

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	S. STR. APPR. SLAB	S. ABUT.	PIER	N. ABUT.	N. STR. APPR. SLAB	SUPER.	TOTALS
203.0200.011	REMOVING OLD STRUCTURE STATION 764+29	LS	----	----	----	----	----	----	1
203.0210.S.006	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-51-21	LS	----	----	----	----	----	----	1
206.1000.010	EXCAVATION FOR STRUCTURES BRIDGES B-51-128	LS	----	----	----	----	----	----	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	----	308	----	295	----	----	603
305.0125	BASE AGGREGATE DENSE 1 1/4 -INCH	CY	206	----	----	----	197	----	403
501.1000.S	ICE HOT WEATHER CONCRETING	LB	1,015	675	1,210	640	970	4,410	8,920
501.1000.S	ICE HOT WEATHER CONCRETING	LB	----	----	----	----	----	1,650	1,650
502.0100	CONCRETE MASONRY BRIDGES	CY	29	90	161	85	27	----	392
502.3200	PROTECTIVE SURFACE TREATMENT	SY	221	----	----	----	211	2,404	2,836
502.3210	PIGMENTED SURFACE SEALER	SY	20	----	----	----	20	218	258
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	----	----	----	----	----	3,091	3,091
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	----	----	2,760	----	----	----	2,760
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	22,350	7,750	35,760	7,390	21,270	134,230	228,750
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	----	----	----	----	----	42,260	42,260
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	----	----	----	----	----	3,450	3,450
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	----	14	28	14	----	----	56
506.4000.020	STEEL DIAPHRAGMS B-51-128	EACH	----	----	----	----	----	52	52
511.1200.007	TEMPORARY SHORING B-51-128	SF	----	1,160	----	1,160	----	----	2,320
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	----	22	----	21	----	34	77
517.1010.S.414	CONCRETE STAINING B-51-128	SF	140	72	2,425	72	140	5,638	8,487
517.1050.S.004	ARCHITECTURAL SURFACE TREATMENT B-51-128	SF	----	16	----	16	----	----	32
550.0600	PILE REDRIVING	EACH	----	3	3	3	----	----	9
550.2106	PILING CIP CONCRETE 10 3/4 X 0.365-INCH	LF	----	2,040	----	1,800	----	----	3,840
550.2126	PILING CIP CONCRETE 12 3/4 X 0.375-INCH	LF	----	----	4,590	----	----	----	4,590
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	----	50	----	50	----	----	100
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	----	106	----	101	----	----	207
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	----	92	----	88	----	----	180
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	6	----	----	----	6	8	20
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	14	----	----	----	14	215	243
653.0220	JUNCTION BOXES 18x6x6-INCH	EACH	----	----	----	----	----	3	3
SPV.0035.400	HPC MASONRY STRUCTURES	CY	107	----	----	----	102	588	797
SPV.0035.400	HPC MASONRY STRUCTURES	CY	----	----	----	----	----	220	220
SPV.0165.401	LONGITUDINAL GROOVING BRIDGE DECK	SF	1,993	----	----	----	1,896	21,635	25,524
SPV.0165.472	PARTIAL DEPTH PRECAST PRESTRESSED CONCRETE DECK PANELS B-51-128	SF	----	----	----	----	----	14,506	14,506
SPV.0180.400	SLOPE PAVING CRUSHED AGGREGATE SPECIAL	SY	----	419	----	429	----	----	848
NON-BID ITEMS									
		SIZE							1/2", 3/4", & 1 1/2"
*	PRECAST PIER COLUMNS								
*	PRECAST PIER CAPS								
*	GROUTED BAR COUPLERS								

ALL BID ITEMS ARE CATEGORY 2090

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

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

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 4 AND IN THE ABUTMENT DETAILS.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-51-128" SHALL BE THE EXISTING GROUNDLINE.

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

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

HAUNCH VOLUME IS TO BE FILLED WITH GROUT, WHICH IS INCIDENTAL TO BID ITEM "PARTIAL DEPTH PRECAST PRESTRESSED CONCRETE DECK PANELS B-51-128".

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF PARAPETS.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE SUPERSTRUCTURE DECK AND STRUCTURAL APPROACH SLABS.

2-WAY TRAFFIC ON IH-94 WILL BE MAINTAINED ON THE EXISTING IH-94 SOUTHBOUND LANES AND BRIDGE (B-51-20) DURING REMOVAL AND RE-CONSTRUCTION OF THE EXISTING IH 94 NORTHBOUND STRUCTURE (B-51-21). ONCE THE NORTHBOUND BRIDGE (B-51-128) IS COMPLETED, TRAFFIC WILL BE SWITCHED OVER FOR CONSTRUCTION OF THE SOUTHBOUND BRIDGE (B-51-127).

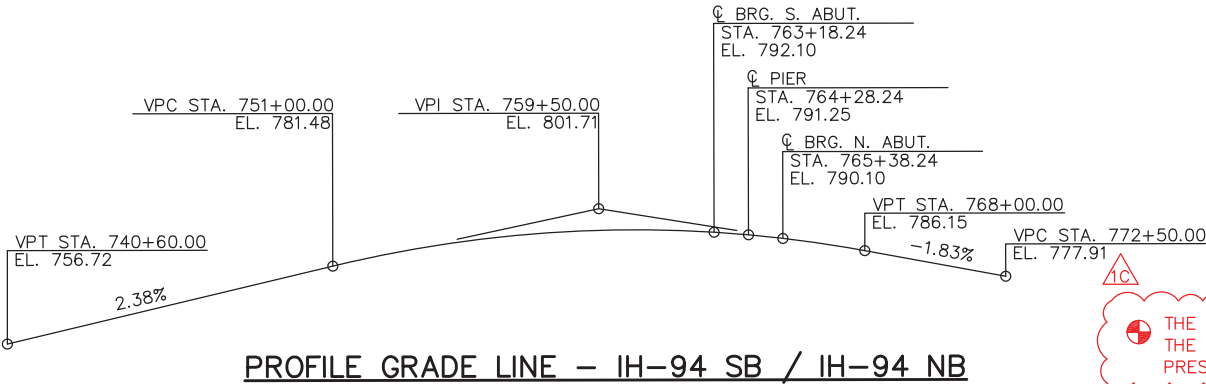
* PRECAST PIER NON-BID ITEMS (PRECAST PIER COLUMNS, PRECAST PIER CAPS, GROUTED BAR COUPLERS) ARE FOR INFORMATIONAL PURPOSES ONLY. IF THE CONTRACTOR ELECTS TO UTILIZE PRECAST PIER COLUMNS, PRECAST PIER CAPS, OR BOTH; THE NON-BID ITEM SPECIAL PROVISIONS WITHIN THIS CONTRACT SHALL GOVERN THE WORK. PAYMENT FOR THE PRECAST PIER SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES" FOR THE CAST-IN-PLACE PIER.

LIST OF DRAWINGS

1. GENERAL PLAN
2. PROFILES, NOTES & QUANTITIES
3. SECTIONS
4. SECTIONS & DETAILS
5. SOUTH ABUTMENT
6. SOUTH ABUTMENT DETAILS
7. NORTH ABUTMENT
8. NORTH ABUTMENT DETAILS
9. ABUTMENT REINFORCEMENT
10. ALTERNATE CONSTRUCTION JOINT
11. PIER
12. PIER DETAILS
13. PIER REINFORCEMENT
14. PIER ALTERNATE
15. BEAM SEAT DETAILS
16. 45W-INCH PRESTRESSED GIRDER
17. 45W-INCH PRESTRESSED GIRDER DETAILS
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19. INTERMEDIATE STEEL DIAPHRAGM DETAILS
20. SUPERSTRUCTURE (1 OF 2)
21. SUPERSTRUCTURE (2 OF 2)
22. SUPERSTRUCTURE SECTION
23. SUPERSTRUCTURE PRECAST DECK PANELS
24. SUPERSTRUCTURE PRECAST DECK PANEL DETAILS
25. ABUTMENT DIAPHRAGMS
26. PIER DIAPHRAGM AND DETAILS
27. SUPERSTRUCTURE REINFORCEMENT
28. SOUTH STRUCTURAL APPROACH SLAB
29. SOUTH STRUCTURAL APPROACH SLAB DETAILS
30. NORTH STRUCTURAL APPROACH SLAB
31. NORTH STRUCTURAL APPROACH SLAB DETAILS
32. STRUCTURAL APPROACH SLAB REINFORCEMENT
33. CONDUIT DETAILS
34. AESTHETIC DETAILS
35. SUBSURFACE EXPLORATION



8/7/18



THE PE STAMP IN THIS PLAN SET COVERS ONLY THE MODIFICATIONS SHOWN CLOUDED IN RED AND SIGNIFIED BY 1C, WHICH MODIFY THE ORIGINAL BRIDGE PLANS TO UTILIZE A TRADITIONAL FULL-DEPTH, CAST-IN-PLACE CONCRETE DECK. THE DECK REINFORCEMENT IS DESIGNED PER CURRENT WISCONSIN DOT BRIDGE MANUAL.

REVISION QUANTITIES FOR INFORMATIONAL PURPOSES ONLY.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "45W" PRESTRESSED GIRDER DETAILS" SHEET.

PROFILE GRADE LINE - 58TH RD

STATE PROJECT NUMBER

1030-24-72

1C	8/7/18	REMOVE PRECAST PANELS	PMF
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-128			
DRAWN BY JAD		PLANS CK'D SKG	
PROFILES, NOTES, QUANTITIES			SHEET 2 OF 35

PLOT DATE: Aug 07, 2018

PLOT SCALE:

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.3 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

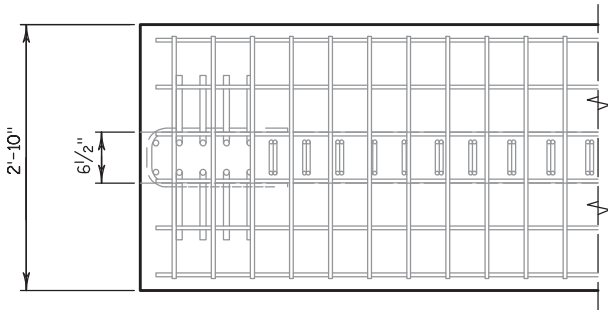
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

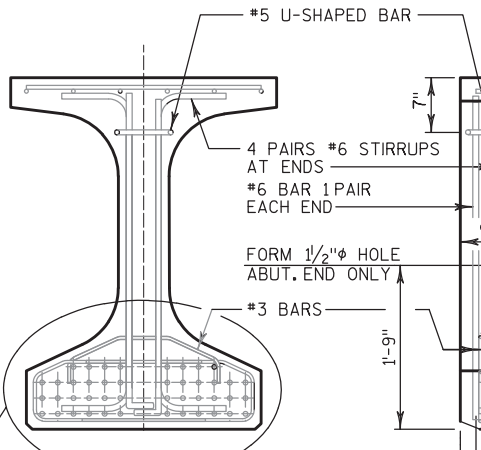
PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

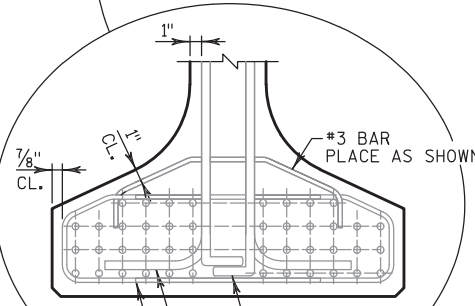
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TOP FLANGE



SECTION A-A



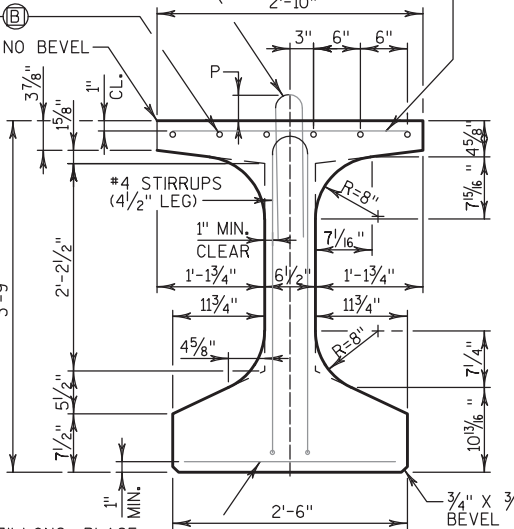
BOTTOM FLANGE

5 3/4" (GIRDERS 1-11)
5 7/8" (GIRDER 12)
5 7/8" (GIRDER 13)
6" (GIRDER 14)

88 SPA. @ 1'-0" = 88'-0" (BOTH SPANS)

#4 BAR, EPOXY COATED. PLACE @ STIRRUP SPACING. EMBED INTO GIRDER 1'-3".

#4 @ 5" FOR 15'-0" EACH END, #4 @ 1'-0" BETWEEN, 2'-7" LONG



SIDE VIEW & TYP. SECTION IN SPAN

- (A) DETAIL TYP. AT EACH END
(B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"

8/7/18



* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

GIRDER DATA																								
SPAN	GIRDER	GIRDER LENGTH "L"	TOTAL DEAD LOAD DEFL. (IN.) (B01)									CONC. STRGTH. f'c (P.S.I.)	"P" 1ST OF 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN						UNDRAPED PATTERN	
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10						TOTAL NO. OF STRANDS	f'ci (P.S.I.) *	(IN.)				TOTAL NO. OF STRANDS	f'ci (P.S.I.) *
																			"A"	"B" MIN.	"B" MAX.	"C"		
1	1	110.375	0.7	1.4	1.9	2.2	2.3	2.2	1.9	1.4	0.7	8000	7.50"	7.00"	7.50"	0.6	34	6800	40	13.75	16.75	5	—	—
1	2-10	110.375	0.8	1.5	2.1	2.4	2.5	2.4	2.0	1.5	0.8	8000	7.50"	7.00"	7.50"	0.6	34	6800	40	13.75	16.75	5	—	—
1	11	110.375	0.8	1.5	2.0	2.4	2.5	2.4	2.0	1.5	0.8	8000	7.50"	7.00"	7.50"	0.6	34	6800	40	13.75	16.75	5	—	—
1	12	110.387	0.8	1.4	2.0	2.3	2.4	2.3	2.0	1.4	0.7	8000	7.50"	7.00"	7.50"	0.6	34	6800	40	13.75	16.75	5	—	—
1	13	110.404	0.8	1.4	2.0	2.3	2.4	2.3	2.0	1.4	0.7	8000	7.50"	7.00"	7.50"	0.6	34	6800	40	13.75	16.75	5	—	—
1	14	110.425	0.7	1.3	1.8	2.2	2.3	2.2	1.8	1.3	0.7	8000	7.50"	7.00"	7.50"	0.6	34	6800	40	13.75	16.75	5	—	—
2	1	110.375	0.7	1.4	1.9	2.3	2.4	2.3	2.0	1.4	0.7	8000	7.50"	7.00"	7.50"	0.6	34	6800	40	13.75	16.75	5	—	—
2	2-10	110.375	0.8	1.5	2.0	2.4	2.5	2.4	2.1	1.5	0.8	8000	7.50"	7.00"	7.50"	0.6	34	6800	40	13.75	16.75	5	—	—
2	11	110.375	0.7	1.4	1.9	2.3	2.4	2.3	1.9	1.4	0.7	8000	7.50"	7.00"	7.50"	0.6	34	6800	40	13.75	16.75	5	—	—
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2	14	110.425	0.7	1.3	1.7	2.1	2.2	2.1	1.8	1.3	0.7	8000	7.50"	7.50"	7.50"	0.6	34	6800	40	13.75	16.75	5	—	—

NOTES

(B01) TOTAL DEAD LOAD DEFLECTION IS SHOWN. REFER TO SHEET 17 FOR DEAD LOAD DEFLECTIONS UNDER PRECAST DECK PANEL LOAD ONLY.

1C

NO.	DATE	REVISION	BY
1C	8/7/18	REMOVE PRECAST PANELS	PMF

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-128			
DRAWN BY	JAD	PLANS CK'D	SJG
45-INCH PRESTRESSED GIRDER		SHEET 16 OF 35	

PLOT DATE: Aug 07, 2018

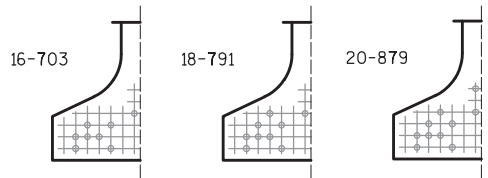
PLOT SCALE:

8/7/18



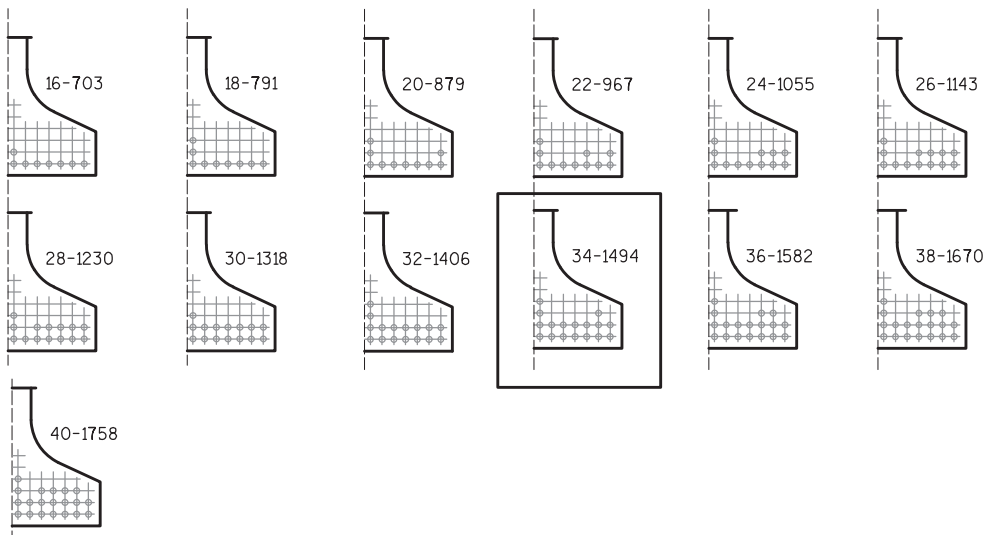
STATE PROJECT NUMBER

1030-24-72



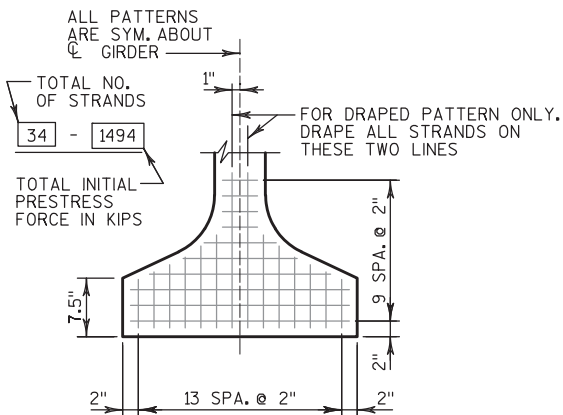
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY
TO AVOID DRAPING OF STRANDS

0.6"φ STRANDS

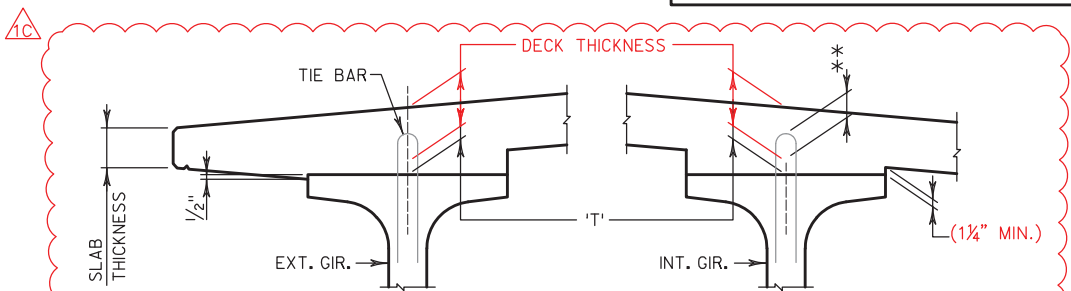


ARRANGEMENT AT ¼ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"φ STRANDS



TYP. STRAND PATTERN



DECK HAUNCH DETAIL

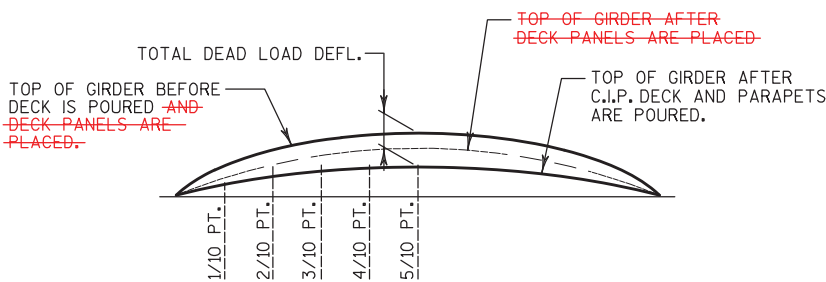
IF 1 1/4" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN 1/2" OR.

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ¼ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3.6" WAS USED IN THE QUANTITY "HPC MASONRY STRUCTURES".

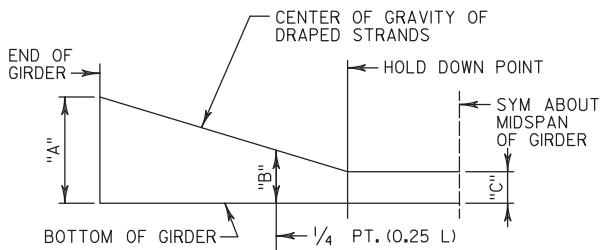


DEAD LOAD DEFLECTION DIAGRAM

SPAN	GIRDER	DEAD LOAD DEFL. (IN.)									
		1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10
1	1	0.1	0.2	0.3	0.4	0.4	0.4	0.3	0.2	0.1	
1	2-10	0.3	0.5	0.7	0.8	0.8	0.8	0.7	0.5	0.3	
1	11	0.2	0.5	0.6	0.8	0.8	0.8	0.6	0.5	0.2	
1	12	0.2	0.5	0.6	0.7	0.8	0.7	0.6	0.5	0.2	
1	13	0.2	0.5	0.6	0.7	0.8	0.7	0.6	0.5	0.2	
1	14	0.1	0.2	0.3	0.4	0.4	0.4	0.3	0.2	0.1	
2	1	0.1	0.2	0.3	0.4	0.4	0.4	0.3	0.2	0.1	
2	2-10	0.3	0.5	0.7	0.8	0.8	0.8	0.7	0.5	0.3	
2	11	0.2	0.4	0.6	0.7	0.8	0.7	0.6	0.4	0.2	
2	12	0.2	0.4	0.6	0.7	0.7	0.7	0.6	0.4	0.2	
2	13	0.2	0.4	0.6	0.7	0.7	0.7	0.6	0.4	0.2	
2	14	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.1	

NOTES

(B02) DEAD LOAD DEFLECTIONS UNDER PRECAST DECK PANEL LOAD ONLY.



DRAPED STRAND PROFILE

THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.)
1	3.61
2	3.61

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'. USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

THE PE STAMP IN THIS PLAN SET COVERS ONLY THE MODIFICATIONS SHOWN CLOUDED IN RED AND SIGNIFIED BY 1C, WHICH MODIFY THE ORIGINAL BRIDGE PLANS TO UTILIZE A TRADITIONAL FULL-DEPTH, CAST-IN-PLACE CONCRETE DECK. THE DECK REINFORCEMENT IS DESIGNED PER CURRENT WISCONSIN DOT BRIDGE MANUAL.

1C	8/7/18	REMOVE PRECAST PANELS	PMF
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-128			
DRAWN BY JAD		PLANS CK'D SJG	
45-INCH PRESTRESSED GIRDER DETAILS		SHEET 17 OF 35	

PLOT DATE: Aug 07, 2018

PLOT SCALE:

NOTES

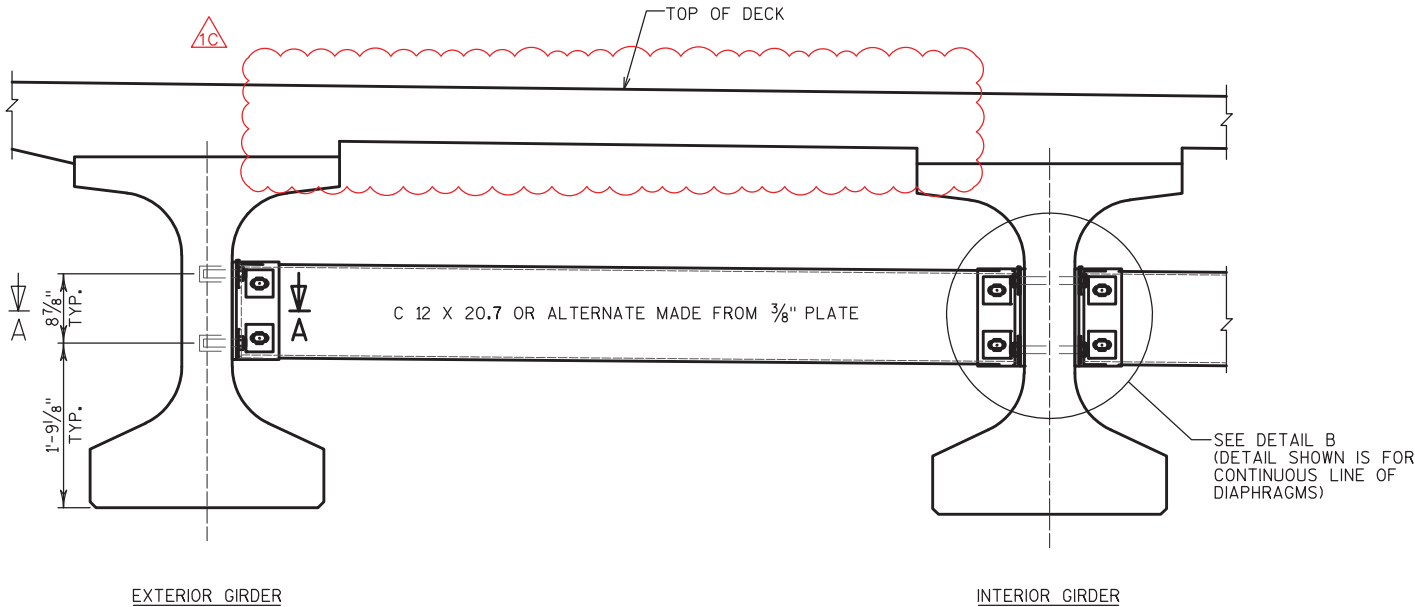
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-51-128", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

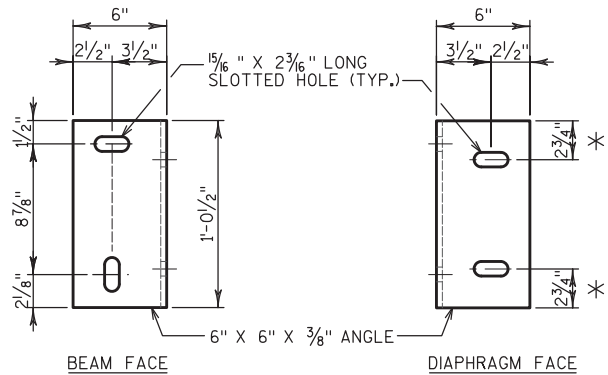
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

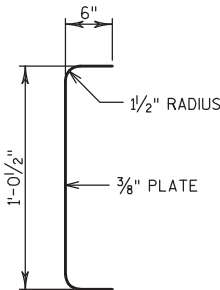


PART TRANSVERSE SECTION AT DIAPHRAGM

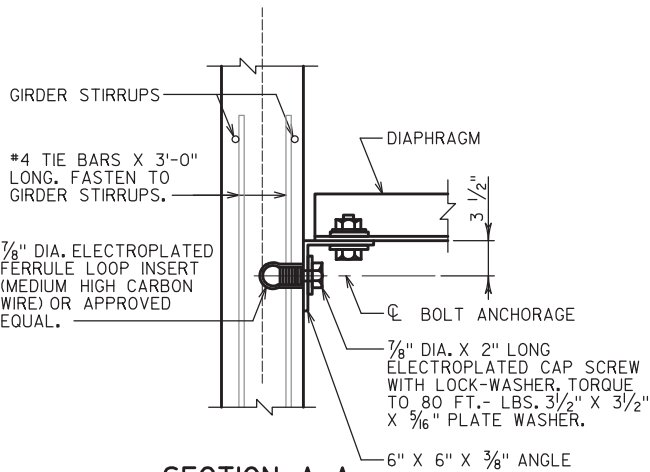


DIAPHRAGM SUPPORT

× 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM

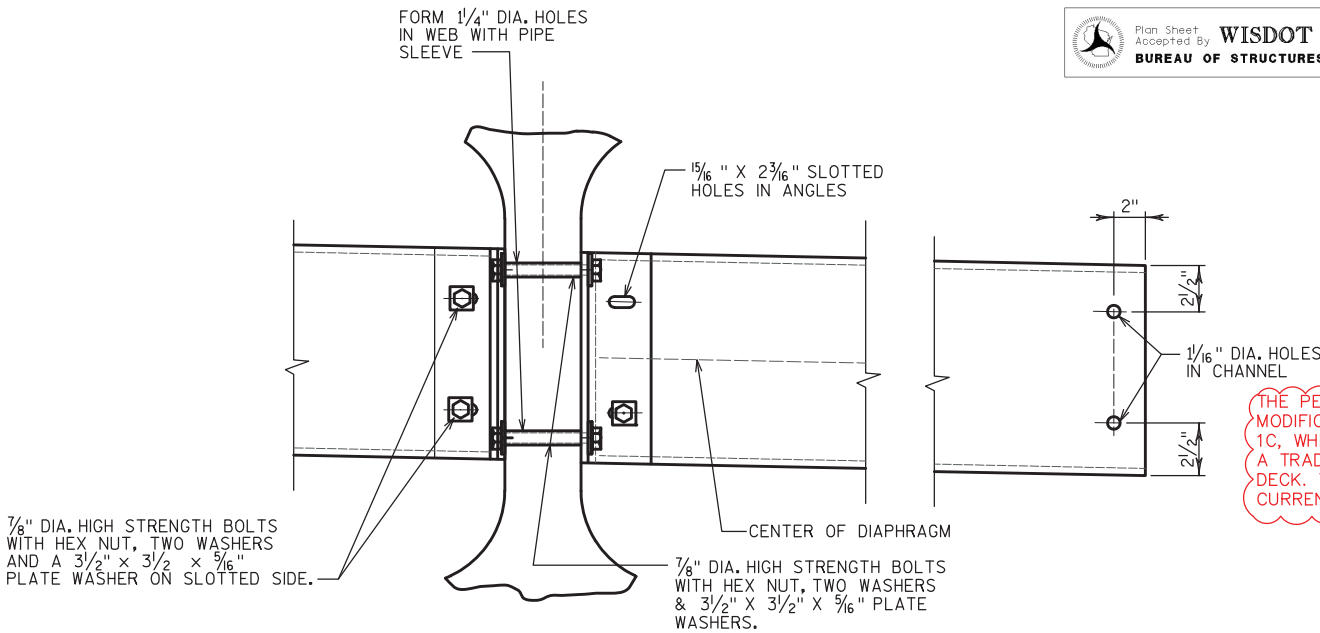


SECTION THRU ALTERNATE DIAPHRAGM



SECTION A-A

(FOR EXTERIOR ATTACHMENT)



DETAIL B

(FOR CONTINUOUS LINE OF DIAPHRAGMS)

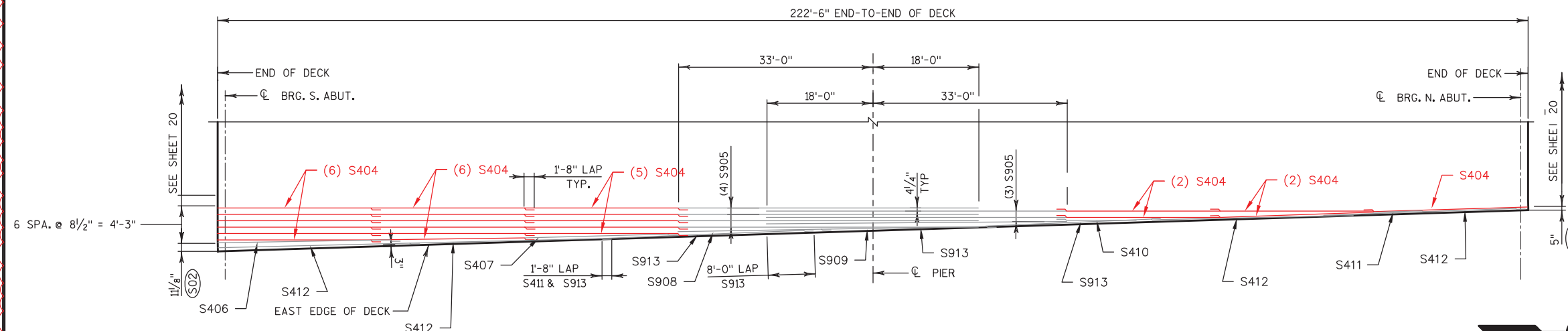
8/7/18



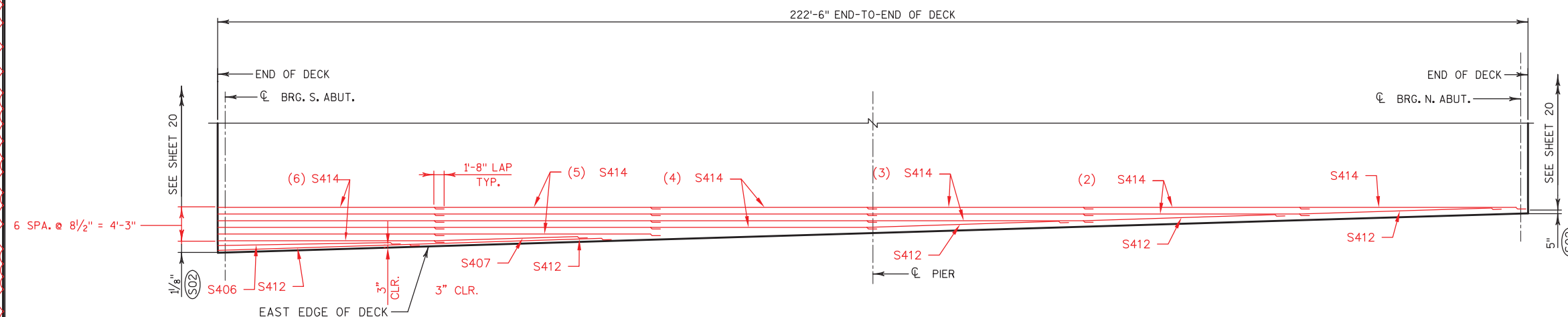
THE PE STAMP IN THIS PLAN SET COVERS ONLY THE MODIFICATIONS SHOWN CLOUDED IN RED AND SIGNIFIED BY 1C, WHICH MODIFY THE ORIGINAL BRIDGE PLANS TO UTILIZE A TRADITIONAL FULL-DEPTH, CAST-IN-PLACE CONCRETE DECK. THE DECK REINFORCEMENT IS DESIGNED PER CURRENT WISCONSIN DOT BRIDGE MANUAL.

1C	8/7/18	REMOVE PRECAST PANELS	PMF
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-128			
DRAWN BY JAD		PLANS CK'D SJG	
INTERMEDIATE STEEL DIAPHRAGM DETAILS		SHEET 19 OF 35	





EAST EDGE LONGITUDINAL REINFORCING DETAIL - TOP MAT



EAST EDGE LONGITUDINAL REINFORCING DETAIL - BOTTOM MAT

8/7/18



NOTES

REFER TO SHEETS 20, AND 22-27 FOR ADDITIONAL SUPERSTRUCTURE REINFORCEMENT AND DETAILS.

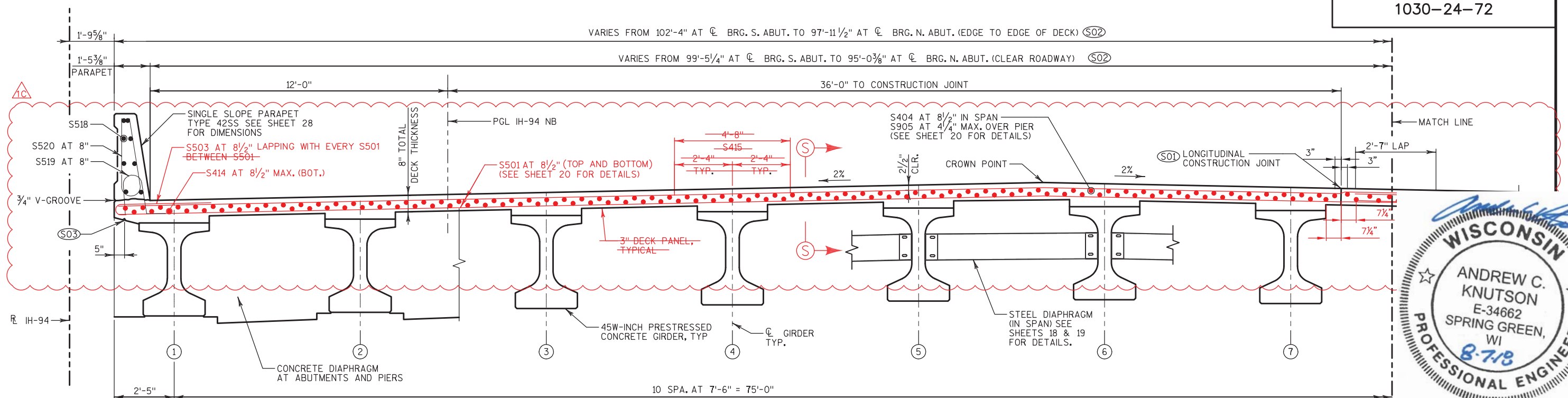
(S02) DIMENSION PROVIDED AT C OF ABUTMENT BRG.

TOP OF DECK ELEVATIONS

	C BRG. S. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	C PIER	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	C BRG. N. ABUT.
W. EOD	791.86	791.79	791.71	791.63	791.55	791.47	791.38	791.29	791.20	791.11	791.01	790.91	790.80	790.69	790.58	790.47	790.35	790.23	790.11	789.99	789.86
GIRDER 1	791.88	791.81	791.73	791.65	791.57	791.49	791.40	791.31	791.22	791.12	791.03	790.92	790.82	790.71	790.60	790.49	790.37	790.25	790.13	790.00	789.88
GIRDER 2	792.03	791.96	791.88	791.80	791.72	791.64	791.55	791.46	791.37	791.27	791.18	791.07	790.97	790.86	790.75	790.64	790.52	790.40	790.28	790.15	790.03
PGL	792.10	792.03	791.95	791.87	791.79	791.71	791.62	791.53	791.44	791.35	791.25	791.15	791.04	790.93	790.82	790.71	790.59	790.47	790.35	790.23	790.10
GIRDER 3	792.18	792.11	792.03	791.95	791.87	791.79	791.70	791.61	791.52	791.42	791.33	791.22	791.12	791.01	790.90	790.79	790.67	790.55	790.43	790.30	790.18
GIRDER 4	792.33	792.26	792.18	792.10	792.02	791.94	791.85	791.76	791.67	791.57	791.48	791.37	791.27	791.16	791.05	790.94	790.82	790.70	790.58	790.45	790.33
GIRDER 5	792.48	792.41	792.33	792.25	792.17	792.09	792.00	791.91	791.82	791.72	791.63	791.52	791.42	791.31	791.20	791.09	790.97	790.85	790.73	790.60	790.48
CROWN	792.58	792.51	792.43	792.35	792.27	792.19	792.10	792.01	791.92	791.83	791.73	791.63	791.52	791.41	791.30	791.19	791.07	790.95	790.83	790.71	790.58
GIRDER 6	792.53	792.46	792.38	792.30	792.22	792.14	792.05	791.96	791.87	791.78	791.68	791.58	791.47	791.36	791.25	791.14	791.02	790.90	790.78	790.66	790.53
GIRDER 7	792.38	792.31	792.23	792.15	792.07	791.99	791.90	791.81	791.72	791.63	791.53	791.43	791.32	791.21	791.10	790.99	790.87	790.75	790.63	790.51	790.38
GIRDER 8	792.23	792.16	792.08	792.00	791.92	791.84	791.75	791.66	791.57	791.48	791.38	791.28	791.17	791.06	790.95	790.84	790.72	790.60	790.48	790.36	790.23
GIRDER 9	792.08	792.01	791.93	791.85	791.77	791.69	791.60	791.51	791.42	791.33	791.23	791.13	791.02	790.91	790.80	790.69	790.57	790.45	790.33	790.21	790.08
GIRDER 10	791.93	791.86	791.78	791.70	791.62	791.54	791.45	791.36	791.27	791.18	791.08	790.98	790.87	790.76	790.65	790.54	790.42	790.30	790.18	790.06	789.93
GIRDER 11	791.78	791.71	791.63	791.55	791.47	791.39	791.30	791.21	791.12	791.03	790.93	790.83	790.72	790.61	790.50	790.39	790.27	790.15	790.03	789.91	789.78
GIRDER 12	791.63	791.56	791.48	791.41	791.33	791.25	791.16	791.07	790.98	790.89	790.79	790.69	790.59	790.48	790.37	790.26	790.15	790.03	789.91	789.78	789.66
GIRDER 13	791.48	791.41	791.34	791.26	791.19	791.10	791.02	790.93	790.85	790.75	790.66	790.56	790.46	790.35	790.24	790.13	790.02	789.90	789.78	789.66	789.54
GIRDER 14	791.33	791.26	791.19	791.12	791.04	790.96	790.88	790.79	790.71	790.62	790.52	790.42	790.32	790.22	790.11	790.01	789.89	789.78	789.66	789.54	789.42
E. EOD	791.31	791.24	791.17	791.10	791.02	790.94	790.86	790.78	790.69	790.60	790.50	790.41	790.30	790.20	790.10	789.99	789.87	789.76	789.64	789.52	789.40

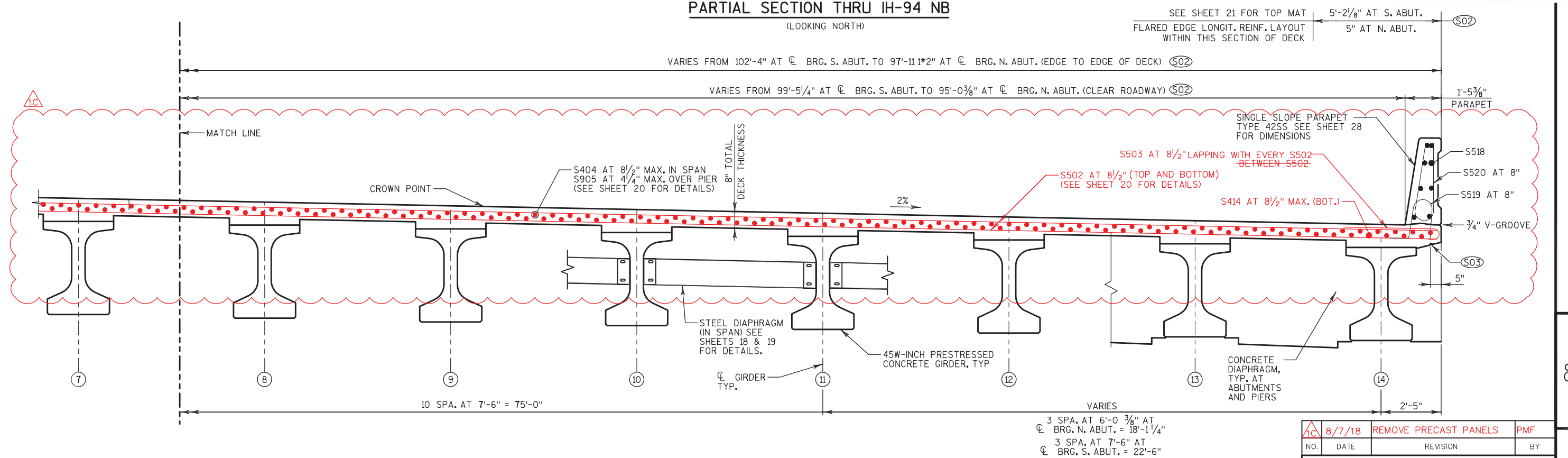
THE PE STAMP IN THIS PLAN SET COVERS ONLY THE MODIFICATIONS SHOWN CLOUDED IN RED AND SIGNIFIED BY 1C, WHICH MODIFY THE ORIGINAL BRIDGE PLANS TO UTILIZE A TRADITIONAL FULL-DEPTH, CAST-IN-PLACE CONCRETE DECK. THE DECK REINFORCEMENT IS DESIGNED PER CURRENT WISCONSIN DOT BRIDGE MANUAL.

1C	8/7/18	REMOVE PRECAST PANELS	PMF
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-128			
DRAWN BY JAD		PLANS CK'D SJG	
SUPERSTRUCTURE (2 OF 2)		SHEET 21 OF 35	



PARTIAL SECTION THRU IH-94 NB

(LOOKING NORTH)



PARTIAL SECTION THRU IH-94 NB

(LOOKING NORTH)

THE PE STAMP IN THIS PLAN SET COVERS ONLY THE MODIFICATIONS SHOWN CLOUDED IN RED AND SIGNIFIED BY 1C, WHICH MODIFY THE ORIGINAL BRIDGE PLANS TO UTILIZE A TRADITIONAL FULL-DEPTH, CAST-IN-PLACE CONCRETE DECK. THE DECK REINFORCEMENT IS DESIGNED PER CURRENT WISCONSIN DOT BRIDGE MANUAL.

8/7/18



1C

SECTION S-S ON SUPERSTRUCTURE REINFORCEMENT SHEET

NO.	DATE	REVISION	BY
1C	8/7/18	REMOVE PRECAST PANELS	PMF
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-128			
DRAWN BY	JAD	PLANS CK'D	SJG
SUPERSTRUCTURE SECTION		SHEET 22 OF 35	

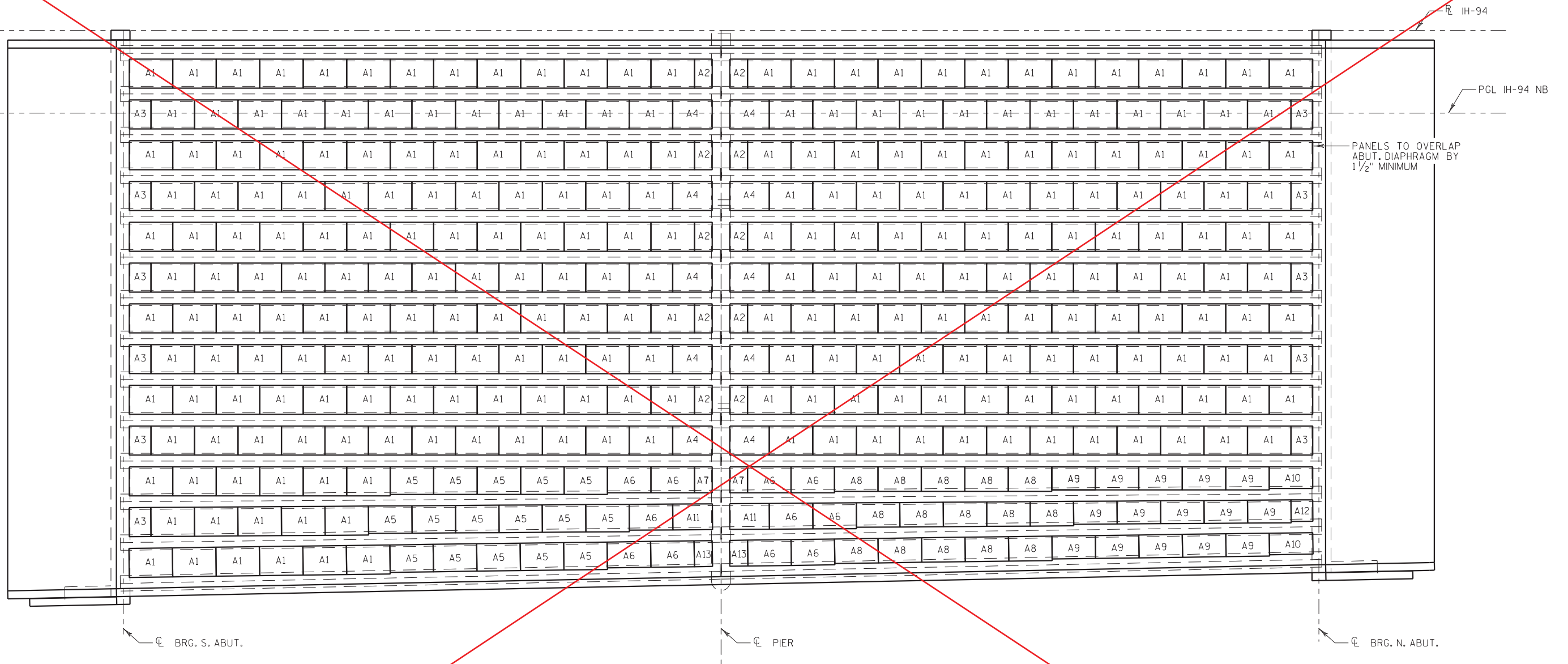
PLOT DATE: Aug 07, 2018

PLOT SCALE:

1C

STATE PROJECT NUMBER

1030-24-72



PANEL PLACEMENT PLAN



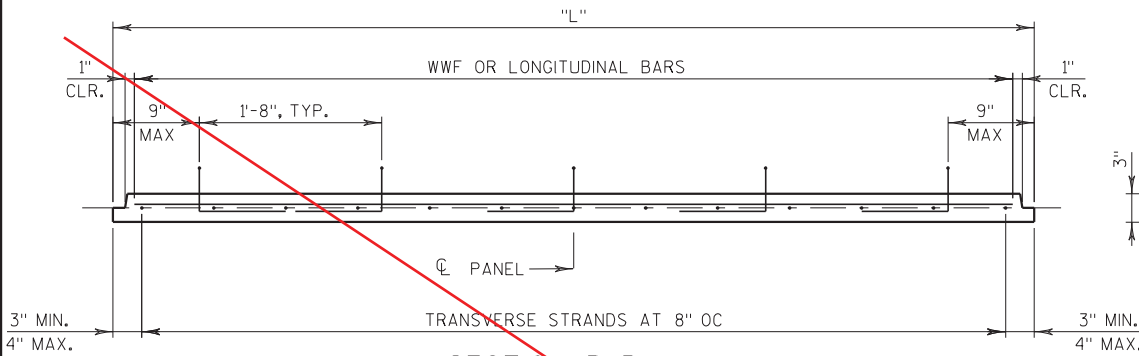
8/7/18



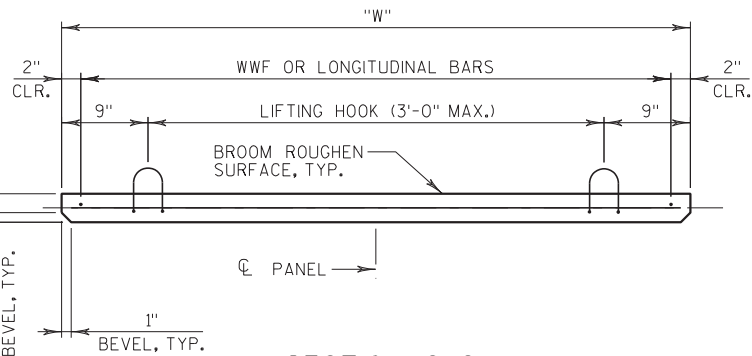
CONCRETE MASONRY FOR DECK PANELS F'C = 6 KSI

THE PE STAMP IN THIS PLAN SET COVERS ONLY THE MODIFICATIONS SHOWN CLOUDED IN RED AND SIGNIFIED BY 1C, WHICH MODIFY THE ORIGINAL BRIDGE PLANS TO UTILIZE A TRADITIONAL FULL-DEPTH, CAST-IN-PLACE CONCRETE DECK. THE DECK REINFORCEMENT IS DESIGNED PER CURRENT WISCONSIN DOT BRIDGE MANUAL.

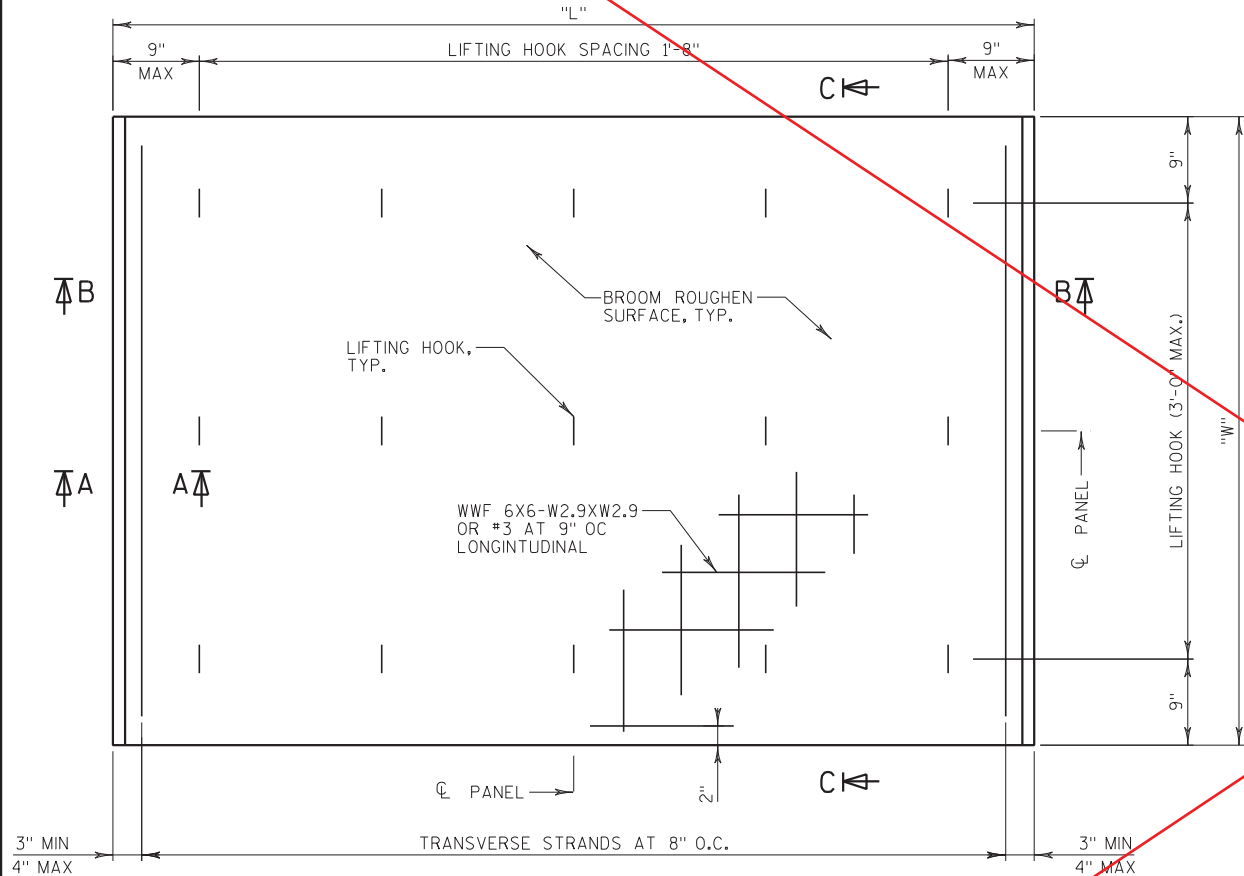
1C	8/7/18	REMOVE PRECAST PANELS	PMF
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-128			
DRAWN BY	JAD	PLANS CK'D.	SJG
SUPERSTRUCTURE PRECAST DECK PANELS		SHEET 23 OF 35 627	



SECTION B-B

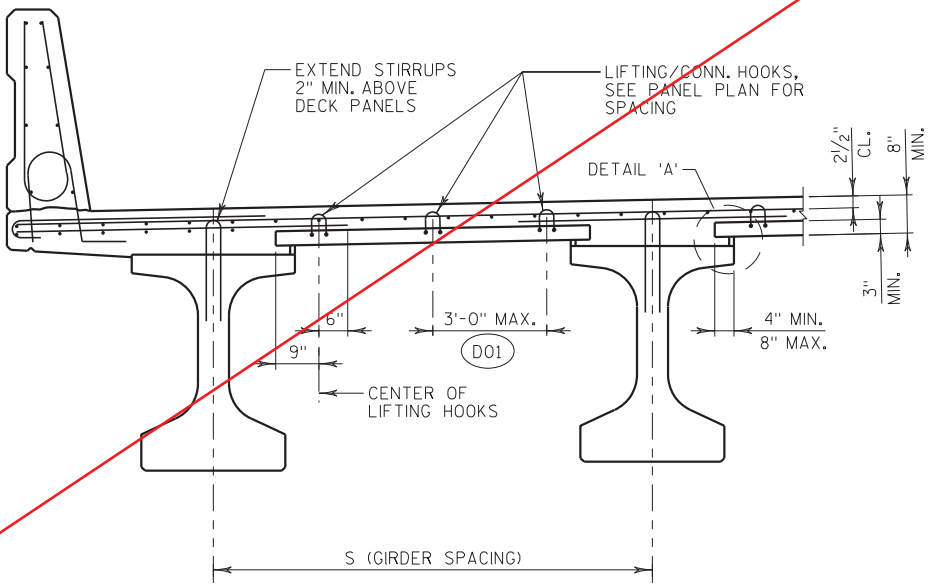


SECTION C-C

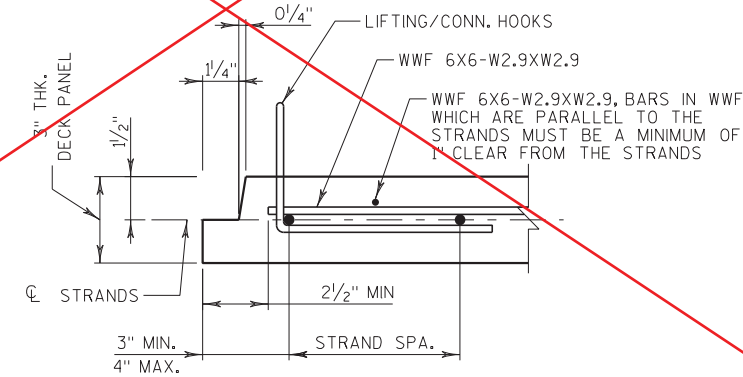


PANEL PLAN

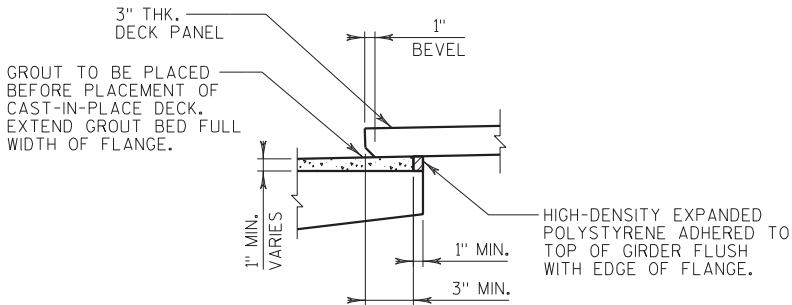
- NOTES:
1. BAR STEEL REINFORCEMENT IS FOR INFORMATION ONLY. REINFORCEMENT IS INCLUDED IN THE PRICE BID FOR "PRECAST CONCRETE DECK PANELS"
 2. WWF OR #3 LONGITUDINAL BARS TO EXTEND 12" (MINIMUM) BEYOND PANEL EDGES AT SUBSTRUCTURE DIAPHRAGMS.
 3. ALL BAR STEEL SHALL BE EPOXY COATED. AN EQUIVALENT AREA OF WELDED WIRE FABRIC EPOXY COATED IN ACCORDANCE WITH A.S.T.M. A84 MAY BE USED AS AN ALTERNATIVE.



TRANSVERSE SECTION



PART SECTION A-A



DETAIL A

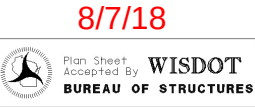
DESIGN DATA

CONCRETE MASONRY FOR DECK PANELS:
f'c = 6,000 P.S.I.
f'ci = 4,400 P.S.I.

PRESTRESSING STRANDS - 0.375" DIAMETER
fu = 270,000 P.S.I.

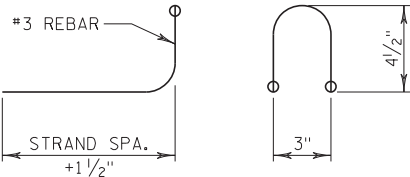
INITIAL PRESTRESSING FORCE:
Pi = 15.8 KIPS/STRAND

PRECAST DECK PANEL SCHEDULE			
PANEL	NO. REQ.	"L"	"W"
A1	267	8'-0"	5'-4"
A2	10	3'-3"	5'-4"
A3	11	4'-0"	5'-4"
A4	10	7'-3"	5'-4"
A5	16	8'-0"	5'-0 1/2"
A6	11	8'-0"	4'-9"
A7	2	3'-3"	4'-9"
A8	15	8'-0"	4'-6"
A9	15	8'-0"	4'-2 1/2"
A10	2	8'-0"	3'-11 1/2"
A11	2	7'-3 1/2"	4'-9"
A12	1	4'-0"	3'-11 1/2"
A13	2	3'-4"	4'-9"



NOTES

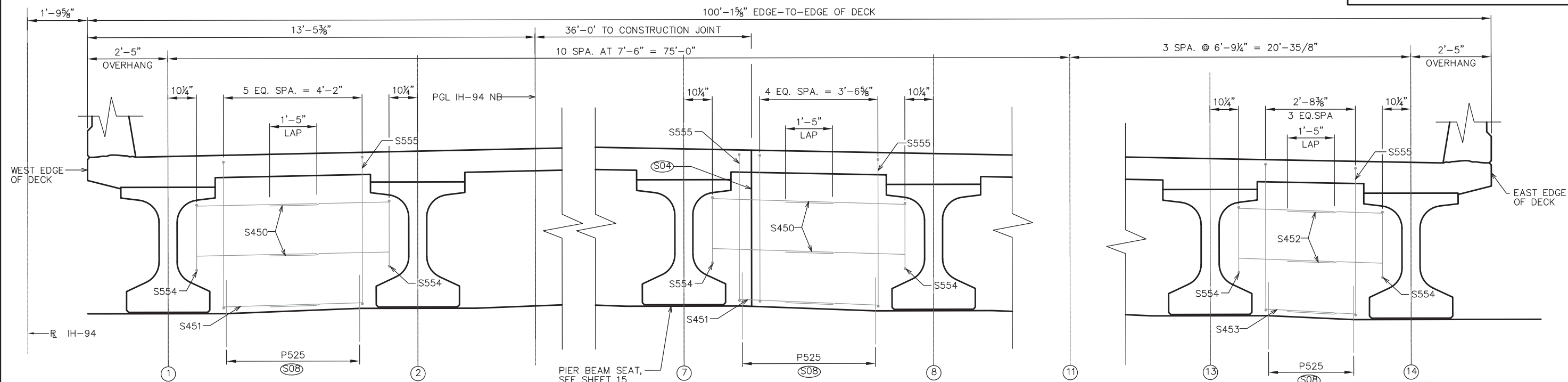
D01 3'-0" MAX. SPACING BETWEEN ADJACENT ROWS.



LIFTING HOOK DETAIL

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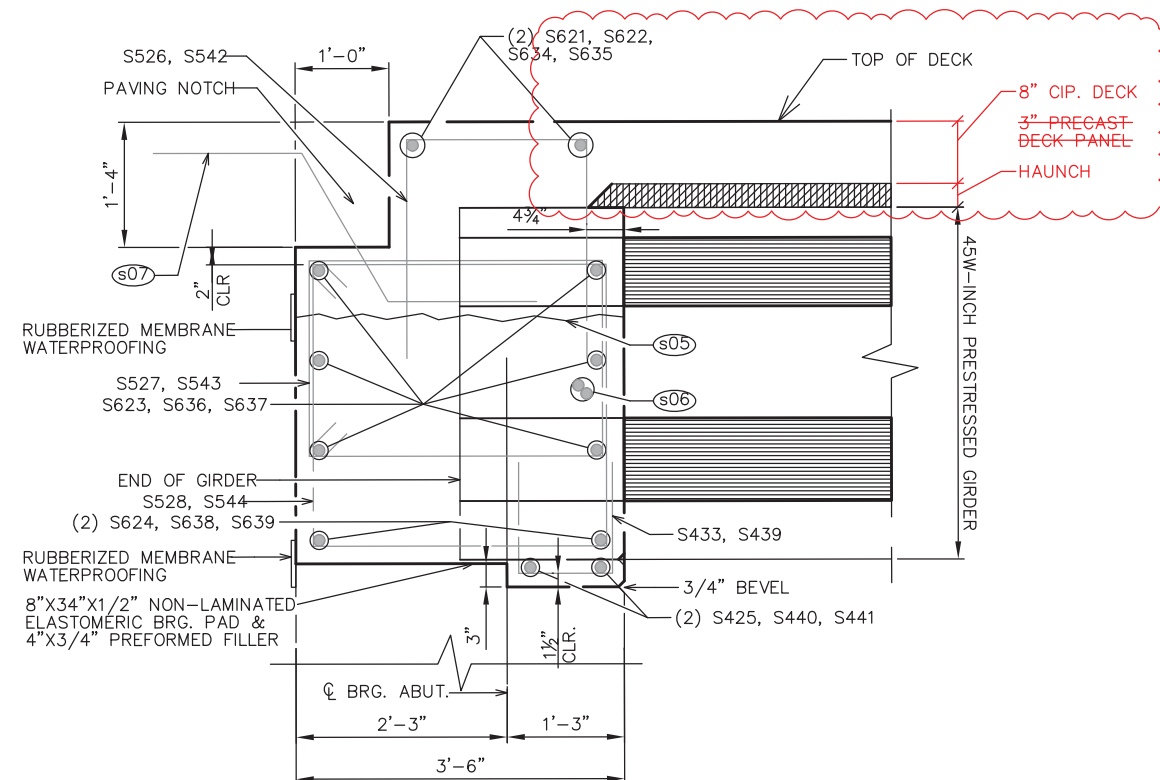
NO.	DATE	REVISION	BY
1C	8/7/18	REMOVE PRECAST PANELS	PMF
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-128			
DRAWN BY		JAD	PLANS CK'D. SJG
SUPERSTRUCTURE PRECAST DECK PANEL DETAILS		SHEET 24 OF 35 628	



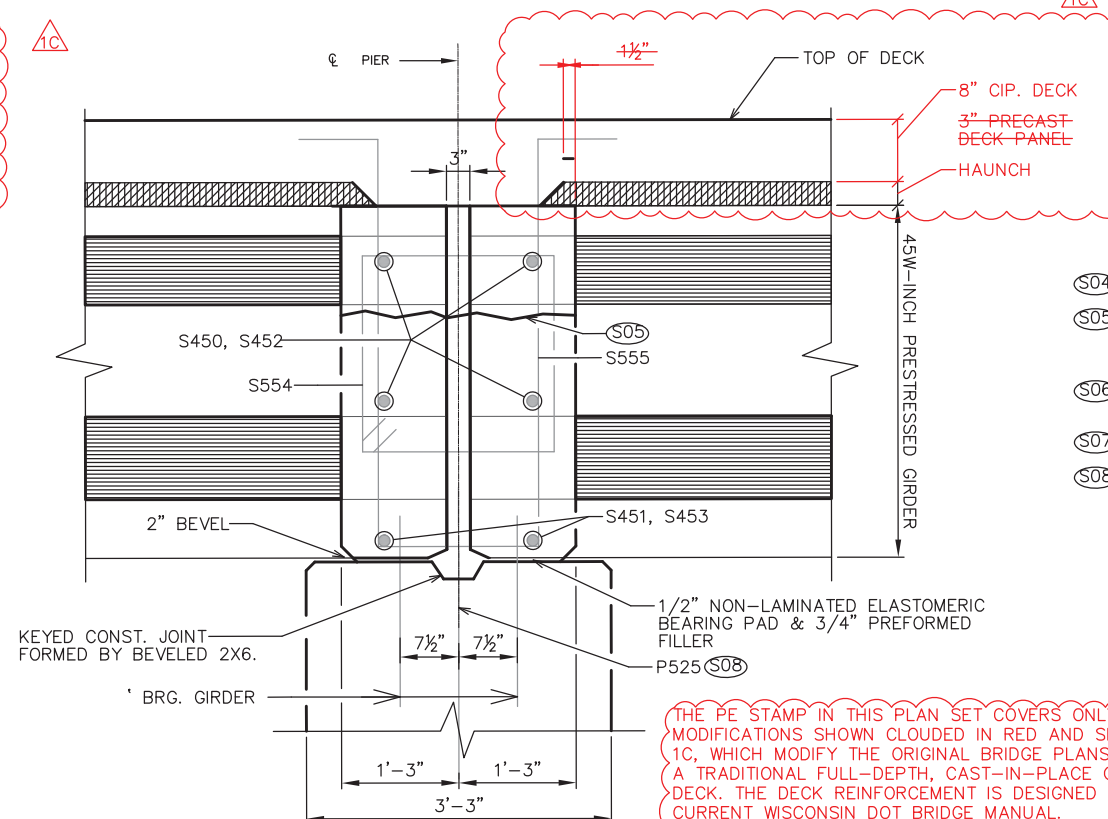
DIAPHRAGM REINFORCEMENT AT PIER

(LOOKING NORTH)

8/7/18



CONCRETE DIAPHRAGM AT ABUTMENT



CONCRETE DIAPHRAGM AT PIER

NOTES

- (S04) CONSTRUCTION JOINT
- (S05) OPTIONAL CONSTRUCTION JOINT 1'-2" BELOW TOP OF GIRDER. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM TIME OF THE DIAPHRAGM POUR.
- (S06) (1) 11/2" DIA. HOLE IN WEB FOR (2) S529, S530, S545 OR S546 BARS. PLACE BARS SYMMETRIC ABOUT ' GIRDERS.
- (S07) SS901 AT 1'-0" (STAINLESS STEEL)
- (S08) SEE SHEET 11 FOR QUANTITY AND LAYOUT OF P525 BARS

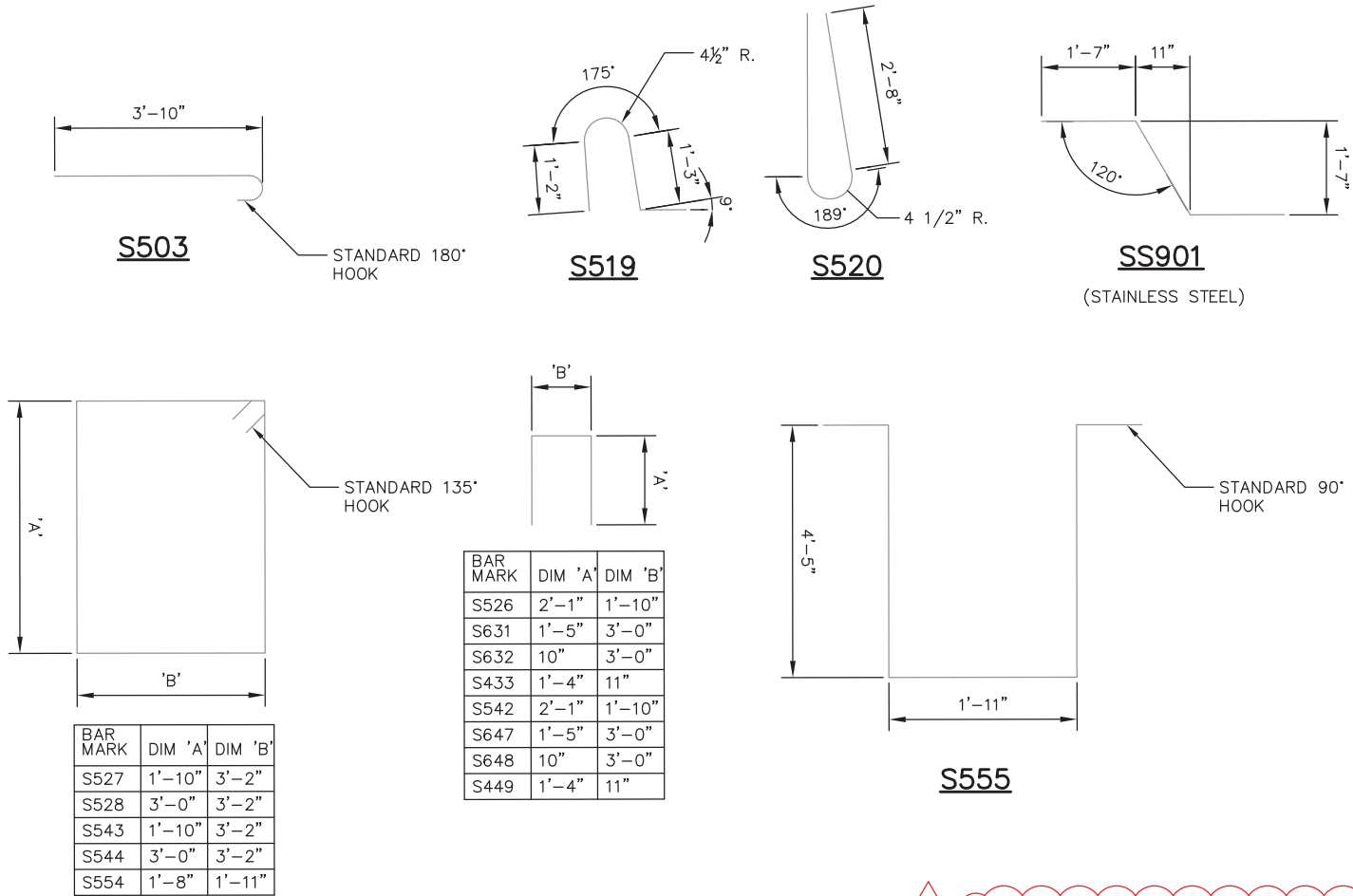
NO.	DATE	REVISION	BY
1C	8/7/18	REMOVE PRECAST PANELS	PMF
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-128			
DRAWN BY	JAD	PLANS CK'D	SJG
PIER DIAPHRAGM AND DETAILS		SHEET 26 OF 35	

BILL OF BARS – SUPERSTRUCTURE

STATE PROJECT NUMBER

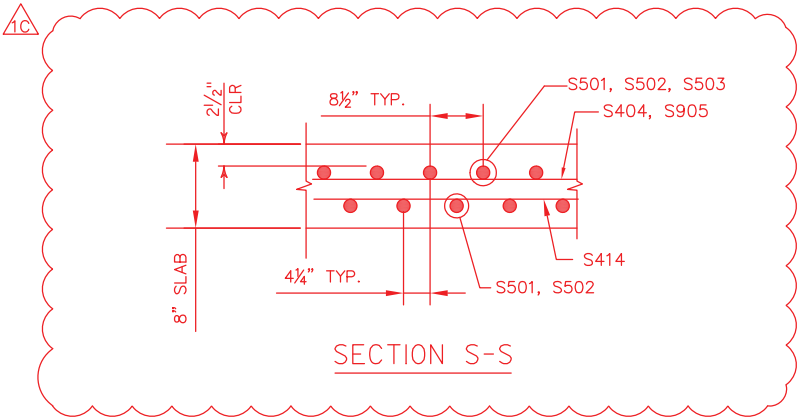
1030-24-72

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S501	X	627	52'-1"			DECK TOP & BOTTOM TRANSVERSE
S502	X	627	50'-3"		X	DECK TOP & BOTTOM TRANSVERSE
S503	X	628	4'-5"	X		DECK TOP TRANSVERSE AT PARAPET
S404	X	862	27'-9"			DECK TOP LONGITUDINAL
S905	X	285	51'-0"			DECK TOP LONGITUDINAL AT PIER
S406	X	2	31'-0"			DECK TOP LONGITUDINAL (SPAN 1)
S407	X	2	26'-0"			DECK TOP LONGITUDINAL (SPAN 1)
S908	X	1	26'-0"			DECK TOP LONGITUDINAL AT PIER
S909	X	1	29'-9"			DECK TOP LONGITUDINAL AT PIER
S410	X	1	13'-6"			DECK TOP LONGITUDINAL (SPAN 2)
S411	X	1	10'-0"			DECK TOP LONGITUDINAL (SPAN 2)
S412	X	9	34'-3"			DECK TOP & BOTTOM LONGITUDINAL
S913	X	3	36'-0"			DECK TOP LONGITUDINAL
S414	X	849	38'-5"			DECK BOTTOM LONGITUDINAL
S415	X	1884	4'-8"			DECK TOP TRANSVERSE
S516	X	314	4'-9"			DECK BOTTOM TRANSVERSE
S517	X	314	4'-9"			DECK BOTTOM TRANSVERSE
S518	X	96	39'-6"			PARAPET LONGITUDINAL
S519	X	668	5'-10"	x		PARAPET DOWEL
S520	X	668	6'-8"	x		PARAPET STIRRUP
S621	X	2	52'-6"			DIAPHRAGM TOP LONGITUDINAL S. ABUT.
S622	X	2	49'-1"			DIAPHRAGM TOP LONGITUDINAL S. ABUT.
S623	X	156	4'-1"			DIAPHRAGM LONGITUDINAL S. ABUT.
S624	X	26	4'-8"			DIAPHRAGM LONGITUDINAL S. ABUT.
S425	X	26	3'-8"			DIAPHRAGM LONGITUDINAL BOTTOM S. ABUT.
S526	X	95	5'-9"	x		DIAPHRAGM HAIRPIN TOP S. ABUT.
S527	X	28	10'-8"	x		DIAPHRAGM STIRRUP S. ABUT.
S528	X	95	13'-0"	x		DIAPHRAGM STIRRUP S. ABUT.
S529	X	4	4'-6"			DIAPHRAGM LONGITUDINAL THRU GIRDER S. ABUT.
S530	X	24	6'-0"			DIAPHRAGM LONGITUDINAL THRU GIRDER S. ABUT.
S631	X	6	5'-6"	x		DIAPHRAGM U-BAR S. ABUT.
S632	X	2	4'-4"	x		DIAPHRAGM U-BAR S. ABUT.
S433	X	65	3'-5"	x		DIAPHRAGM BOTTOM HAIRPIN S. ABUT.
S634	X	2	49'-1"			DIAPHRAGM TOP LONGITUDINAL N. ABUT.
S635	X	2	48'-1"			DIAPHRAGM TOP LONGITUDINAL N. ABUT.
S636	X	120	4'-1"			DIAPHRAGM LONGITUDINAL N. ABUT.
S637	X	36	3'-3"			DIAPHRAGM LONGITUDINAL N. ABUT.
S638	X	20	4'-8"			DIAPHRAGM LONGITUDINAL N. ABUT.
S639	X	6	3'-2"			DIAPHRAGM LONGITUDINAL N. ABUT.
S440	X	20	3'-8"			DIAPHRAGM LONGITUDINAL BOTTOM N. ABUT.
S441	X	6	2'-2"			DIAPHRAGM LONGITUDINAL BOTTOM N. ABUT.
S542	X	89	5'-9"	x		DIAPHRAGM HAIRPIN TOP N. ABUT.
S543	X	28	10'-8"	x		DIAPHRAGM STIRRUP N. ABUT.
S544	X	89	13'-0"	x		DIAPHRAGM STIRRUP N. ABUT.
S545	X	4	4'-6"			DIAPHRAGM LONGITUDINAL THRU GIRDER N. ABUT.
S546	X	24	6'-0"			DIAPHRAGM LONGITUDINAL THRU GIRDER N. ABUT.
S647	X	6	5'-6"	x		DIAPHRAGM U-BAR N. ABUT.
S648	X	2	4'-4"	x		DIAPHRAGM U-BAR N. ABUT.
S449	X	62	3'-5"	x		DIAPHRAGM BOTTOM HAIRPIN N. ABUT.
S450	X	80	3'-8"			DIAPHRAGM LONGITUDINAL PIER
S451	X	40	2'-10"			DIAPHRAGM LONGITUDINAL PIER
S452	X	24	2'-11"			DIAPHRAGM LONGITUDINAL PIER
S453	X	12	2'-1"			DIAPHRAGM LONGITUDINAL PIER
S554	X	26	7'-10"	x		DIAPHRAGM STIRRUP PIER
S555	X	72	11'-11"	x		DIAPHRAGM STIRRUP PIER
SS901		203	5'-0"	X		CONC. ABUT. DIAPH. TO APPROACH SLAB



BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH	LOCATION
S502	1 SERIES OF 314	48'-1" TO 52'-6"	TOP
S502	1 SERIES OF 313	48'-1" TO 52'-6"	BOTTOM



8/7/18



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1C	8/7/18	REMOVE PRECAST PANELS	PMF
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-51-128			
DRAWN BY JAD		PLANS CK'D SJG	
SUPERSTRUCTURE REINFORCEMENT		SHEET 27 OF 35	

PLOT DATE: Aug 07, 2018

PLOT SCALE: