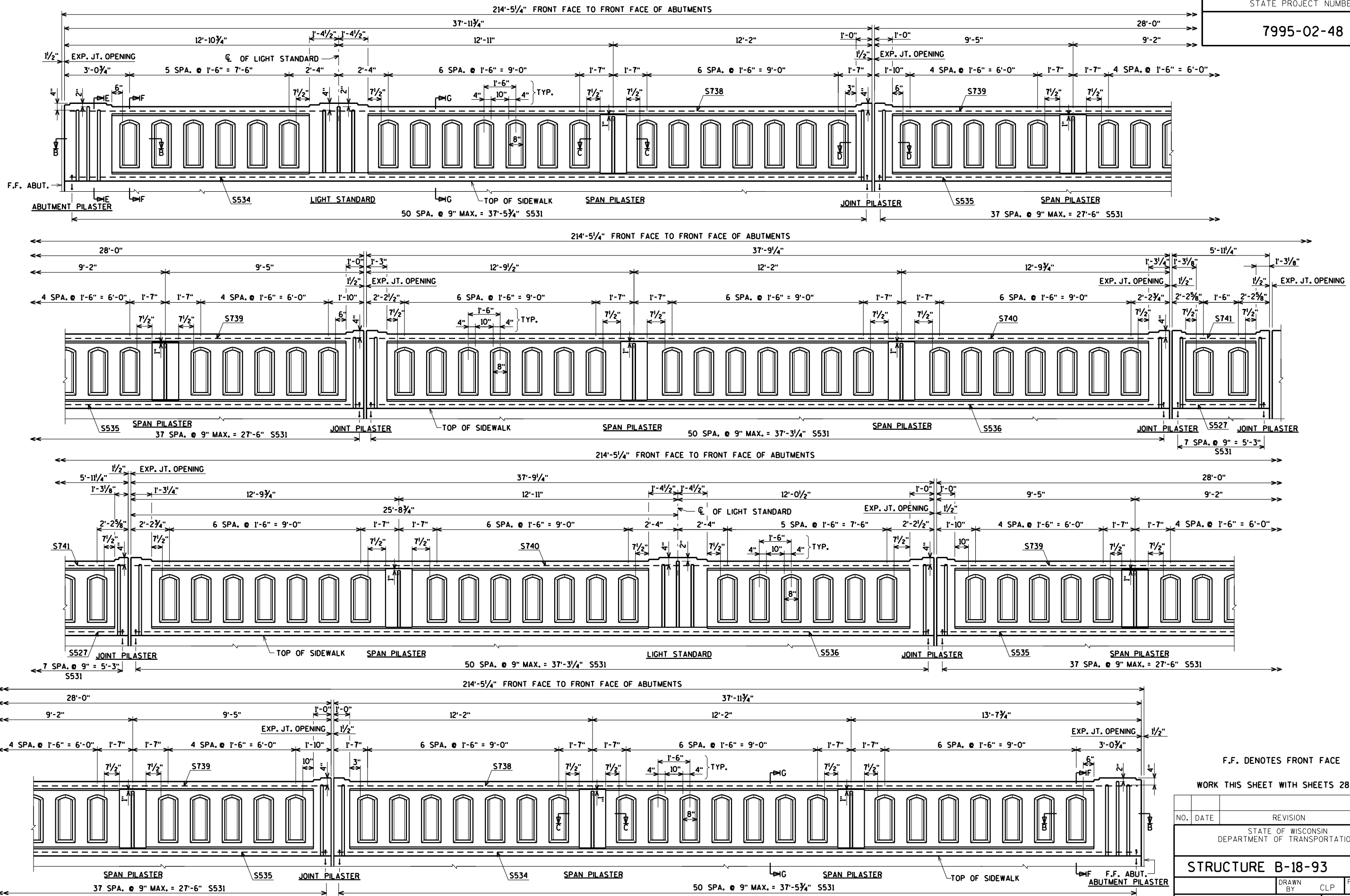
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F.F. DENOTES FRONT FACE

WORK THIS SHEET WITH SHEETS 28 & 29

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY CLP		PLANS CK'D. CBM	
<b>VERTICAL FACE PARAPET 'TX' EAST LAYOUT</b>			SHEET 26 OF 40

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**WEST SIDE RAIL SPACING**  
(LOOKING WEST)

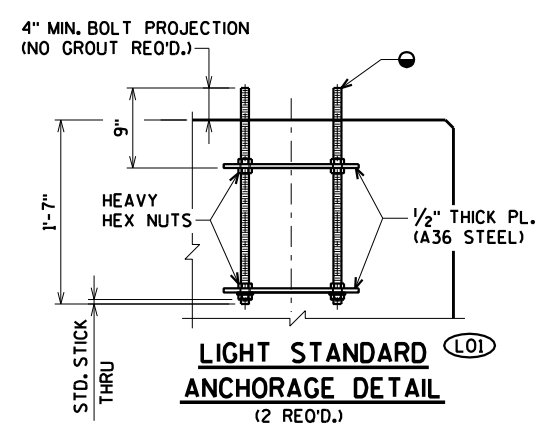
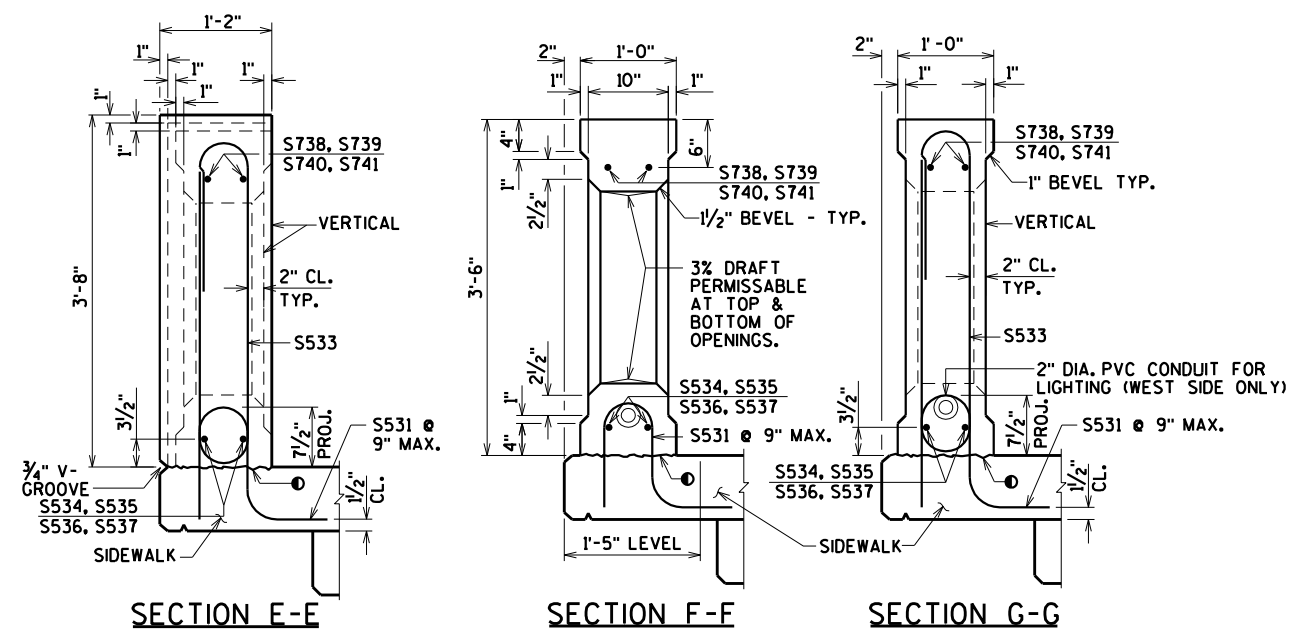
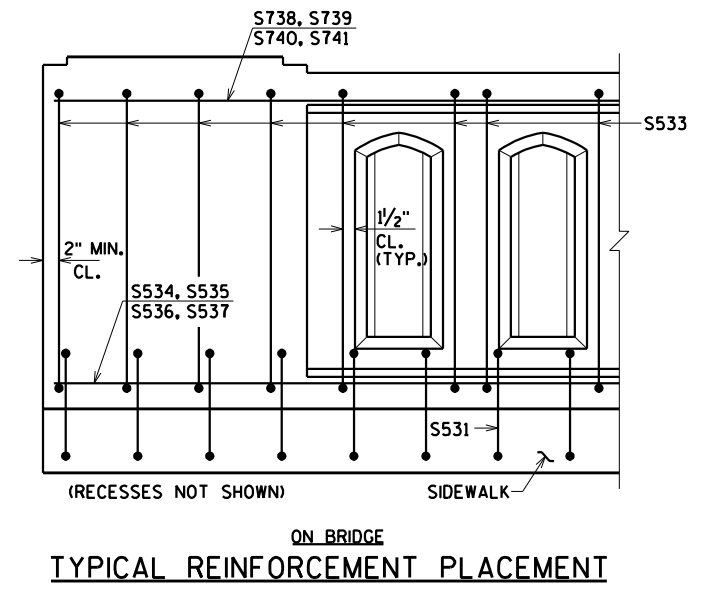
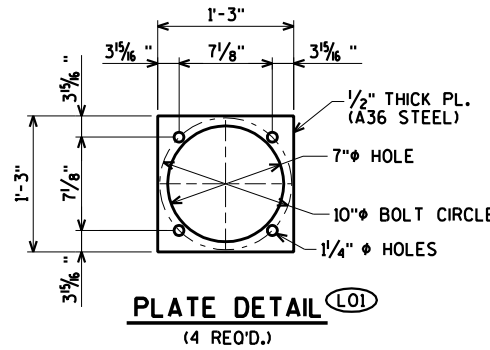
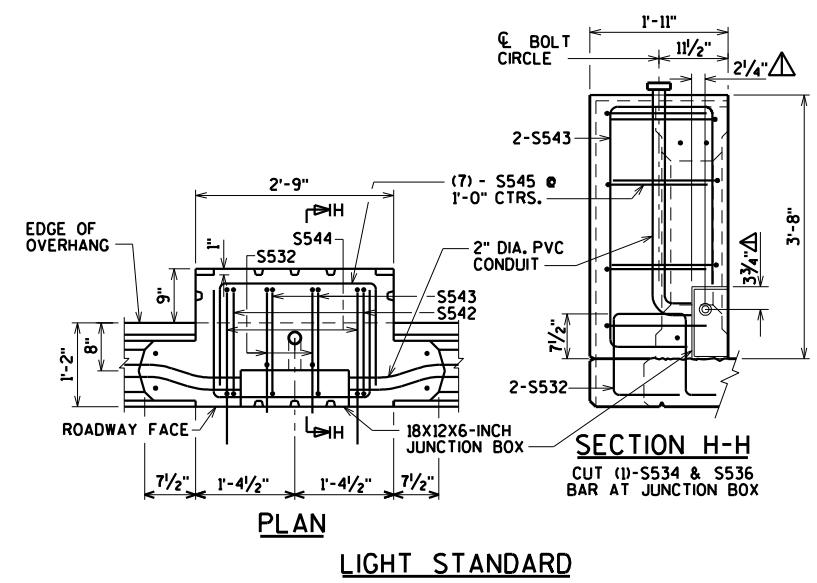
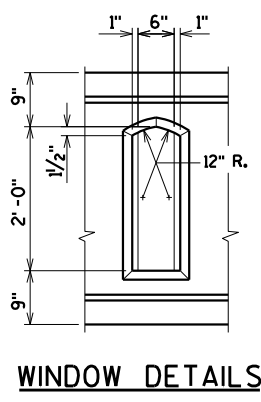
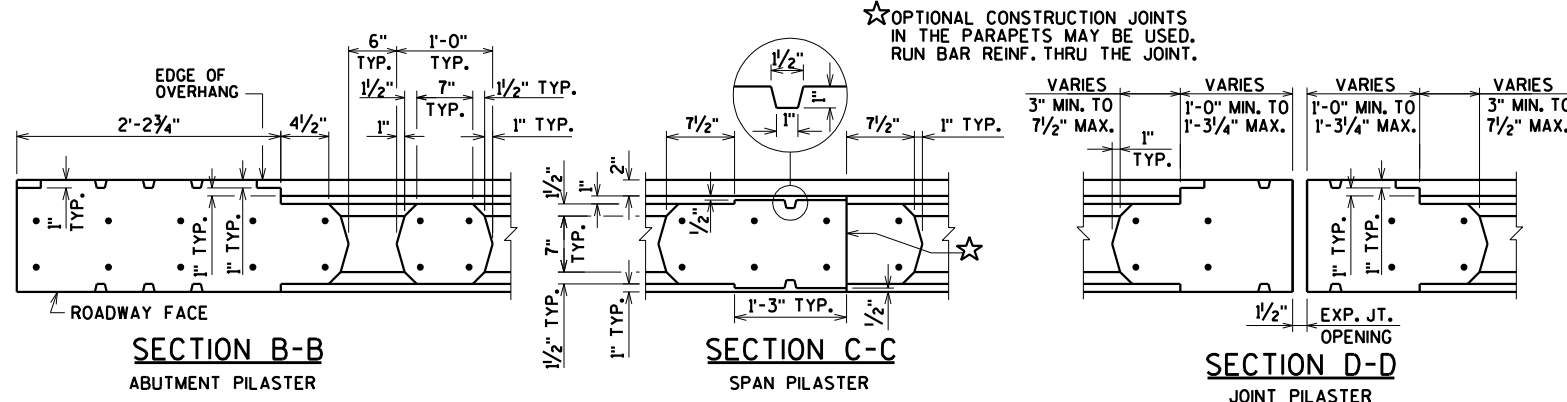
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F.F. DENOTES FRONT FACE

WORK THIS SHEET WITH SHEETS 28 & 29

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY CLP		PLANS CK'D. CBM	
<b>VERTICAL FACE PARAPET 'TX' WEST LAYOUT</b>			SHEET 27 OF 40

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WORK THIS SHEET WITH SHEETS 26, 27, AND 29

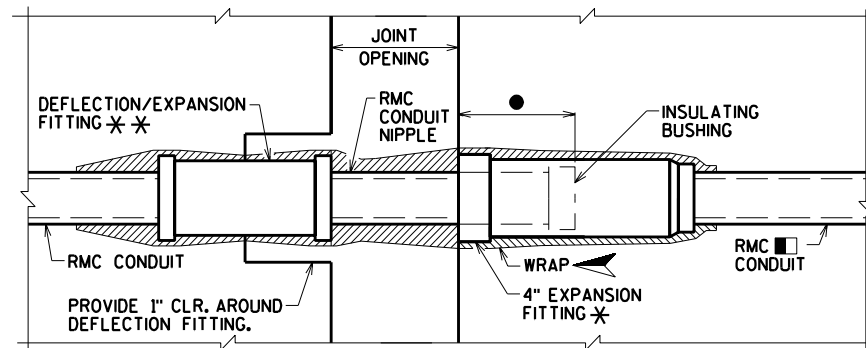
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-18-93			
DRAWN BY CLP		PLANS CK'D. CBM	
VERTICAL FACE PARAPET 'TX' DETAILS			SHEET 28 OF 40

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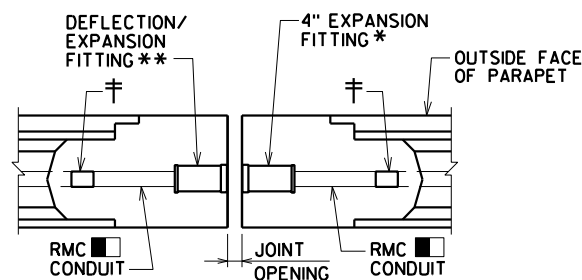
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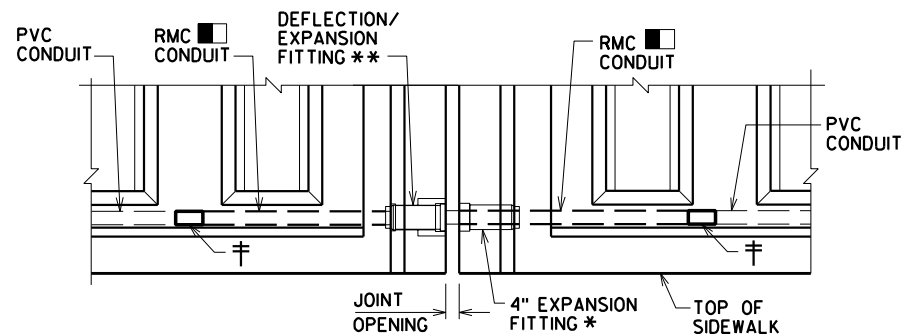


**DEFLECTION/EXPANSION AND 4" EXPANSION FITTING**

THIS DETAIL ACCOMMODATES A MAXIMUM OF 4" TOTAL MOVEMENT AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION. BOND JUMPER NOT SHOWN FOR CLARITY



**PLAN OF PARAPET AT EXP. JOINT**



**ELEVATION OF PARAPET AT EXP. JOINT**

**NOTES**

- CONDUIT SHALL BE EMBEDDED 2" CLEAR.
- USE 2" DIA. RIGID NONMETALLIC CONDUIT (PVC) UNLESS NOTED OTHERWISE.
- CONDUIT FITTINGS, CONDUIT BENDS, AND ADAPTER FITTINGS INCIDENTAL TO CONDUIT WORK.
- CONDUIT BENDS SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.
- PROVIDE JUNCTION BOXES FROM THE APPROVED PRODUCTS LIST.

**LEGEND**

- ⊕ NONMETALLIC CONDUIT TO METALLIC CONDUIT ADAPTOR FITTING (UL OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED)
- USE 2" DIA. RIGID METALLIC (RMC) CONDUIT AT FITTINGS. PROVIDE RMC FOR 3'-0" MIN. ON EACH SIDE OF JOINT OPENINGS UNLESS NOTED OTHERWISE.
- POSITION MOVABLE END OF CONDUIT INSIDE EXPANSION FITTING, SUCH THAT IT WILL HAVE THE SAME ALLOWANCE FOR MOVEMENT (EXPANSION/CONTRACTION) AS THE EXPANSION DEVICE SET IN PLACE IN THE DECK BELOW IT. TAKE CARE TO INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.
- ◀ SPONGE RUBBER WRAP TO BE AASHTO M153, TYPE 1 OR EQUIVALENT - 1/4" MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN. SPONGE RUBBER WRAP INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH"
- \* EXPANSION FITTING REQUIREMENTS (IF USED):
  - 4" TOTAL CONDUIT MOVEMENT WITH BONDING JUMPER
- \*\* DEFLECTION/EXPANSION FITTING REQUIREMENTS (IF USED):
  - UP TO 3/4" CONDUIT CONTRACTION OR EXPANSION AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION WITH BONDING JUMPER

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WORK THIS SHEET WITH SHEETS 26 THRU 28

NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-18-93**

DRAWN BY	CLP	PLANS CK'D.	CBM
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**CONDUIT  
DETAILS**

SHEET 29 OF 40

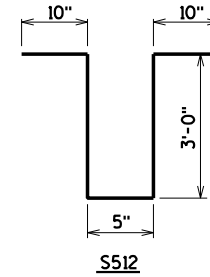
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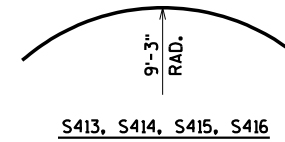
**BILL OF BARS**

BAR NO.	COATED BAR NO. REQ'D.	LENGTH	BENT BAR BUNDLED	BAR SERIES	91,570* COATED
					LOCATION
S401	X	56	28-10		TRANS. @ JOINTS
S402	X	140	6-0		TRANS. @ JOINTS BTWN. FABRICATED SUPPORTS
S503	X	170	37-6		DECK LONG. BOT. @ ABUT. ENDS
S504	X	170	27-6		DECK LONG. BOT. IN SPAN
S505	X	170	37-3		DECK LONG. BOT. @ PIER ENDS
S506	X	85	5-5		DECK LONG. BOT. OVER PIER
S407	X	1,270	28-10		DECK TRANS. TOP & BOT.
S508	X	168	37-6		DECK LONG. TOP @ ABUT. ENDS
S509	X	168	27-6		DECK LONG. TOP IN SPAN
S510	X	168	37-3		DECK LONG. TOP @ PIER ENDS
S511	X	84	5-5		DECK LONG. TOP OVER PIER
S512	X	232	7-7	X	EXTERIOR ARCH WALLS VERT.
S413	X	8	5-9	X	EXTERIOR ARCH WALL DETAIL A HORIZ. BOT.
S414	X	32	6-6	X	EXTERIOR ARCH WALL DETAIL B HORIZ. BOT.
S415	X	16	5-2	X	EXTERIOR ARCH WALL DETAIL C HORIZ. BOT.
S416	X	8	5-7	X	EXTERIOR ARCH WALL DETAIL D HORIZ. BOT.
S417	X	16	5-9		EXTERIOR ARCH WALL DETAIL A HORIZ.
S418	X	64	6-6		EXTERIOR ARCH WALL DETAIL B HORIZ.
S419	X	32	5-2		EXTERIOR ARCH WALL DETAIL C HORIZ.
S420	X	16	5-7		EXTERIOR ARCH WALL DETAIL D HORIZ.
S421	X	1,704	2-8	X	DECK @ SDWK. VERT.
S422	X	292	2-10		SDWK. TRANS. BOT. OVERHANG
S423	X	60	37-6		SDWK. LONG. @ ABUT. ENDS
S424	X	60	27-6		SDWK. LONG. IN SPAN
S425	X	60	37-3		SDWK. LONG. @ PIER ENDS
S426	X	30	5-5		SDWK. LONG. OVER PIER
S527	X	852	9-4	X	SDWK. TRANS. TOP
S528	X	10	5-6		SDWK @ LIGHT STANDARD BOT. TRANS.
S529	X	10	6-1	X	SDWK @ LIGHT STANDARD TOP TRANS.
S630	X	4	5-7	X	SDWK @ LIGHT STANDARD
S531	X	576	3-4	X	PARAPET VERT. @ SDWK.
S532	X	4	4-3	X	PARAPET VERT. @ LIGHT STANDARD
S533	X	546	8-6	X	PARAPET VERT.
S534	X	8	37-7		PARAPET HORIZ. BOT. @ ABUT. ENDS
S535	X	8	27-8		PARAPET HORIZ. BOT. IN SPAN
S536	X	8	37-5		PARAPET HORIZ. BOT. @ PIER ENDS
S537	X	4	5-7		PARAPET HORIZ. BOT. OVER PIER
S738	X	8	37-7		PARAPET HORIZ. TOP @ ABUT. ENDS
S739	X	8	27-8		PARAPET HORIZ. TOP IN SPAN
S740	X	8	37-5		PARAPET HORIZ. TOP @ PIER ENDS
S741	X	4	5-7		PARAPET HORIZ. TOP OVER PIER
S542	X	4	9-6	X	PARAPET VERT. @ LIGHT STANDARD
S543	X	4	7-7	X	PARAPET VERT. @ LIGHT STANDARD
S544	X	4	4-9	X	PARAPET VERT. @ LIGHT STANDARD
S545	X	14	4-9	X	PARAPET HORIZ. @ LIGHT STANDARD

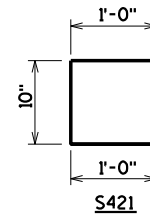
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



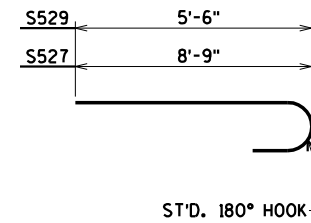
S512



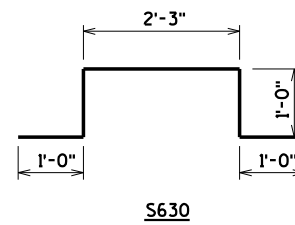
S413, S414, S415, S416



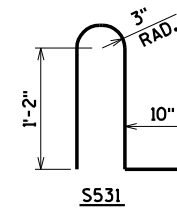
S421



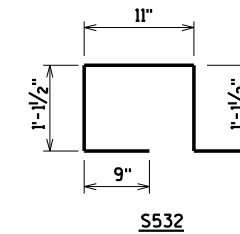
ST'D. 180° HOOK



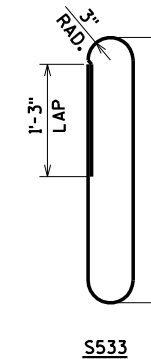
S630



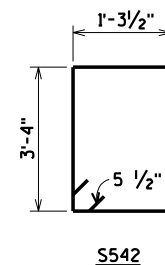
S531



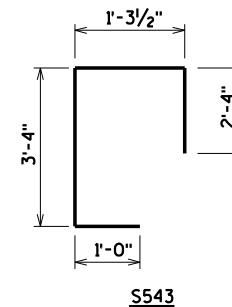
S532



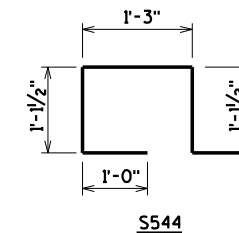
S533



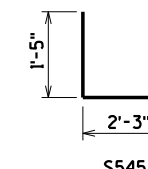
S542



S543



S544



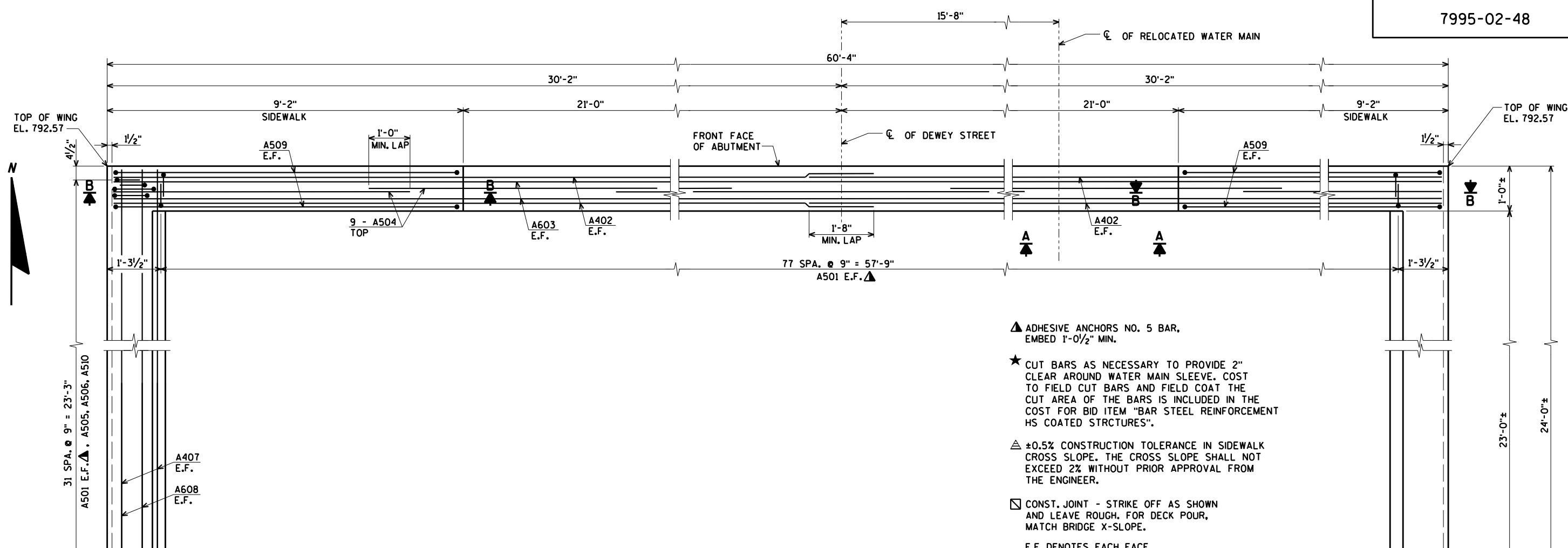
S545

9/4/2019 PENTABLEBReou\_std\_util.tbl

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>SUPERSTRUCTURE BILL OF BARS</b>			SHEET 30 OF 40

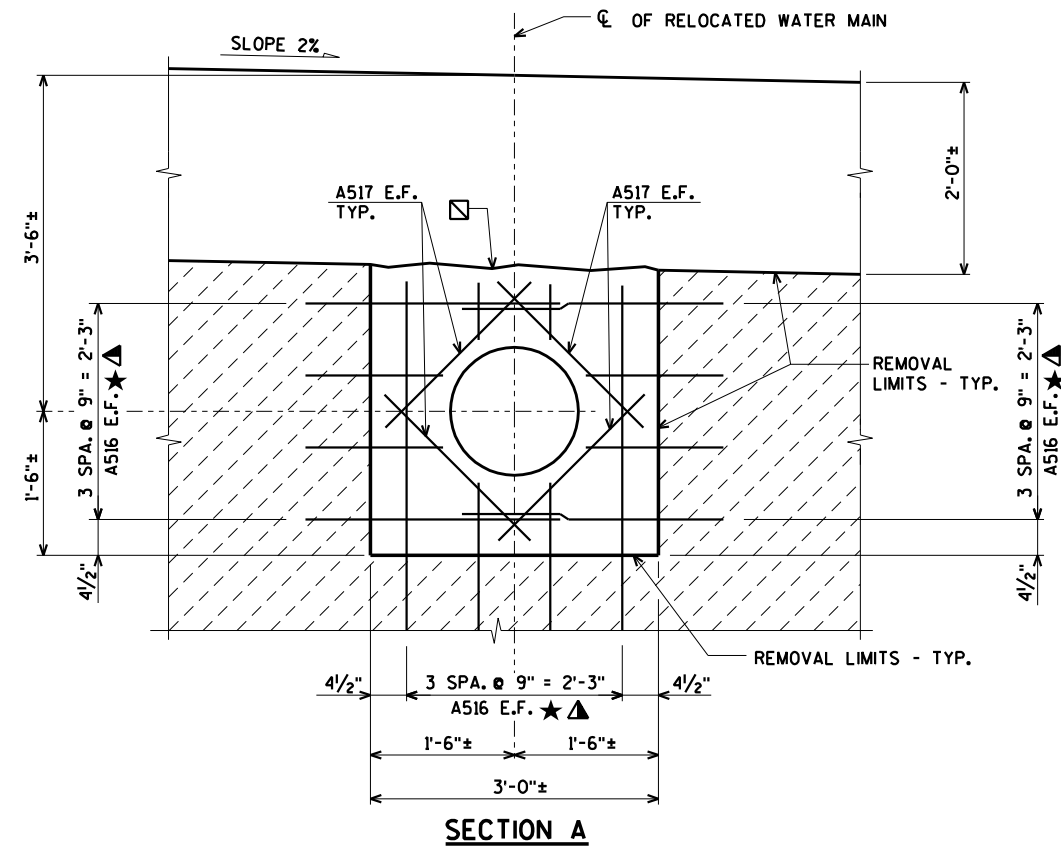
ORIGINAL PLANS PREPARED BY  
**AVRES ASSOCIATES**  
3433 Oakwood Hills Parkway  
Eau Claire, WI 54701  
www.AyresAssociates.com

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U:\42-1123.00 - City of Eau Claire, Dewey Street Bridge Rehab\Structures\Final\Structure\421123 S.abut.dgn

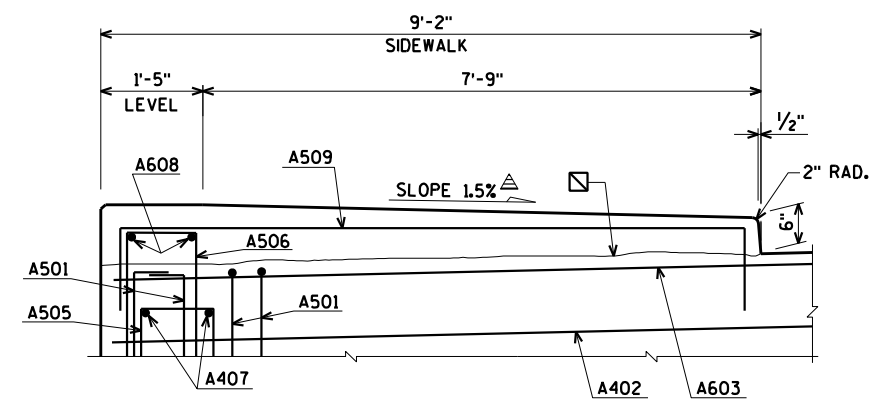


- ▲ ADHESIVE ANCHORS NO. 5 BAR, EMBED 1'-0 1/2" MIN.
  - ★ CUT BARS AS NECESSARY TO PROVIDE 2" CLEAR AROUND WATER MAIN SLEEVE. COST TO FIELD CUT BARS AND FIELD COAT THE CUT AREA OF THE BARS IS INCLUDED IN THE COST FOR BID ITEM "BAR STEEL REINFORCEMENT HS COATED STRUCTURES".
  - △ ±0.5% CONSTRUCTION TOLERANCE 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.
- E.F. DENOTES EACH FACE

**PLAN**



**SECTION A**



**SECTION B**

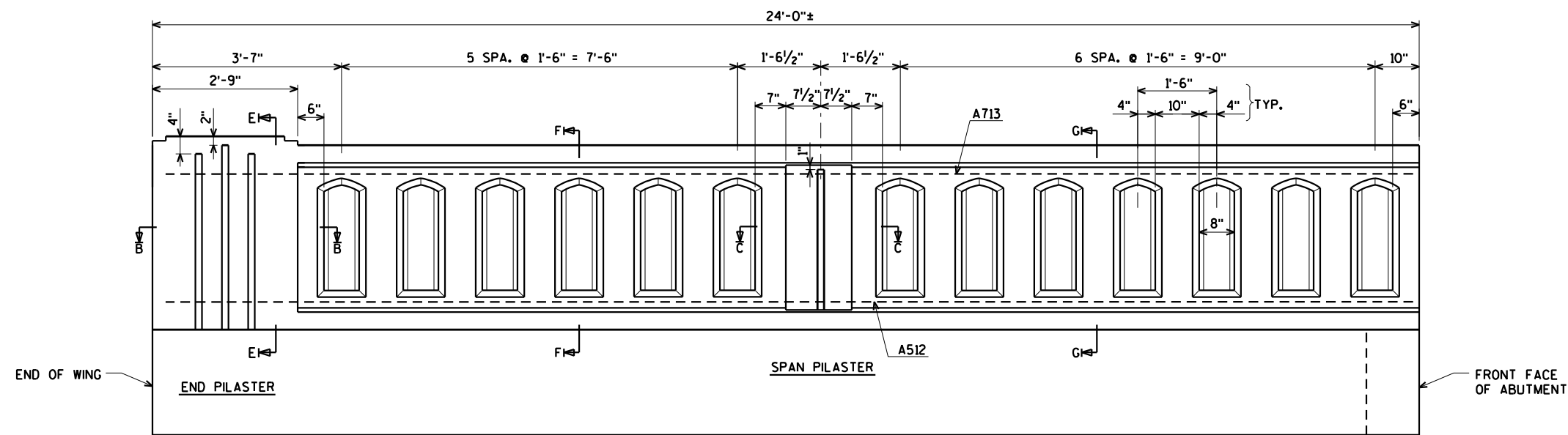
WORK THIS SHEET WITH SHEETS 32 AND 33

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>SOUTH ABUTMENT PLAN</b>			SHEET 31 OF 40

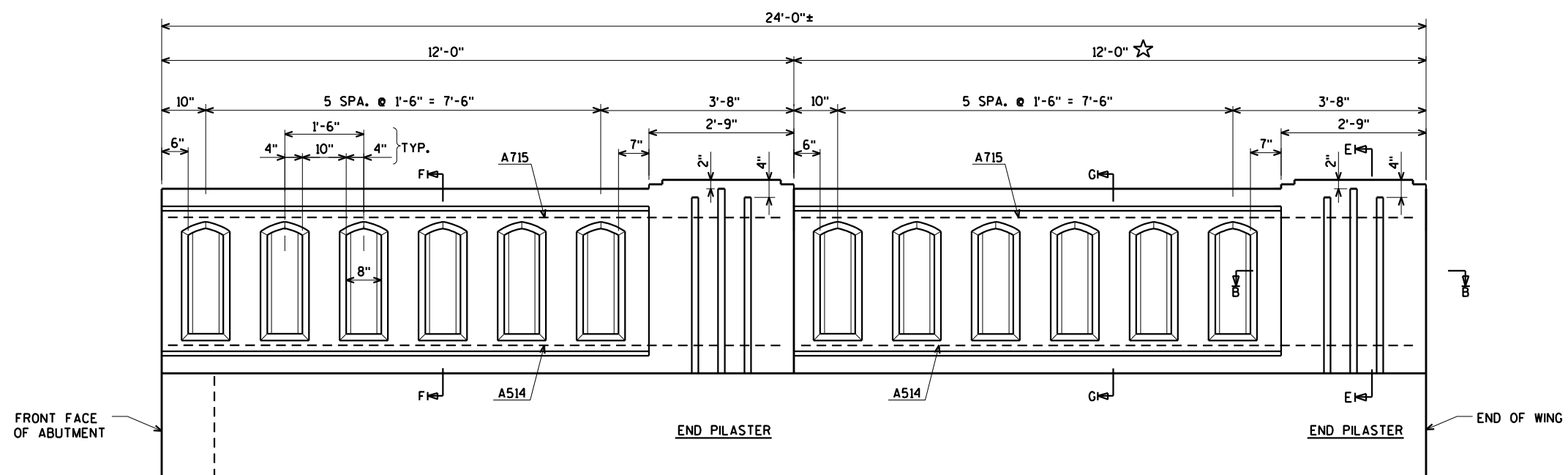
ORIGINAL PLANS PREPARED BY  
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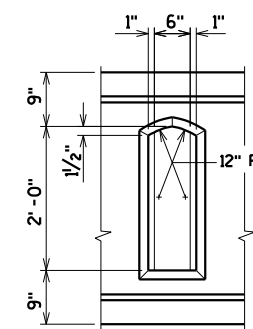
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**ELEVATION OF PARAPET ON WING ①**  
LOOKING WEST



**ELEVATION OF PARAPET ON WING ②**  
(LOOKING EAST)



**WINDOW DETAILS**

WORK THIS SHEET WITH SHEETS 31 AND 33

NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-18-93**

DRAWN BY CLP PLANS CK'D. CBM

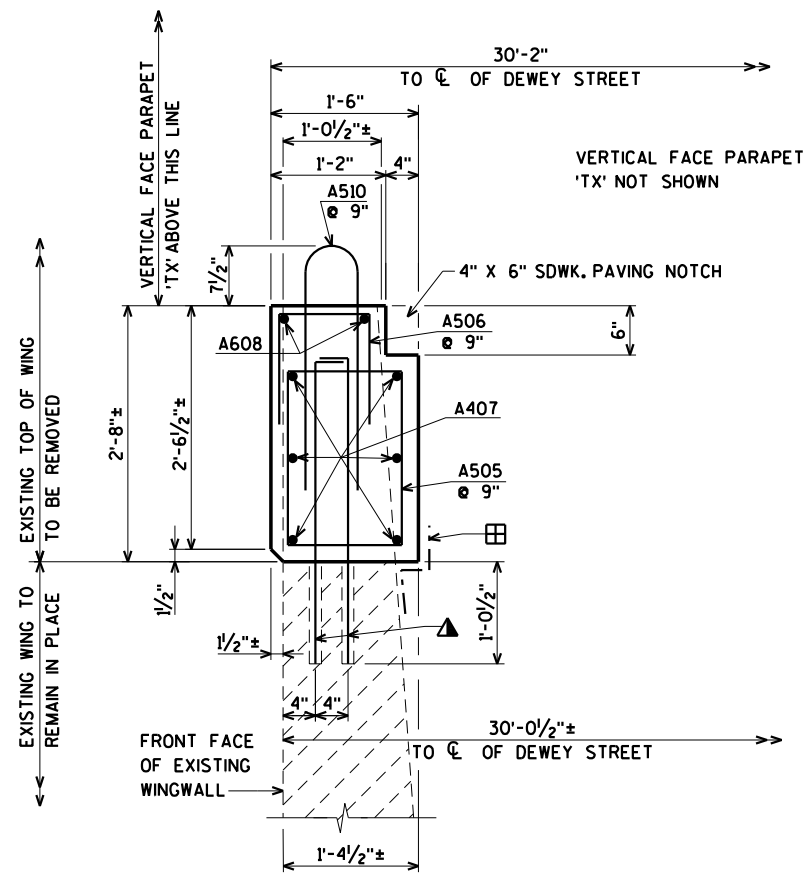
**VERTICAL FACE  
PARAPET 'TX'  
ON SOUTH WINGS**

SHEET 32 OF 40

☆ END OF RAILING MAY BE REMOVED IN THE FUTURE TO CONNECT A BIKE TRAIL ALONG THE SOUTH BANK OF THE EAU CLAIRE RIVER

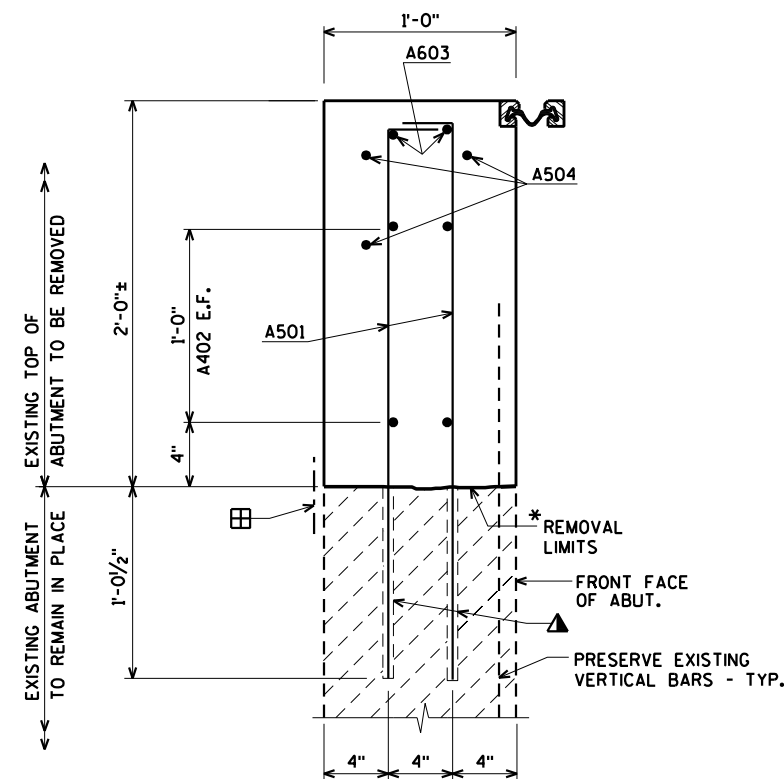
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**TYPICAL SECTION THRU WINGWALL**

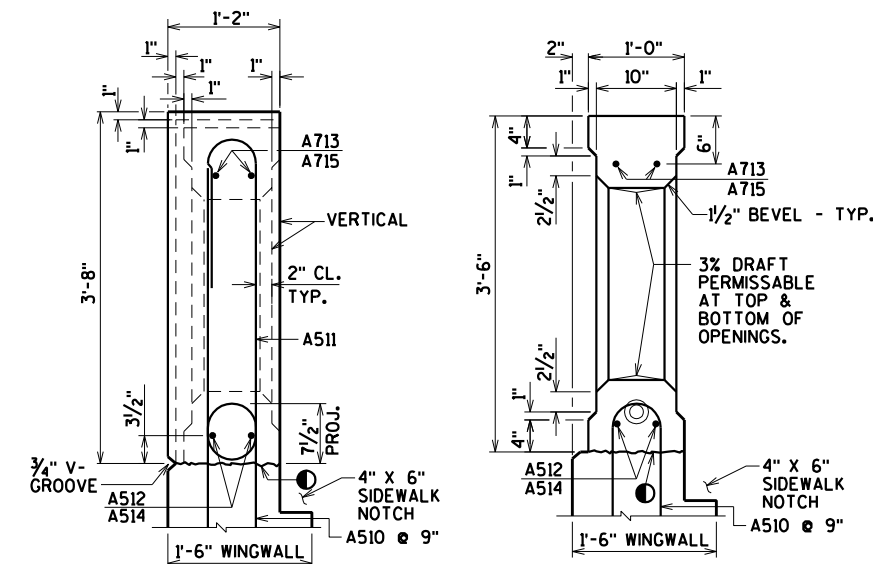
(WING 1 SHOWN, WING 2 SIMILAR)  
(LOOKING SOUTH)



**TYPICAL SECTION THRU ABUTMENT**

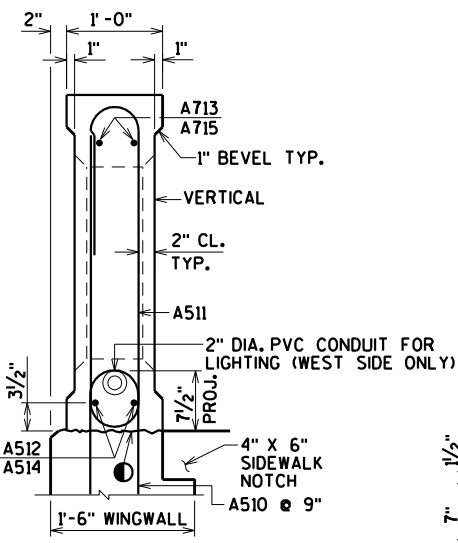
\* POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE.

18" RUBBERIZED MEMBRANE WATERPROOFING

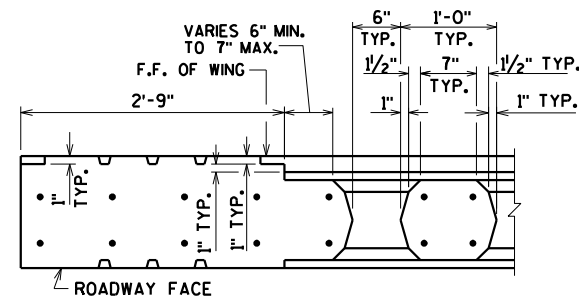


**SECTION E-E**

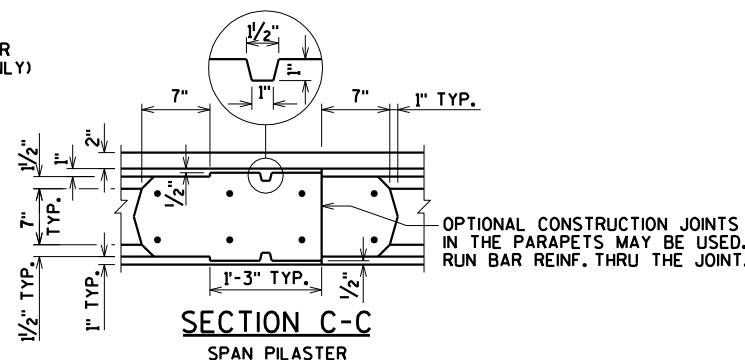
**SECTION F-F**



**SECTION G-G**



**SECTION B-B  
END PILASTER**



**SECTION C-C  
SPAN PILASTER**

E.F. DENOTES EACH FACE  
F.F. DENOTES FRONT FACE.

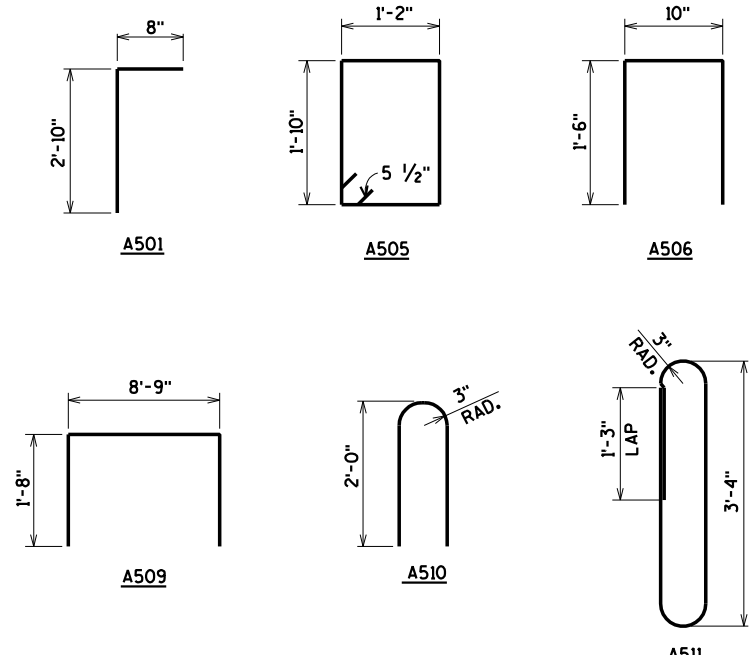
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Eau Claire, WI 54701  
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**BILL OF BARS**

BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR BUNDLED	BAR SERIES	3,850* COATED
						LOCATION
A501	X	284	3-4	X		ABUTMENT DOWELS
A402	X	8	30-10			ABUTMENT BODY HORIZ. E.F.
A603	X	2	60-0			ABUTMENT BODY HORIZ. TOP E.F.
A504	X	27	8-0			ABUTMENT BODY HORIZ. TOP @ JOINT
A505	X	64	6-6	X		ABUTMENT WING VERT.
A506	X	64	3-7	X		ABUTMENT WING VERT. TOP
A407	X	12	23-8			ABUTMENT WING HORIZ. E.F.
A608	X	4	23-8			ABUTMENT WING HORIZ. TOP E.F.
A509	X	4	11-10	X		ABUTMENT BODY SDWK. TRANS.
A510	X	64	4-4	X		PARAPET VERT. @ WINGS
A511	X	64	8-6	X		PARAPET VERT.
A512	X	2	23-8			PARAPET HORIZ. BOT. @ WING 1
A713	X	2	23-8			PARAPET HORIZ. TOP @ WING 1
A514	X	4	11-8			PARAPET HORIZ. BOT. @ WING 2
A715	X	4	11-8			PARAPET HORIZ. TOP @ WING 2
A516	X	24	2-9			ABUTMENT BODY DOWELS E.F. @ WATER MAIN
A517	X	8	2-3			ABUTMENT BODY E.F. @ WATER MAIN

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

▲ ADHESIVE ANCHORS NO. 5 BAR, EMBED 1'-0 1/2" MIN.

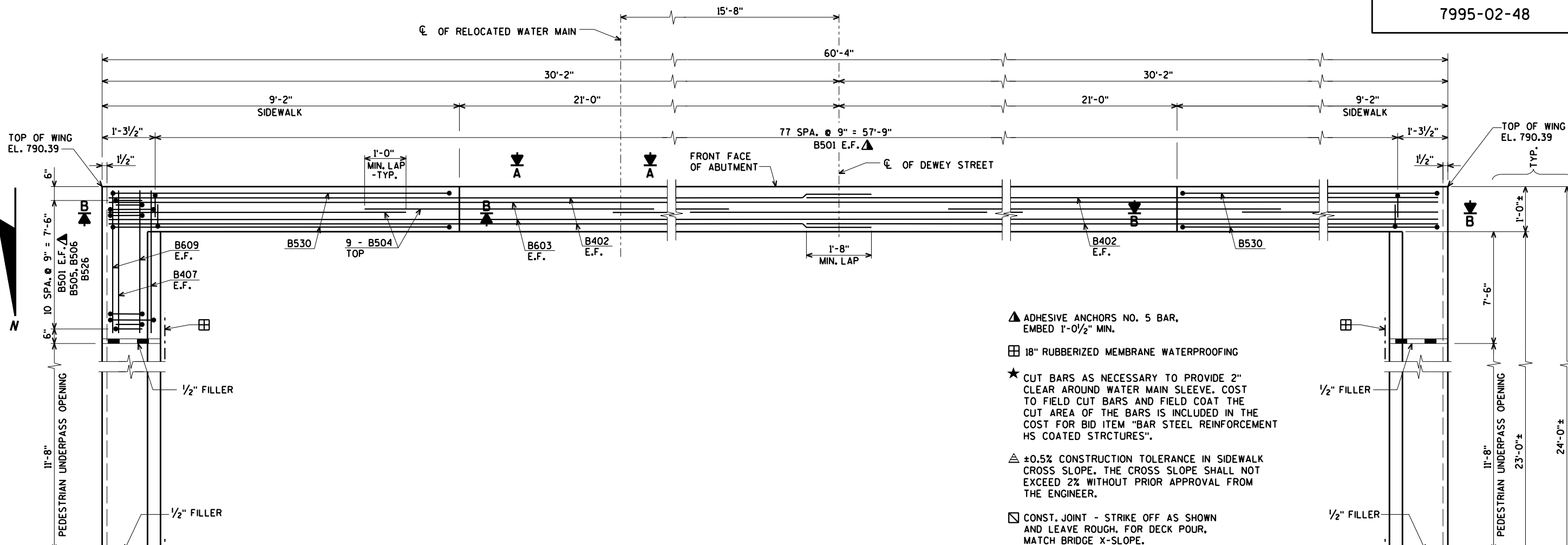


WORK THIS SHEET WITH SHEETS 31 AND 32

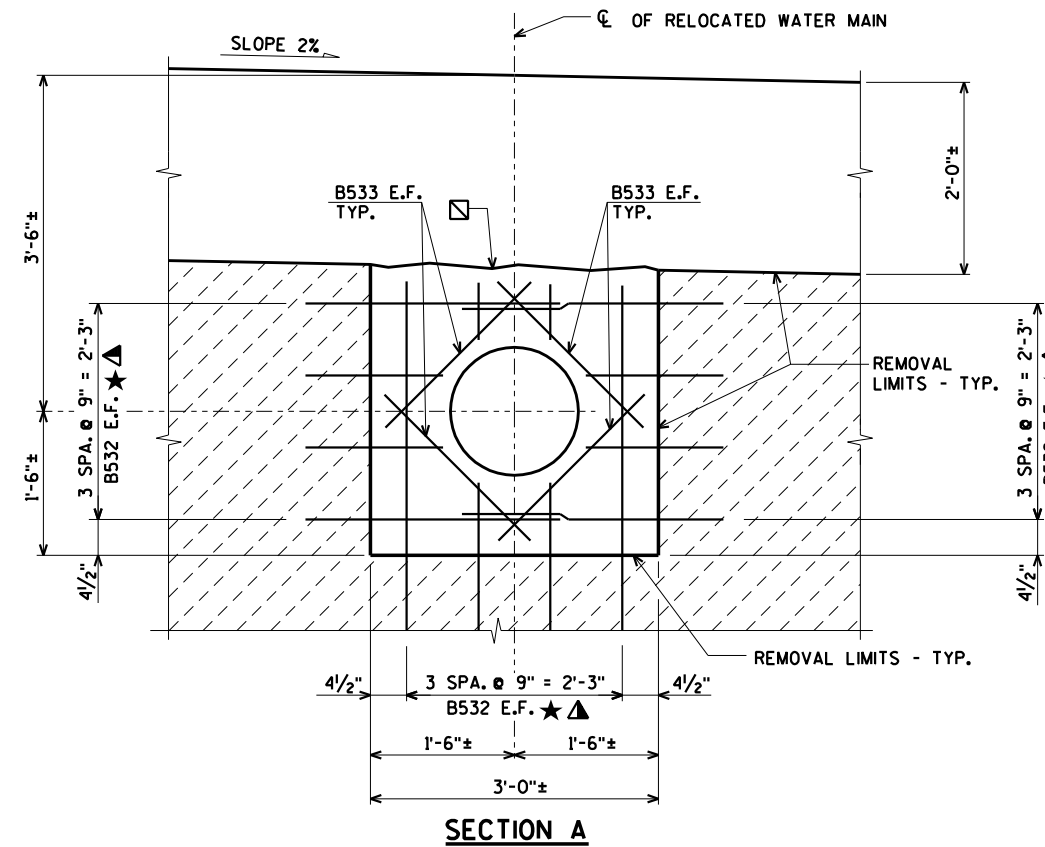
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY CLP		PLANS CK'D. CBM	
<b>SOUTH ABUTMENT DETAILS AND BILL OF BARS</b>			SHEET 33 OF 40



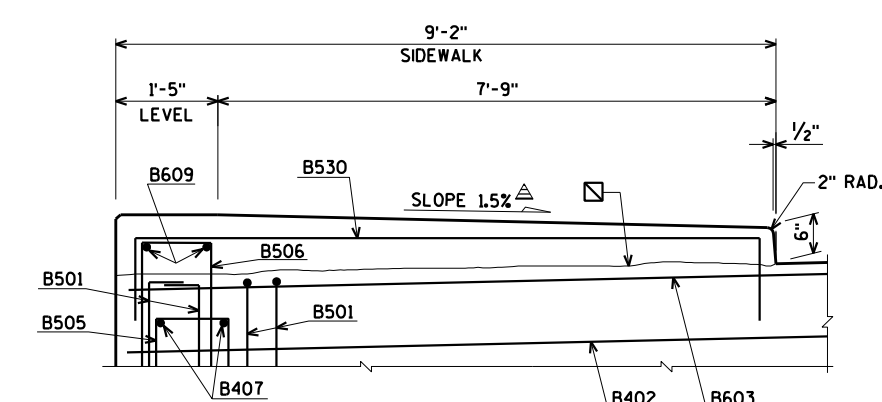
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PLAN



SECTION A



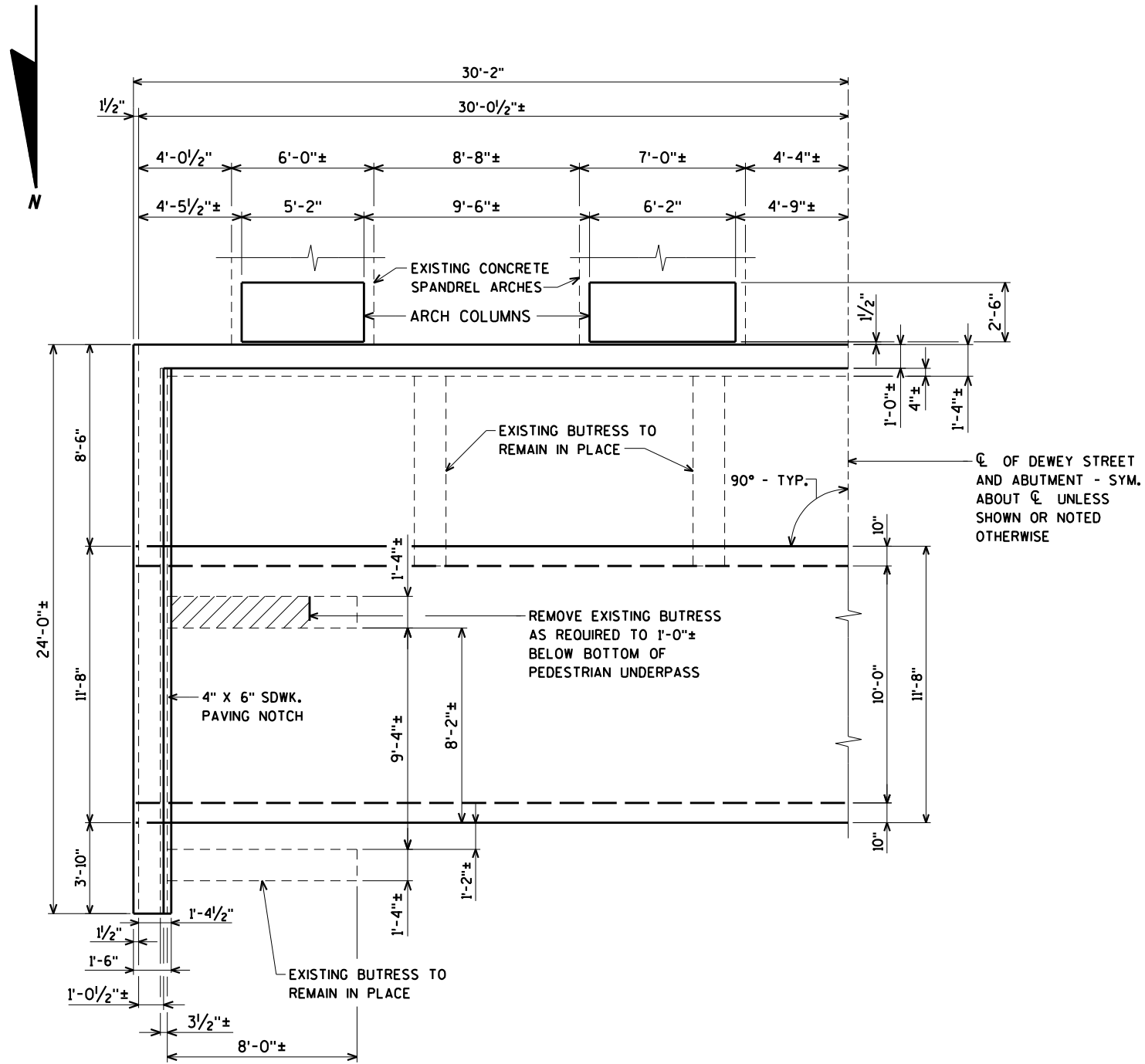
SECTION B

WORK THIS SHEET WITH SHEETS 35 THRU 39

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY	CLP	PLANS CK'D.	CBM
<b>NORTH ABUTMENT PLAN</b>			SHEET 34 OF 40

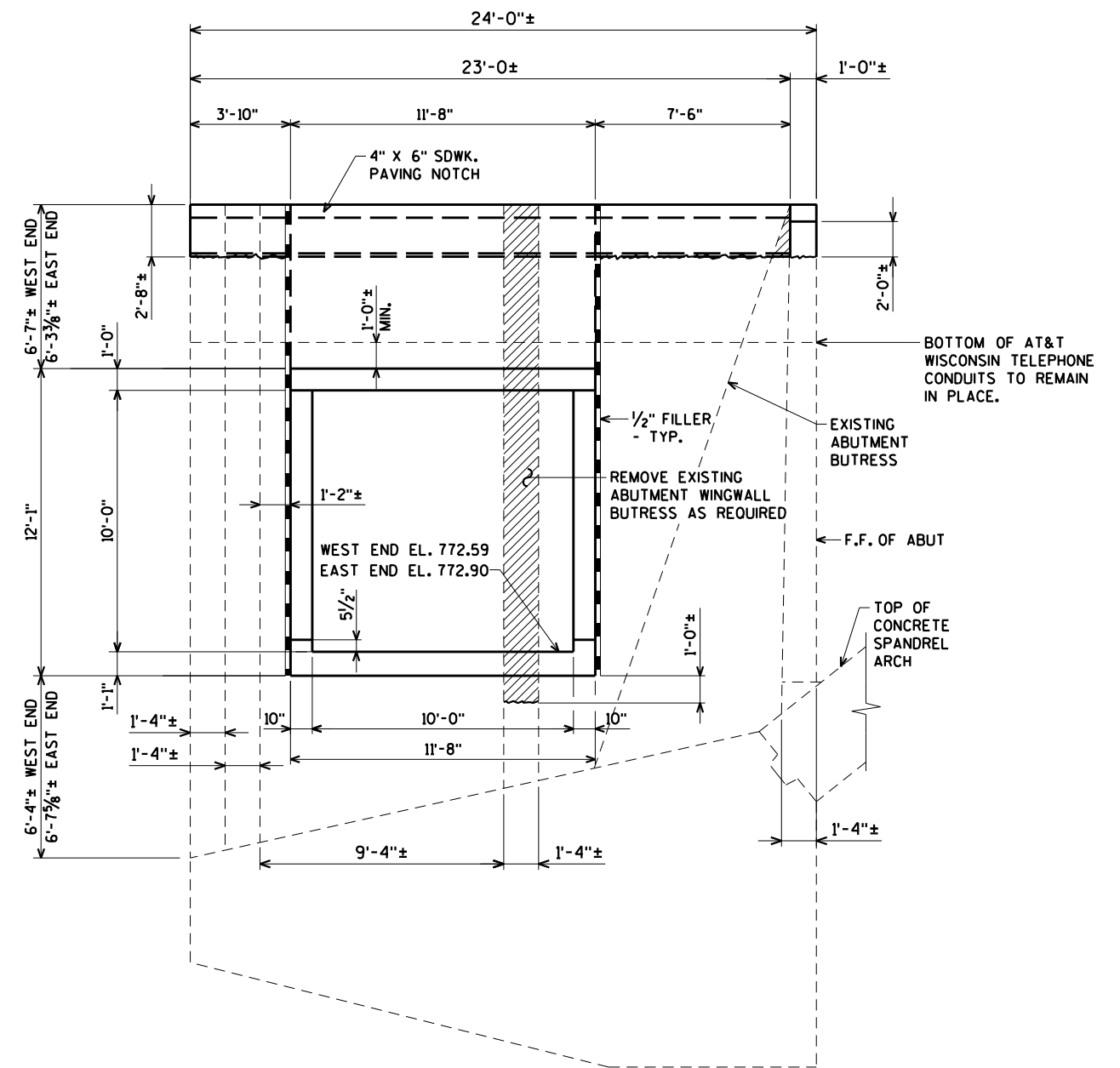
ORIGINAL PLANS PREPARED BY  
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 Eau Claire, WI 54701  
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**PARTIAL PLAN OF PEDESTRIAN UNDERPASS AT NORTH ABUTMENT**

(WING 4 SHOWN, WING 3 SIMILAR)



**SECTION THRU PEDESTRIAN UNDERPASS**

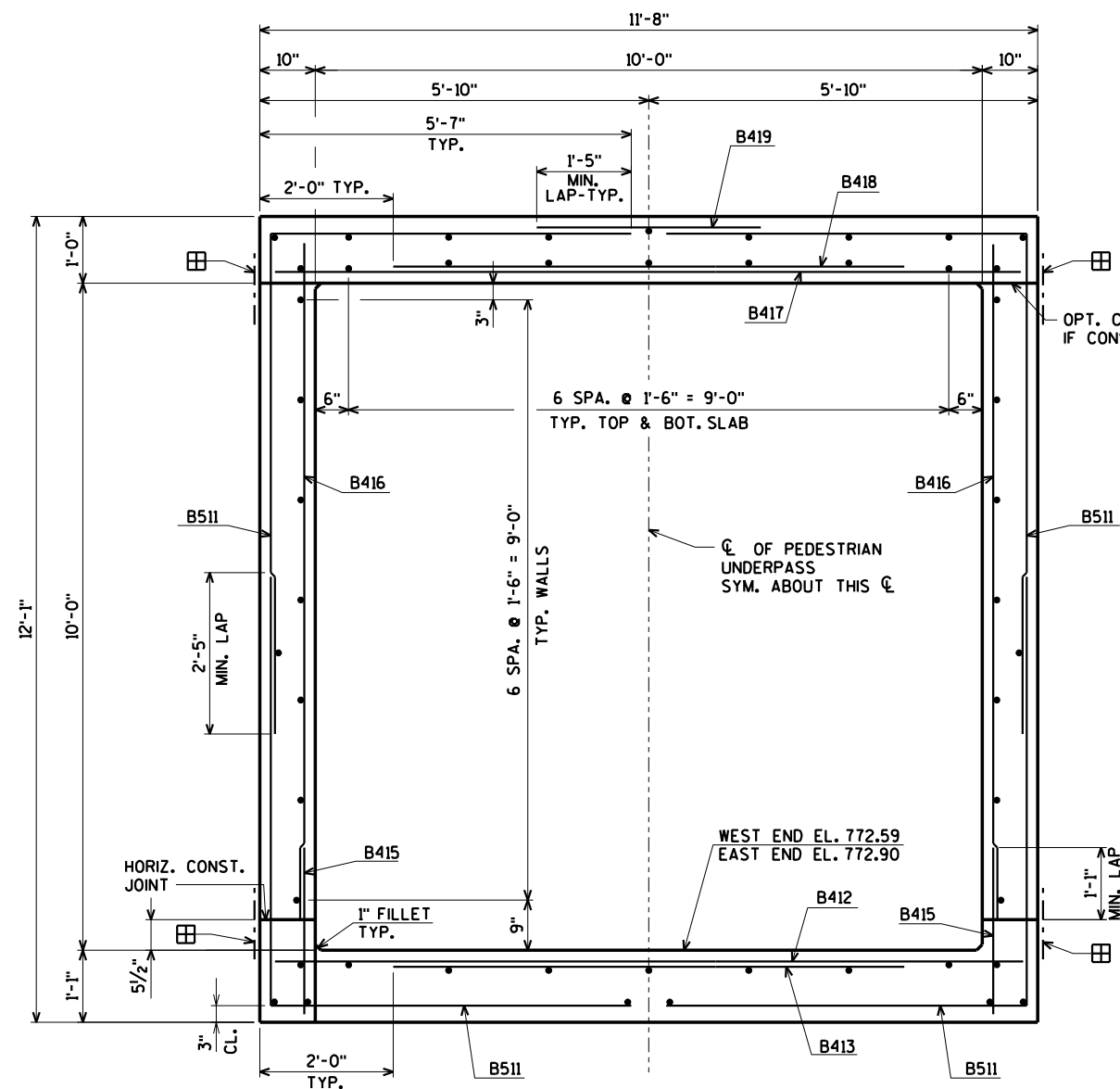
(LOOKING EAST AT WING 4)

F.F. DENOTES FRONT FACE.

WORK THIS SHEET WITH SHEETS 34 AND SHEETS 36 THRU 39

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>NORTH ABUTMENT PEDESTRIAN UNDERPASS LAYOUT</b>			SHEET 35 OF 40

ORIGINAL PLANS PREPARED BY  
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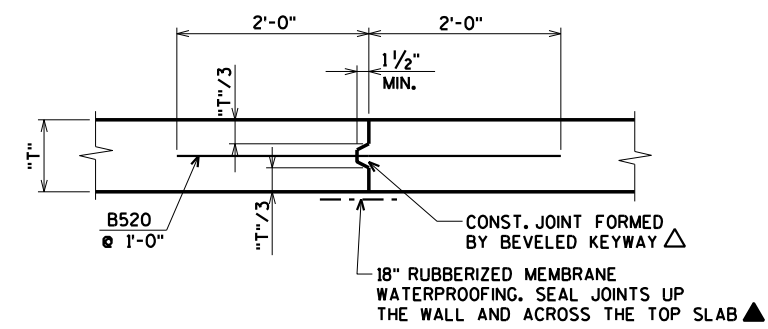
ALL LONGITUDINAL BARS IN BOX ARE B414 UNLESS SHOWN OTHERWISE

OPT. CONST. JOINT OMIT 1" FILLET IF CONST. JOINT IS USED - TYP.

CL OF PEDESTRIAN UNDERPASS SYM. ABOUT THIS CL

WEST END EL. 772.59  
 EAST END EL. 772.90

TYPICAL SECTION THRU PEDESTRIAN UNDERPASS



**VERT. CONST. JOINT**  
 (ALL WALLS AND SLABS)

- △ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING, B520 BARS 4'-0" LONG AT 1'-0" CENTERS REQUIRED.
- ▲ USE "SHEET MEMBRANE WATERPROOFING FOR TOP SLAB B-18-93". SHEET MEMBRANE WATERPROOFING REQUIRED UP WALLS AND ACROSS TOP SLAB FOR ENTIRE CULVERT LENGTH. EXTEND 6" BELOW THE TOP OF BOTTOM SLAB.

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING

9/4/2019 PENTABLE:Breou\_std\_util.tbl

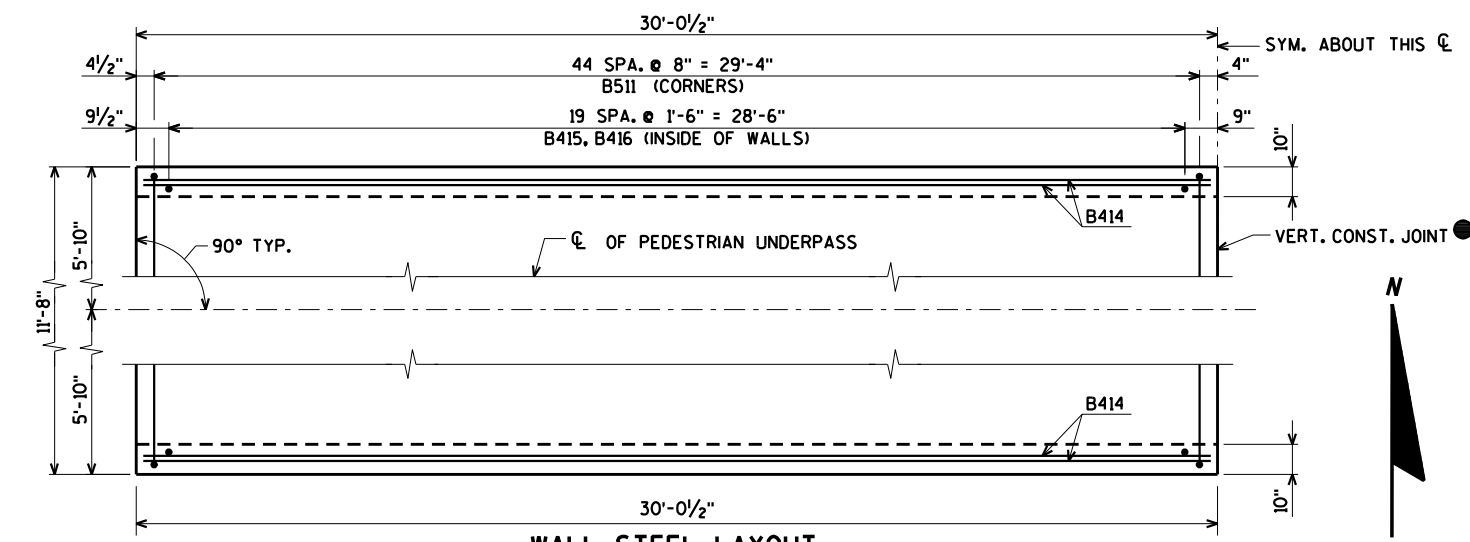
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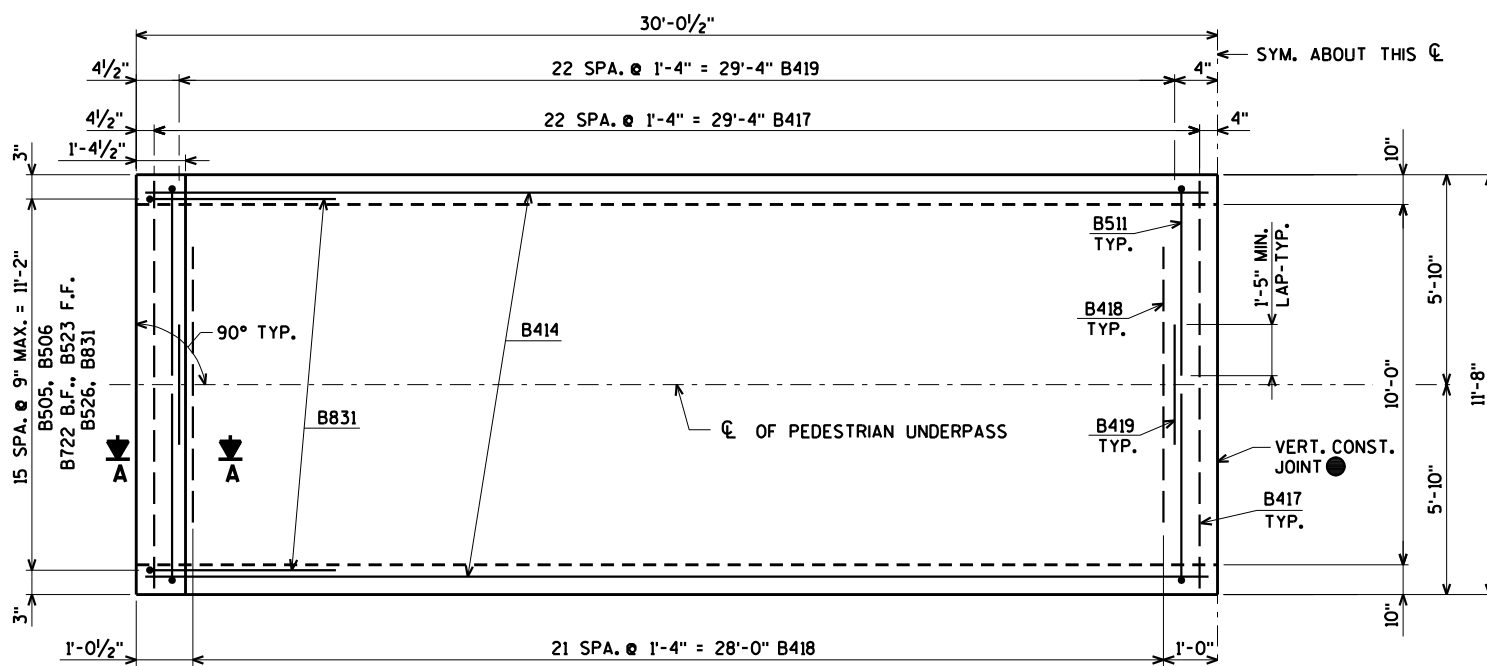
WORK THIS SHEET WITH SHEETS 34, 35 AND SHEETS 37 THRU 39

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY	CLP	PLANS CK'D.	CBM
<b>PEDESTRIAN UNDERPASS</b>			SHEET 36 OF 40
<b>TYPICAL SECTION</b>			

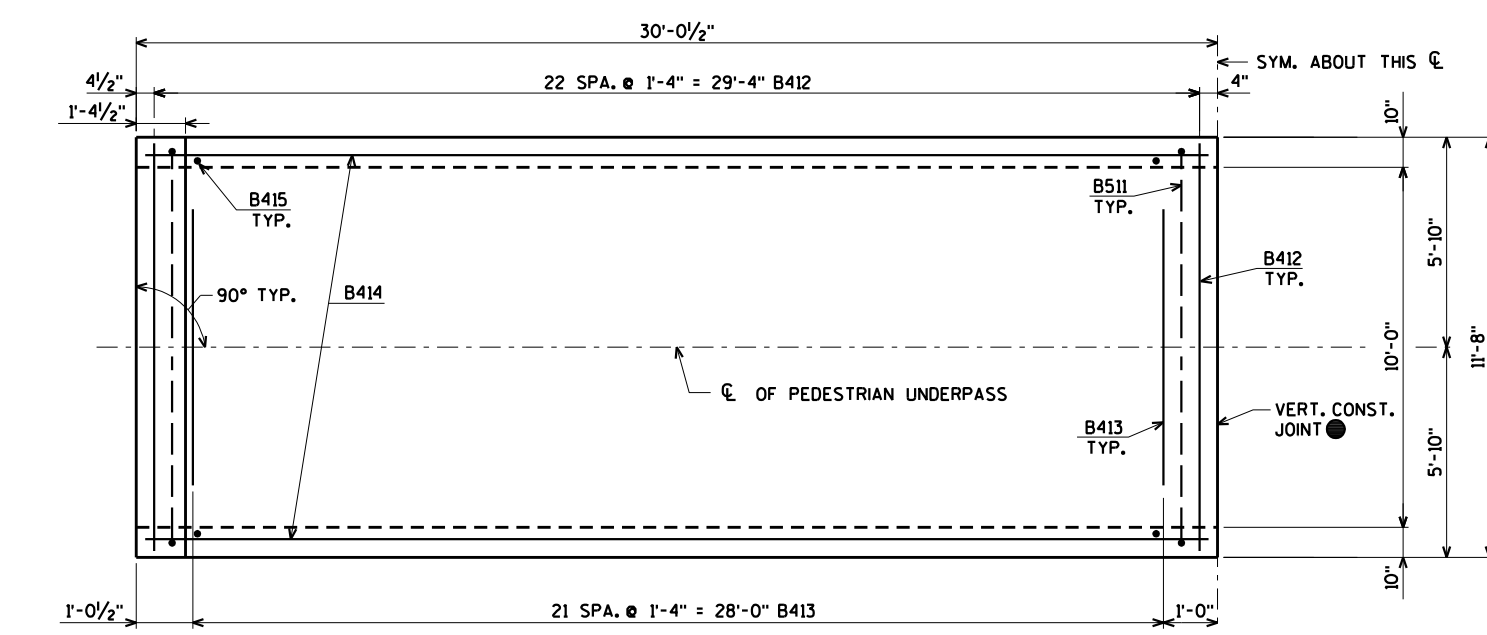
ORIGINAL PLANS PREPARED BY  
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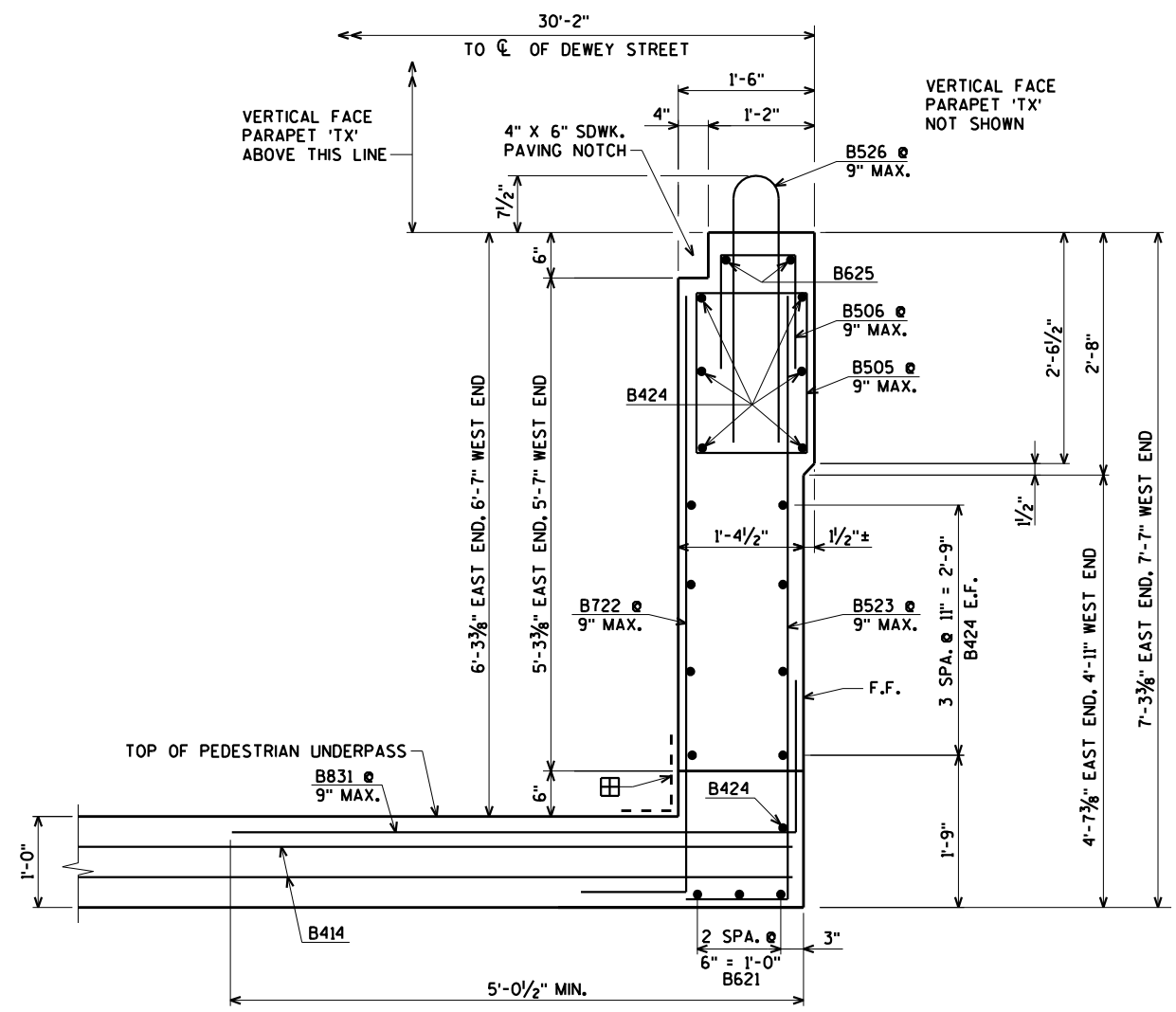
**WALL STEEL LAYOUT**



**TOP SLAB STEEL LAYOUT**



**BOTTOM SLAB STEEL LAYOUT**



**SECTION A**

- ▣ 18" RUBBERIZED MEMBRANE WATERPROOFING
- 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING UP WALLS AND ACROSS TOP SLAB.
- E.F. DENOTES EACH FACE
- F.F. DENOTES FRONT FACE
- B.F. DENOTES BACK FACE

WORK THIS SHEET WITH SHEETS 34 THRU 36 AND SHEETS 38 AND 39

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY CLP		PLANS CK'D. CBM	
<b>PEDESTRIAN UNDERPASS STEEL LAYOUTS</b>			SHEET 37 OF 40

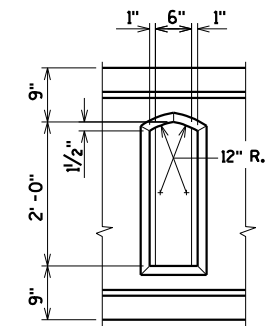
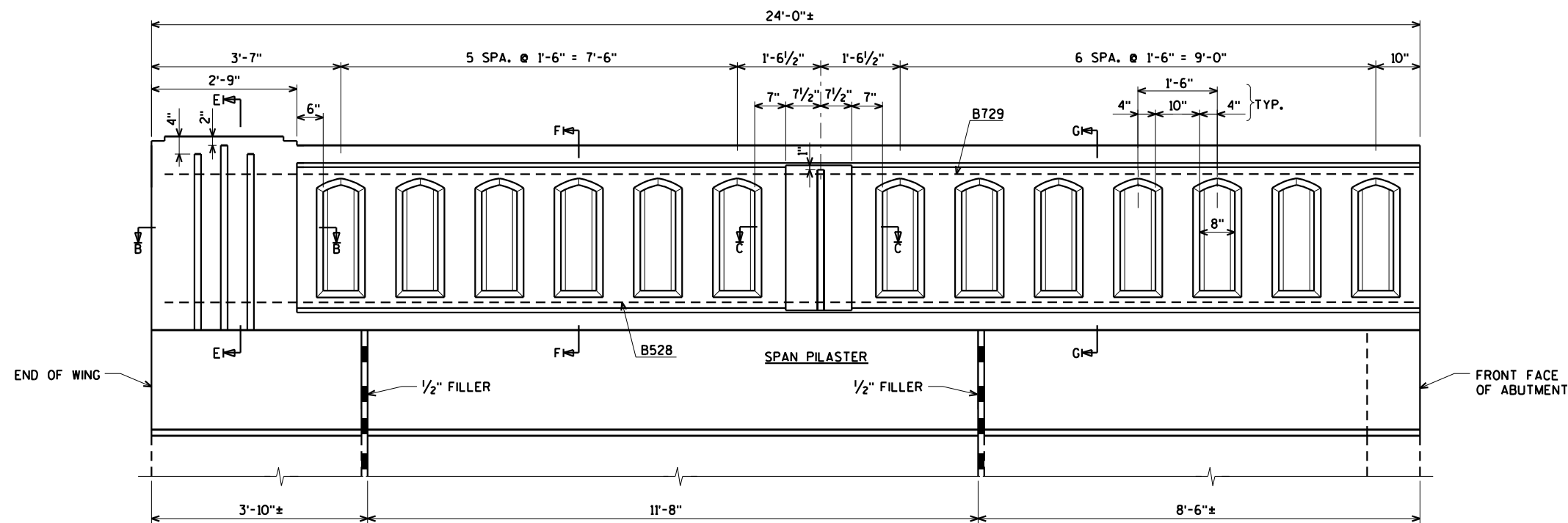
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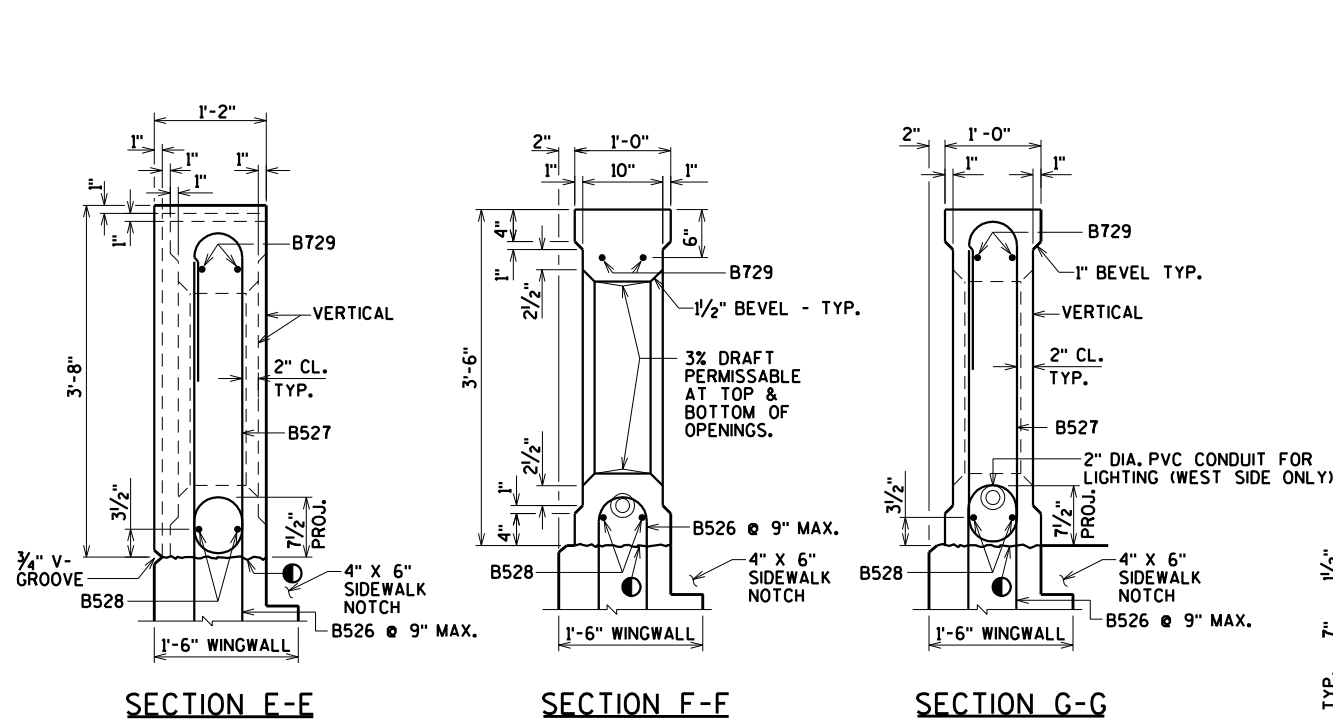
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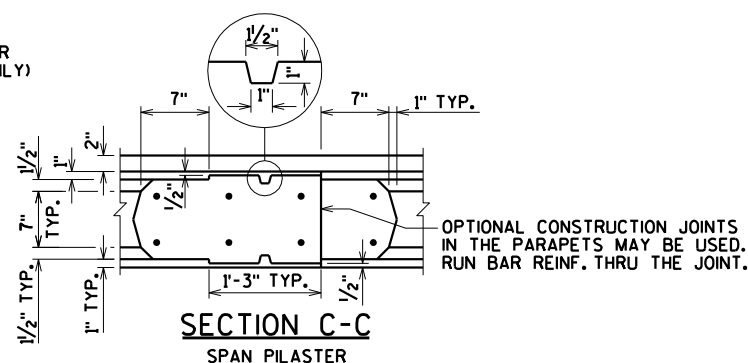
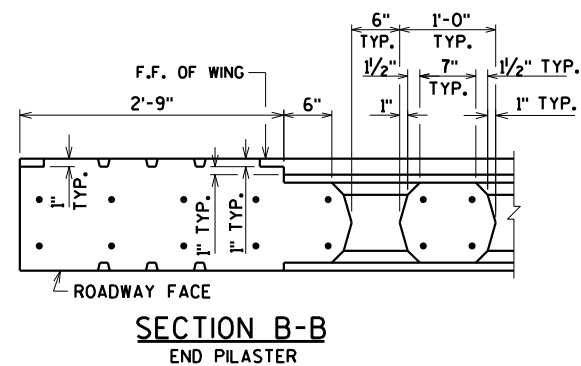
WINDOW DETAILS

**ELEVATION OF PARAPET ON WING**

LOOKING EAST AT WING ③, WING ④ SIMILAR



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



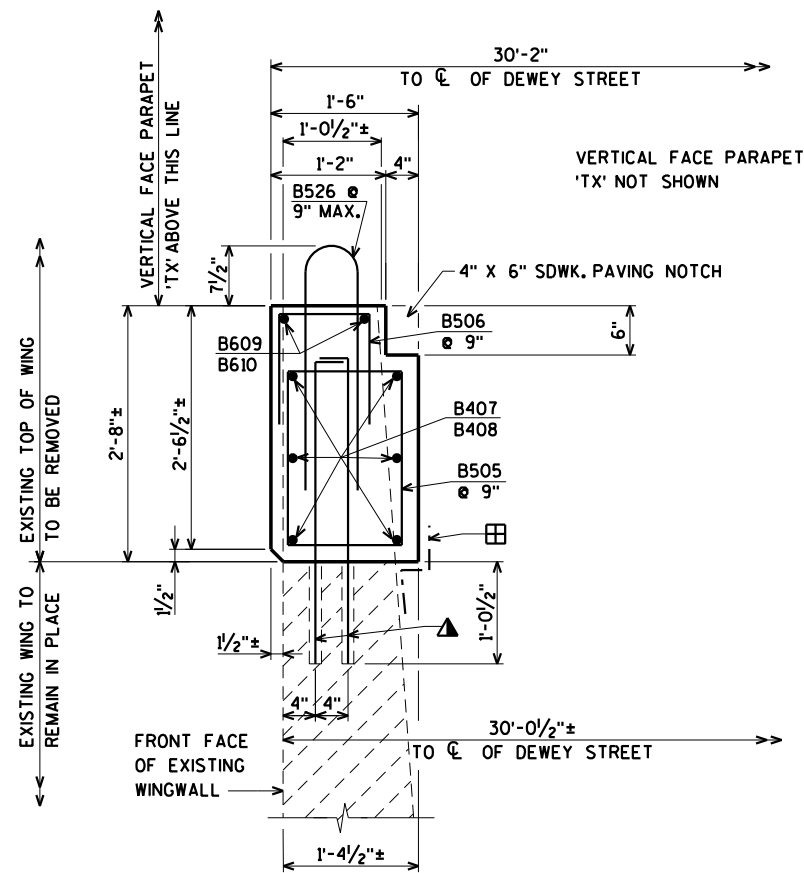
F.F. DENOTES FRONT FACE

WORK THIS SHEET WITH SHEETS 34 THRU 37 AND SHEET 39

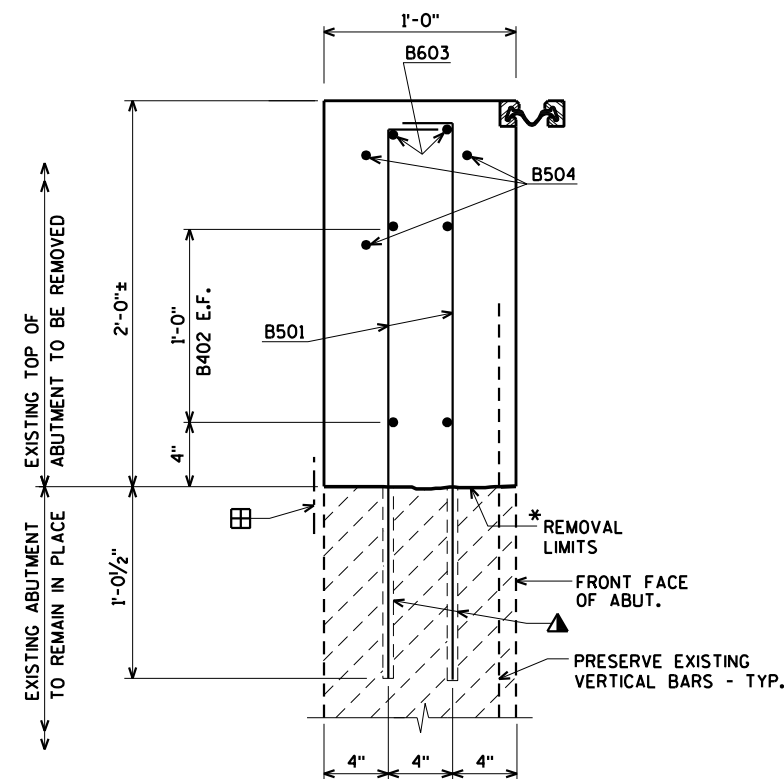
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY CLP		PLANS CK'D. CBM	
<b>VERTICAL FACE PARAPET 'TX' ON NORTH WINGS</b>			SHEET 38 OF 40

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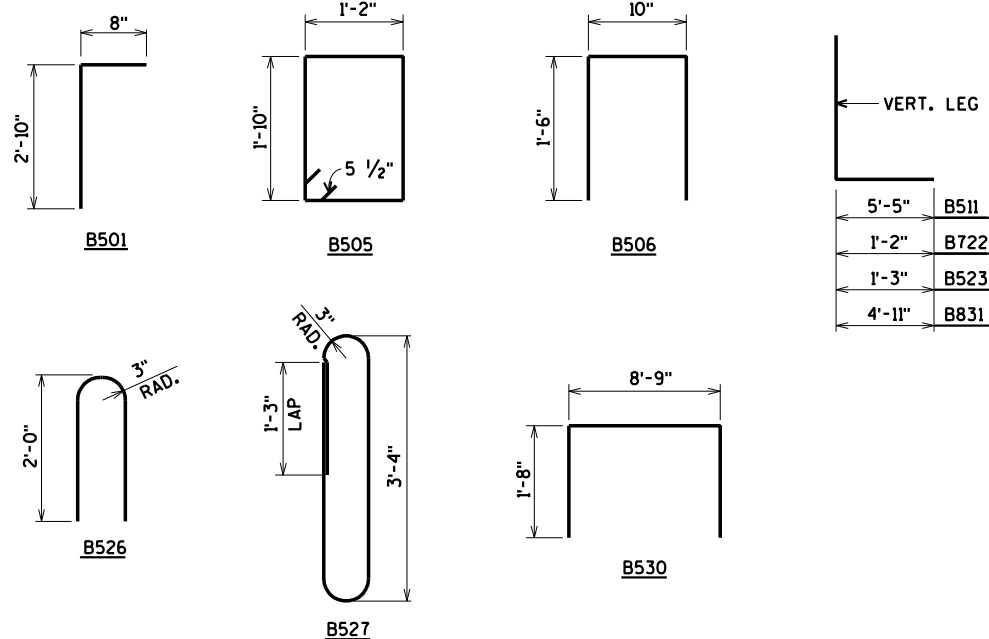
**TYPICAL SECTION THRU WINGWALL**  
(EXCEPT OVER PEDESTRIAN UNDERPASS)



**TYPICAL SECTION THRU ABUTMENT**

\* POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE.

☒ 18" RUBBERIZED MEMBRANE WATERPROOFING



**BILL OF BARS**

BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	4,600# COATED	9,210# UNCOATED	LOCATION
B501	X	220	3-4	X					ABUTMENT DOWELS
B402	X	8	30-10						ABUTMENT BODY HORIZ. E.F.
B603	X	2	60-0						ABUTMENT BODY HORIZ. TOP E.F.
B504	X	27	8-0						ABUTMENT BODY HORIZ. TOP @ JOINT
B505	X	64	6-6	X					ABUTMENT WING AND PED. UNDERPASS HEADER VERT.
B506	X	64	3-7	X					ABUTMENT WING AND PED. UNDERPASS HEADER VERT. TOP
B407	X	12	8-1						ABUTMENT WING HORIZ. E.F.
B408	X	12	3-5						ABUTMENT WING HORIZ. E.F.
B609	X	4	8-1						ABUTMENT WING HORIZ. TOP E.F.
B610	X	4	3-5						ABUTMENT WING HORIZ. TOP E.F.
B511		360	12-4	X					PED. UNDERPASS CORNER BARS
B412		46	11-4						PED. UNDERPASS BOT. SLAB TRANS.
B413		44	7-8						PED. UNDERPASS BOT. SLAB TRANS.
B414		98	29-8						PED. UNDERPASS LONG.
B415		80	2-4						PED. UNDERPASS WALLS DOWELS
B416		80	10-4						PED. UNDERPASS WALLS VERT.
B417		46	11-4						PED. UNDERPASS TOP SLAB TRANS.
B418		44	7-8						PED. UNDERPASS TOP SLAB TRANS.
B419		46	3-4						PED. UNDERPASS TOP SLAB TRANS. TOP
B520		44	4-0						PED. UNDERPASS SLAB & WALL CONST. JT.
B621	X	6	11-4						PED. UNDERPASS HEADER @ BOT.
B722	X	32	7-5	X					PED. UNDERPASS HEADER VERT. B.F.
B523	X	32	8-0	X					PED. UNDERPASS HEADER VERT. F.F.
B424	X	30	11-4						PED. UNDERPASS HEADER HORIZ. E.F.
B625	X	4	11-4						PED. UNDERPASS HEADER HORIZ. TOP E.F.
B526	X	64	4-4	X					PARAPET VERT. @ WINGS AND PED. UNDERPASS HEADER
B527	X	64	8-6	X					PARAPET VERT.
B528	X	4	23-8						PARAPET HORIZ. BOT. @ WINGS
B729	X	4	23-8						PARAPET HORIZ. TOP @ WINGS
B530	X	4	11-10	X					ABUTMENT BODY SDWK. TRANS.
B831		32	6-2	X					PED. UNDERPASS TOP SLAB @ HEADER LONG.
B532	X	24	2-9						ABUTMENT BODY DOWELS E.F. @ WATER MAIN
B533	X	8	2-3						ABUTMENT BODY E.F. @ WATER MAIN

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

▲ ADHESIVE ANCHORS NO. 5 BAR, EMBED 1'-0 1/2" MIN.

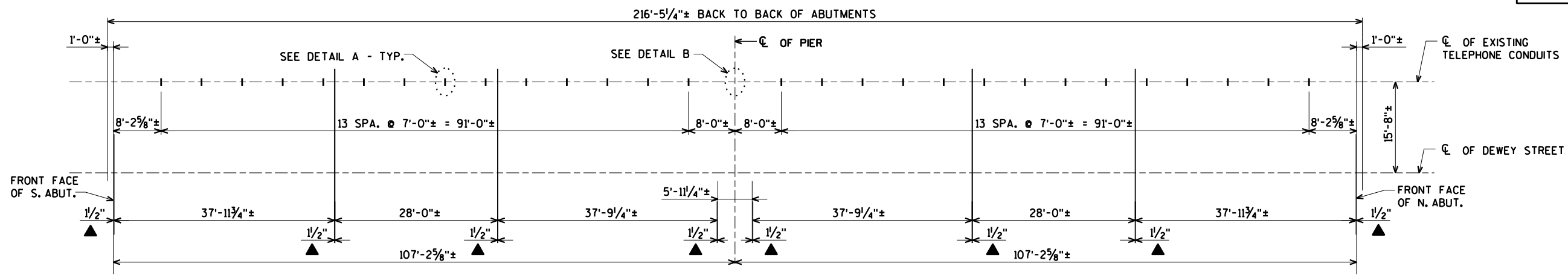
● PEDESTRIAN UNDERPASS BARS (CATEGORY 0030) 1,150# COATED AND 9,210# UNCOATED.

E.F. DENOTES EACH FACE  
F.F. DENOTES FRONT FACE  
B.F. DENOTES BACK FACE

WORK THIS SHEET WITH SHEETS 34 THRU 38

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY		CLP	PLANS CK'D. CBM
<b>NORTH ABUTMENT DETAILS AND BILL OF BARS</b>			SHEET 39 OF 40

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



**SPACING OF CONDUIT PACK HANGERS**

▲ STRIP SEAL EXPANSION JOINT

**GENERAL NOTES**

EXISTING TELEPHONE CONDUITS TO REMAIN IN PLACE AND BE ATTACHED TO THE NEW DECK AND SUPERSTRUCTURE AS PART OF THIS CONTRACT.

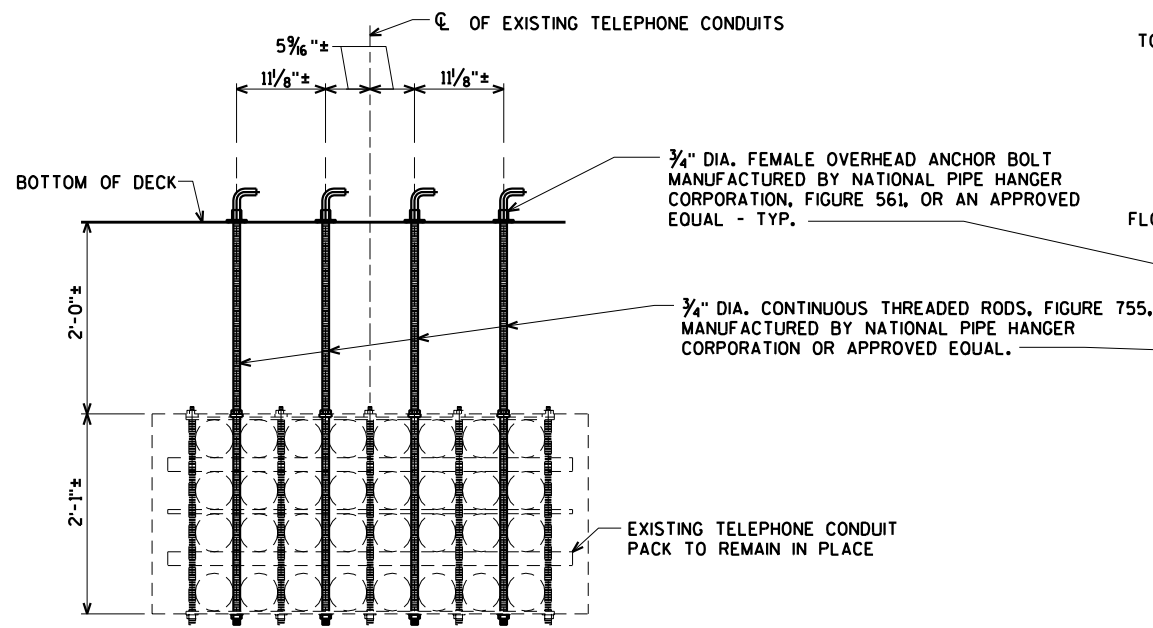
ANCHOR BOLTS SHALL BE 3/4" DIA. FEMALE OVERHEAD ANCHOR BOLTS, FIGURE 561, AS MANUFACTURED BY NATIONAL PIPE HANGER CORPORATION OR AN APPROVED EQUAL.

ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED FINISH.

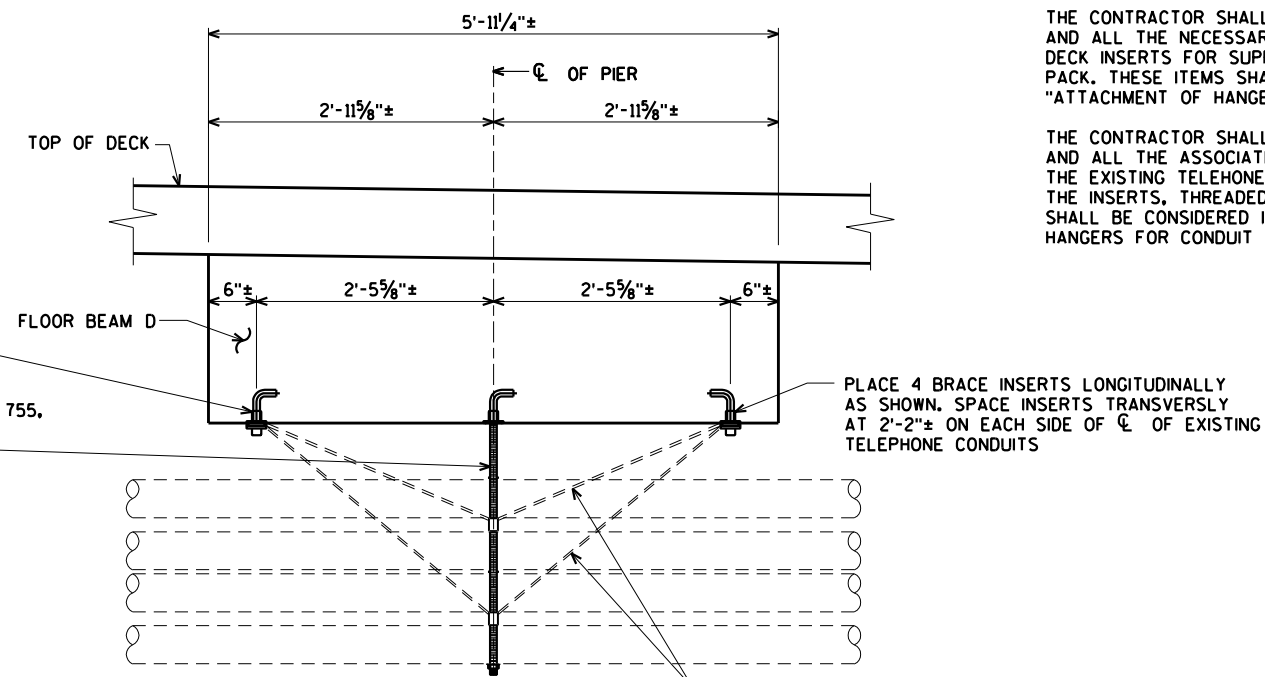
THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER (AT&T) TO DETERMINE THE NUMBER AND SPACING OF THE DECK INSERTS, HANGERS, AND ALL NECESSARY HARDWARE REQUIRED TO INSTALL AND SECURE THE EXISTING TELEPHONE CONDUIT PACK.

THE CONTRACTOR SHALL SUPPLY DECK INSERTS, THREADED RODS, AND ALL THE NECESSARY HARDWARE REQUIRED TO INSTALL THE DECK INSERTS FOR SUPPORTING THE EXISTING TELEPHONE CONDUIT PACK. THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "ATTACHMENT OF HANGERS FOR CONDUIT PACK".

THE CONTRACTOR SHALL INSTALL THE INSERTS, THREADED RODS, AND ALL THE ASSOCIATED HARDWARE REQUIRED TO RE-INSTALL THE EXISTING TELEPHONE CONDUIT PACK. THE INSTALLATION OF THE INSERTS, THREADED RODS, AND ALL ASSOCIATED HARDWARE SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "ATTACHMENT OF HANGERS FOR CONDUIT PACK".



**DETAIL A**  
HANGERS FOR CONDUIT PACK



**DETAIL B**  
HANGER FOR CONDUIT PACK  
AT CENTER OF PIER  
(LOOKING WEST)

9/4/2019 PENTABLE:Requ-shd\_util.tbl

8

8

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-18-93</b>			
DRAWN BY	CLP	PLANS CK'D.	CBM
<b>CONDUIT PACK DETAILS</b>			SHEET 40 OF 40

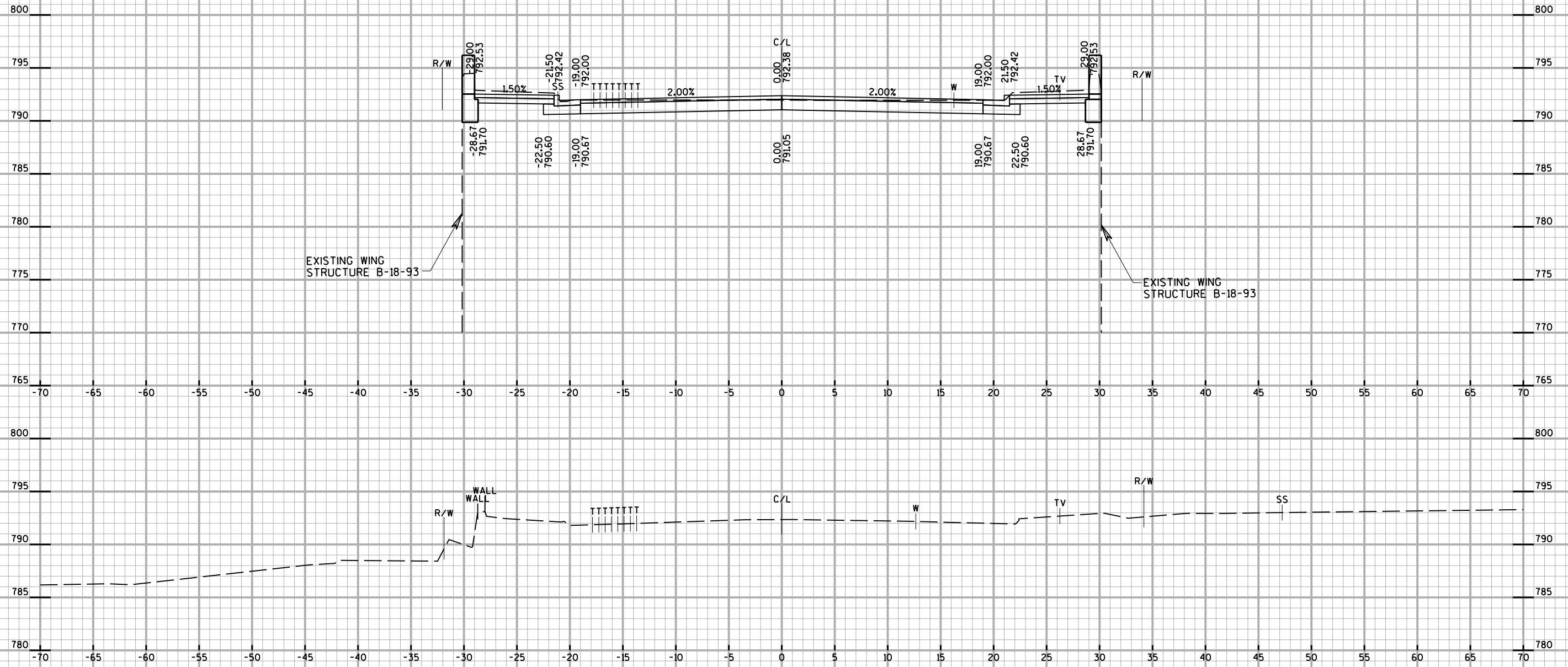
ORIGINAL PLANS PREPARED BY  
**AYRES ASSOCIATES** 3433 Oakwood Hills Parkway  
Eau Claire, WI 54701  
www.AyresAssociates.com

DEWEY STREET COMPUTER EARTHWORK

Station	Distance	Area (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Salvaged / Unuseable Pavement Material	Fill	Cut	Salvaged / Unuseable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.30	
9+75.78	--	65.2	13.9	0.0						
9+98.78	23	59.4	12.7	0.0	53	11	0	42	0	42
B-18-93	--	--		--	--	--	--	--	--	--
12+15.22	--	60.1	12.7	0.0	--	--	--	--	--	--
12+38.22	23	63.6	12.6	0.8	53	30	0	65	0	64
12+50	12	59.0	11.6	0.9	27	26	0	65	1	64
12+75	25	54.8	10.1	1.0	53	22	1	96	2	94
12+92.22	17	54.2	10.7	1.3	35	21	1	110	3	107
					220	110	2			

Note 1 - Cut	Cut includes existing asphalt pavement.
Note 2 - Fill	Volume needed to be filled.
Note 3 - Mass Ordinate	(Cut) - (Fill * 1.30)
Note 4 - Salvaged / Unuseable Pavement Material	Existing existing asphalt pavement to be removed from Cut.
Note 5 - Cut	Cut reduced by salvaged/unuseable asphaltic pavement





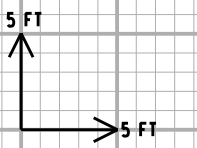
EXISTING WING  
STRUCTURE B-18-93

EXISTING WING  
STRUCTURE B-18-93

9+98.78

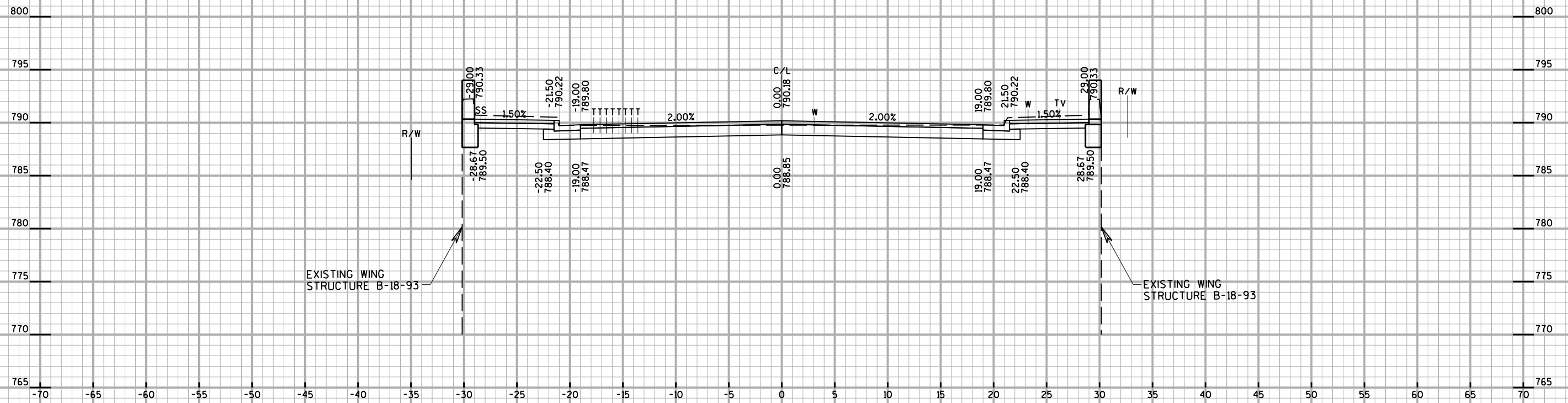
9+75.78

BEGIN CONSTRUCTION  
STA. 9+75.78  
(MATCH EXISTING)



9

9

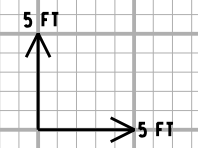


EXISTING WING  
STRUCTURE B-18-93

EXISTING WING  
STRUCTURE B-18-93

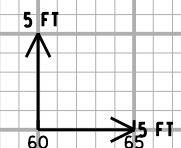
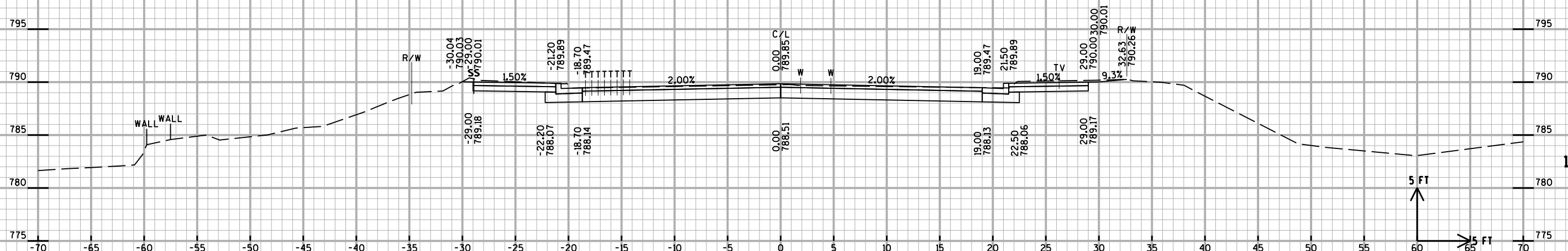
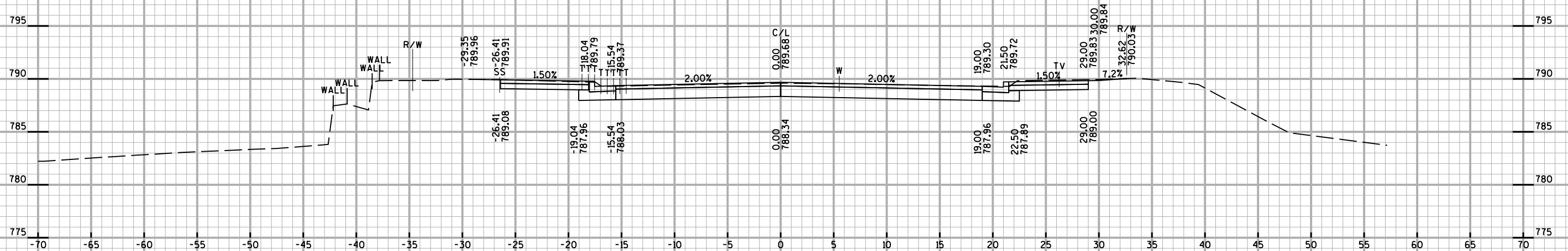
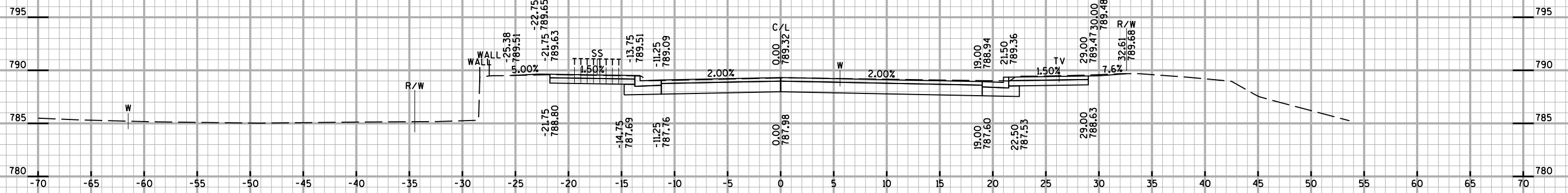
12+15.22

STRUCTURE B-18-93

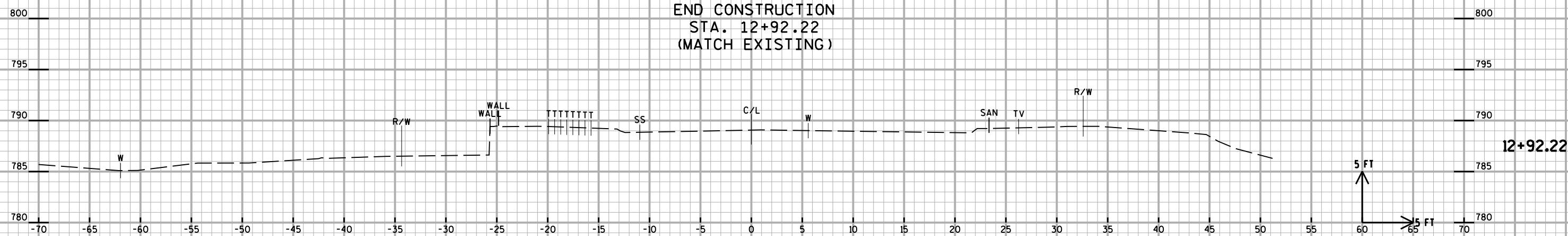


9

9



END CONSTRUCTION  
STA. 12+92.22  
(MATCH EXISTING)



9

9

Notes



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