

UTILITIES UNDER OAKWOOD RD. ARE NOT TO SCALE. ELEVATIONS ARE UNKNOWN.

1. GENERAL PLAN & ELEVATION
2. CROSS SECTION
3. QUANTITIES & PROFILE GRADE LINE
4. SUBSURFACE EXPLORATION
5. CONSTRUCTION STAGING
6. SOUTH ABUTMENT
7. SOUTH ABUTMENT DETAILS
8. NORTH ABUTMENT
9. NORTH ABUTMENT DETAILS
10. ABUTMENT WINGWALL DETAILS & BILL OF BARS
11. PIER 1
12. PIER 1 DETAILS (1 OF 2)
13. PIER 1 DETAILS (2 OF 2)
14. PIER 2
15. PIER 2 DETAILS (1 OF 2)
16. PIER 2 DETAILS (2 OF 2)
17. SUPERSTRUCTURE
18. SUPERSTRUCTURE DETAILS
19. SUPERSTRUCTURE BILL OF BARS
20. SOUTH STRUCTURAL APPROACH SLAB
21. NORTH STRUCTURAL APPROACH SLAB
22. SLOPED FACE PARAPET 'HF'MODIFIED (1 OF 2)
23. SLOPED FACE PARAPET 'HF'MODIFIED (2 OF 2)
24. AESTHETIC DETAILS
25. SLOPE PAVING DETAILS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
KARL SCHMID (414) 272-2426

NO.	DATE	REVISION	BY
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ACCEPTED _____
CHIEF STRUCTURES DESIGN ENGINEER DATE _____

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-804

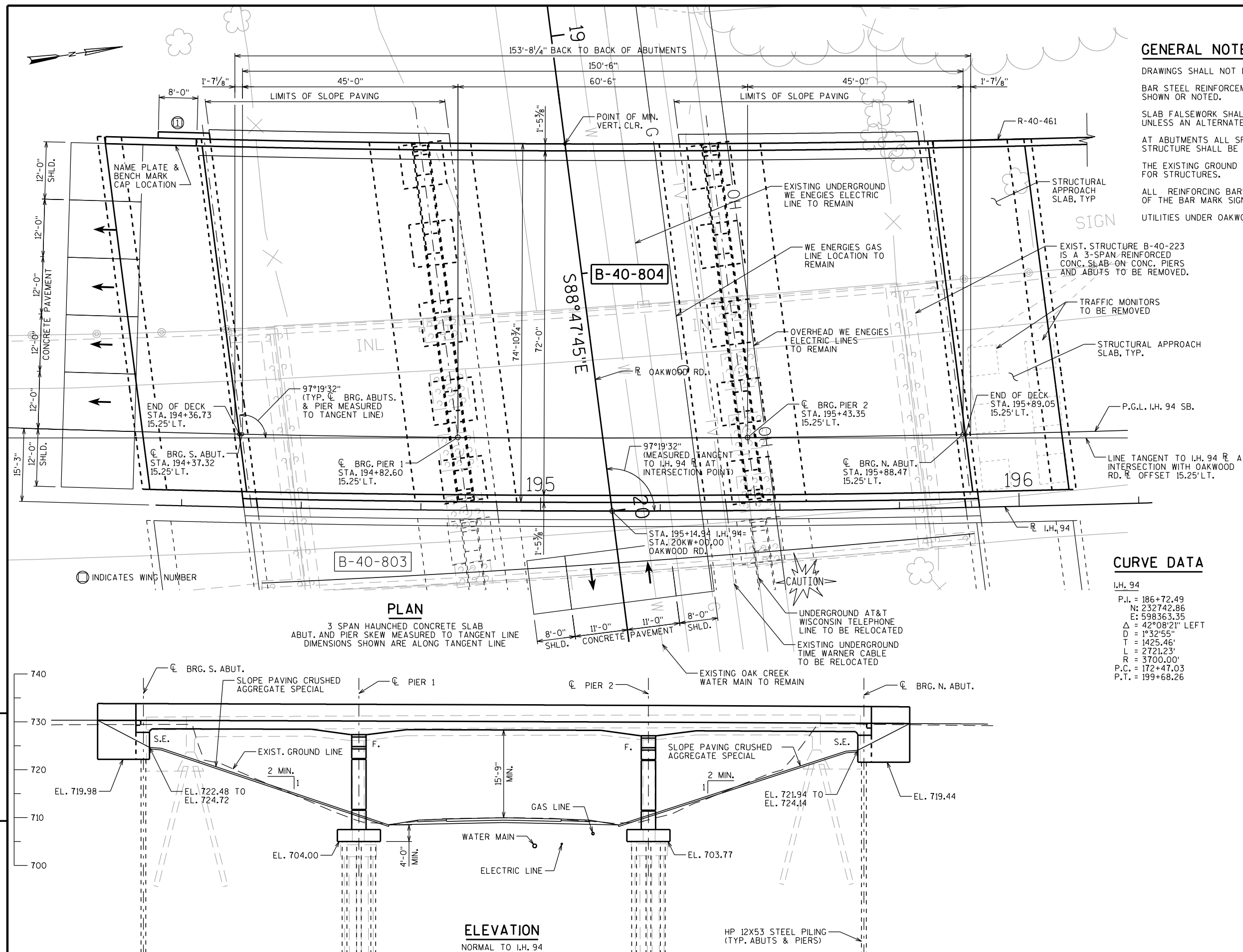
EB IH 94 OVER OAKWOOD RD.

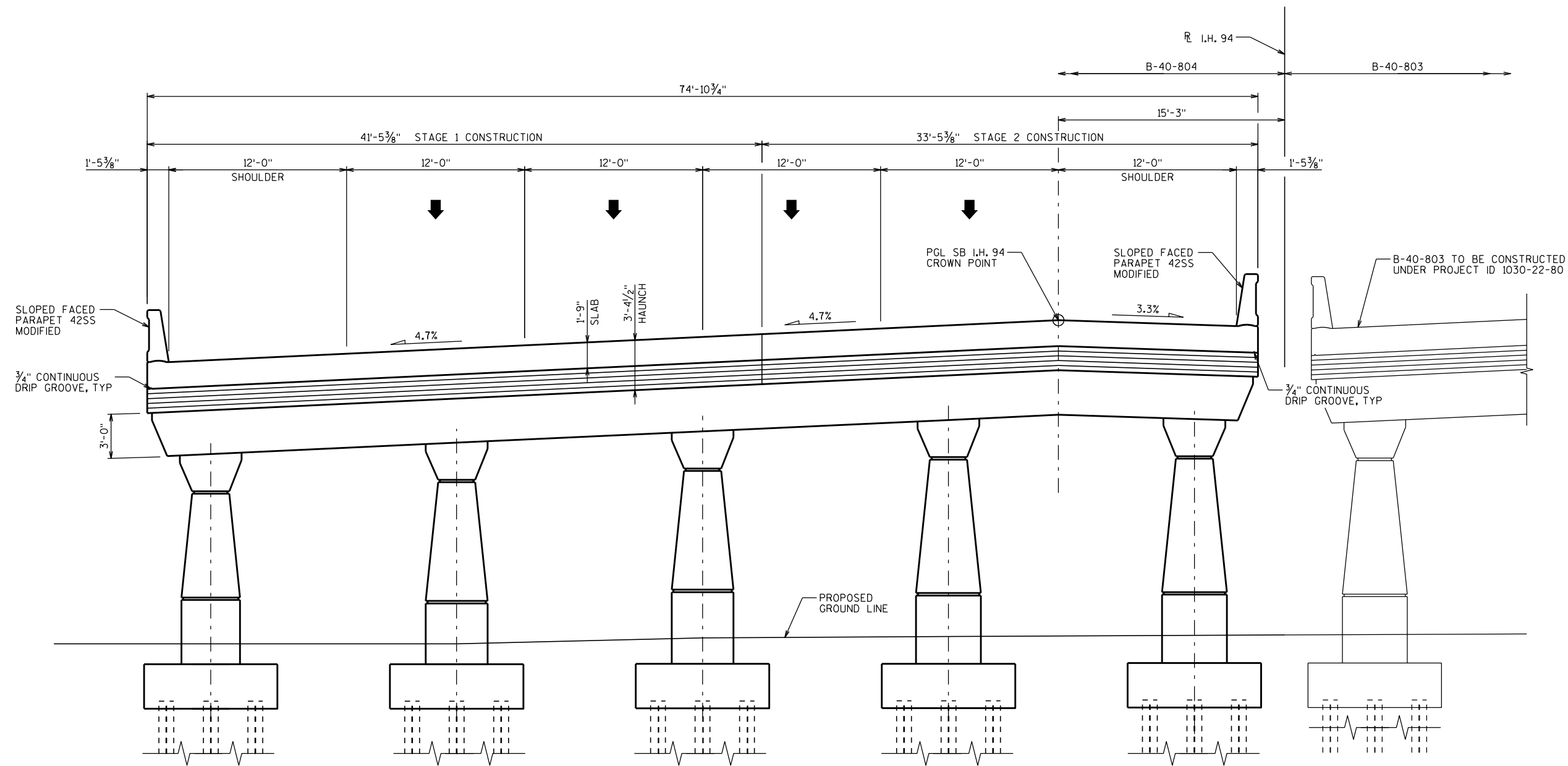
COUNTY	MILWAUKEE	TOWN/CITY/VILLAGE	OAK CREEK
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DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY DGS/SKT	DESIGN CK'D. KES	DRAWN BY JBA	PLANS CK'D. KE

GENERAL PLAN & ELEVATION

SHEET 1 OF 25





TYPICAL SECTION THRU SB I.H. 94

HAUNCHED REINFORCED CONCRETE SLAB
(LOOKING NORTH)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
		DRAWN BY JBA	PLANS CK'D. KES
TYPICAL CROSS SECTION			SHEET 2 OF 25

DESIGN DATA

LIVE LOAD

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.09
OPERATING RATING FACTOR: RF = 1.41
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 190 KIPS

STRUCTURE IS DESIGNED FOR A 1½" SACRIFICIAL WEARING SURFACE PLACED AT INITIAL CONSTRUCTION INTEGRAL WITH THE DECK. NO ALLOWANCE HAS BEEN MADE FOR A FUTURE WEARING SURFACE LOAD.

ULTIMATE DESIGN STRESSES

CONCRETE MASONRY _____ f'c = 4,000 PSI
BAR STEEL REINFORCEMENT _____ fy = 60,000 PSI
STEEL PILING _____ Fy = 50,000 PSI

FOUNDATION DATA

ABUTMENTS AND PIERS TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE PER PILE AS DETERMINED BY THE PDA/CAPWAP METHOD.

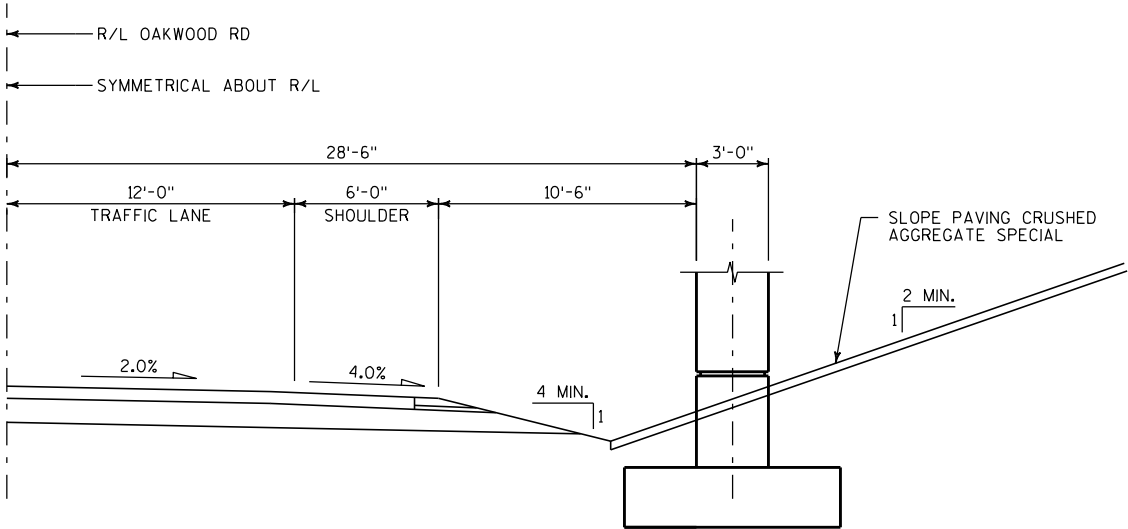
	EST. PILE LENGTHS:	REQUIRED DRIVING RESISTANCE **:
S. ABUT. _____	40 FEET	100 TONS
PIER 1 _____	70 FEET	200 TONS
PIER 2 _____	70 FEET	200 TONS
N. ABUT. _____	40 FEET	100 TONS

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PDA/CAPWAP METHOD TO DETERMINE DRIVEN PILE CAPACITY.

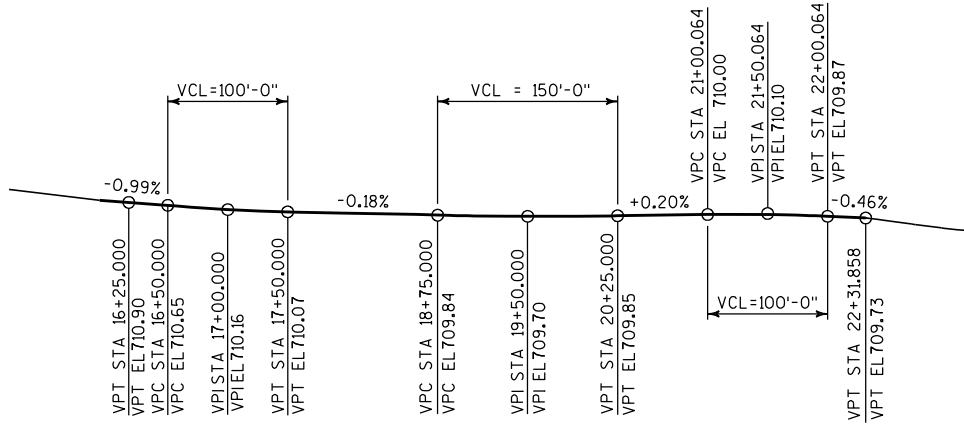
TRAFFIC VOLUME

OAKWOOD RD. I.H. 94

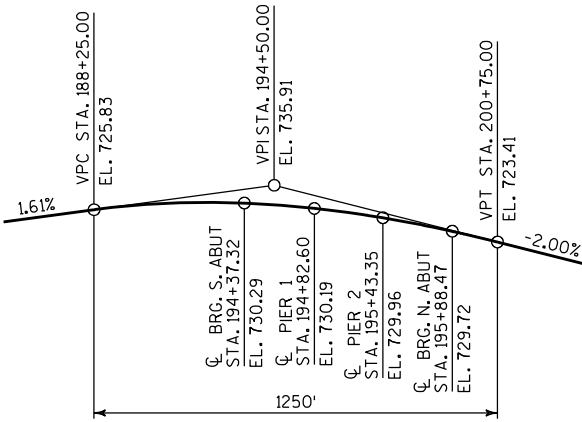
A.D.T. = 3,900 (2035) A.D.T. = 115,000 (2035)
R.D.S. = 40 M.P.H. R.D.S. = 70 M.P.H.



TYPICAL SECTION THRU OAKWOOD RD.



PROFILE GRADE LINE OAKWOOD ROAD



PROFILE GRADE LINE I.H. 94

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	SOUTH ABUT.	NORTH ABUT.	PIER 1	PIER 2	SUPER	TOTAL
203.0200	REMOVING OLD STRUCTURE STA 195+15	LS	-	-	-	-	-	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-40-804	LS	-	-	-	-	-	1
210.0100	BACKFILL STRUCTURE	CY	183	182	-	-	-	365
502.0100	CONCRETE MASONRY BRIDGES	CY	54	47	101	101	-	303
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	-	-	-	1,214	1,214
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	-	-	3,870	3,870	-	7,740
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	5,670	5,170	25,985	25,985	162,860	225,670
505.0905	BAR COUPLERS NO. 5	EACH	-	-	4	4	107	115
505.0908	BAR COUPLERS NO. 8	EACH	-	-	24	24	-	48
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	14	14	-	-	-	28
550.1120.S	PILING STEEL HP 12-INCH X 53 LB	LF	440	440	2,100	2,100	-	5,080
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	116	115	-	-	-	231
SPV.0035.4000	HPC MASONRY SUPERSTRUCTURES	CY	-	-	-	-	898	898
SPV.0060.4000	PDA TESTING	EACH	3	3	5	5	-	16
SPV.0060.4001	PDA RESTRIKES	EACH	2	2	4	4	-	12
SPV.0165.4002	LONGITUDINAL GROOVING BRIDGE DECK	SF	-	-	-	-	10,925	10,925
SPV.0165.4003	STAINING CONCRETE	SF	355	330	1,545	1,530	3,320	7,080
SPV.0180.4000	SLOPE PAVING CRUSHED AGGREGATE SPECIAL	SY	445	451	-	-	-	896
	NON-BID ITEMS							
	FILLER	SIZE						1/2" & 3/4"
	NAME PLATE	EACH						1

NOTE: ALL ITEMS CATEGORY 2040

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		JBA	PLANS CK'D. KES
QUANTITIES & PROFILE GRADE LINES		SHEET 3 OF 25	



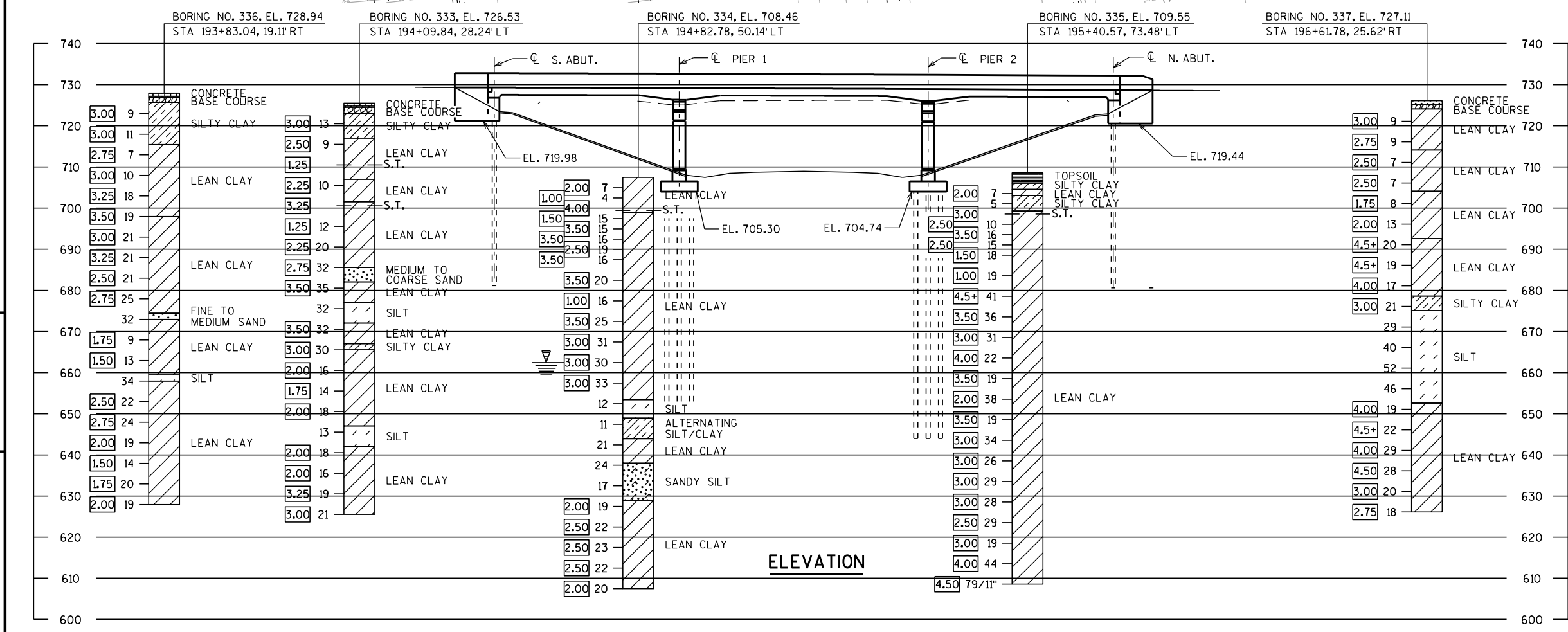
NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
GESTRA ENGINEERING, INC.

SOIL BORING TAKEN:
JULY 29, 2008 - BORING 333
JULY 23, 2008 - BORING 334
JULY 23, 2008 - BORING 335
JULY 8, 2008 - BORING 336
JUNE 20, 2008 - BORING 337



STATE PROJECT NUMBER

1030-20-87

ABBREVIATIONS

F — FINE
WS — WEATHERED

M — MEDIUM
SO — SOUND

C — COARSE

MATERIAL SYMBOLS

TOPSOIL / FILL
SAND
GRAVEL

SILT
PEAT
CLAY

SANDSTONE
LIMESTONE
IGNEOUS ROCK

LEGEND OF PROBING

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

95/6-95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350* WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING

ELEV.
BORING NO.
STA.

UNCONFINED STRENGTH (TSF) 7.7
BLOWS PER FT. USING 140* WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION

SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO
LIMESTONE

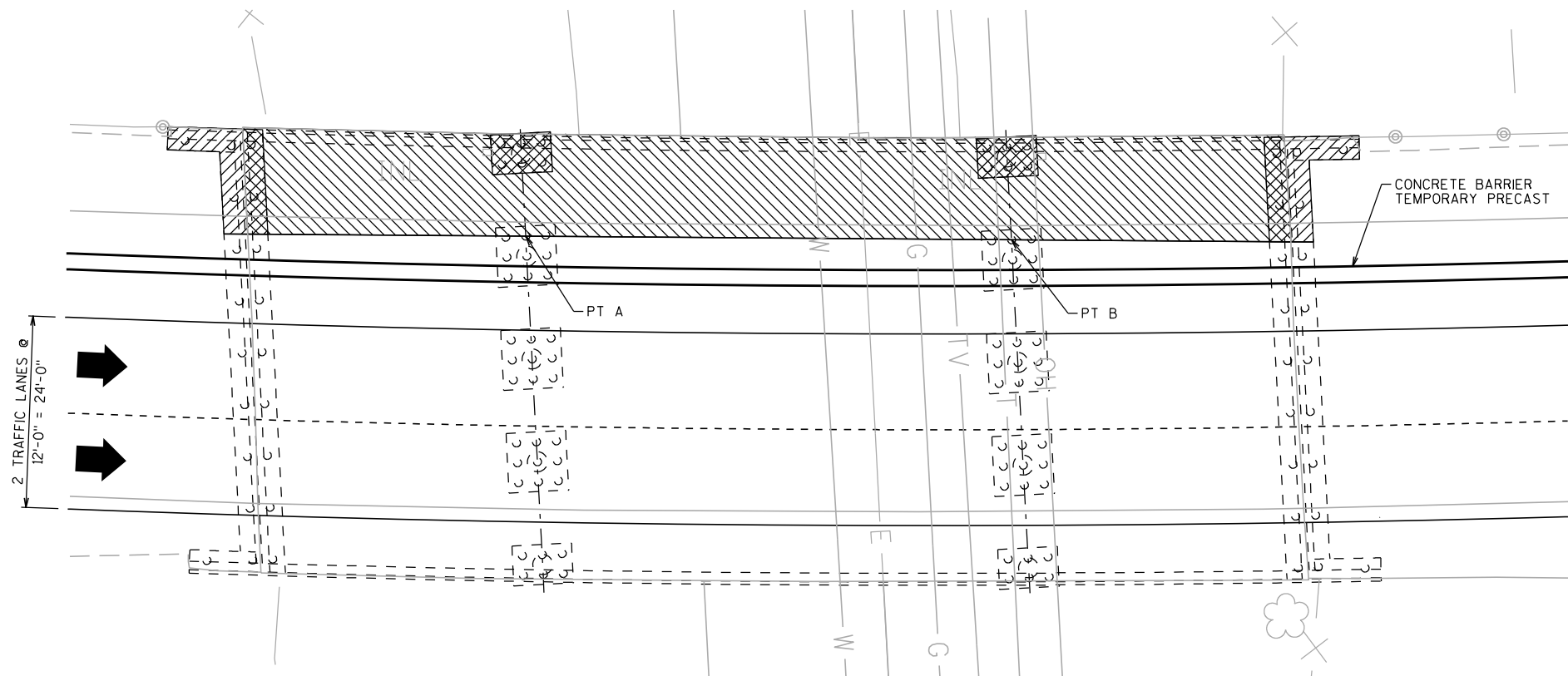
SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

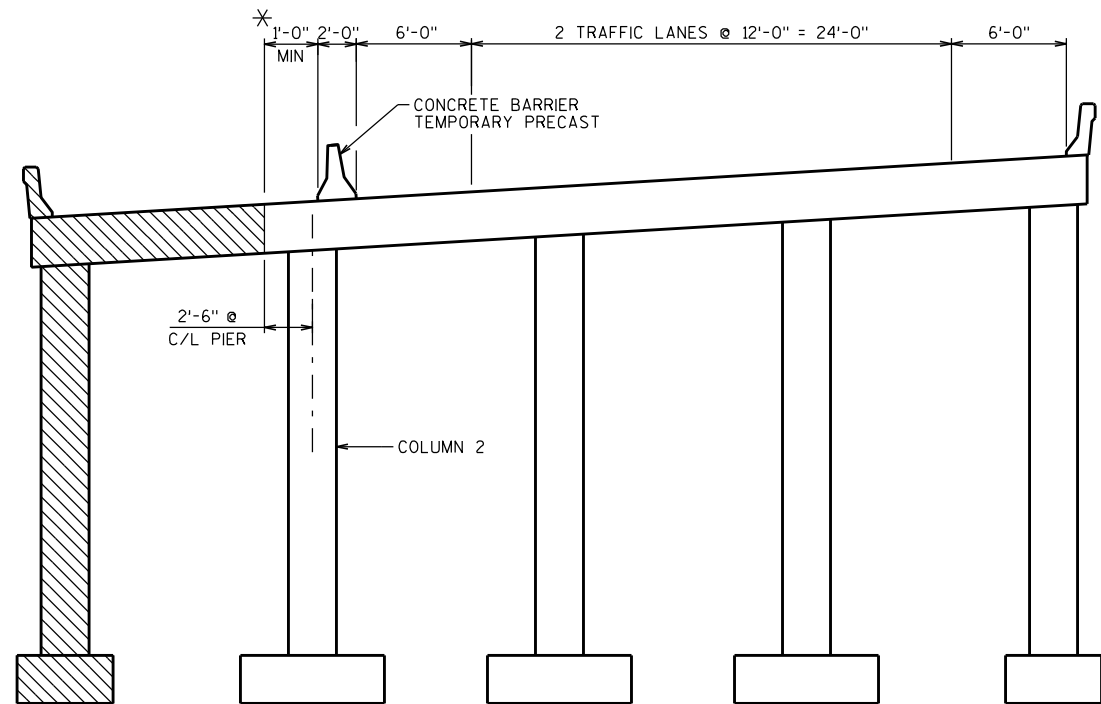
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		JBA	PLANS CK'D. KES
SUBSURFACE EXPLORATION		SHEET 4 OF 25	

8

8



PARTIAL REMOVAL PLAN



SECTION THRU EXISTING BRIDGE B-40-223

LOOKING NORTH

POTENTIAL CONSTRUCTION STAGING SEQUENCE

1. SHIFT SB IH 94 TRAFFIC TO THE EAST SIDE OF THE EXISTING BRIDGE AND INSTALL CONCRETE BARRIER TEMPORARY PRECAST TO LOCATIONS SHOWN IN THE TRAFFIC CONTROL PLANS.
2. INSTALL TEMPORARY SHORING LEFT IN PLACE AS NECESSARY FOR EXISTING STRUCTURE REMOVAL.
3. REMOVE THE EXISTING STRUCTURE TO THE LIMITS SHOWN ON THE PLAN. THE REMOVAL LINE IS DEFINED AS A STRAIGHT LINE BETWEEN POINTS A & B, AND THEN CONTINUED ON TO THE END OF DECK ON EITHER END. PT A IS LOCATED 2'-6" WEST OF COLUMN 2 ALONG THE C/L OF PIER 1. PT B IS LOCATED 2'-6" WEST OF COLUMN 2 ALONG THE C/L OF PIER 2.
4. CONSTRUCT STAGE 1 OF PROPOSED BRIDGE B-40-804. AFTER COMPLETION, INSTALL CONCRETE BARRIER TEMPORARY PRECAST TO LOCATIONS SHOWN IN THE TRAFFIC CONTROL PLANS.
5. AFTER INSTALLING TRAFFIC BARRIER, SHIFT SB IH 94 TRAFFIC TO NEW STRUCTURE B-40-804
6. REMOVE THE REMAINDER OF THE EXISTING STRUCTURE.
7. CONSTRUCT STAGE 2 OF PROPOSED BRIDGE B-40-804.

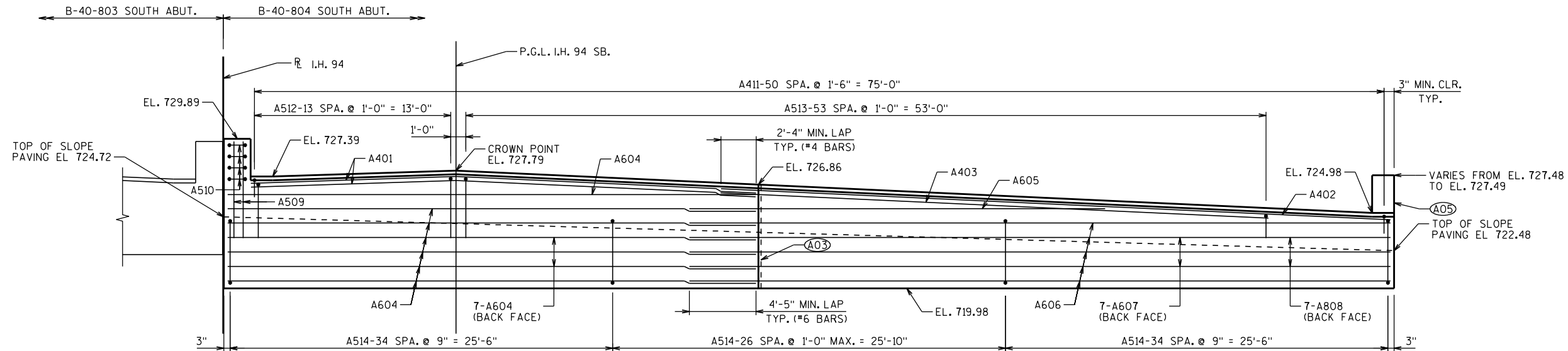
REMOVAL NOTES

1. TWO LANES OF SB IH 94 TRAFFIC MUST BE MAINTAINED DURING THE REMOVAL OF EXISTING BRIDGE AND CONSTRUCTION OF PROPOSED BRIDGE. SEE TRAFFIC CONTROL PLANS FOR COMPLETE STAGING REQUIREMENTS.
 2. STRUCTURE B-40-223 IS A 3-SPAN REINFORCED CONCRETE HAUNCHED SLAB BRIDGE ON CONCRETE PIERS AND ABUTMENTS. SEE EXISTING BRIDGE PLANS FOR FURTHER INFORMATION ON THIS STRUCTURE.
 3. THE EXISTING STRUCTURE REMOVAL IS PAID FOR UNDER THE BID ITEM "REMOVING OLD STRUCTURE STA.195+15".
 4. THE CONTRACTOR SHALL PREPARE A REMOVAL PLAN FOR APPROVAL BY THE ENGINEER. THE STAGING SHEETS SHOWN IN THESE PLANS SUGGEST POTENTIAL REMOVAL LIMITS TO ALLOW MAINTENANCE OF THREE LANES OF TRAFFIC DURING CONSTRUCTION.
 5. CONCRETE BARRIER TEMPORARY PRECAST IS NOT A BRIDGE ITEM. SEE TRAFFIC CONTROL PLANS.
- * IF DISTANCE TO EDGE OF SLAB IS LESS THAN 4'-0", THE CONCRETE BARRIER TEMPORARY PRECAST WILL BE ANCHORED TO THE SLAB.

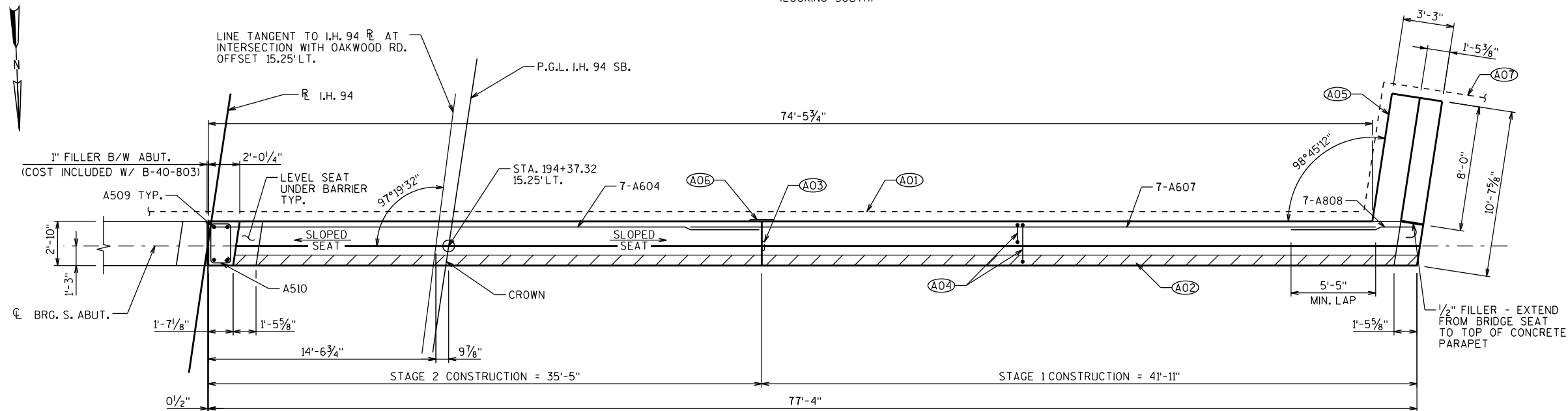
LEGEND

- SLAB REMOVAL
- SUBSTRUCTURE REMOVAL
- SLAB & SUBSTRUCTURE REMOVAL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		MRA	PLANS CK'D. KES
CONSTRUCTION STAGING			SHEET 5 OF 25



ELEVATION
(LOOKING SOUTH)

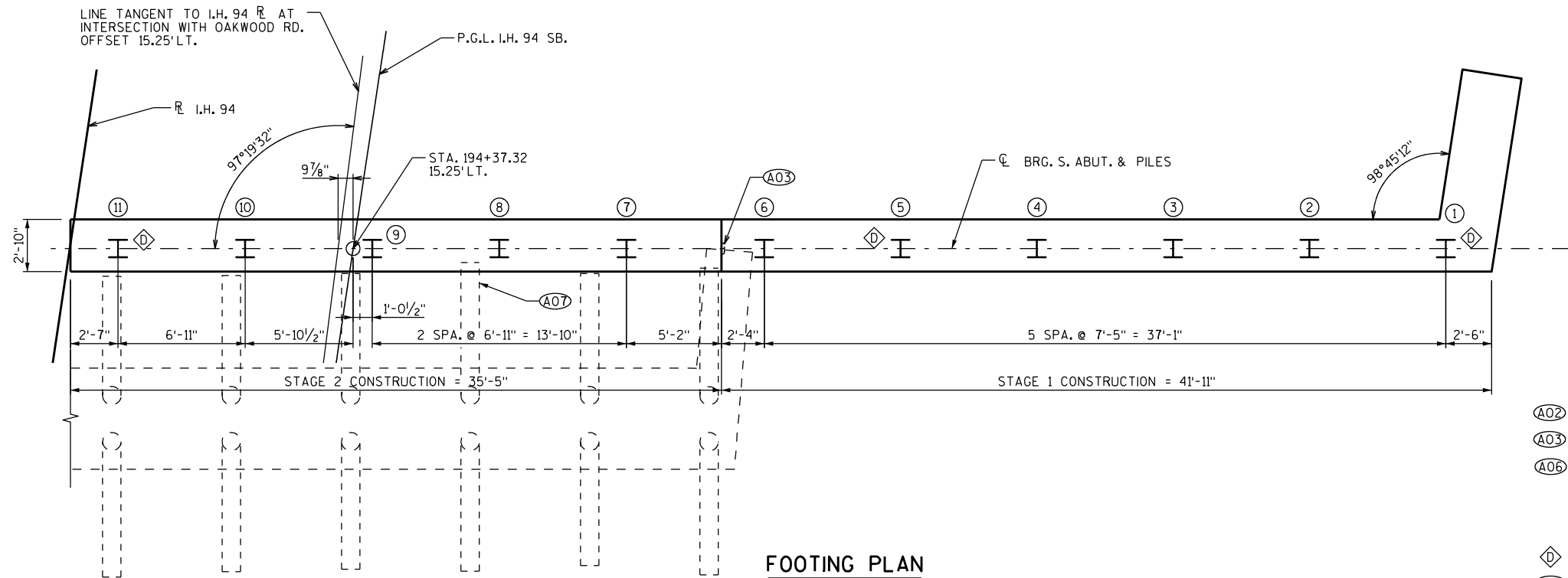


PLAN

NOTES

- (A01) PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN TO DRAIN.
- (A02) 4"x3/4" FILLER
- (A03) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8"
- (A04) PLACE STIRRUPS AND U-SHAPED BARS NORMAL TO ABUT. BODY
- (A05) FOR WINGWALL REINFORCING DETAILS, SEE SHEET 9
- (A06) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE OF ABUTMENT
- (A07) PIPE UNDERDRAIN WRAPPED (6-INCH), LOCATE TO SUITABLE DRAINAGE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		DGS	PLANS CK'D. KES
SOUTH ABUTMENT			SHEET 6 OF 25



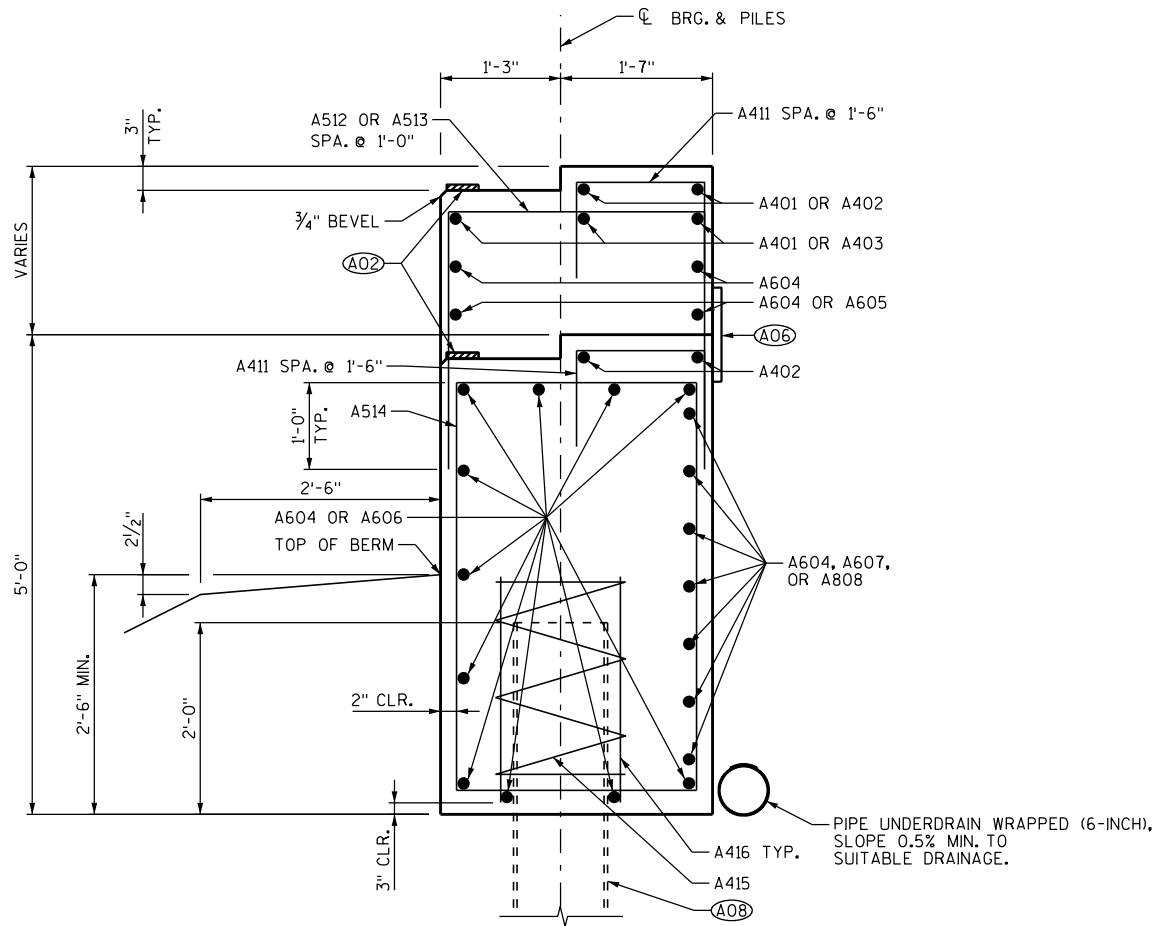
FOOTING PLAN

NOTES

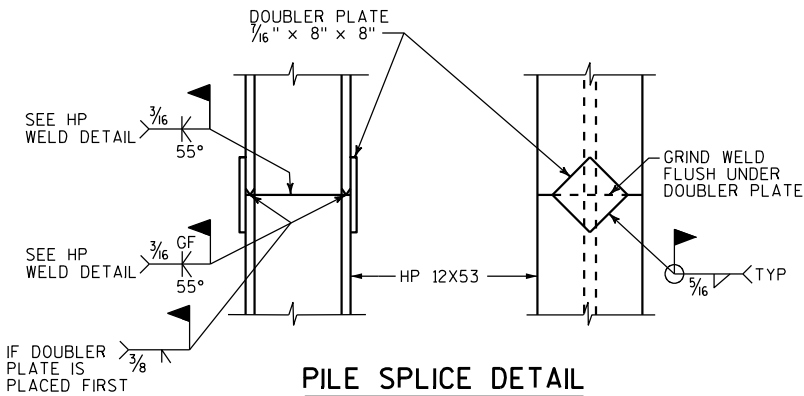
- (A02) 4"x3/4" FILLER
- (A03) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8"
- (A06) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE OF ABUTMENT

PILE NOTES

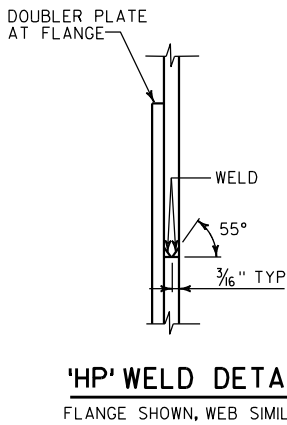
- (D) DYNAMIC PILE LOAD TESTING
- (A07) LOCATION AND PROJECTION OF EXISTING BATTERED PILES IS SHOWN BASED ON EXISTING STRUCTURE PLANS. VERIFY EXISTING PILE LOCATIONS IMMEDIATELY AFTER EXPOSURE AND NOTIFY THE ENGINEER OF ANY EXISTING PILES THAT INTERFERE WITH PROPOSED NEW PILES.
- (A08) IF NECESSARY, PROPOSED PILES THAT CONFLICT WITH EXISTING PILES MAY BE RELOCATED NOT MORE THAN 9" ALONG C. BRG FROM THE PROPOSED LOCATION SHOWN IN THE PLAN TO AVOID CONFLICTING WITH THE EXISTING PILES. DISTANCE FROM EDGE OF PILING TO EDGE OF FOOTING SHALL BE 9" MIN.
- (A08) ABUTMENT TO BE SUPPORTED ON HP12X53 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE ESTIMATED 40' LONG.



SECTION THRU ABUTMENT BODY

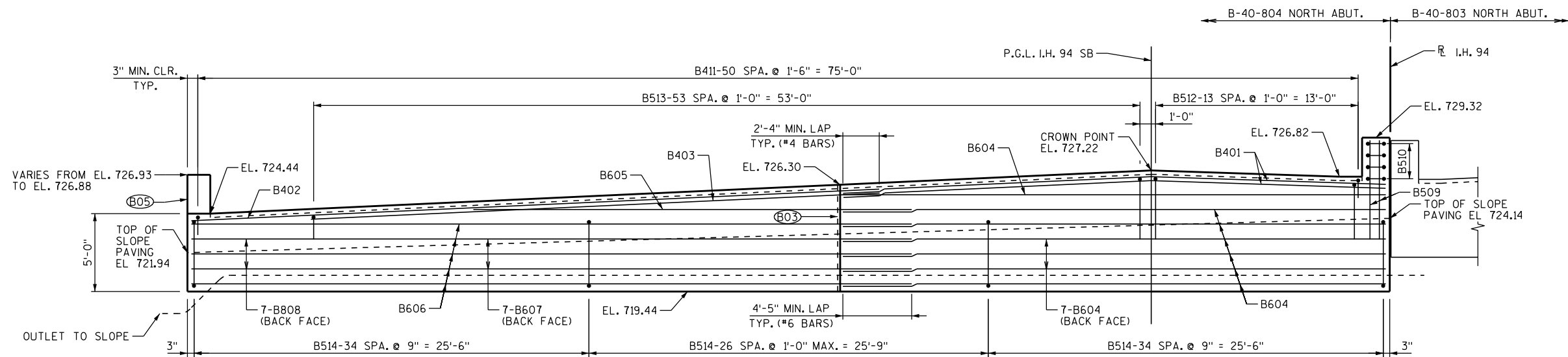


PILE SPLICE DETAIL

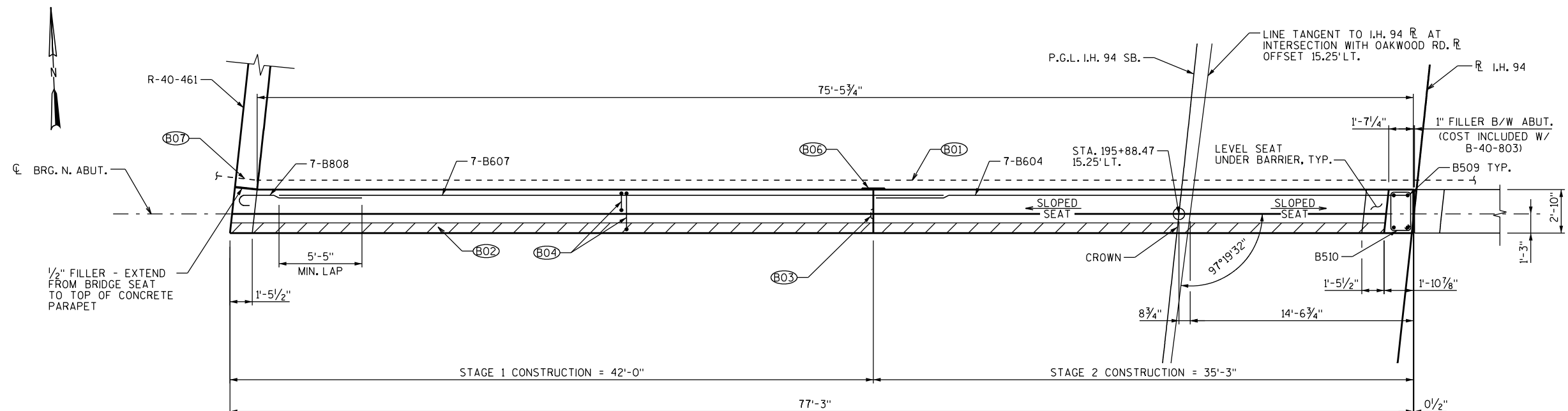


'HP' WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		DGS	PLANS CK'D. KES
SOUTH ABUTMENT DETAILS		SHEET 7 OF 25	

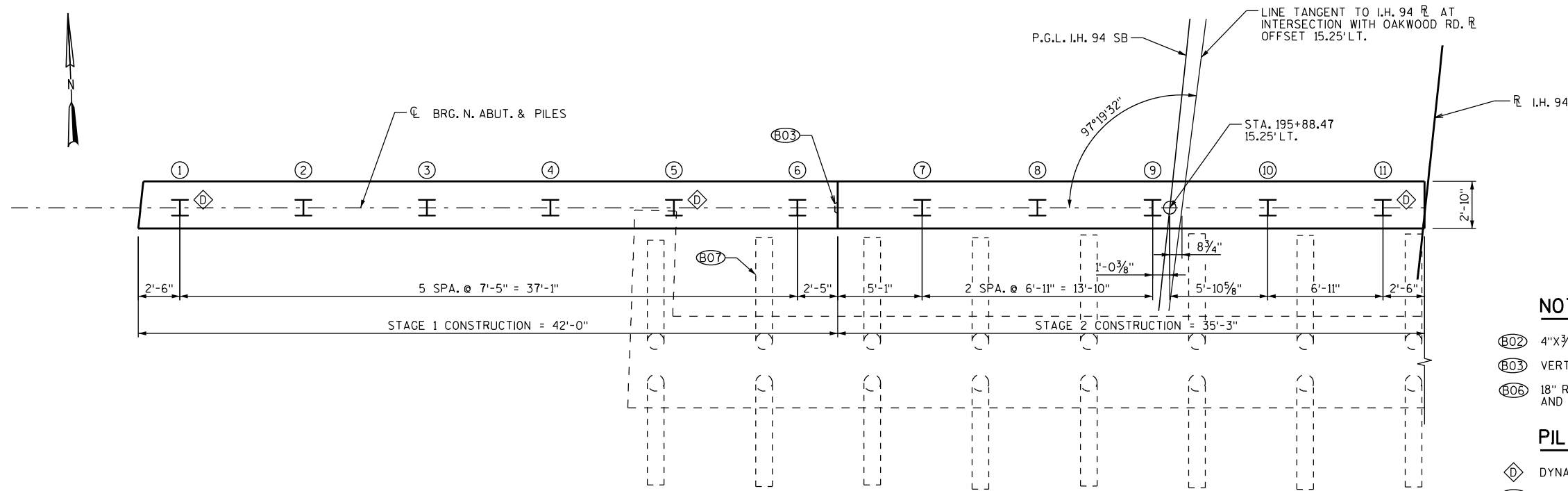


ELEVATION
(LOOKING NORTH)



- (B01) PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN TO DRAIN.
- (B02) 4"X3/4" FILLER
- (B03) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8"
- (B04) PLACE STIRRUPS AND U-SHAPED BARS NORMAL TO ABUT. BODY
- (B05) FOR WINGWALL REINFORCING DETAILS, SEE SHEET 9
- (B06) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT
- (B07) PIPE UNDERDRAIN WRAPPED (6-INCH), LOCATE TO SUITABLE DRAINAGE.

NO.	DATE	REVISION	BY
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STRUCTURE B-40-804			
DRAWN BY		DGS	PLANS CK'D. KES
NORTH ABUTMENT			SHEET 8 OF 25



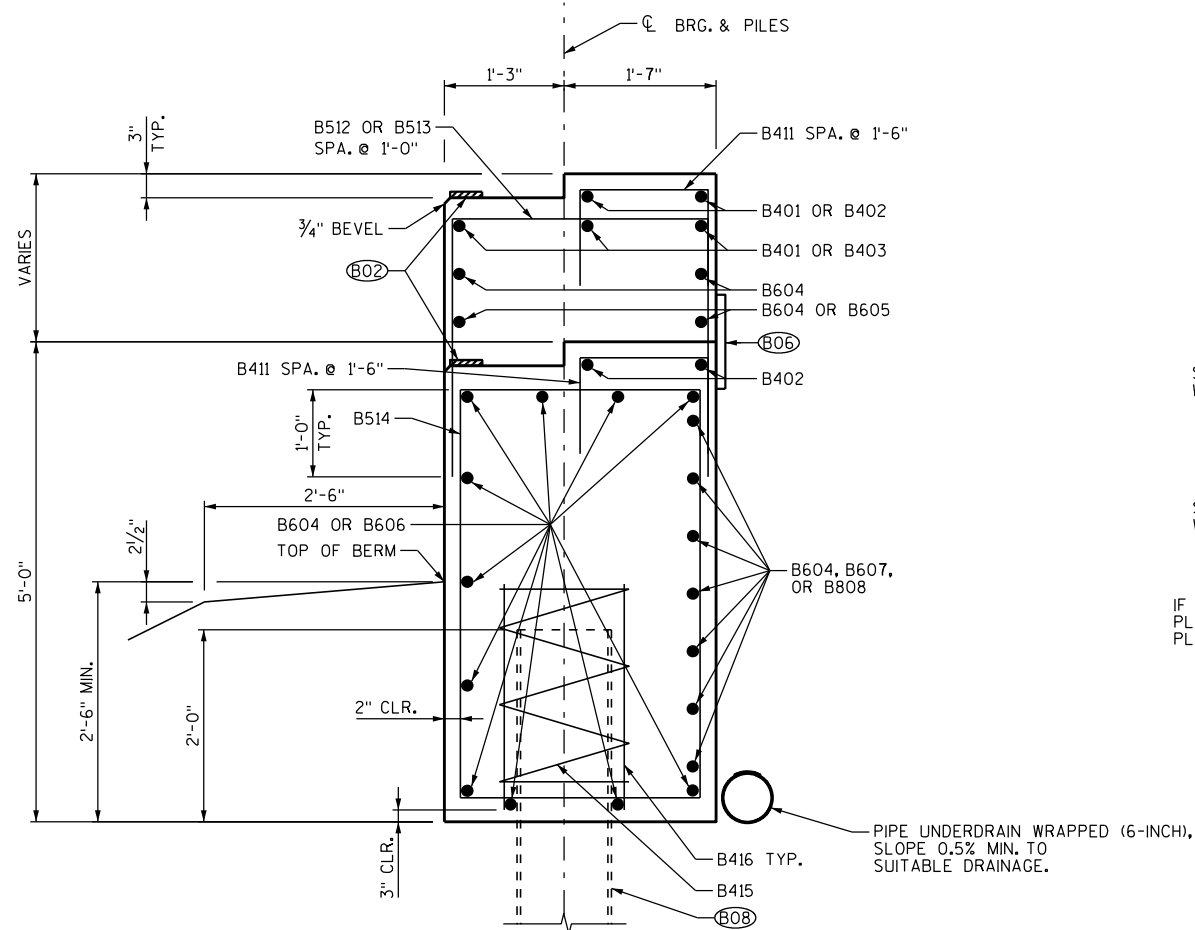
FOOTING PLAN

NOTES

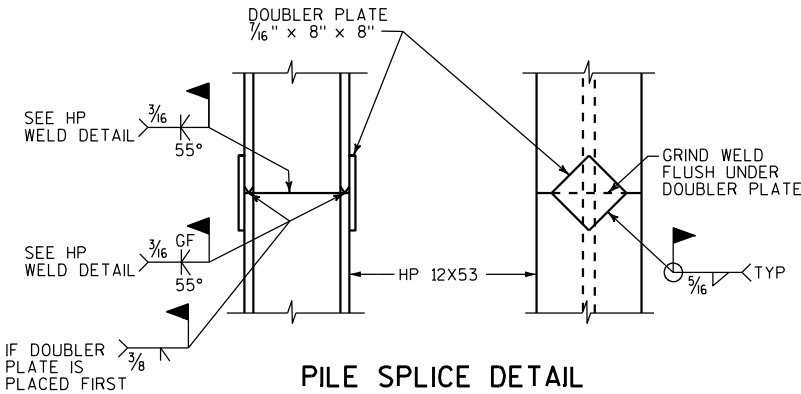
- (B02) 4"x3/4" FILLER
- (B03) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8"
- (B06) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE OF ABUTMENT

PILE NOTES

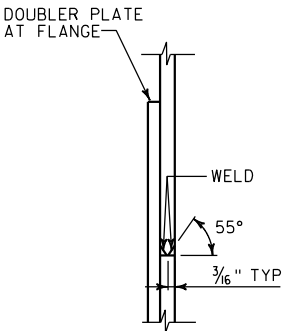
- (D) DYNAMIC PILE LOAD TESTING
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- (B08) ABUTMENT TO BE SUPPORTED ON HP12X53 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE ESTIMATED 40' LONG.



SECTION THRU ABUTMENT BODY

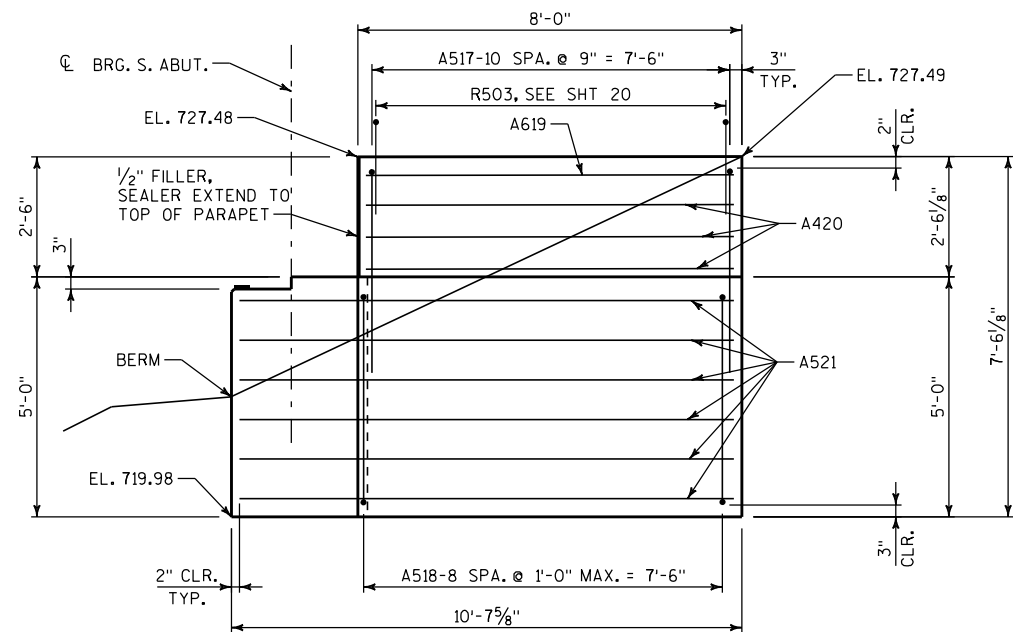


PILE SPLICE DETAIL



'HP' WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		DGS	PLANS CK'D. KES
NORTH ABUTMENT DETAILS		SHEET 9 OF 25	

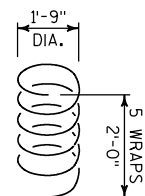


SOUTH ABUT. WINGWALL ELEVATION
(FRONT FACE)

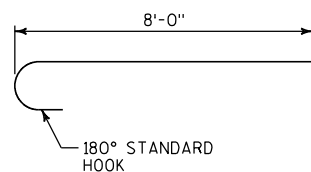
BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
A401	X	5	35'-1"			SEAT
A402	X	2	44'-7"			SEAT
A403	X	3	36'-2"			SEAT
A604	X	22	35'-1"			BODY - HORIZ.
A605	X	2	27'-7"			BODY - HORIZ.
A606	X	11	46'-8"			BODY - HORIZ.
A607	X	7	44'-1"			BODY - HORIZ.
A808	X	7	9'-2"	X		BODY - HORIZ.
A509	X	4	6'-2"			BODY - MEDIAN VERT.
A510	X	4	7'-5"	X		BODY - MEDIAN STIRRUP
A411	X	51	3'-3"	X		SEAT
A512	X	14	9'-2"	X	△	SEAT
A513	X	54	7'-1"	X	△	SEAT
A514	X	95	13'-7"	X		BODY - STIRRUP
A415	X	11	28'-0"	X		BODY PILES - 1 PER PILE
A416	X	22	2'-3"			BODY PILES - 2 PER PILE
A517	X	11	9'-6"	X		WING - STIRRUP
A518	X	9	15'-7"	X		WING - STIRRUP
A619	X	2	7'-7"			WING - HORIZ.
A420	X	5	7'-7"			WING - HORIZ.
A521	X	6	9'-11"			WING - HORIZ.
A622	X	8	10'-3"			WING - HORIZ.

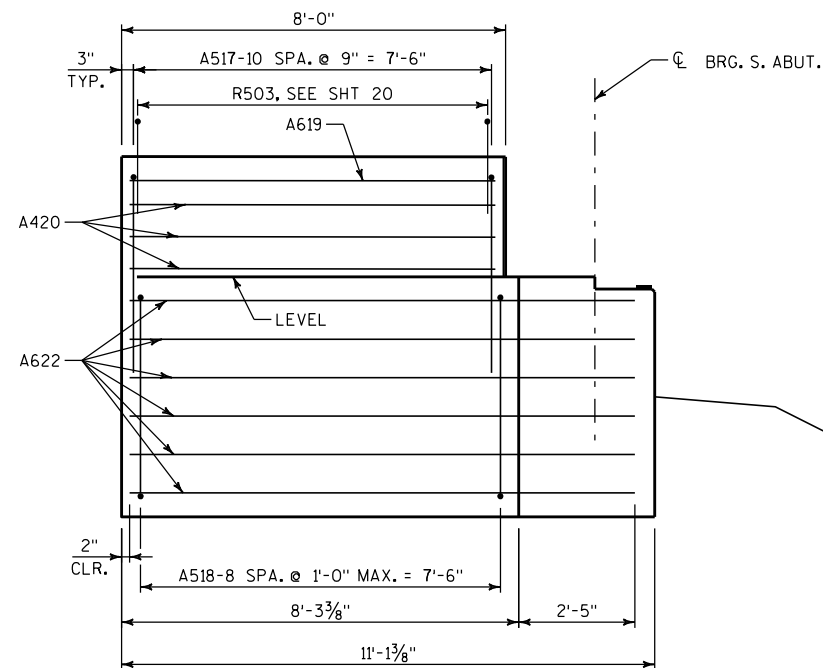
△ LENGTH SHOWN FOR BAR IS AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATION. (SEE BAR SERIES TABLE FOR ACTUAL LENGTH)



A415



A808



SOUTH ABUT. WINGWALL ELEVATION
(BACK FACE)

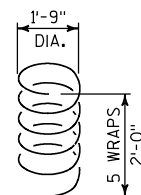
NOTES

FOR SOUTH ABUTMENT DETAILS, SEE SHEETS 6-7.
FOR SOUTH ABUTMENT BILL OF BARS, SEE SHEET 6.
FOR NORTH ABUTMENT DETAILS, SEE SHEETS 8-9.
FOR NORTH ABUTMENT BILL OF BARS, SEE SHEET 8.

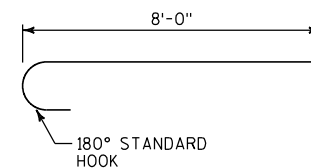
BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
B401	X	5	34'-11"			SEAT
B402	X	2	44'-6"			SEAT
B403	X	3	36'-6"			SEAT
B604	X	22	34'-11"			BODY - HORIZ.
B605	X	2	28'-2"			BODY - HORIZ.
B606	X	11	46'-5"			BODY - HORIZ.
B607	X	7	44'-0"			BODY - HORIZ.
B808	X	7	9'-2"	X		BODY - HORIZ.
B509	X	4	6'-2"			BODY - MEDIAN VERT.
B510	X	4	7'-5"	X		BODY - MEDIAN STIRRUP
B411	X	51	3'-3"	X		SEAT
B512	X	14	9'-2"	X	△	SEAT
B513	X	54	7'-1"	X	△	SEAT
B514	X	95	13'-7"	X		BODY - STIRRUP
B415	X	11	28'-0"	X		BODY PILES - 1 PER PILE
B416	X	22	2'-3"			BODY PILES - 2 PER PILE

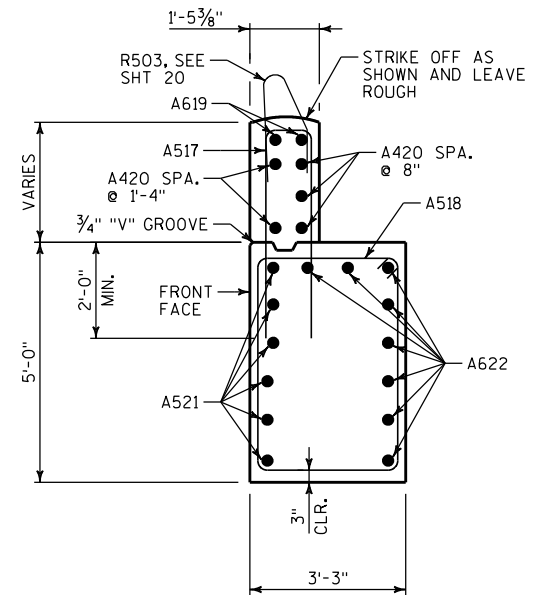
△ LENGTH SHOWN FOR BAR IS AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATION. (SEE BAR SERIES TABLE FOR ACTUAL LENGTH)



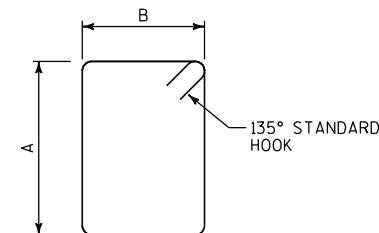
B415



B808

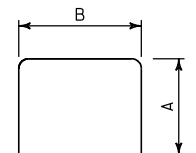


SOUTH ABUT. WINGWALL SECTION



BAR MARK	DIM "A"	DIM "B"
B510	2'-2"	1'-3"
B514	4'-4"	2'-2"

B510, B514



BAR MARK	DIM "A"	DIM "B"
B411	1'-3"	11"
B512	3'-5" TO 3'-10"	2'-2"
B513	1'-4" TO 3'-10"	2'-2"

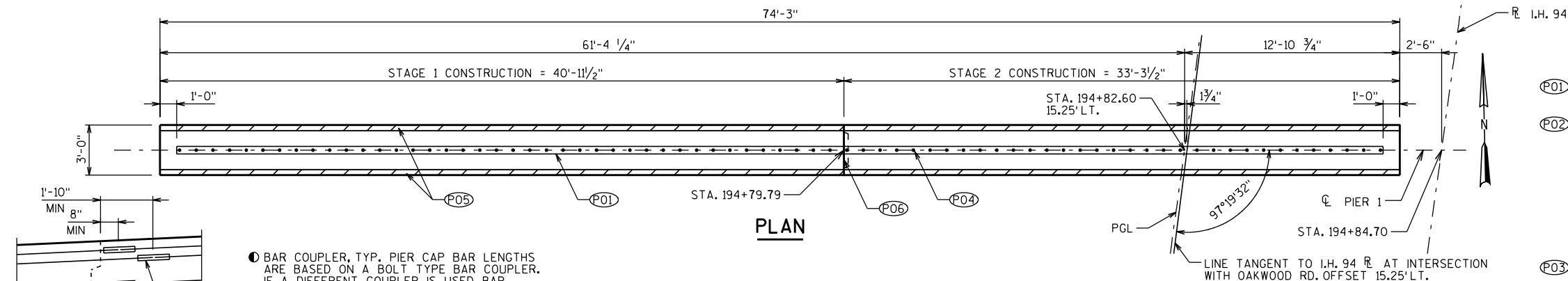
B411, B512, B513, B517

BAR SERIES TABLE

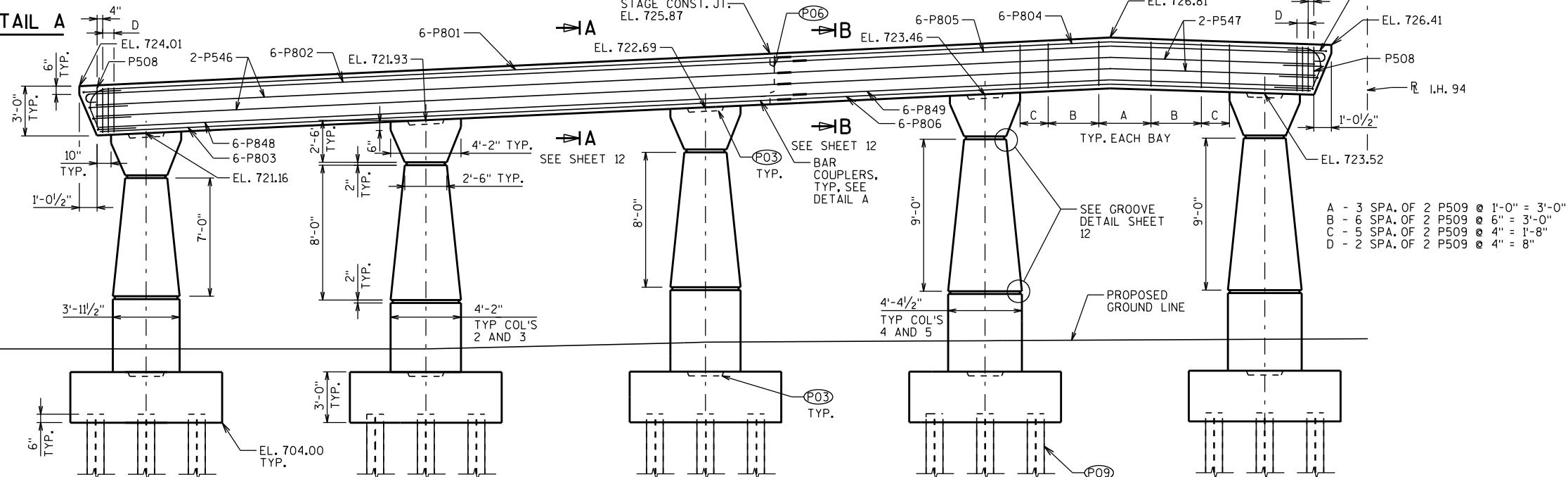
BAR MARK	NO. REQ'D	LENGTH	NO.	DATE	REVISION	BY
B512	1 SERIES OF 14	8'-9" TO 9'-7"	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
B513	1 SERIES OF 54	4'-7" TO 9'-7"				
			STRUCTURE B-40-804			
			DRAWN BY		DGS	PLANS CK'D. KES
			ABUTMENT WINGWALL DETAILS & BILL OF BARS			SHEET 10 OF 25

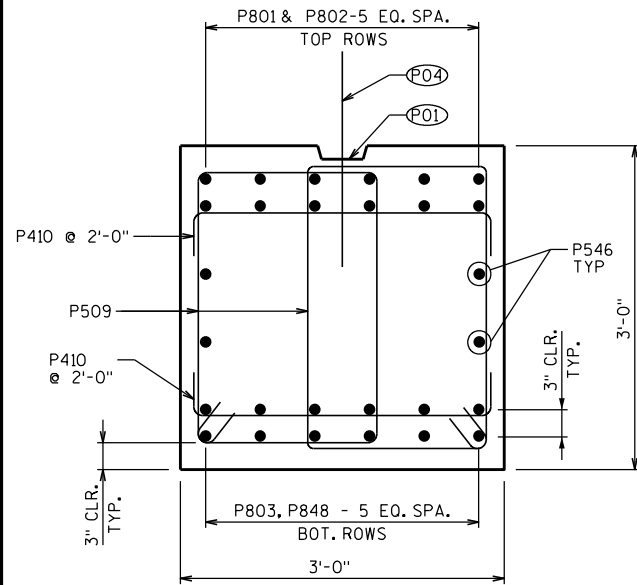
NOTES

- (P01) KEYED CONSTRUCTION JOINT FORMED BY A SURFACE BEVELED 2" X 6" BETWEEN BEAM SEATS.
- (P02) LOCATION OF EXISTING TIMBER PILES IS SHOWN BASED ON EXISTING STRUCTURE PLANS. VERIFY EXISTING PILE LOCATIONS IMMEDIATELY AFTER EXPOSURE AND NOTIFY THE ENGINEER OF ANY EXISTING PILES THAT INTERFERE WITH PROPOSED NEW PILES.
- IF NECESSARY, PROPOSED PILES THAT CONFLICT WITH EXISTING PILES MAY BE RELOCATED NOT MORE THAN 9" FROM THE PROPOSED LOCATION SHOWN IN THE PLAN TO AVOID CONFLICTING WITH EXISTING PILES. EXISTING PILES MAY BE EXTRACTED AND THE HOLE THEN FILLED WITH SAND. REMOVAL OF EXISTING PILES AND PLACEMENT OF SAND IS INCLUDED IN THE PAY ITEM "REMOVING OLD STRUCTURE STA 195+15".
- (P03) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 3" X 1'-0" X 2'-2". TYPICAL AT TOP AND BOTTOM OF COLUMNS.
- (P04) P507 BARS AT 1'-0" CENTERS MUST BE EMBEDDED 1'-0" INTO CONCRETE.
- (P05) 4" X 3/4" FILLER
- (P06) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 3" X 1'-0" X 1'-3" IN PIER CAP.



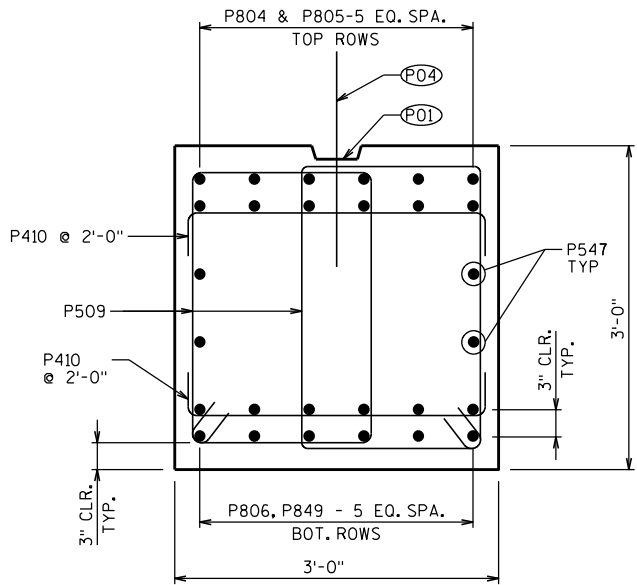
DETAIL A





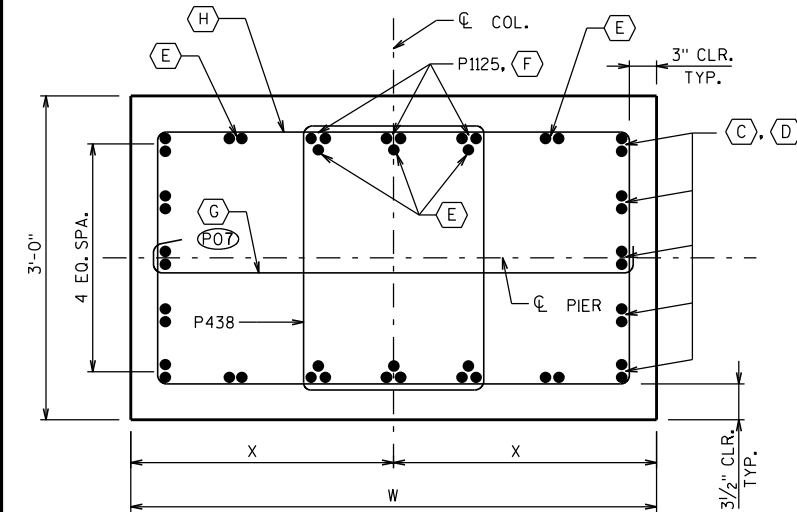
SECTION A-A

SEE SHEET 11 FOR LOCATION

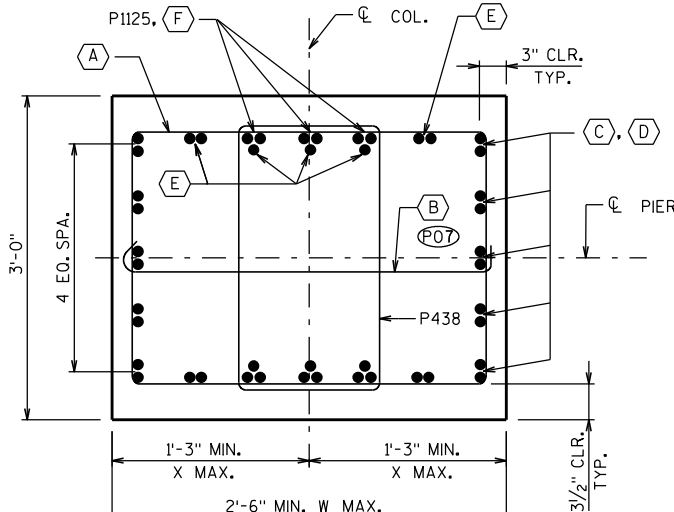


SECTION B-B

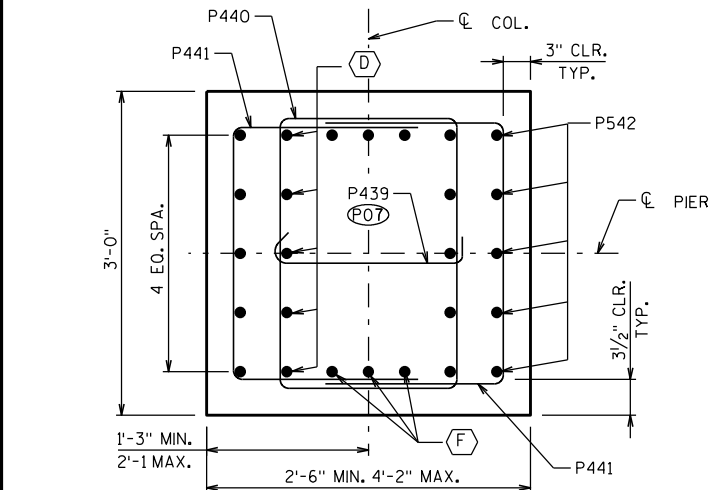
SEE SHEET 11 FOR LOCATION



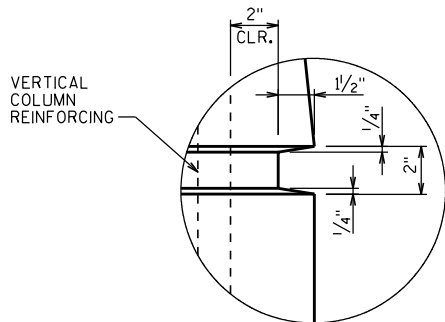
SECTION C-C



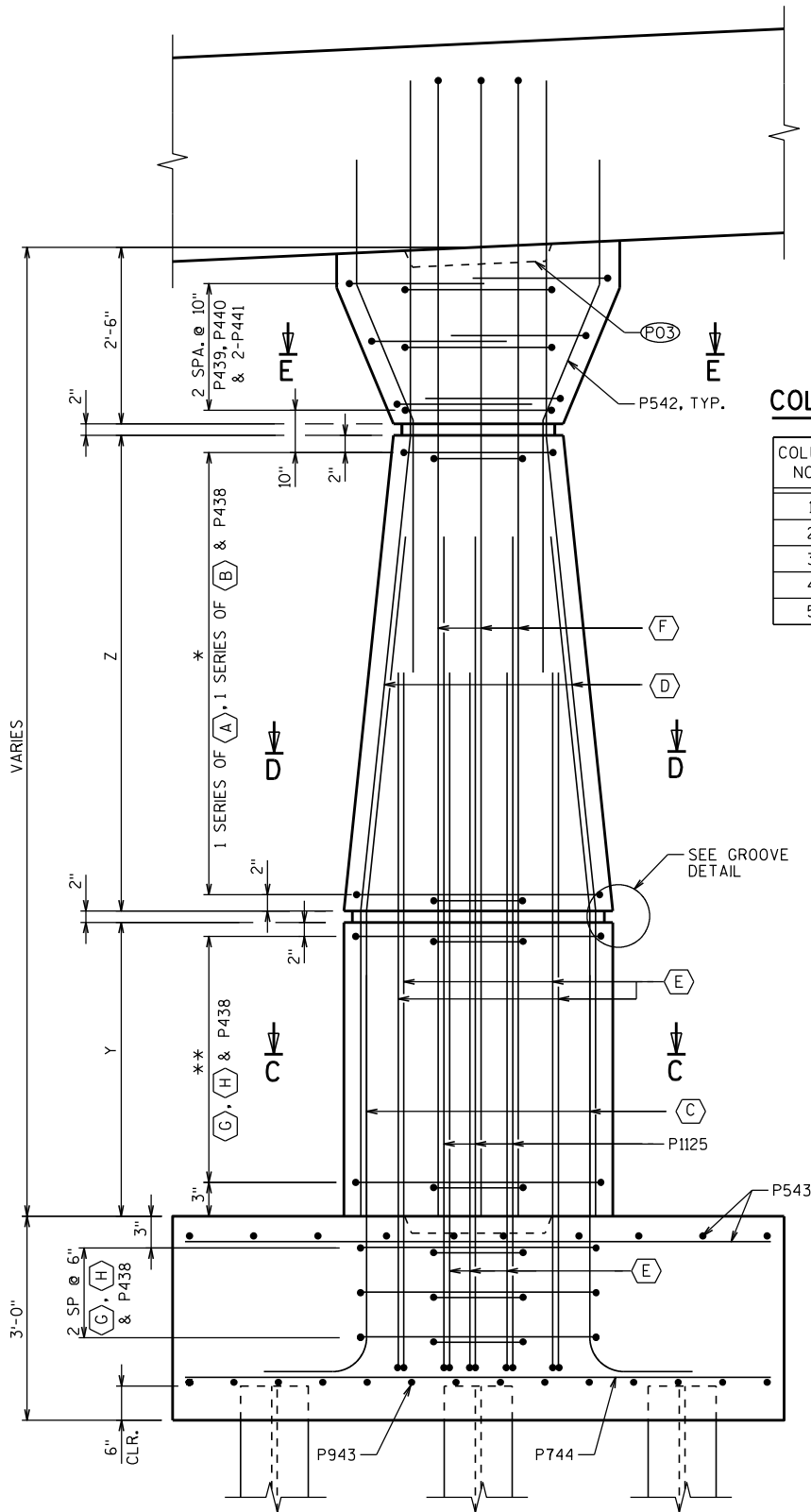
SECTION D-D



SECTION E-E



GROOVE DETAIL



COLUMN ELEVATION

COLUMN DATA

COLUMN NO.	W	X	Y	Z
1	3'-11 1/2"	1'-11 3/4"	4'-3 7/8"	7'-0"
2	4'-2"	2'-1"	4'-1 1/8"	8'-0"
3	4'-2"	2'-1"	4'-10 1/4"	8'-0"
4	4'-4 1/2"	2'-2 1/4"	4'-7 1/2"	9'-0"
5	4'-4 1/2"	2'-2 1/4"	4'-8 1/4"	9'-0"

COLUMN TIES

COLUMN NO.	*	(A)	(B)	**	(G)	(H)
1	13 EQ SPA	P426	P429	8 EQ SPA	P432	P435
2	15 EQ SPA	P427	P430	8 EQ SPA	P433	P436
3	15 EQ SPA	P427	P430	9 EQ SPA	P433	P436
4	17 EQ SPA	P428	P431	9 EQ SPA	P434	P437
5	17 EQ SPA	P428	P431	9 EQ SPA	P434	P437

COLUMN VERTICAL REINF.

COLUMN NO.	(C)	(D)	(E)	(F)
1	P1111	P1117	P1115	P1121
2	P1112	P1118	P1116	P1122
3	P1113	P1119	P1116	P1123
4 & 5	P1114	P1120	P1116	P1124

NOTES

- (P01) KEYED CONSTRUCTION JOINT FORMED BY A SURFACE BEVELED 2" X 6" BETWEEN BEAM SEATS.
- (P03) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 3" X 1'-0" X 2'-2". TYPICAL AT TOP AND BOTTOM OF COLUMNS.
- (P04) P507 BARS AT 1'-0" CENTERS MUST BE EMBEDDED 1'-0" INTO CONCRETE.
- (P07) ALTERNATE HOOKED ENDS OF TIES.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY JBA		PLANS CK'D. KES	
PIER 1 DETAILS (1 OF 2)			SHEET 12 OF 25

BAR SERIES TABLE

COLUMN NO.	BAR MARK	NO. REQ'D	LENGTH
1	P426	1 SERIES OF 14	9'-4" TO 12'-2"
2, 3	P427	2 SERIES OF 16	9'-4" TO 12'-8"
4, 5	P428	2 SERIES OF 18	9'-4" TO 13'-0"
1	P429	1 SERIES OF 14	2'-8" TO 4'-1"
2, 3	P430	2 SERIES OF 16	2'-8" TO 4'-4"
4, 5	P431	2 SERIES OF 18	2'-8" TO 4'-6"

COLUMN NO.	BAR MARK	A	B
1	P1111	6'-10"	5'-7"
2	P1112	6'-8"	5'-9"
3	P1113	7'-4"	5'-1"
4 & 5	P1114	7'-2"	5'-3"

P1111, P1112, P1113, P1114

BAR MARK	A	B
P508	2'-2"	1'-8"
P509	2'-6"	1'-8"
P426	2'-5"	2'-0" TO 3'-5"
P427	2'-5"	2'-0" TO 3'-7 $\frac{1}{2}$ "
P428	2'-5"	2'-0" TO 3'-10"
P435	2'-5"	3'-5 $\frac{1}{2}$ "
P436	2'-5"	3'-8"
P437	2'-5"	3'-10 $\frac{1}{2}$ "
P438	2'-5"	1'-6"
P440	2'-5"	2'-3"

P508, P509, P426, P427, P428, P435, P436, P437, P438, P440

BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
P801	X	6	43'-1"	X		PIER CAP TOP
P802	X	6	43'-6"	X		PIER CAP TOP
P803	X	6	40'-6"			PIER CAP BOTTOM
P804	X	6	34'-2"	X		PIER CAP TOP
P805	X	6	32'-3"	X		PIER CAP TOP
P806	X	6	31'-8"	X		PIER CAP BOTTOM
P507	X	73	2'-0"			PIER CAP - DOWEL - VERT
P508	X	4	8'-3"	X		PIER CAP STIRRUP
P509	X	220	8'-11"	X		PIER CAP STIRRUP
P410	X	74	3'-5"	X		PIER CAP - TIE
P1111	X	10	14'-1"	X		COLUMN 1 - VERT - FTG DOWEL
P1112	X	10	14'-1"	X		COLUMN 2 - VERT - FTG DOWEL
P1113	X	10	14'-1"	X		COLUMN 3 - VERT FTG DOWEL
P1114	X	20	14'-1"	X		COL 4-5 - VERT - FTG DOWEL
P1115	X	14	12'-2"	X		COLUMN 1 - VERT - FTG DOWEL
P1116	X	56	12'-8"	X		COL 2-5 - VERT - FTG DOWEL
P1117	X	10	15'-10"	X		COLUMN 1 - VERT
P1118	X	10	16'-8"	X		COLUMN 2 - VERT
P1119	X	10	17'-4"	X		COLUMN 3 - VERT
P1120	X	20	18'-2"	X		COLUMN 4 & 5 - VERT
P1121	X	6	17'-11"	X		COLUMN 1 - VERT - TOP
P1122	X	6	18'-9"	X		COLUMN 2 - VERT - TOP
P1123	X	6	19'-6"	X		COLUMN 3 - VERT - TOP
P1124	X	12	20'-3"	X		COLUMN 4 & 5 - VERT - TOP
P1125	X	30	14'-2"	X		COL 1-5 - VERT - FTG DOWEL
P426	X	14	10'-9"	X	△	COLUMN 1 - TIES - MIDDLE
P427	X	32	10'-12"	X	△	COLUMN 2 & 3 - TIES - MIDDLE
P428	X	36	11'-2"	X	△	COLUMN 4 & 5 - TIES - MIDDLE
P429	X	14	3'-8"	X	△	COLUMN 1 - TIES - MIDDLE
P430	X	32	3'-9"	X	△	COLUMN 2 & 3 - TIES - MIDDLE
P431	X	36	3'-11"	X	△	COLUMN 4 & 5 - TIES - MIDDLE
P432	X	9	4'-5"	X		COLUMN 1 - TIES - BOTTOM
P433	X	19	4'-8"	X		COLUMN 2 & 3 - TIES - BOTT
P434	X	20	4'-10"	X		COLUMN 4 & 5 - TIES - BOTT
P435	X	9	12'-3"	X		COLUMN 1 - TIES - BOTTOM
P436	X	19	12'-8"	X		COLUMN 2 & 3 - TIES - BOTT
P437	X	20	13'-1"	X		COLUMN 4 & 5 - TIES - BOTT
P438	X	155	8'-4"	X		COLUMN - TIES
P439	X	15	2'-10"	X		COLUMN - TIES - TOP
P440	X	15	9'-10"	X		COLUMN - TIES - TOP
P441	X	30	6'-6"	X		COLUMN - TIES - TOP
P542	X	50	10'-1"	X		COLUMN - VERT - TOP
P543		100	8'-6"			FOOTING - TOP
P744		55	8'-6"			FOOTING - BOTTOM
P945		70	8'-6"			FOOTING - BOTTOM
P546	X	4	40'-11"			PIER CAP - HORIZ - SIDES
P547	X	4	31'-6"			PIER CAP - HORIZ - SIDES
P848	X	6	41'-8"			PIER CAP BOTTOM
P849	X	6	30'-6"	X		PIER CAP BOTTOM
P550	X	8	8'-4"	X		PIER CAP - HORIZ - ENDS

△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATION (SEE BAR SERIES TABLE FOR ACTUAL LENGTH)

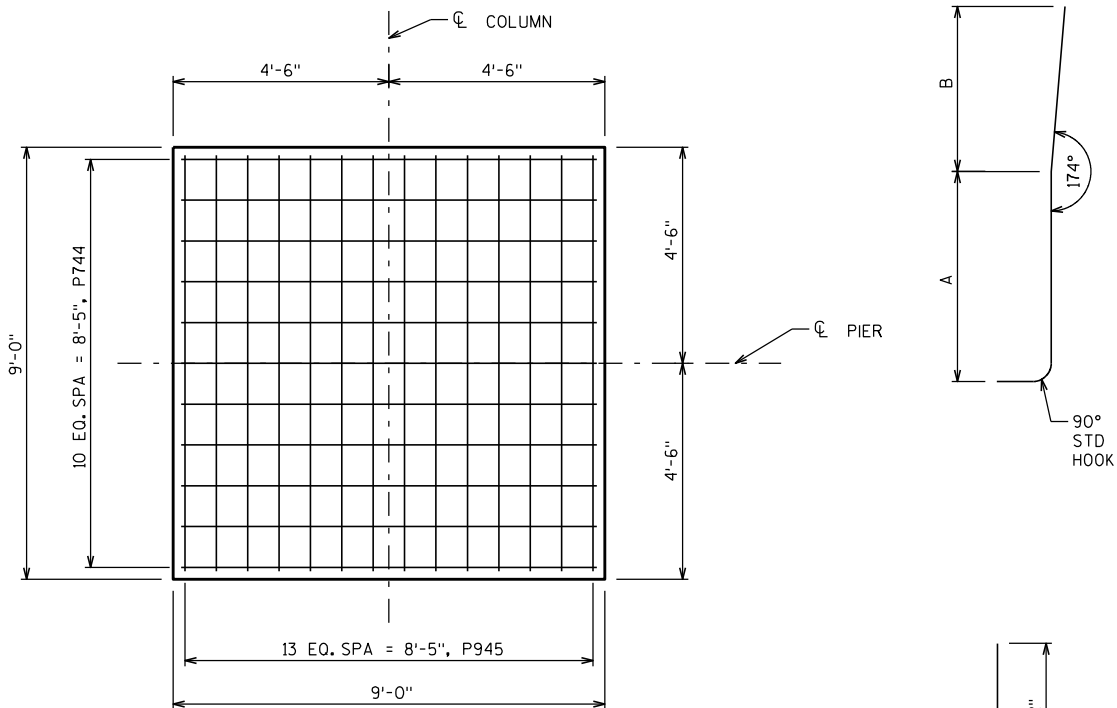
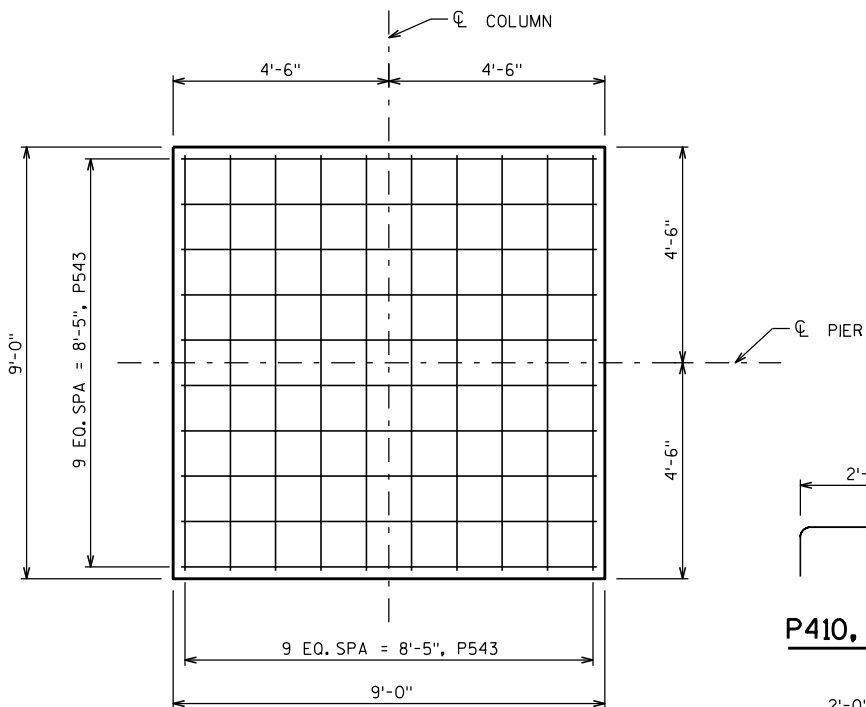
NO.	DATE	REVISION	BY
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

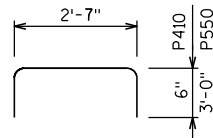
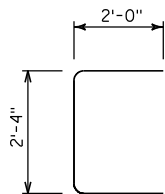
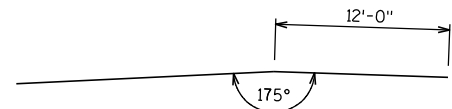
STRUCTURE B-40-804

DRAWN BY JBA
PLANS CK'D. KESPIER 1
DETAILS (2 OF 2)

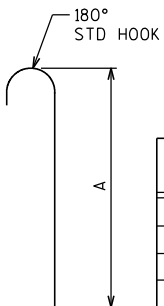
SHEET 13 OF 25

FOOTING BOT. REINFORCEMENT PLANFOOTING TOP REINFORCEMENT PLAN

COLUMN NO.	BAR MARK	A	B	C
1	P1117	4'-6"	7'-2"	8 $\frac{3}{4}$ "
2	P1118	4'-4"	8'-2"	10"
3	P1119	5'-0"	8'-2"	10"
4 & 5	P1120	4'-10"	9'-2"	11 $\frac{1}{4}$ "

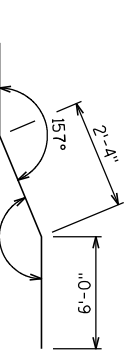
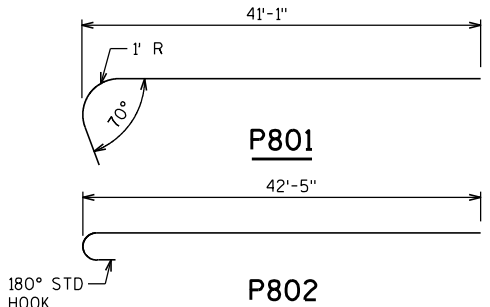
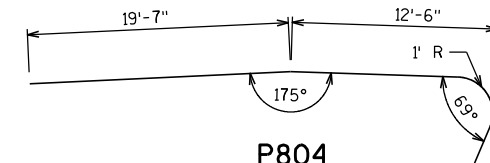
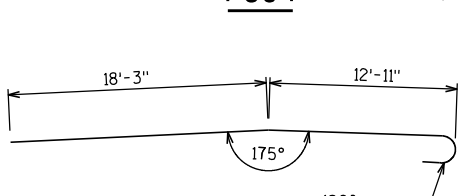
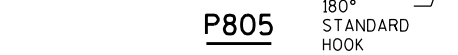
P1117, P1118, P1119, P1120P410, P550P441P806, P547, P849

BAR MARK	A
P1115	10'-6"
P1116	11'-0"
P1125	12'-6"

P1115, P1116, P1125P1121, P1122, P1123, P1124

BAR MARK	A
P1121	16'-3"
P1122	17'-1"
P1123	17'-10"
P1124	18'-7"

BAR MARK	A
P429	2'-0" TO 3'-5"
P430	2'-0" TO 3'-7 $\frac{1}{2}$ "
P431	2'-0" TO 3'-10"
P432	3'-5 $\frac{1}{2}$ "
P433	3'-8"
P434	3'-10 $\frac{1}{2}$ "
P439	1'-10"

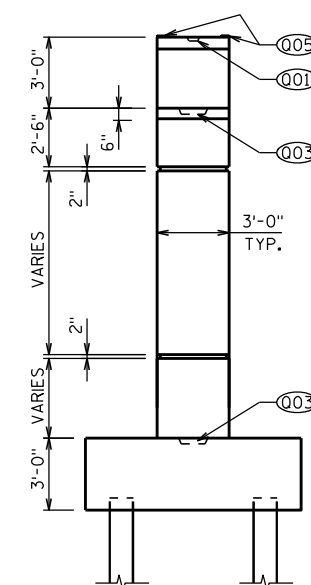
P429, P430, P431, P432, P433, P434, P439P542P801P802P804P805

001 KEYED CONSTRUCTION JOINT FORMED BY A SURFACE BEVELED 2" X 6"
BETWEEN BEAM SEATS.

002 LOCATION OF EXISTING TIMBER PILES IS SHOWN BASED ON EXISTING STRUCTURE
PLANS. VERIFY EXISTING PILE LOCATIONS IMMEDIATELY AFTER EXPOSURE AND
NOTIFY THE ENGINEER OF ANY EXISTING PILES THAT INTERFERE WITH PROPOSED
NEW PILES.

IF NECESSARY, PROPOSED PILES THAT CONFLICT WITH EXISTING PILES MAY BE RELOCATED NOT MORE THAN 9" FROM THE PROPOSED LOCATION SHOWN IN THE PLAN TO AVOID CONFLICTING WITH EXISTING PILES. EXISTING PILES MAY BE EXTRACTED AND THE HOLE THEN FILLED WITH SAND. REMOVAL OF EXISTING PILES AND PLACEMENT OF SAND IS INCLUDED IN THE PAY ITEM "REMOVING OLD STRUCTURE STA 195+15".

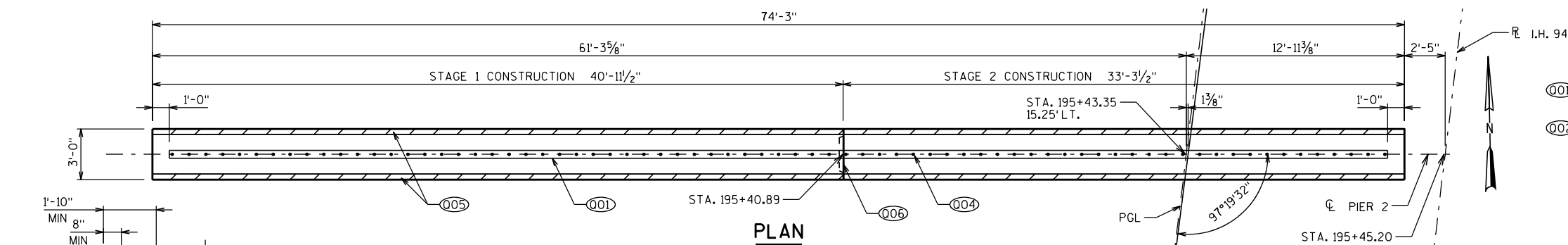
- ①003 KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 3" X 1'-0" X 2'-2".
TYPICAL AT TOP AND BOTTOM OF COLUMNS.
- ①004 P507 BARS AT 1'-0" CENTERS MUST BE EMBEDDED 1'-0" INTO CONCRETE.
- ①005 4" X 3/4" FILLER
- ①006 KEYED CONSTRUCTION JOINT FORMED BY BEVELED 3" X 1'-0" X 1'-3" IN PIER CAP.



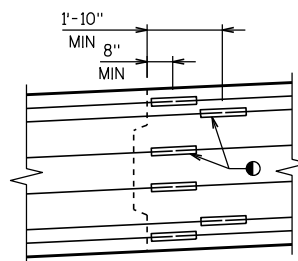
SEE SHEET 15 FOR COLUMN REINFORCING DETAIL

(009) DYNAMIC PILE LOAD TESTING
 PIER TO BE SUPPORTED ON HP 12X53 STEEL
 PILING WITH A REQUIRED DRIVING RESISTANCE
 OF 200 TONS PER PILE ESTIMATED 70' LONG.
 SEE SHEET 7 FOR PILE SPLICE DETAIL.

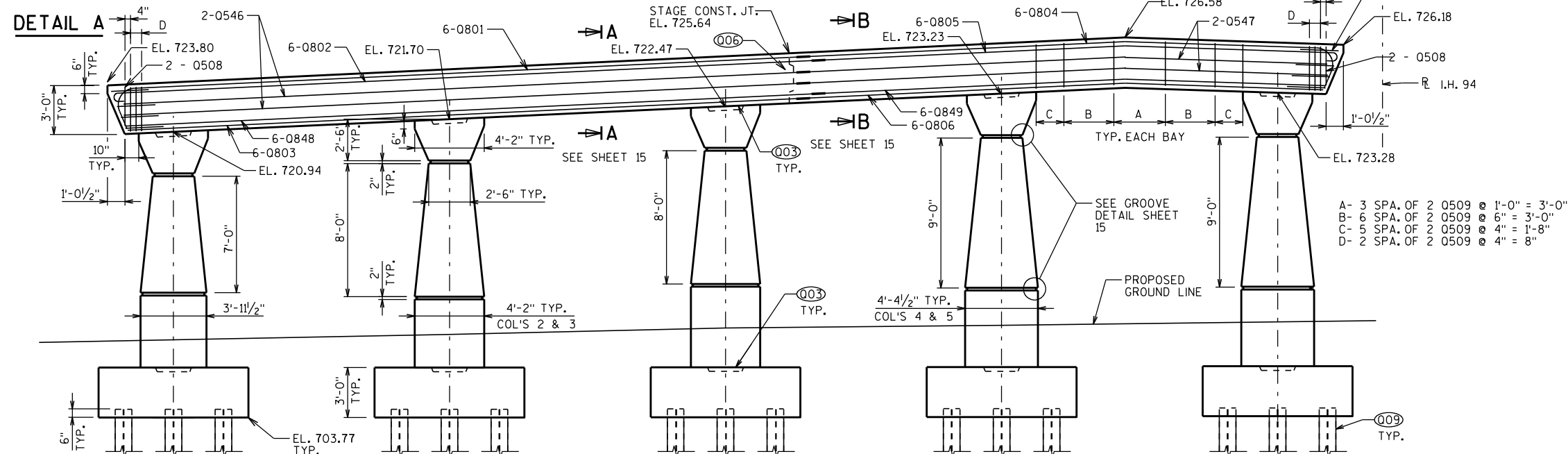
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		JBA	PLANS CK'D. KES
PIER 2		SHEET 14 OF 25	



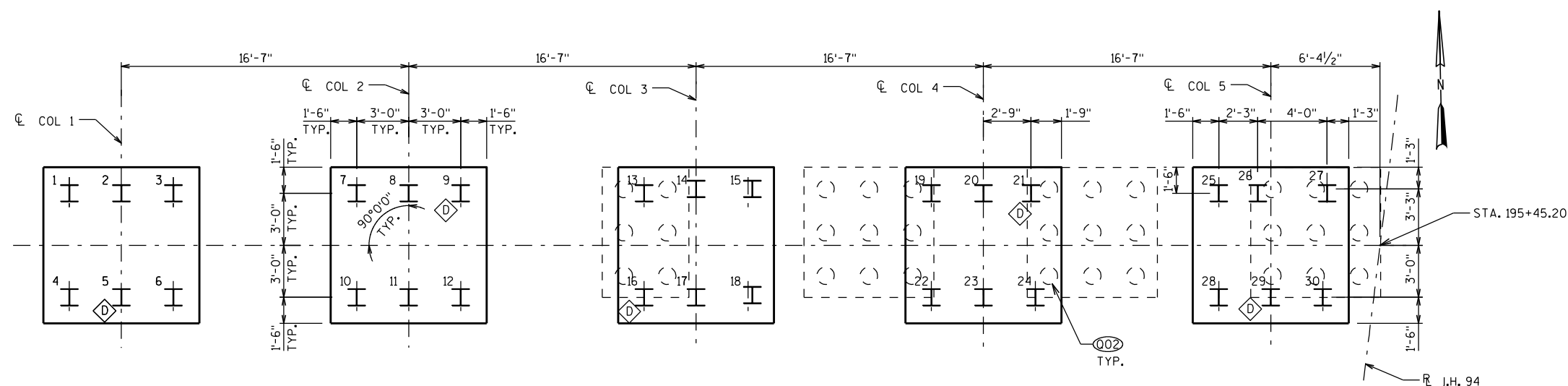
PLAN



● BAR COUPLER, TYP. PIER CAP BAR LENGTHS ARE BASED ON A BOLT TYPE BAR COUPLER. IF A DIFFERENT COUPLER IS USED, BAR LENGTHS MAY NEED TO BE REVISED.



ELEVATION
(LOOKING NORTH)



FOOTING PLAN

COLUMN DATA

COLUMN NO.	W	X	Y	Z
1	3'-11 1/2"	1'-11 3/4"	4'-3 7/8"	7'-0"
2	4'-2"	2'-1"	4'-1 1/8"	8'-0"
3	4'-2"	2'-1"	4'-10 1/4"	8'-0"
4	4'-4 1/2"	2'-2 1/4"	4'-7 1/2"	9'-0"
5	4'-4 1/2"	2'-2 1/4"	4'-8 1/4"	9'-0"

COLUMN TIES

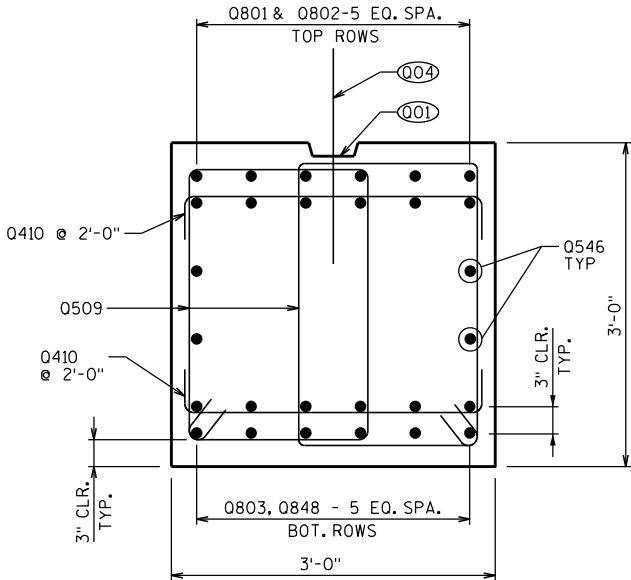
COLUMN NO.	*	(A)	(B)	**	(G)	(H)
1	13 EQ SPA	Q426	Q429	8 EQ SPA	Q432	Q435
2	15 EQ SPA	Q427	Q430	8 EQ SPA	Q433	Q436
3	15 EQ SPA	Q427	Q430	9 EQ SPA	Q433	Q436
4	17 EQ SPA	Q428	Q431	9 EQ SPA	Q434	Q437
5	17 EQ SPA	Q428	Q431	9 EQ SPA	Q434	Q437

COLUMN VERTICAL REINF.

COLUMN NO.	(C)	(D)	(E)	(F)
1	Q1111	Q1117	Q1115	Q1121
2	Q1112	Q1118	Q1116	Q1122
3	Q1113	Q1119	Q1116	Q1123
4 & 5	Q1114	Q1120	Q1116	Q1124

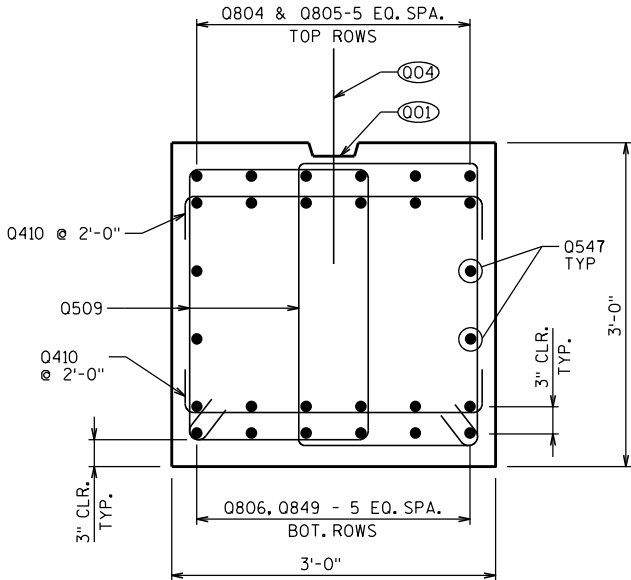
NOTES

- (Q01) KEYED CONSTRUCTION JOINT FORMED BY A SURFACE BEVELED 2" X 6" BETWEEN BEAM SEATS.
- (Q03) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 3" X 1'-0" X 2'-2". TYPICAL AT TOP AND BOTTOM OF COLUMNS.
- (Q04) Q507 BARS AT 1'-0" CENTERS MUST BE EMBEDDED 1'-0" INTO CONCRETE.
- (Q07) ALTERNATE HOOKED ENDS OF TIES.



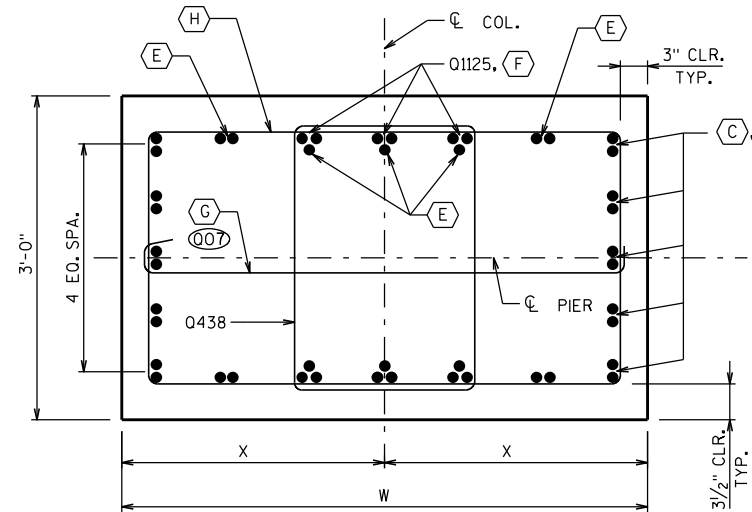
SECTION A-A

SEE SHEET 14 FOR LOCATION

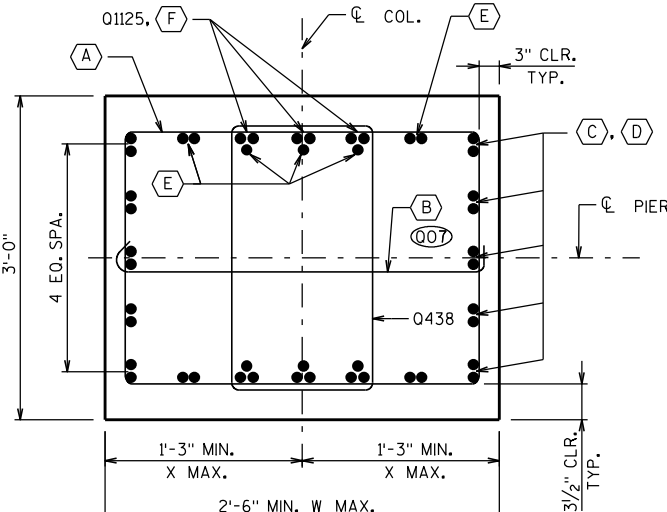


SECTION B-B

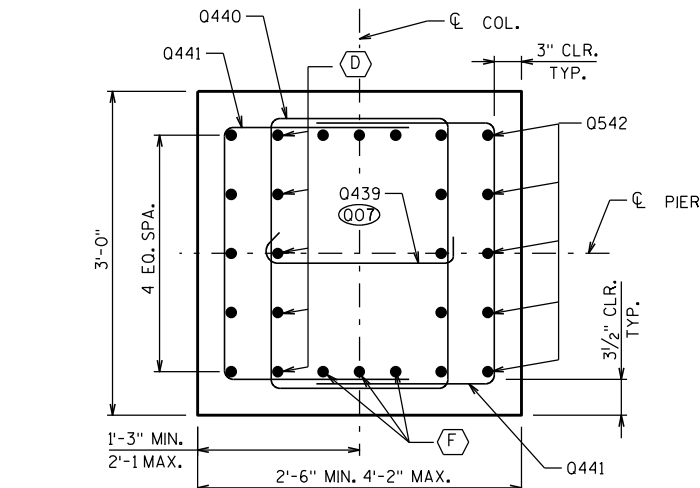
SEE SHEET 14 FOR LOCATION



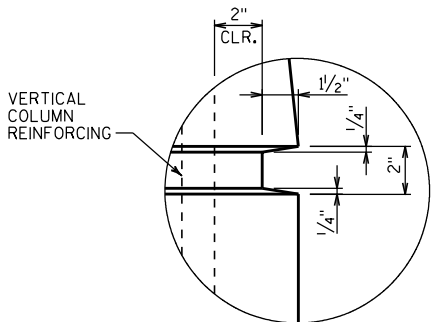
SECTION C-C



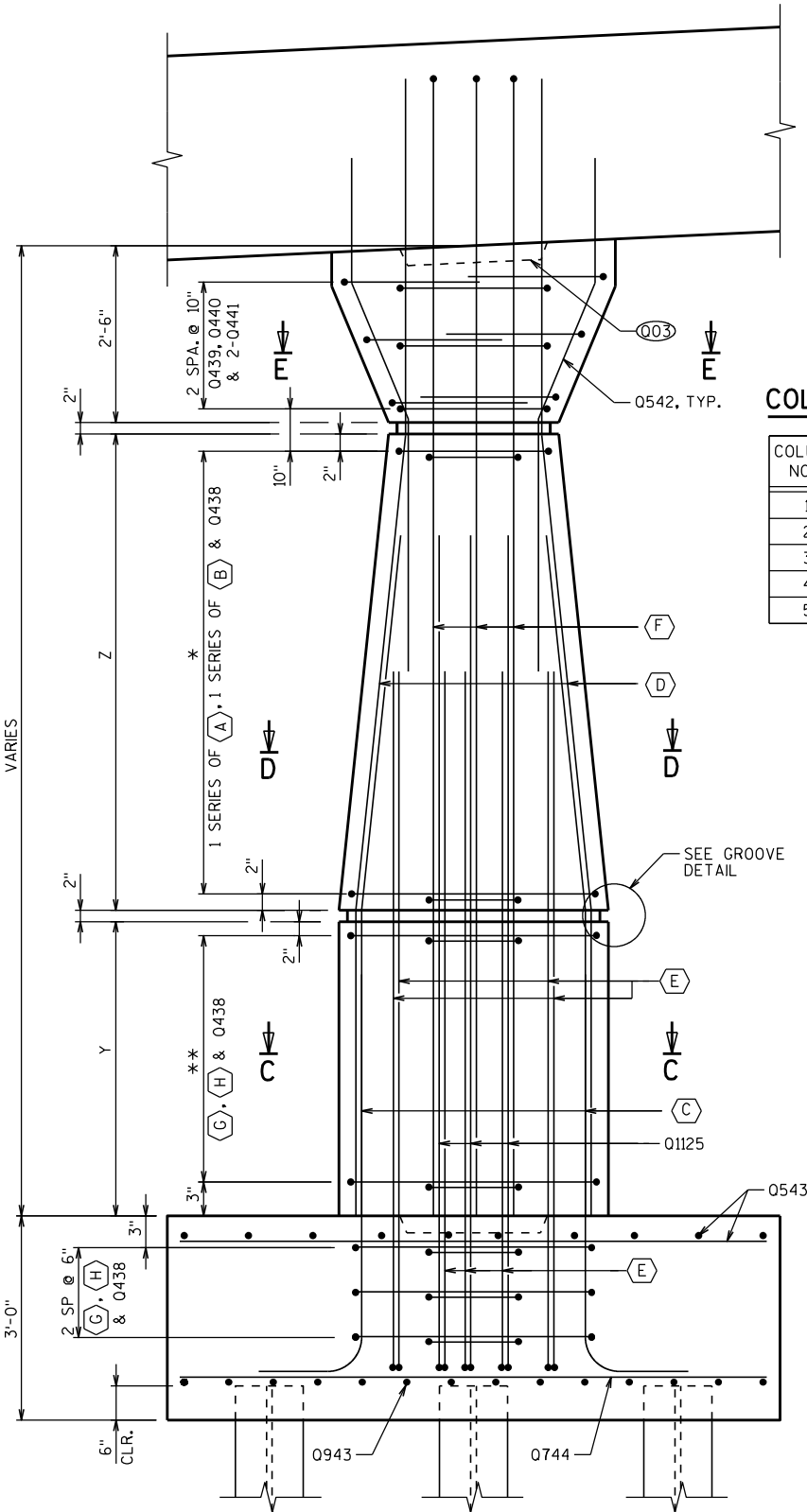
SECTION D-D



SECTION E-E



GROOVE DETAIL



COLUMN ELEVATION

NO.	DATE	REVISION	BY
		STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
		STRUCTURE B-40-804	
		DRAWN BY JBA	PLANS CK'D. KES
		PIER 2 DETAILS (1 OF 2)	SHEET 15 OF 25

BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
Q801	X	6	43'-1"	X		PIER CAP TOP
Q802	X	6	43'-6"	X		PIER CAP TOP
Q803	X	6	40'-6"			PIER CAP BOTTOM
Q804	X	6	34'-2"	X		PIER CAP TOP
Q805	X	6	32'-3"	X		PIER CAP TOP
Q806	X	6	31'-8"	X		PIER CAP BOTTOM
Q507	X	73	2'-0"			PIER CAP - DOWEL - VERT
Q508	X	4	8'-3"	X		PIER CAP STIRRUP
Q509	X	220	8'-11"	X		PIER CAP STIRRUP
Q410	X	74	3'-5"	X		PIER CAP - TIE
Q1111	X	10	14'-1"	X		COLUMN 1 - VERT - FTG DOWEL
Q1112	X	10	14'-1"	X		COLUMN 2 - VERT - FTG DOWEL
Q1113	X	10	14'-1"	X		COLUMN 3 - VERT FTG DOWEL
Q1114	X	20	14'-1"	X		COL 4-5 - VERT - FTG DOWEL
Q1115	X	14	12'-2"	X		COLUMN 1 - VERT - FTG DOWEL
Q1116	X	56	12'-8"	X		COL 2-5 - VERT - FTG DOWEL
Q1117	X	10	15'-10"	X		COLUMN 1 - VERT
Q1118	X	10	16'-8"	X		COLUMN 2 - VERT
Q1119	X	10	17'-4"	X		COLUMN 3 - VERT
Q1120	X	20	18'-2"	X		COLUMN 4 & 5 - VERT
Q1121	X	6	17'-11"	X		COLUMN 1 - VERT - TOP
Q1122	X	6	18'-9"	X		COLUMN 2 - VERT - TOP
Q1123	X	6	19'-6"	X		COLUMN 3 - VERT - TOP
Q1124	X	12	20'-3"	X		COLUMN 4 & 5 - VERT - TOP
Q1125	X	30	14'-2"	X		COL 1-5 - VERT - FTG DOWEL
Q426	X	14	10'-9"	X	△	COLUMN 1 - TIES - MIDDLE
Q427	X	32	10'-12"	X	△	COLUMN 2 & 3 - TIES - MIDDLE
Q428	X	36	11'-2"	X	△	COLUMN 4 & 5 - TIES - MIDDLE
Q429	X	14	3'-8"	X	△	COLUMN 1 - TIES - MIDDLE
Q430	X	32	3'-9"	X	△	COLUMN 2 & 3 - TIES - MIDDLE
Q431	X	36	3'-11"	X	△	COLUMN 4 & 5 - TIES - MIDDLE
Q432	X	9	4'-5"	X		COLUMN 1 - TIES - BOTTOM
Q433	X	19	4'-8"	X		COLUMN 2 & 3 - TIES - BOTT
Q434	X	20	4'-10"	X		COLUMN 4 & 5 - TIES - BOTT
Q435	X	9	12'-3"	X		COLUMN 1 - TIES - BOTTOM
Q436	X	19	12'-8"	X		COLUMN 2 & 3 - TIES - BOTT
Q437	X	20	13'-1"	X		COLUMN 4 & 5 - TIES - BOTT
Q438	X	155	8'-4"	X		COLUMN - TIES
Q439	X	15	2'-10"	X		COLUMN - TIES - TOP
Q440	X	15	9'-10"	X		COLUMN - TIES - TOP
Q441	X	30	6'-6"	X		COLUMN - TIES - TOP
Q542	X	50	10'-1"	X		COLUMN - VERT - TOP
Q543		100	8'-6"			FOOTING - TOP
Q744		55	8'-6"			FOOTING - BOTTOM
Q945		70	8'-6"			FOOTING - BOTTOM
Q546	X	4	40'-11"			PIER CAP - HORIZ - SIDES
Q547	X	4	31'-6"			PIER CAP - HORIZ - SIDES
Q848	X	6	41'-8"			PIER CAP BOTTOM
Q849	X	6	30'-6"	X		PIER CAP BOTTOM
Q550	X	8	8'-4"	X		PIER CAP - HORIZ - ENDS

△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATION (SEE BAR SERIES TABLE FOR ACTUAL LENGTH)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		JBA	PLANS CK'D. KES
PIER 2 DETAILS (2 OF 2)			SHEET 16 OF 25

BAR SERIES TABLE

COLUMN NO.	BAR MARK	NO. REQ'D	LENGTH
1	Q426	1 SERIES OF 14 (PER COL.)	9'-4" TO 12'-2"
2, 3	Q427	1 SERIES OF 16 (PER COL.)	9'-4" TO 12'-8"
4, 5	Q428	1 SERIES OF 18 (PER COL.)	9'-4" TO 13'-0"
1	Q429	1 SERIES OF 14 (PER COL.)	2'-8" TO 4'-1"
2, 3	Q430	1 SERIES OF 16 (PER COL.)	2'-8" TO 4'-4"
4, 5	Q431	1 SERIES OF 18 (PER COL.)	2'-8" TO 4'-6"

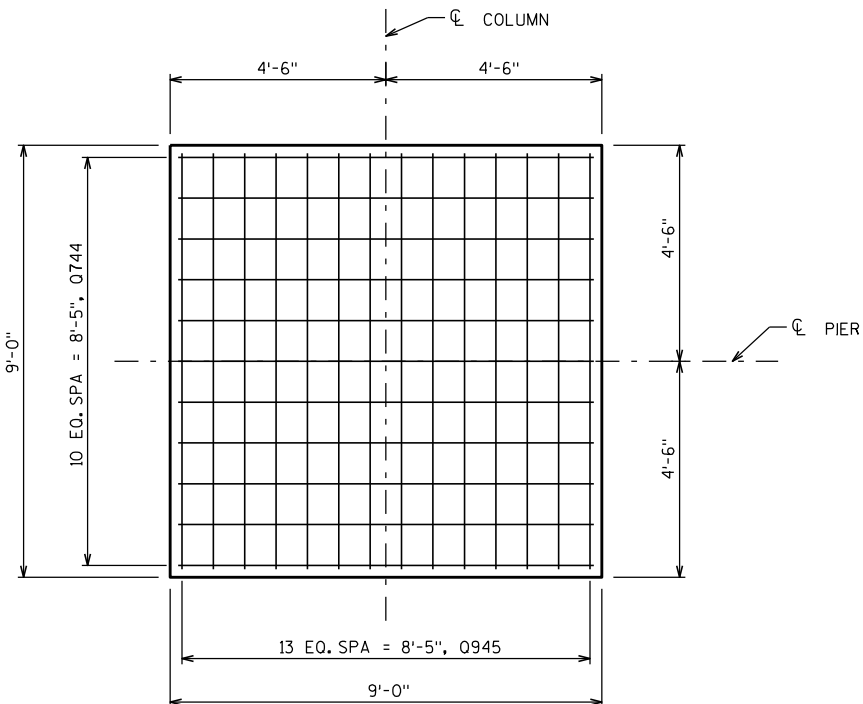
COLUMN NO.	BAR MARK	A	B
1	Q1111	6'-10"	5'-7"
2	Q1112	6'-8"	5'-8"
3	Q1113	7'-4"	5'-1"
4 & 5	Q1114	7'-2"	5'-3"

Q1111, Q1112, Q1113, Q1114

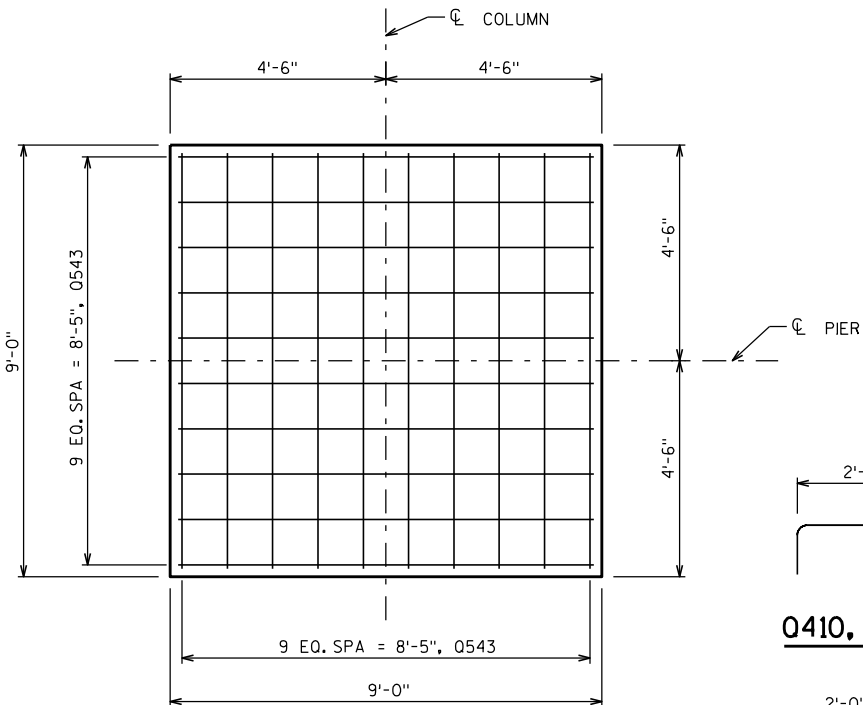
BAR MARK	A	B
Q508	2'-2"	1'-8"
Q509	2'-6"	1'-8"
Q426	2'-5"	2'-0" TO 3'-5"
Q427	2'-5"	2'-0" TO 3'-7½"
Q428	2'-5"	2'-1" TO 3'-10"
Q435	2'-5"	3'-5½"
Q436	2'-5"	3'-8"
Q437	2'-5"	3'-10½"
Q438	2'-5"	1'-6"
Q440	2'-5"	2'-3"

Q508, Q509, Q426, Q427, Q428, Q435, Q436, Q437, Q438, Q440

FOOTING BOT. REINFORCEMENT PLAN

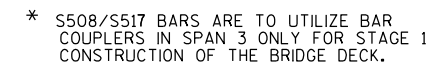


FOOTING TOP REINFORCEMENT PLAN

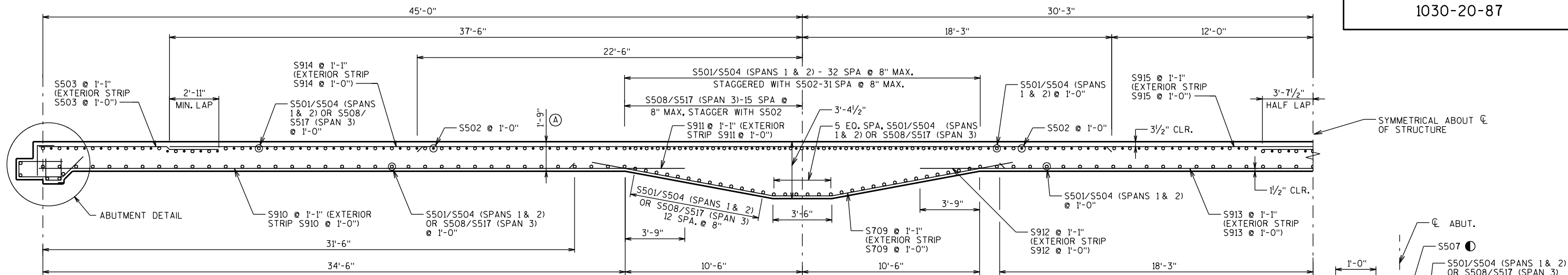


COLUMN NO.	BAR MARK	A	B	C
1	Q1117	4'-6"	7'-2"	8¾"
2	Q1118	4'-4"	8'-2"	10"
3	Q1119	5'-0"	8'-2"	10"
4 & 5	Q1120	4'-10"	9'-2"	11¼"

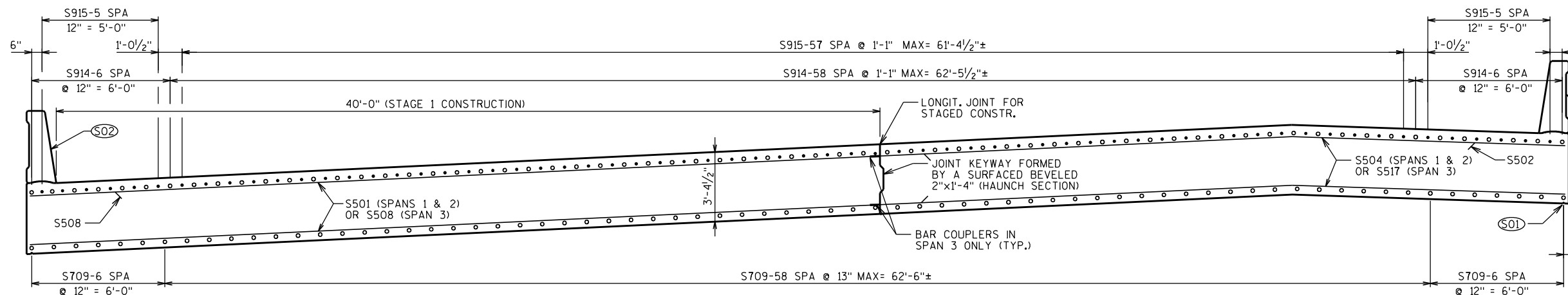
Q1117, Q1118, Q1119, Q1120Q542Q806, Q547, Q849Q410, Q550Q441Q1115, Q1116, Q1125Q1121, Q1122, Q1123, Q1124Q429, Q430, Q431, Q432, Q433, Q434, Q439



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		JBA	PLANS CK'D. KES
SUPERSTRUCTURE			SHEET 17 OF 25

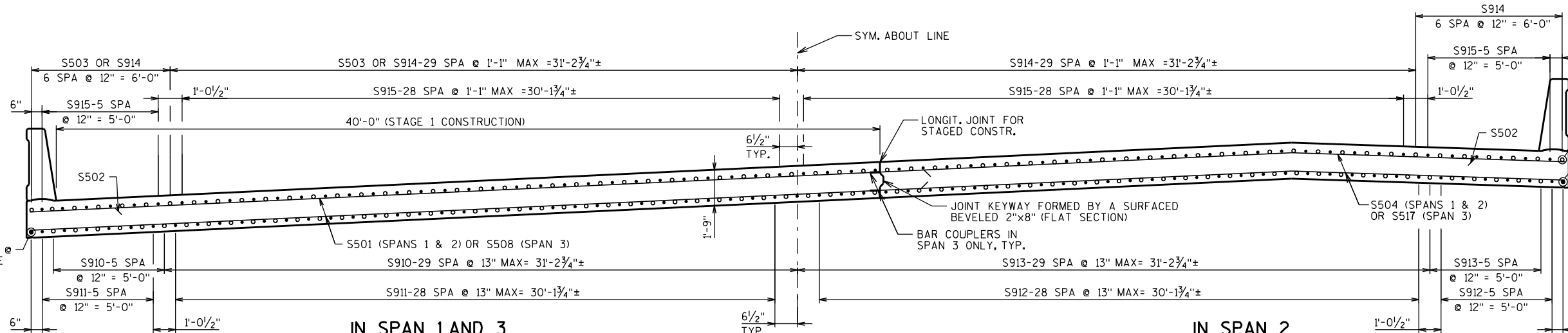


LONGITUDINAL SECTION THRU ROADWAY



CROSS SECTION THRU SUPERSTRUCTURE

THRU HAUNCH - BOTH PIERS



CROSS SECTION THRU SUPERSTRUCTURE

IN SPAN

IN SPAN 2

(AT CL STRUCTURE)

ABUTMENT DETAIL

SPACE BARS @ 1'-0" CTRS IN EXTERIOR STRIP, 1'-1" CTRS OTHERWISE

NOTES

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

TOP TRANS. BARS IN THE SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROX. 3'-0" CENTERS EACH WAY, BOTTOM LONG. BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROX. 4'-0" CENTERS.

TRANSVERSE BARS SHALL BE PLACED PARALLEL TO THE CL OF SUBSTRUCTURE UNITS.

(S01) 3/4" CONTINUOUS DRIP GROOVE TO END 2'-0" AWAY FROM FACE OF ABUTMENT.

(S02) PARAPETS SHALL BE PLACED AFTER FALSEWORK HAS BEEN RELEASED.

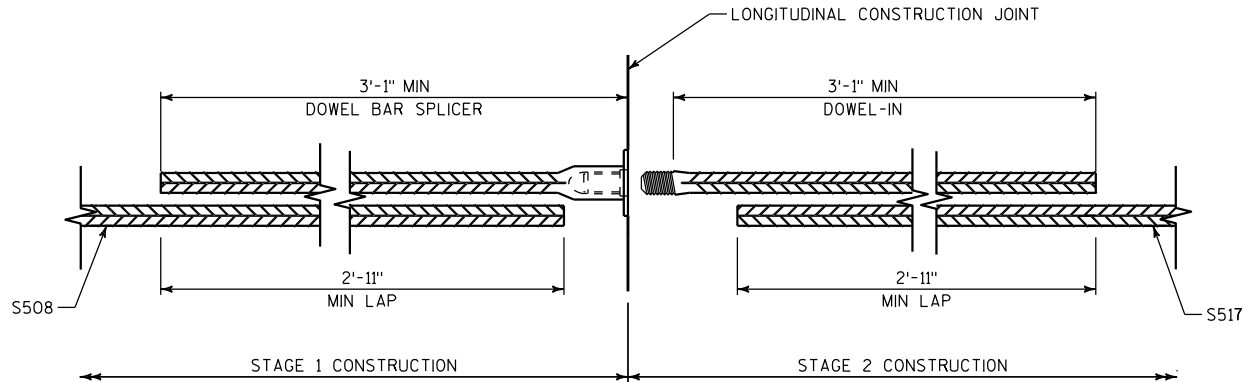
NO.	DATE	REVISION	BY
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-804

DRAWN BY JBA PLANS CK'D. KES

SUPERSTRUCTURE DETAILS SHEET 18 OF 25



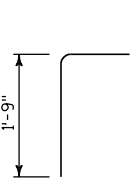
NO. 5 BAR COUPLER DETAIL

(COUPLERS LOCATED IN SPAN 3 ONLY)
EACH "BAR COUPLERS NO. 5" BID ITEM INCLUDES
DOWEL BAR SPLICER WITH DEFORMED REBAR MATERIAL AND
DOWEL-IN WITH DEFORMED REBAR MATERIAL AND THREADED END.
BAR COUPLER REBAR MATERIAL NOT TO BE PAID AS
"BAR STEEL REINFORCEMENT HS BRIDGES".

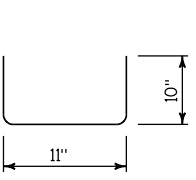
BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	LOCATION
S501	X	249	44'-9"		SLAB TRANS. TOP & BOT. SPANS 1 & 2
S502	X	348	4'-9"		SLAB TRANS. TOP
S503	X	142	10'-10"		SLAB LONGIT. TOP SPANS 1 & 3
S504	X	249	33'-6"		SLAB TRANS. TOP & BOT. SPANS 1 & 2
S505	X	142	2'-4"	X	ABUT. DIAPH.
S506	X	142	6'-1"	X	ABUT. DIAPH.
S507	X	142	3'-2"	X	ABUT. DIAPH.
S508	X	107	41'-4"		SLAB TRANS. TOP & BOT. SPAN 3
S709	X	142	25'-0"	X	HAUNCH LONGIT. BOT.
S910	X	138	35'-0"		SLAB LONGIT. BOT. SPANS 1 & 3
S911	X	144	38'-7"		SLAB LONGIT. BOT. SPANS 1 & 3
S912	X	72	47'-0"		SLAB LONGIT. BOT. SPAN 2
S913	X	72	36'-6"		SLAB LONGIT. BOT. SPAN 2
S914	X	142	55'-9"		SLAB LONGIT. TOP
S915	X	140	56'-5"		SLAB LONGIT. TOP
* S516	X	460	6'-10"	X	SLAB/PARAPET TRANS.
S517	X	107	33'-4"		SLAB TRANS. TOP & BOT. SPAN 3
S518	X	2	29'-10"		SLAB LONGIT. TOP SPAN 2

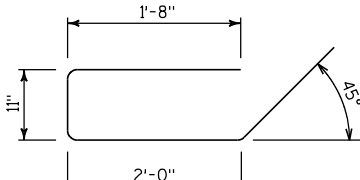
* SEE SHEETS 22 AND 23 FOR LOCATION AND LAYOUT OF S516 BAR.



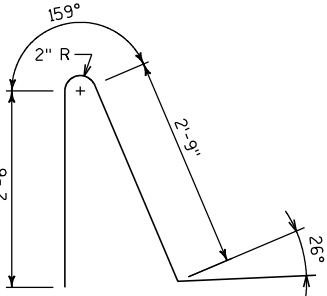
S507



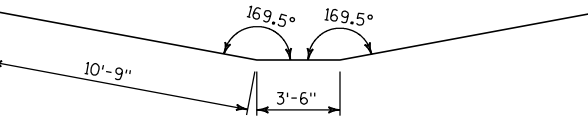
S505



S506

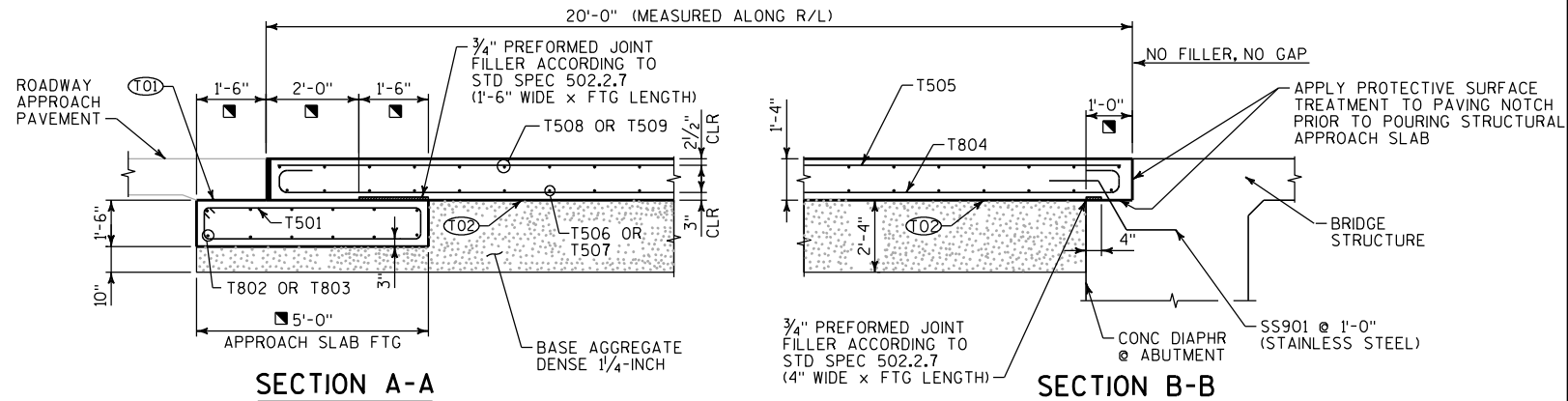
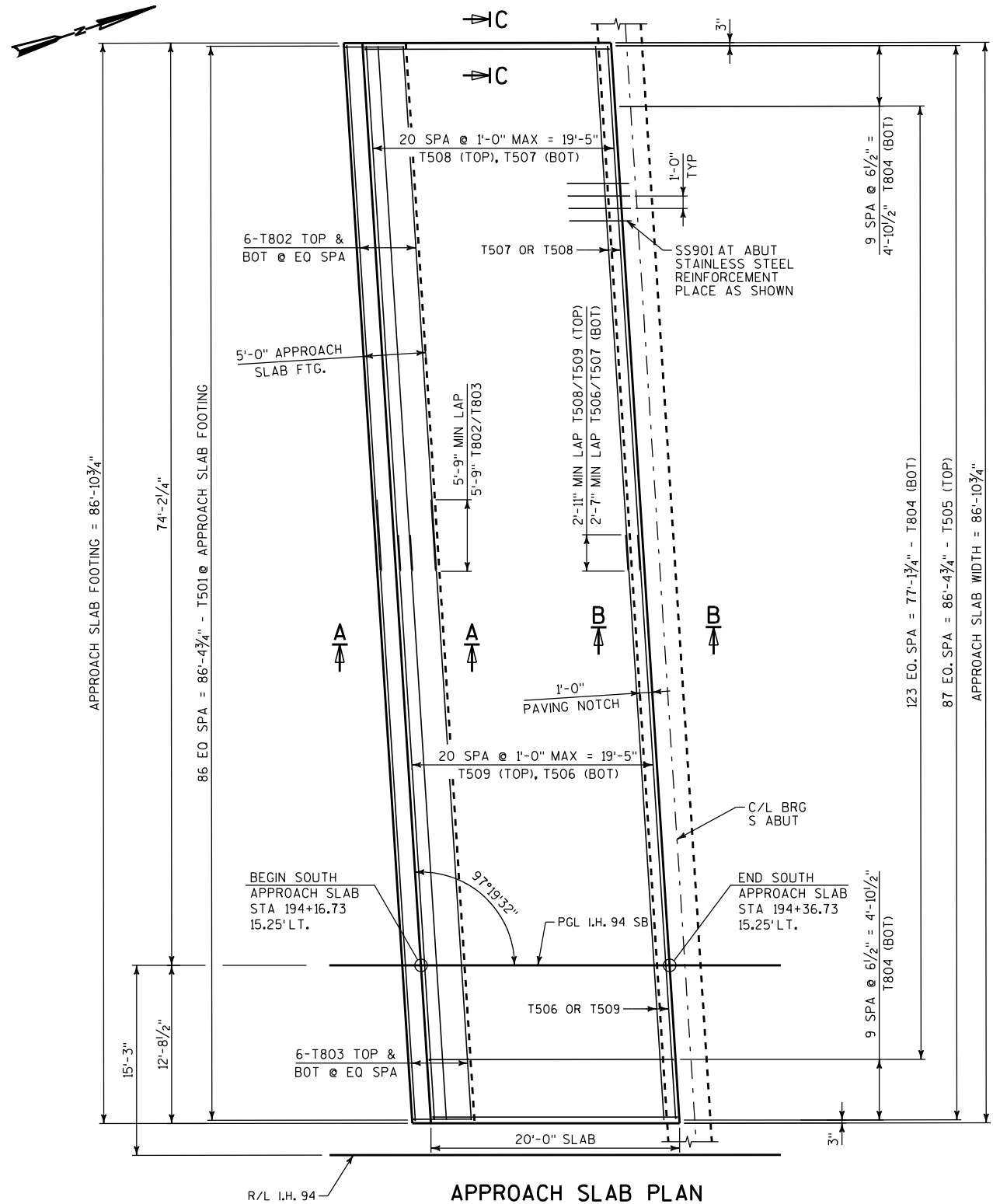


S516



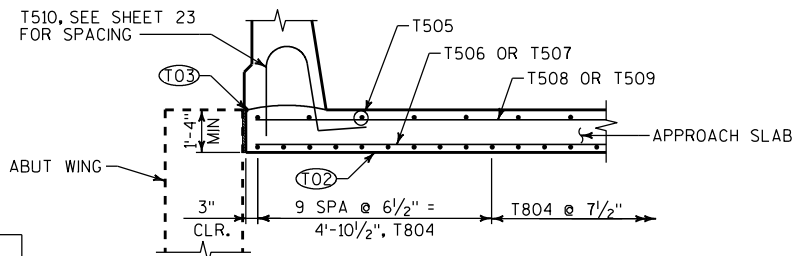
S709

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		JBA	PLANS CK'D. KES
SUPERSTRUCTURE BILL OF BARS			SHEET 19 OF 25



SECTION THRU APPROACH SLAB

MEASURED NORMAL TO ABUTMENT



ELEVATIONS

FEATURE	SOUTH APPROACH					
	BEGIN			END		
	STATION	OFFSET	ELEV	STATION	OFFSET	ELEV
TOE OF EAST BARRIER	99EW+14.32	-88.02	750.91	99EW+34.32	-88.01	751.05
CROWN	99EW+17.36	-40.02	751.89	99EW+37.36	-40.01	752.03
WB LAYOUT LINE	99EW+18.12	-28.02	751.66	99EW+38.12	-28.01	751.80
TOE OF WEST BARRIER	99EW+19.64	-4.02	751.19	99EW+39.64	-4.01	751.33

APPROACH SLAB NOTES

THE APPROACH SLAB SHALL HAVE LONGITUDINAL GROOVING, SEE SPECIAL PROVISIONS.

APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF THE APPROACH SLAB AND AREAS OUTLINED IN THE SECTION THRU APPROACH SLAB.

POLYETHYLENE SHEETS SHALL BE CONSIDERED INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

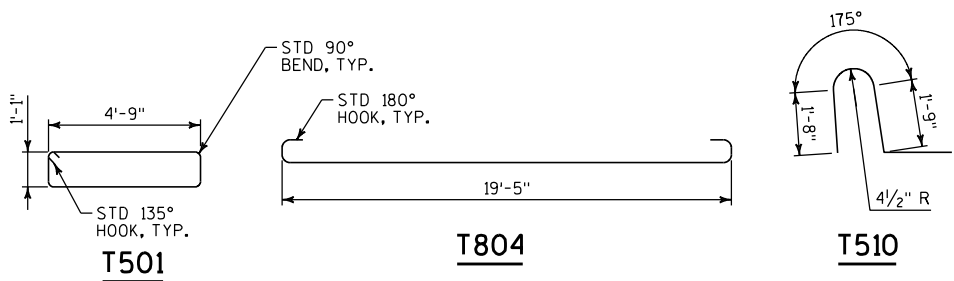
LEGEND

- (T01) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING
- (T02) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE
- (T03) 1/2" PREFORMED JOINT FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.

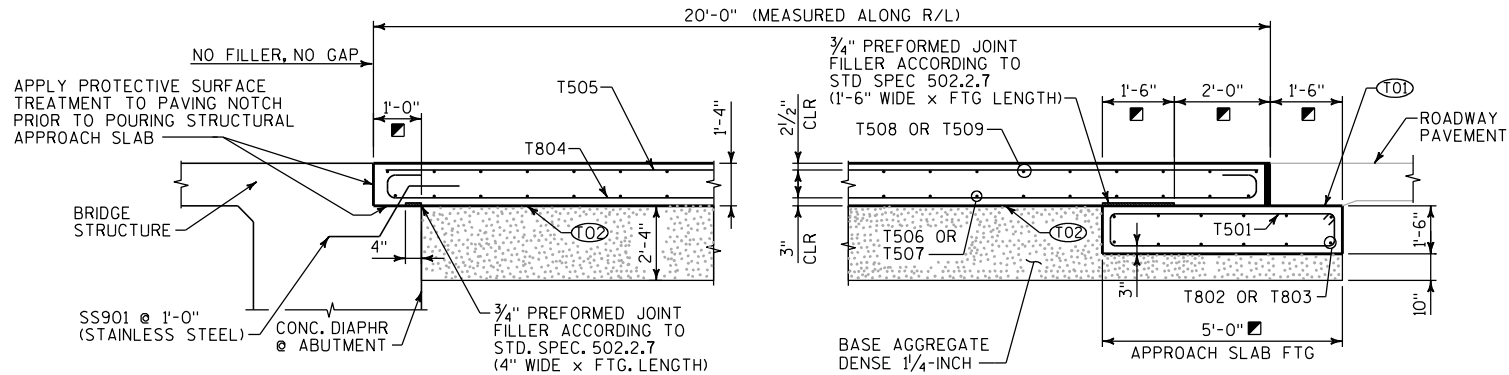
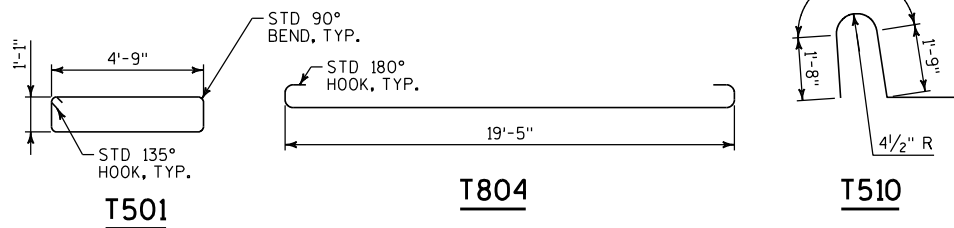
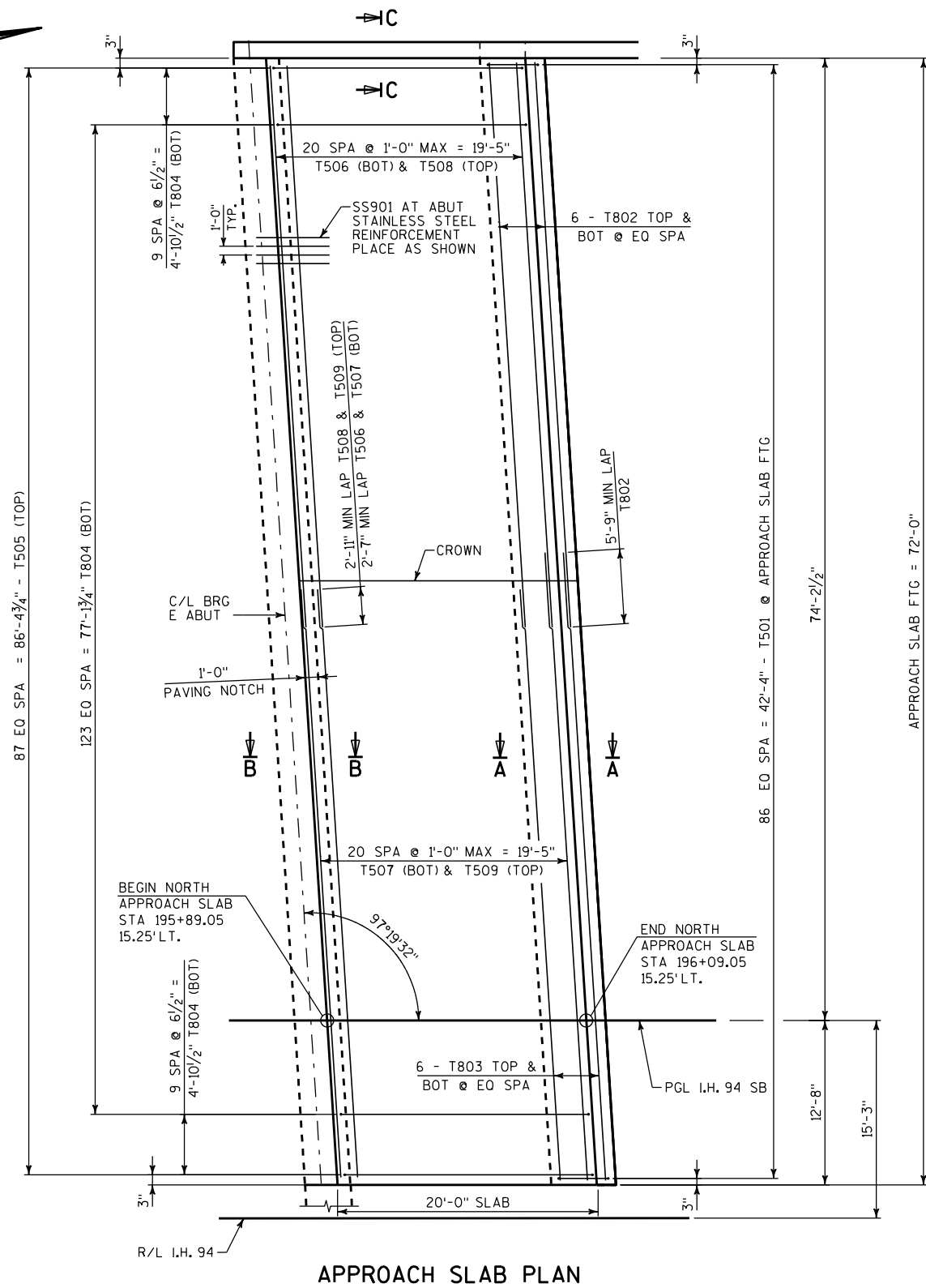
BILL OF BARS

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

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	LOCATION
T501	X	87	12'-3"	X	APPROACH SLAB FTG. - STIRRUP
T802	X	12	42'-3"		APPROACH SLAB FTG. - TRANS
T803	X	12	50'-0"		APPROACH SLAB FTG. - TRANS
T804	X	142	21'-3"	X	APPROACH SLAB - LONG. - BOT
T505	X	88	19'-5"		APPROACH SLAB - LONG. - TOP
T506	X	21	47'-2"		APPROACH SLAB - TRANS. - BOT
T507	X	21	42'-3"		APPROACH SLAB - TRANS. - BOT
T508	X	21	42'-3"		APPROACH SLAB - TRANS. - TOP
T509	X	21	47'-2"		APPROACH SLAB - TRANS. - TOP
T510	X	60	5'-5"	X	APPROACH SLAB - PARAPET DOWEL



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		TEK	PLANS CK'D. KES
SOUTH STRUCTURAL APPROACH SLAB			SHEET 20 OF 25

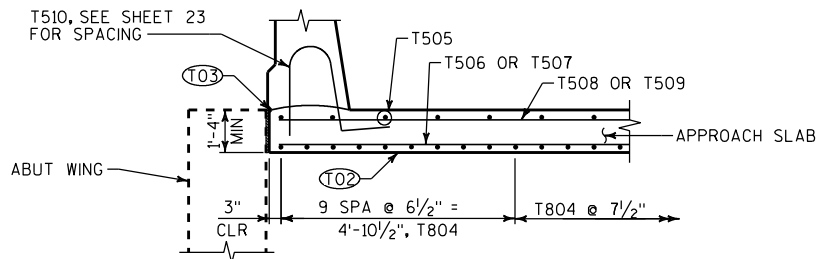


SECTION B-B

SECTION A-A

SECTION THRU APPROACH SLAB

MEASURED NORMAL TO ABUTMENT



SECTION C-C

ELEVATIONS

FEATURE	OFFSET	NORTH APPROACH			
		BEGIN		END	
		STATION	ELEV	STATION	ELEV
TOE OF EAST BARRIER	-88.00	102EW+10.82	752.09	102EW+30.82	752.10
CROWN	-40.00	102EW+13.86	753.05	102EW+33.86	753.06
SB PGL	-28.00	102EW+14.62	752.81	102EW+34.62	752.82
TOE OF WEST BARRIER	-4.00	102EW+16.14	752.33	102EW+36.14	752.34

BILL OF BARS

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

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	LOCATION
T501	X	87	12'-3"	X	APPROACH SLAB FTG. - STIRRUP
T802	X	12	42'-3"		APPROACH SLAB FTG. - TRANS
T803	X	12	50'-0"		APPROACH SLAB FTG. - TRANS
T804	X	142	21'-3"	X	APPROACH SLAB - LONG. - BOT
T505	X	88	19'-5"		APPROACH SLAB - LONG. - TOP
T506	X	21	47'-2"		APPROACH SLAB - TRANS. - BOT
T507	X	21	42'-3"		APPROACH SLAB - TRANS. - BOT
T508	X	21	42'-3"		APPROACH SLAB - TRANS. - TOP
T509	X	21	47'-2"		APPROACH SLAB - TRANS. - TOP
T510	X	60	5'-5"	X	APPROACH SLAB - PARAPET DOWEL

APPROACH SLAB NOTES

THE APPROACH SLAB SHALL HAVE LONGITUDINAL GROOVING, SEE SPECIAL PROVISIONS.

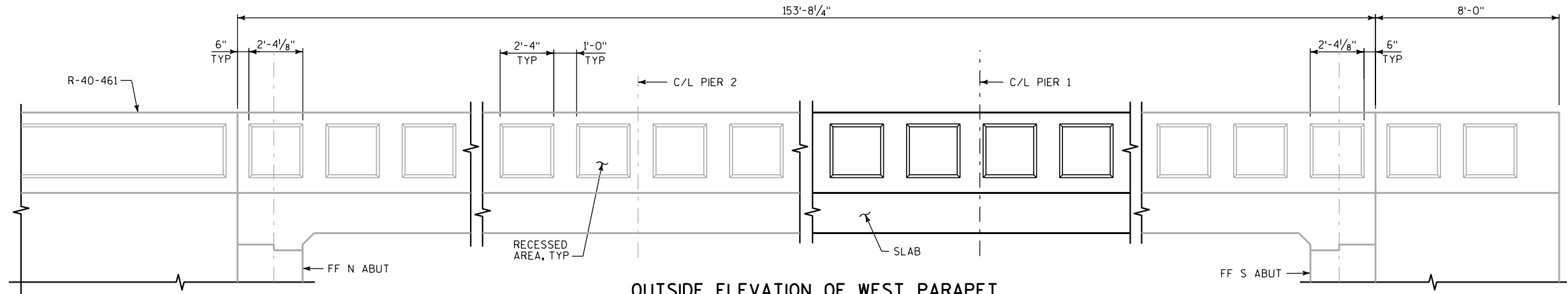
APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF THE APPROACH SLAB AND AREAS OUTLINED IN THE SECTION THRU APPROACH SLAB.

POLYETHYLENE SHEETS SHALL BE CONSIDERED INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

LEGEND

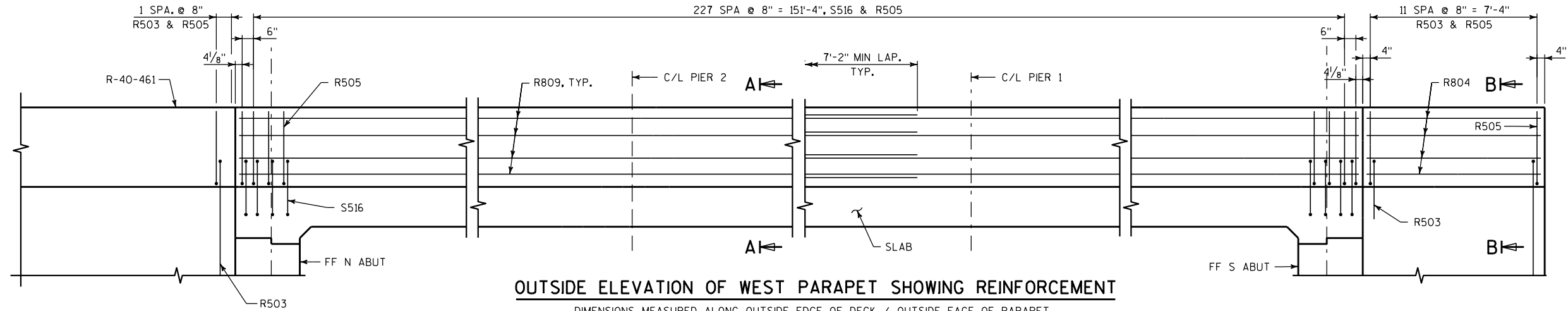
- (T01) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING
- (T02) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE
- (T03) 1/2" PREFORMED JOINT FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		TEK	PLANS CK'D. KES
NORTH STRUCTURAL APPROACH SLAB			SHEET 21 OF 25



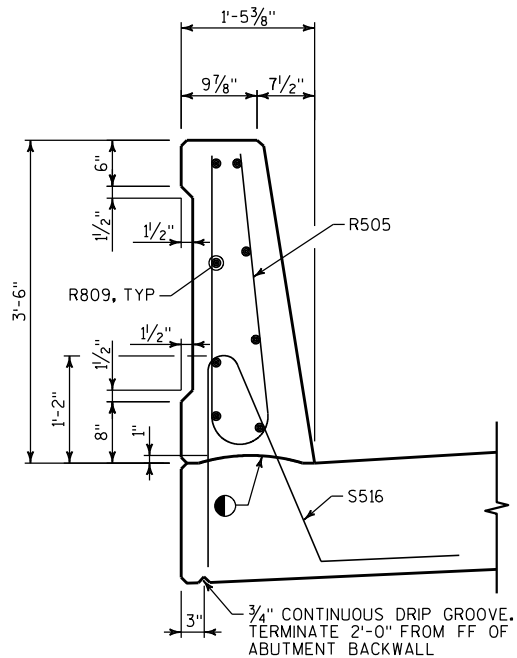
OUTSIDE ELEVATION OF WEST PARAPET

DIMENSIONS MEASURED ALONG OUTSIDE EDGE OF DECK / OUTSIDE FACE OF PARAPET (LOOKING EAST)

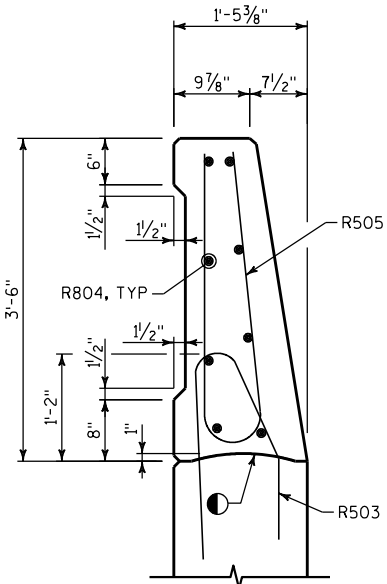


OUTSIDE ELEVATION OF WEST PARAPET SHOWING REINFORCEMENT

DIMENSIONS MEASURED ALONG OUTSIDE EDGE OF DECK / OUTSIDE FACE OF PARAPET (LOOKING EAST)



SECTION A



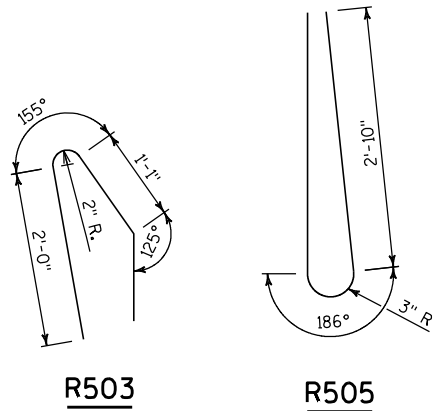
SECTION B

CONSTRUCTION JOINT - STRIKE OFF AS SHOWN

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
R503	X	12	4'-7"	X		PARAPET VERT.
R804	X	8	7'-8"			PARAPET HORIZ.
R505	X	242	6'-6"	X		PARAPET VERT.
R809	X	24	55'-9"			PARAPET HORIZ.

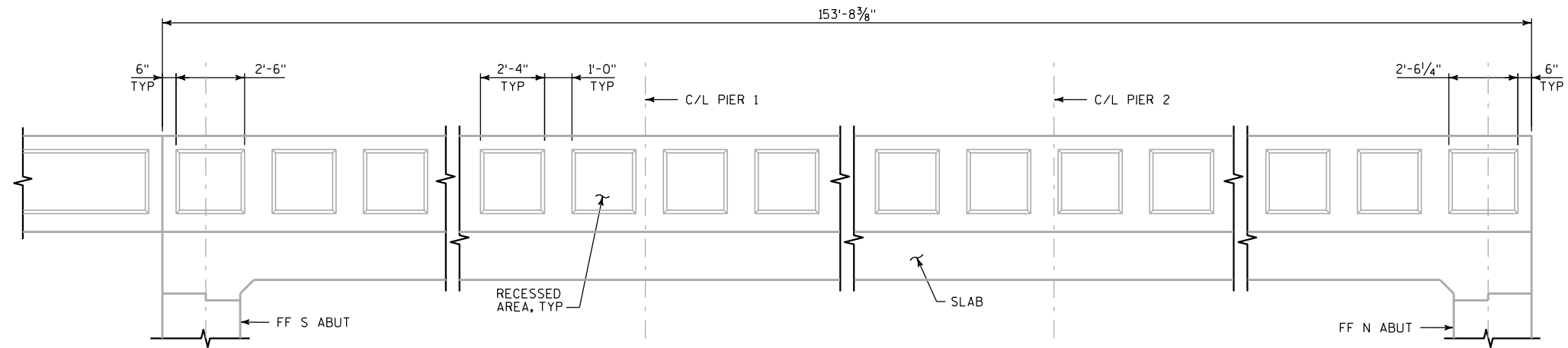
NOTE:
BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE



R503

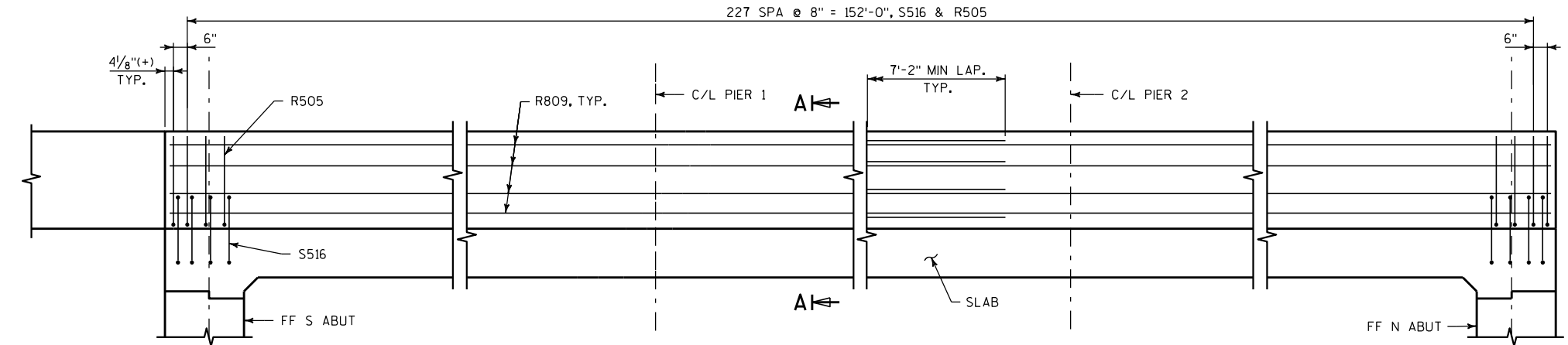
R505

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY JBA		PLANS CK'D. KES	
SLOPED FACE PARAPET 42SS MODIFIED (1 OF 2)			SHEET 22 OF 25



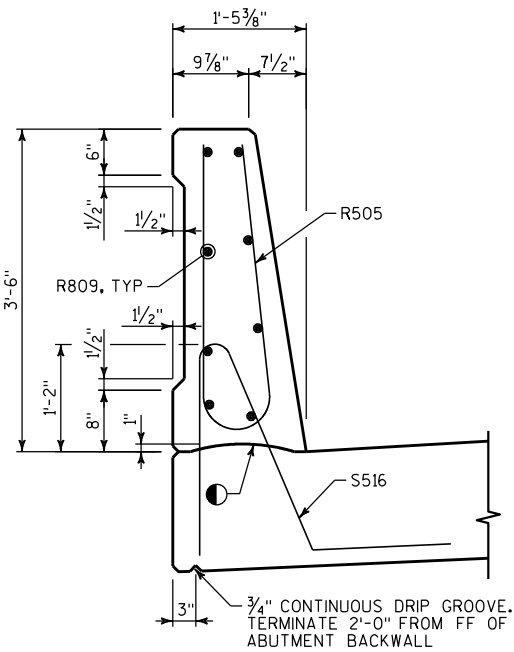
OUTSIDE ELEVATION OF EAST PARAPET

DIMENSIONS MEASURED ALONG OUTSIDE EDGE OF DECK / OUTSIDE FACE OF PARAPET
(LOOKING WEST)



OUTSIDE ELEVATION OF EAST PARAPET SHOWING REINFORCEMENT

DIMENSIONS MEASURED ALONG OUTSIDE EDGE OF DECK / OUTSIDE FACE OF PARAPET
(LOOKING WEST)



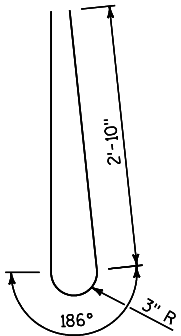
SECTION A

CONSTRUCTION JOINT - STRIKE OFF AS SHOWN

BILL OF BARS

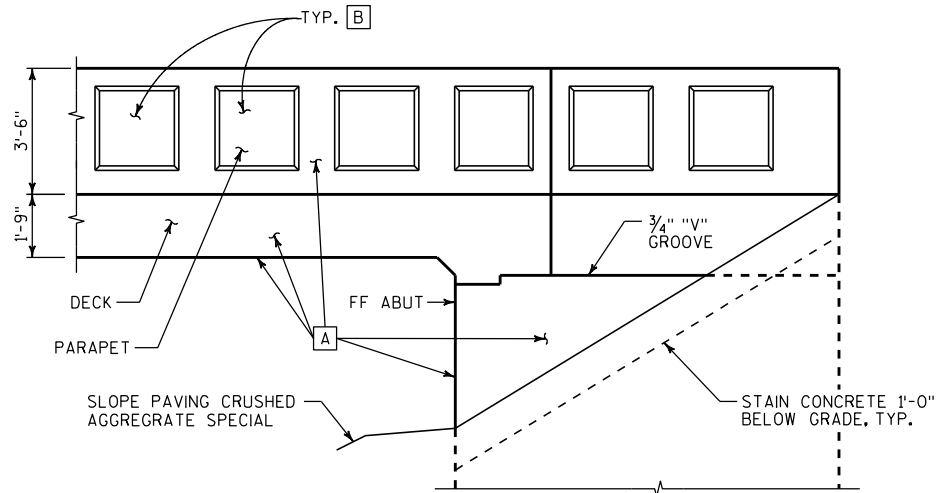
NOTE:
BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO.	LENGTH	BENT	LOCATION
R505	X	230	6'-6"	X	PARAPET VERT.
R809	X	24	55'-9"		PARAPET HORIZ.



R505

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		JBA	PLANS CK'D. KES
SLOPED FACE PARAPET 42SS MODIFIED (2 OF 2)			SHEET 23 OF 25

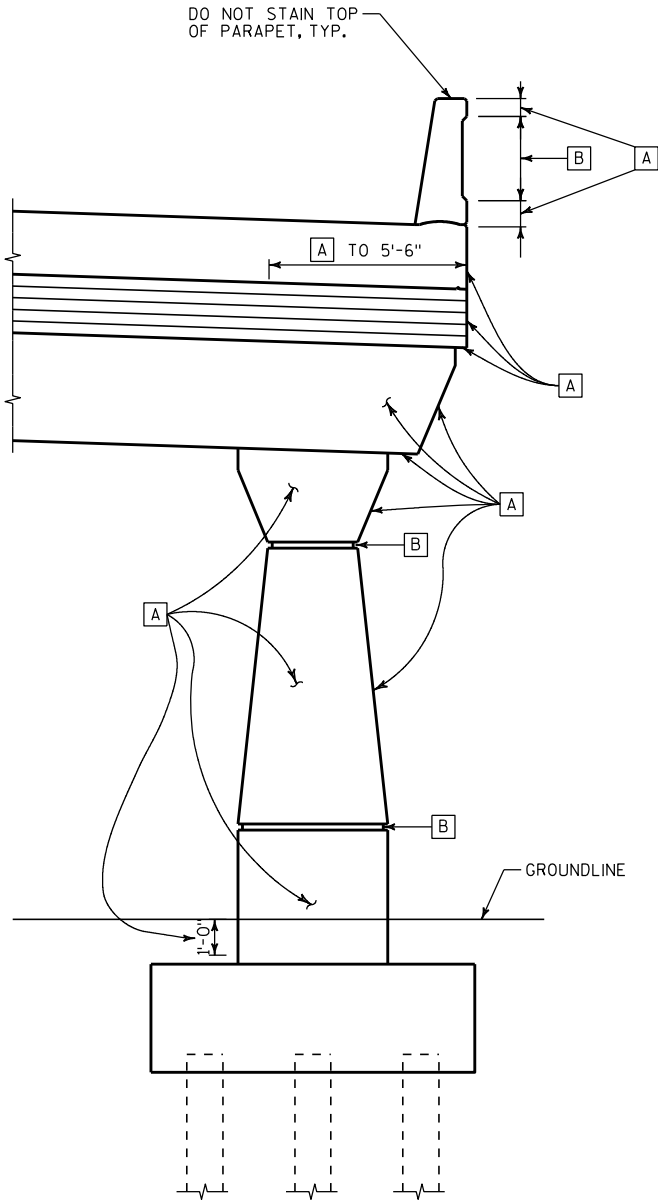


OUTSIDE ELEVATION OF PARAPET

CONCRETE STAINING SCHEDULE

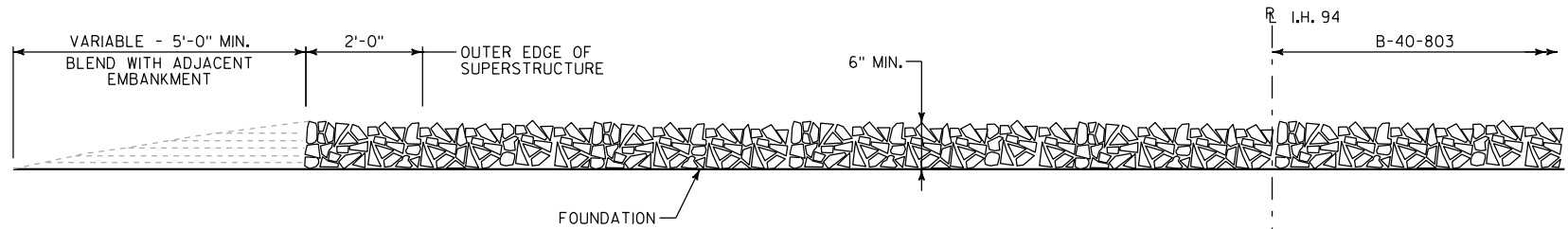
MARK	COLOR	LOCATION	NOTES
[A]	BASE COLOR	PARAPETS	EXTERIOR, EXCEPT AS NOTED FOR ACCENT COLORS, DO NOT STAIN TOP OR FRONT
		DECK	FASCIA & EXTERIOR 5'-6" OF EXPOSED UNDERSIDE
		ABUTMENT	WINGWALLS, ENDS, AND FRONT FACE FROM SLAB TO 1'-0" BELOW FINAL GRADE
		PIERS	PIER CAP & COLUMNS, EXCEPT AS NOTED FOR ACCENT COLORS, FROM BEAM SEAT TO 1'-0" BELOW FINAL GRADE
[B]	ACCENT COLOR #1	PARAPETS	RECESSED PANELS
		COLUMNS	HORIZONTAL RUSTICATIONS

SEE SPECIAL PROVISIONS FOR STAIN COLORS.

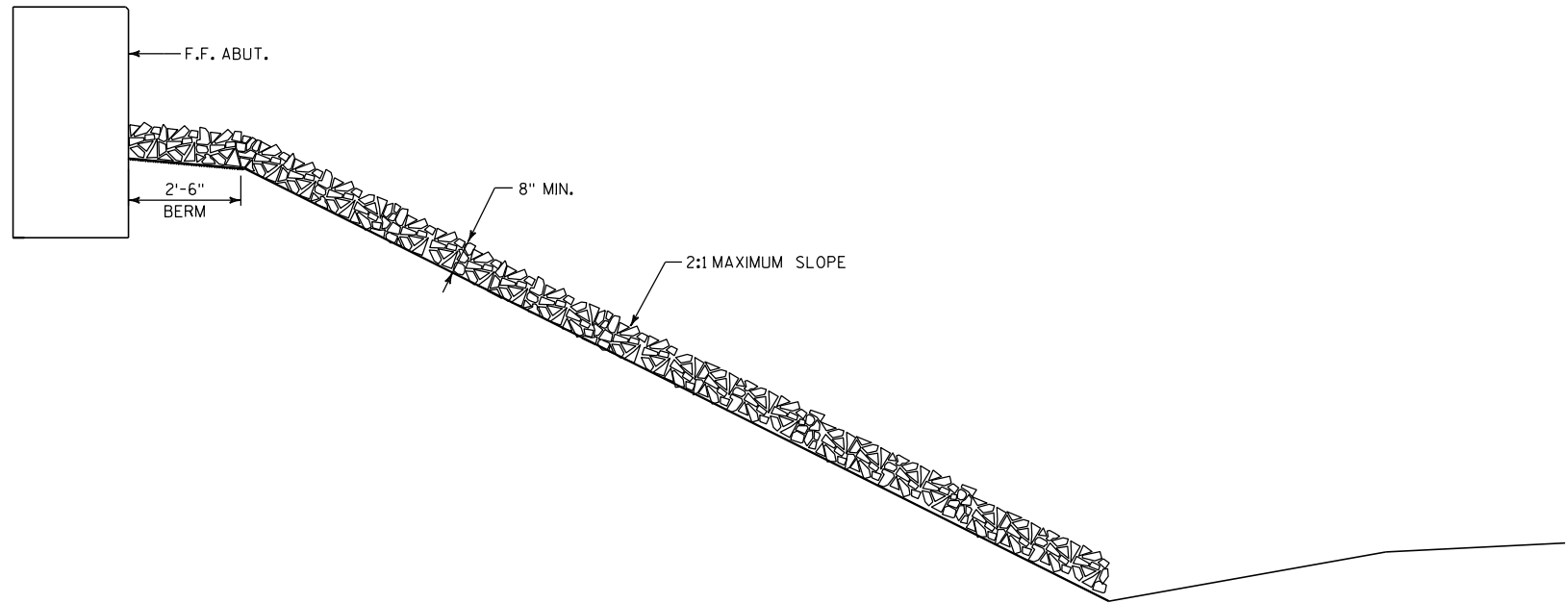


ELEVATION OF PIER
LOOKING NORTH

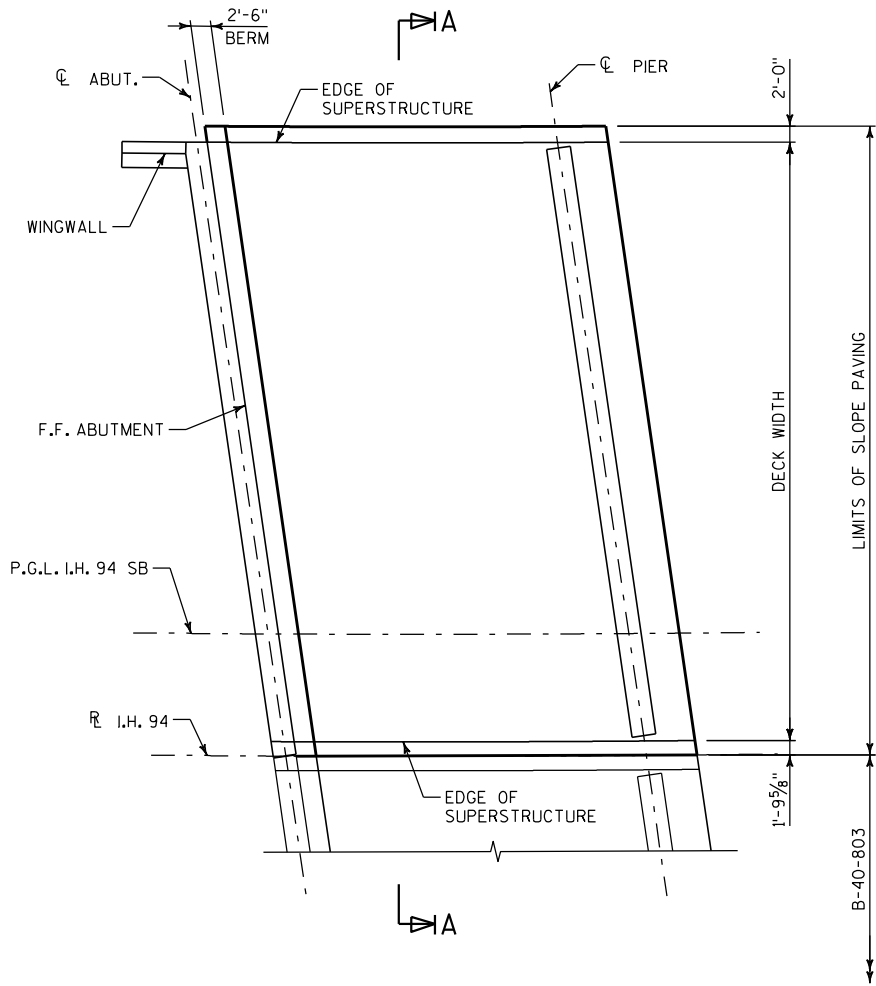
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		JBA	PLANS CK'D. KES
AESTHETIC DETAILS		SHEET 24 OF 25	



SECTION A-A



STANDARD CROSS SECTION THRU CRUSHED AGGREGATE SPECIAL



PLAN

GENERAL NOTES

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

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-40-804			
DRAWN BY		DGS	PLANS CK'D. KES
SLOPE PAVING DETAILS			SHEET 25 OF 25