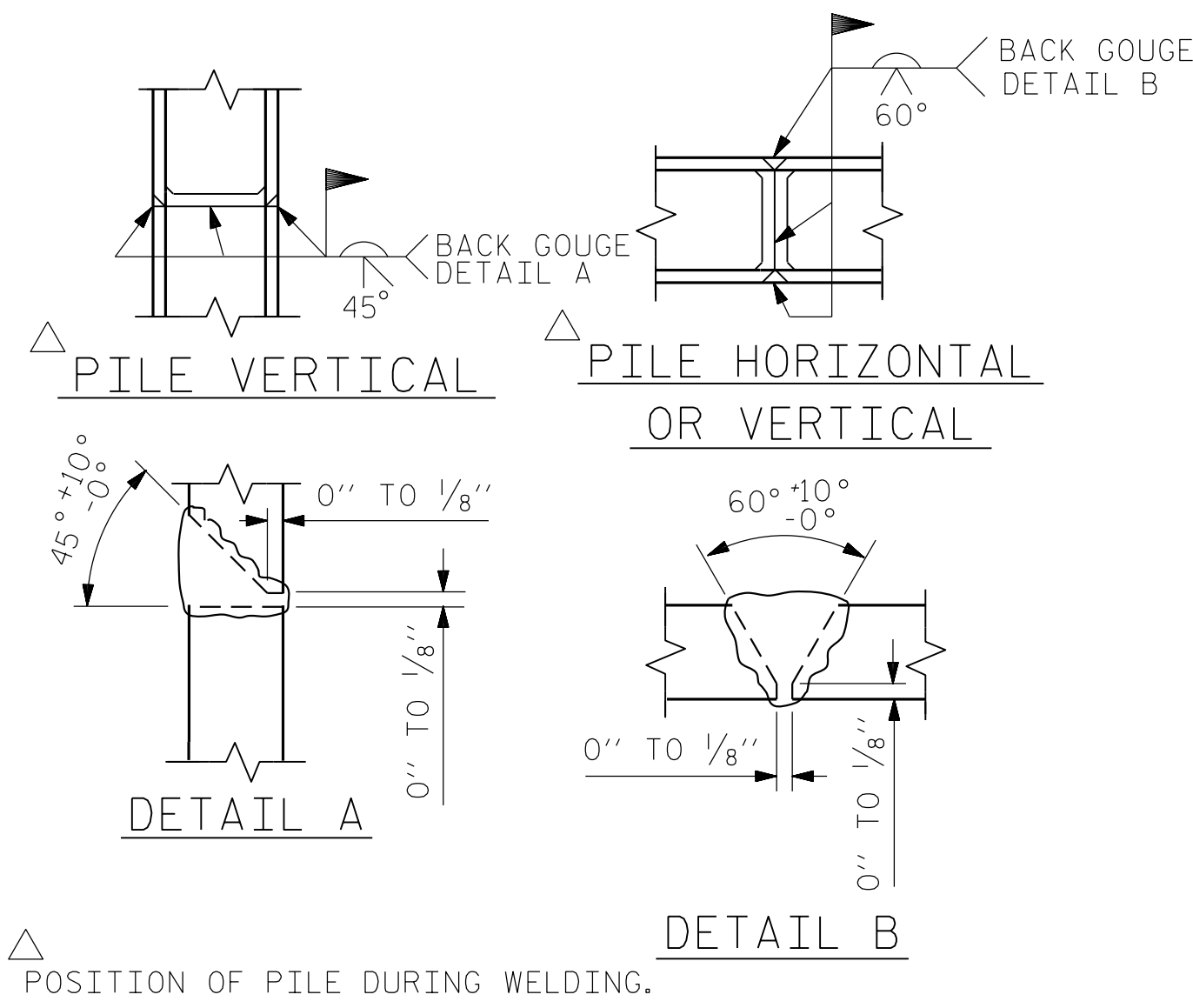


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

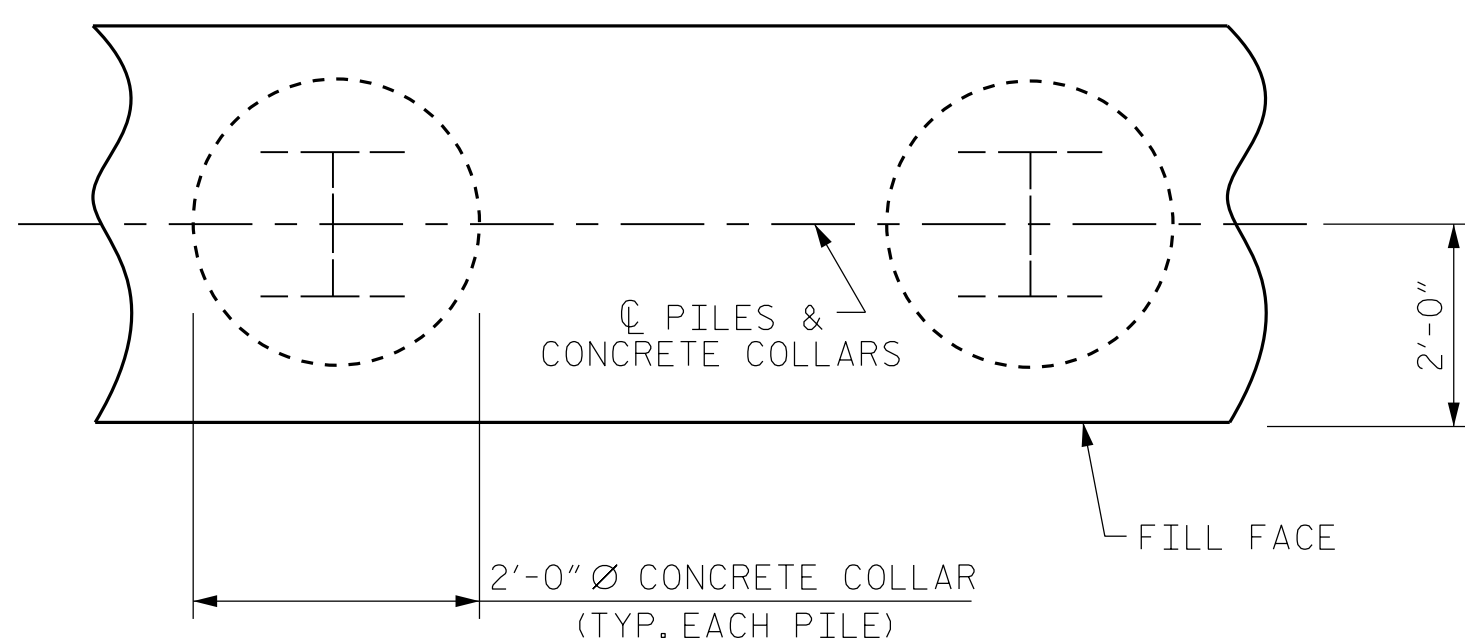
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR EFFECTIVENESS.

NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

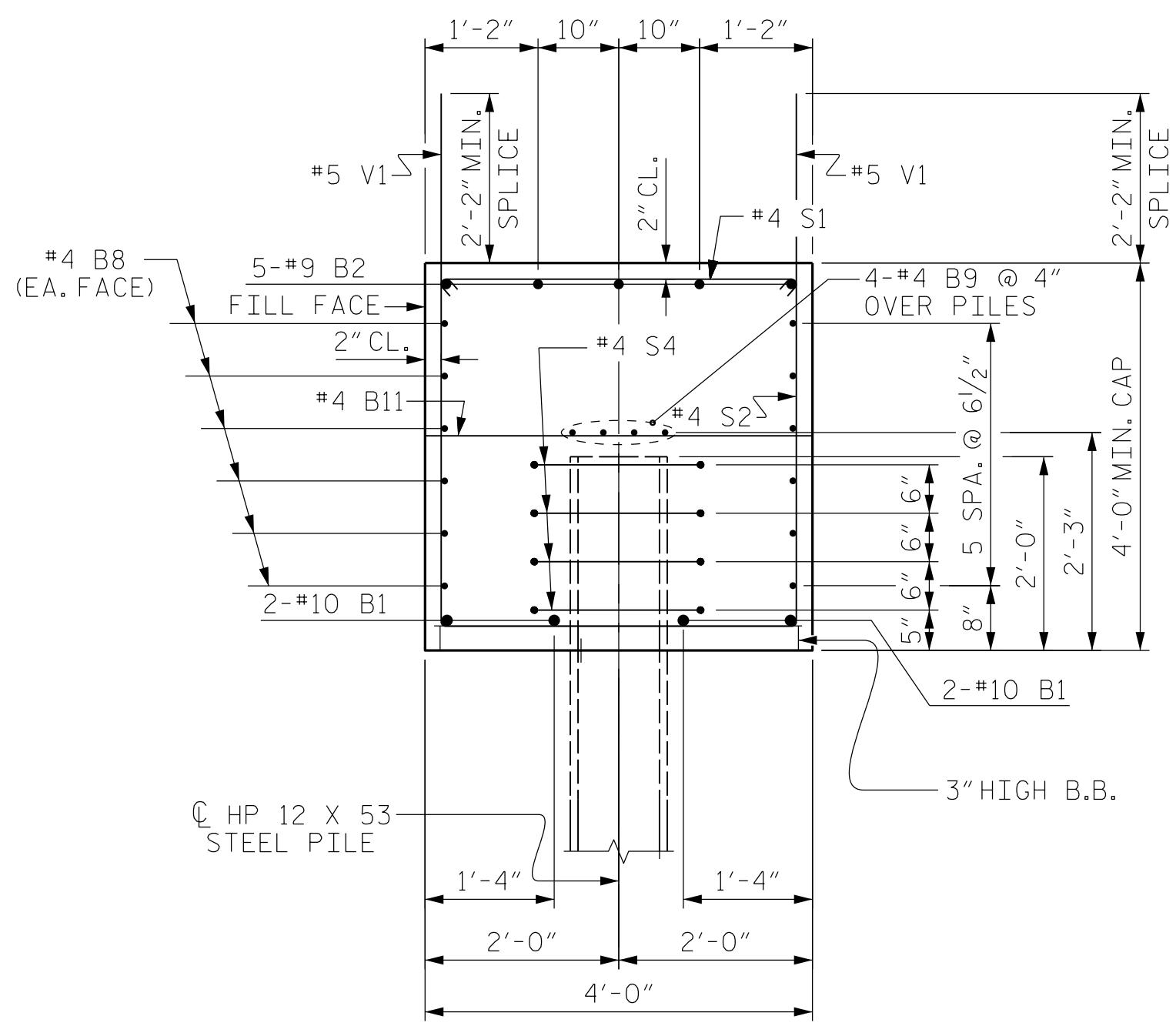
TEMPORARY DRAINAGE AT END BENT



PILE SPLICE DETAILS

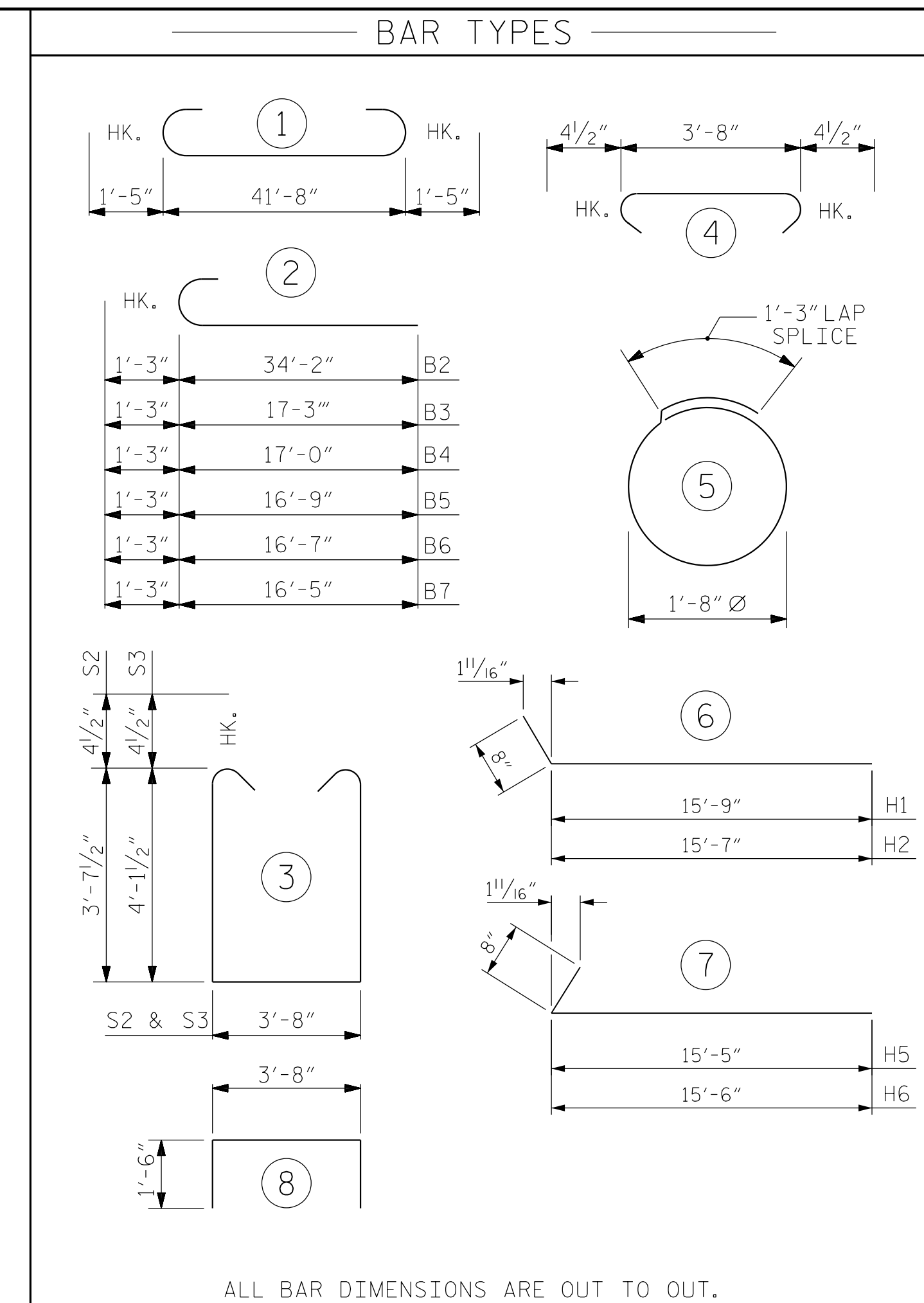


CORROSION PROTECTION FOR STEEL PILES DETAIL

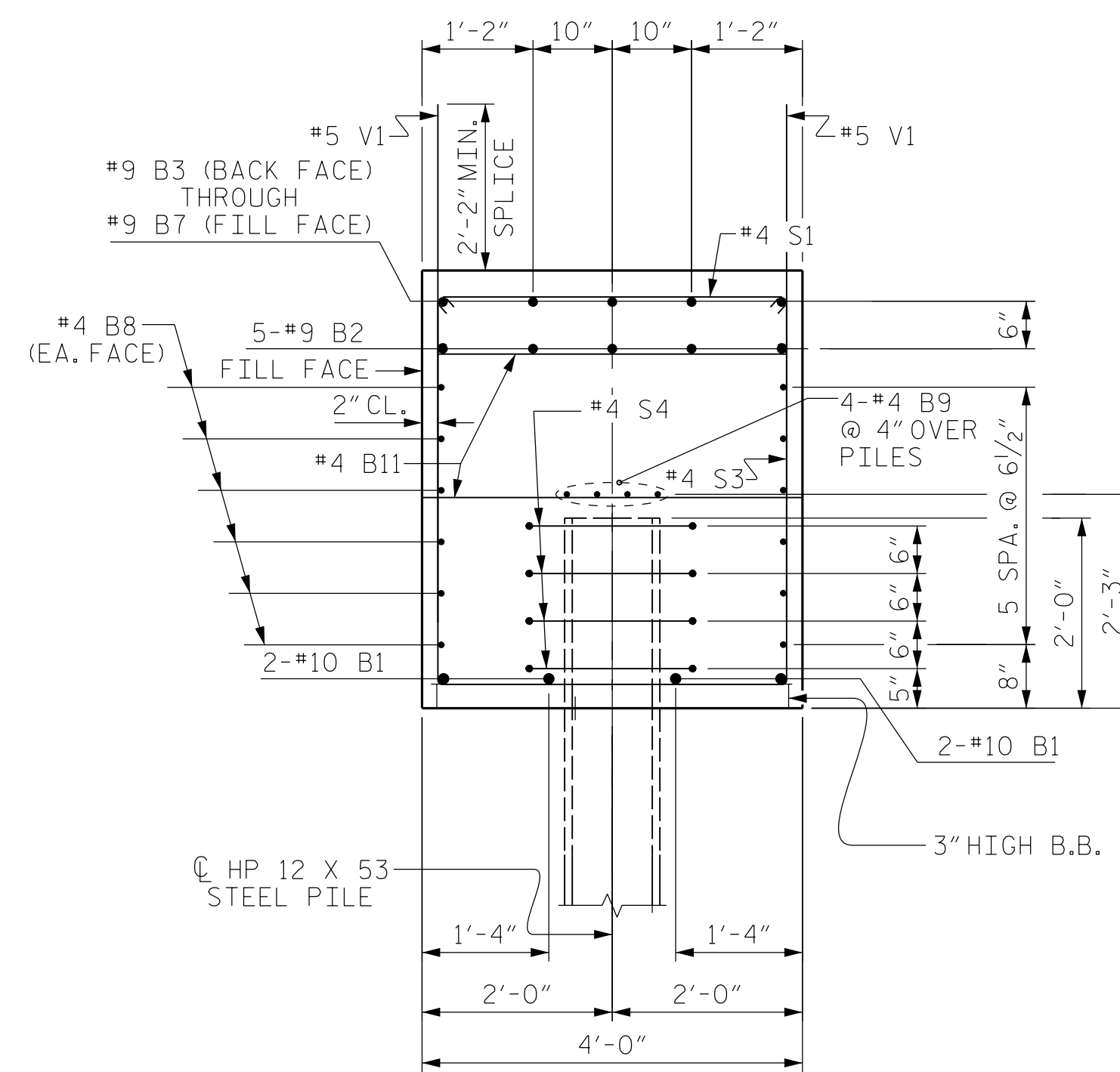


SECTION A-A

(CONCRETE COLLAR NOT SHOWN FOR CLARITY. SEE "CORROSION PROTECTION FOR STEEL PILES DETAIL.")



ALL BAR DIMENSIONS ARE OUT TO OUT.



SECTION B-B

(CONCRETE COLLAR NOT SHOWN FOR CLARITY. SEE "CORROSION PROTECTION FOR STEEL PILES DETAIL.")

BAR TYPES

BILL OF MATERIAL

END BENT #1

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	4	#10	1	44'-6"	766
B2	5	#9	2	35'-5"	602
B3	1	#9	2	18'-6"	63
B4	1	#9	2	18'-3"	62
B5	1	#9	2	18'-0"	61
B6	1	#9	2	17'-10"	61
B7	1	#9	2	17'-8"	60
B8	24	#4	STR	22'-2"	355
B9	8	#4	STR	22'-2"	118
B10	5	#4	STR	9'-5"	31
B11	14	#4	STR	3'-8"	34
B12	1	#4	STR	7'-6"	5
B13	1	#4	STR	7'-3"	5
B14	1	#4	STR	7'-1"	5
B15	1	#4	STR	6'-11"	5
B16	1	#4	STR	6'-9"	5
H1	22	#6	6	16'-5"	542
H2	22	#6	6	16'-3"	537
H3	2	#6	STR	9'-3"	28
H4	2	#6	STR	7'-10"	24
H5	24	#6	7	16'-1"	580
H6	24	#6	7	16'-2"	583
K1	36	#4	STR	2'-8"	64
S1	58	#4	4	4'-5"	171
S2	35	#4	3	11'-8"	273
S3	23	#4	3	12'-8"	195
S4	36	#4	5	6'-6"	156
U1	12	#4	8	6'-8"	53
V1	144	#5	STR	7'-3"	1089
V2	18	#5	STR	6'-10"	128
V3	8	#5	STR	7'-0"	58
V4	8	#5	STR	7'-2"	60
V5	10	#5	STR	7'-3"	76
V6	18	#5	STR	7'-0"	131
V7	10	#5	STR	7'-2"	75
V8	10	#5	STR	7'-4"	76

REINFORCING STEEL (FOR ONE END BENT) 7137 LBS.

CLASS A CONCRETE BREAKDOWN (FOR ONE END BENT)

POUR #1 CAP, LOWER PART OF WINGS & COLLARS 33.8 C.Y.

POUR #2 UPPER PART OF WINGS 9.9 C.Y.

TOTAL CLASS A CONCRETE 43.7 C.Y.

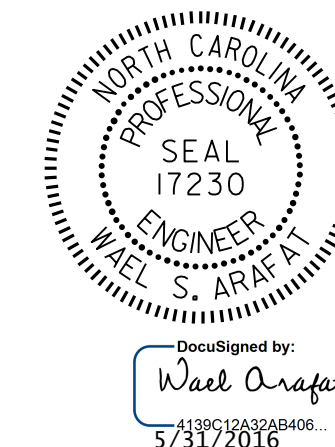
HP 12 X 53 STEEL PILES
NO: 9 LIN. FT. = 250

PROJECT NO. R-4060
ALLEGHANY COUNTY
STATION: 36+45.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
INTEGRAL
END BENT #1



DRAWN BY: H. T. BARBOUR DATE: 3-3-15
CHECKED BY: V. X. NGUYEN DATE: 11-15
DESIGN ENGINEER OF RECORD: S. I. CHAMPION DATE: 12-15

27-MAY-2016 10:28
*****SDCN*****
wrafat AT SD-290338

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-20
1			3			TOTAL SHEETS
2			4			26