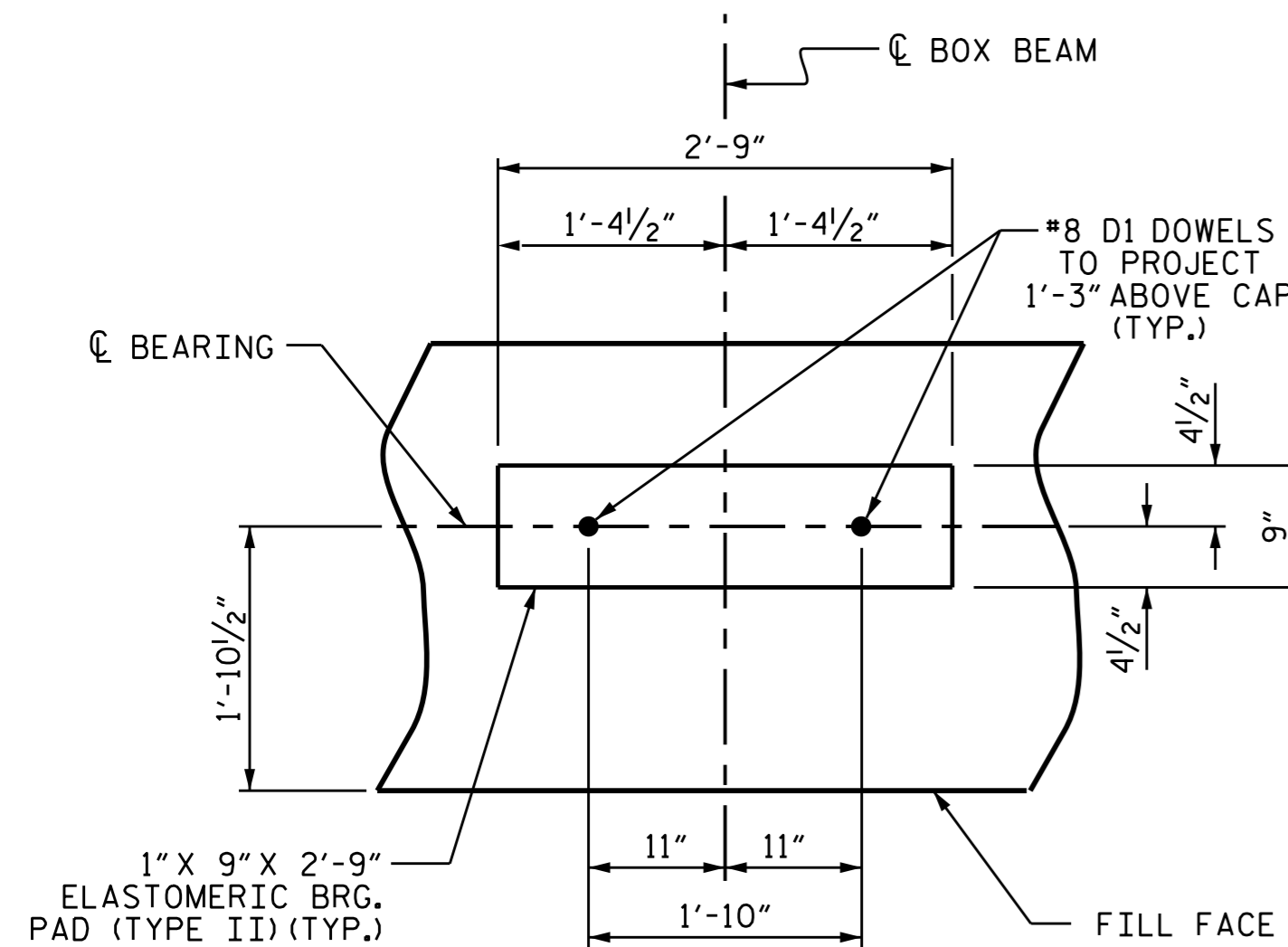


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

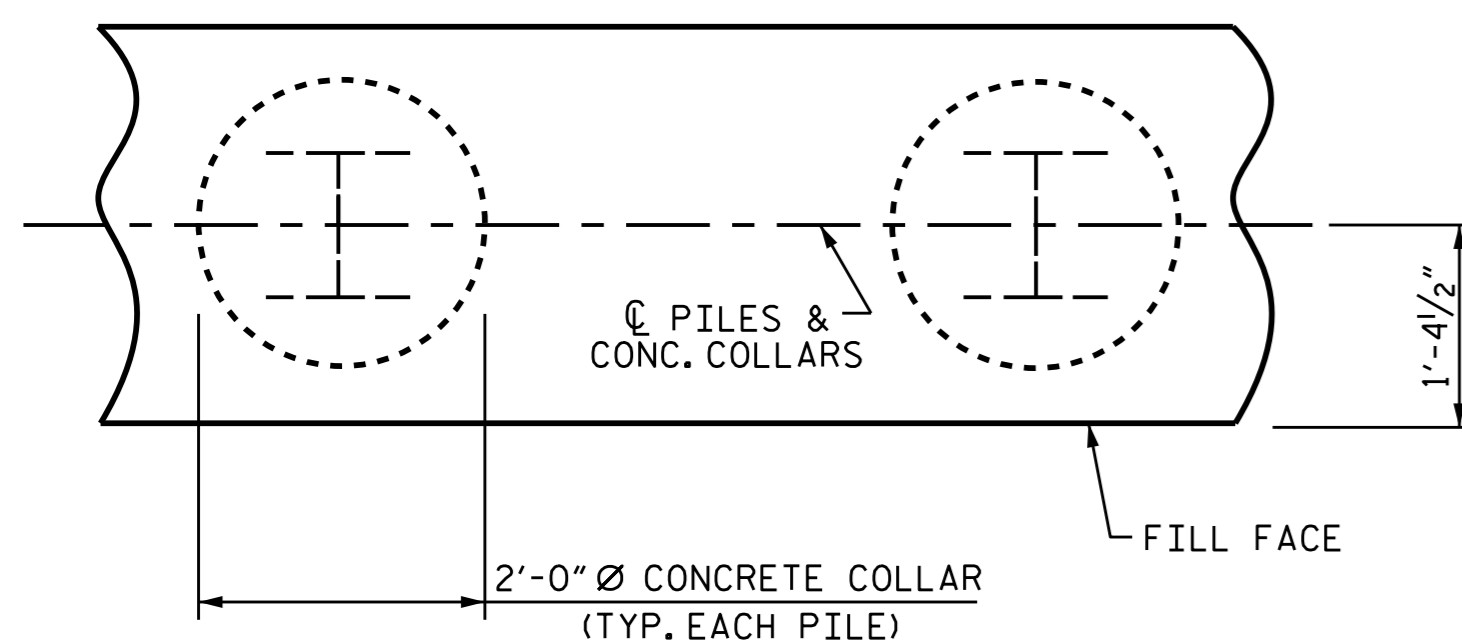
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



DETAIL "A"

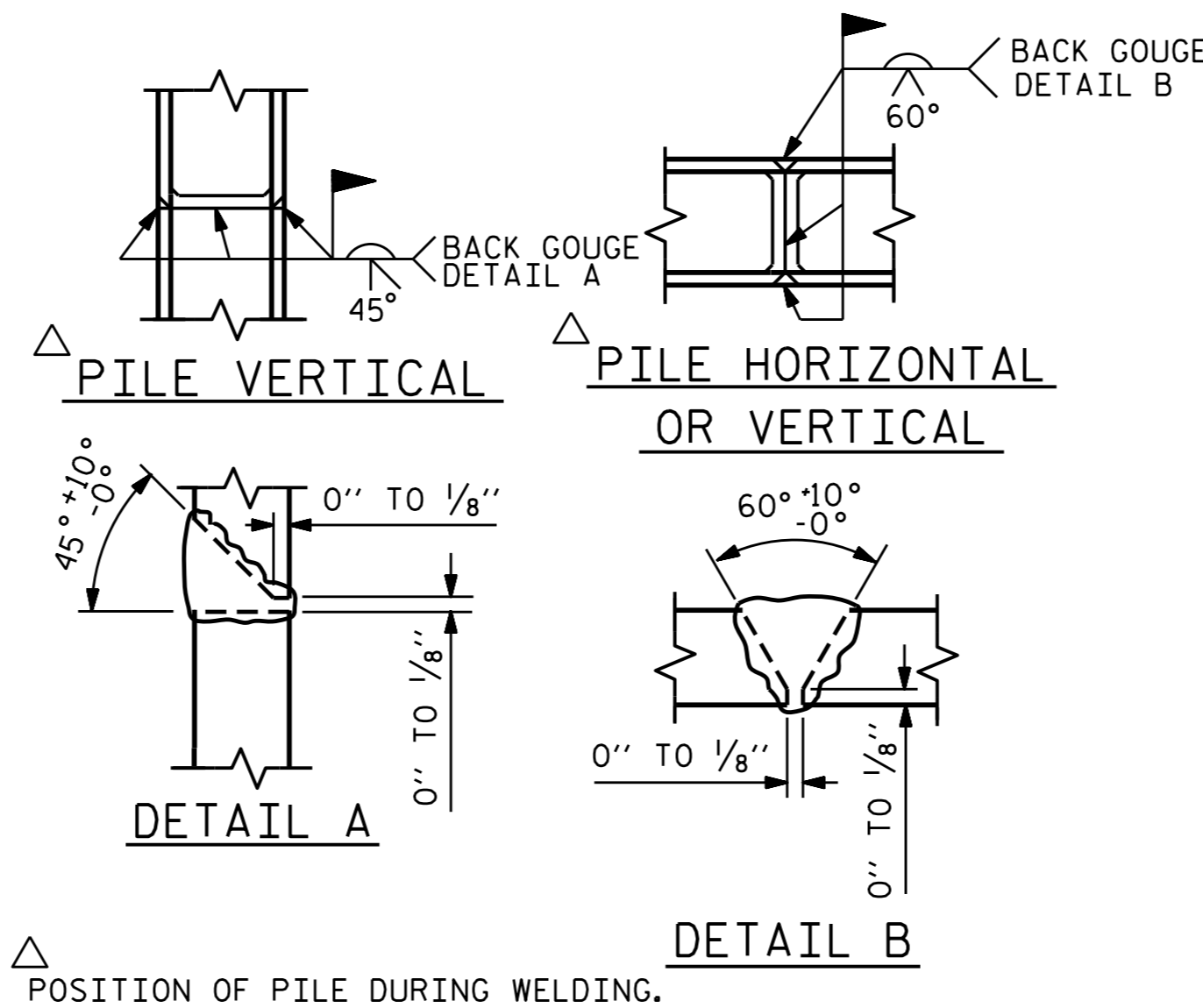
END BENT 1 SHOWN, END BENT 2 SIMILAR BY ROTATION



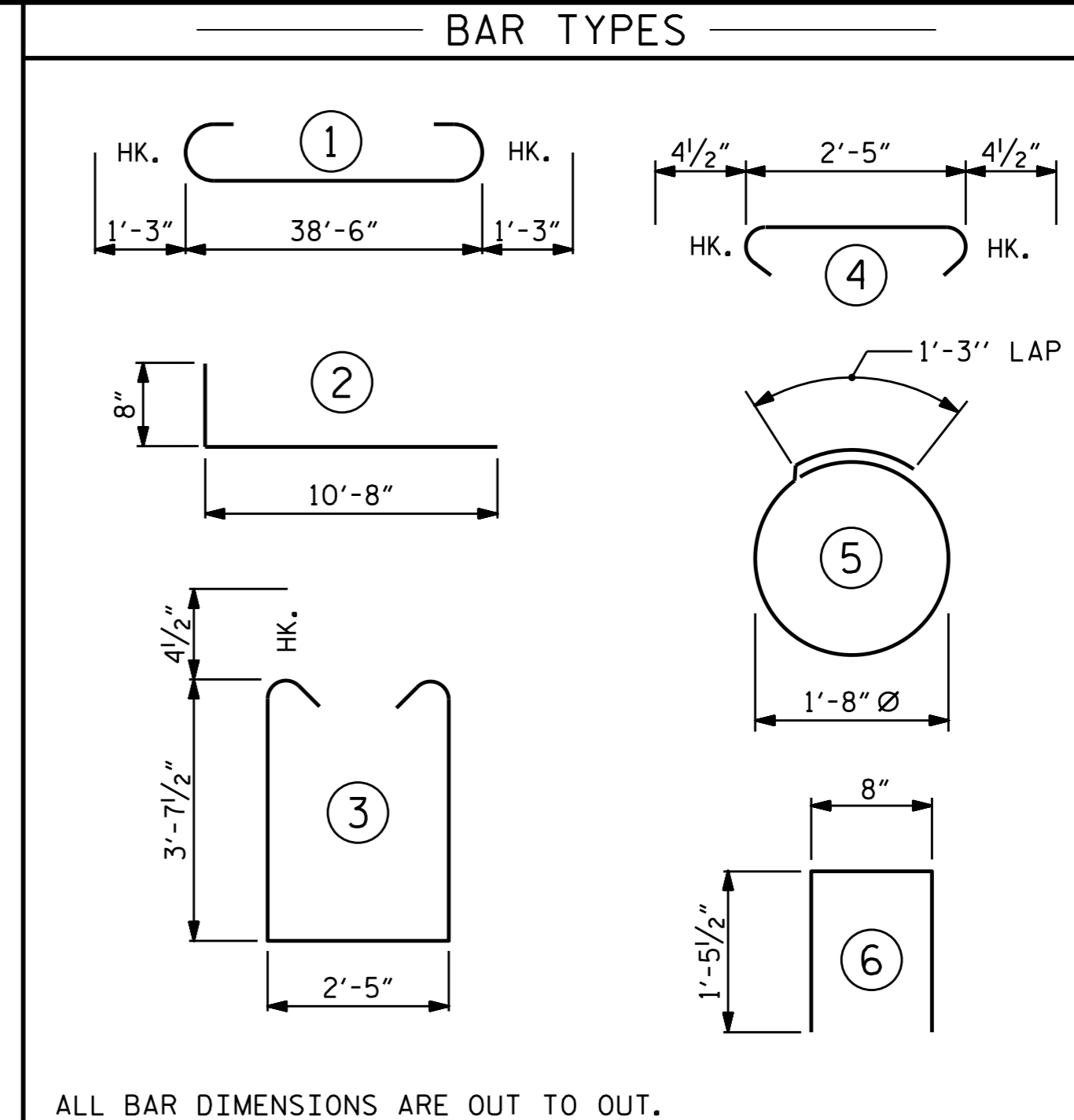
PLAN

CORROSION PROTECTION FOR STEEL PILES DETAIL

END BENT 1 SHOWN, END BENT 2 SIMILAR BY ROTATION

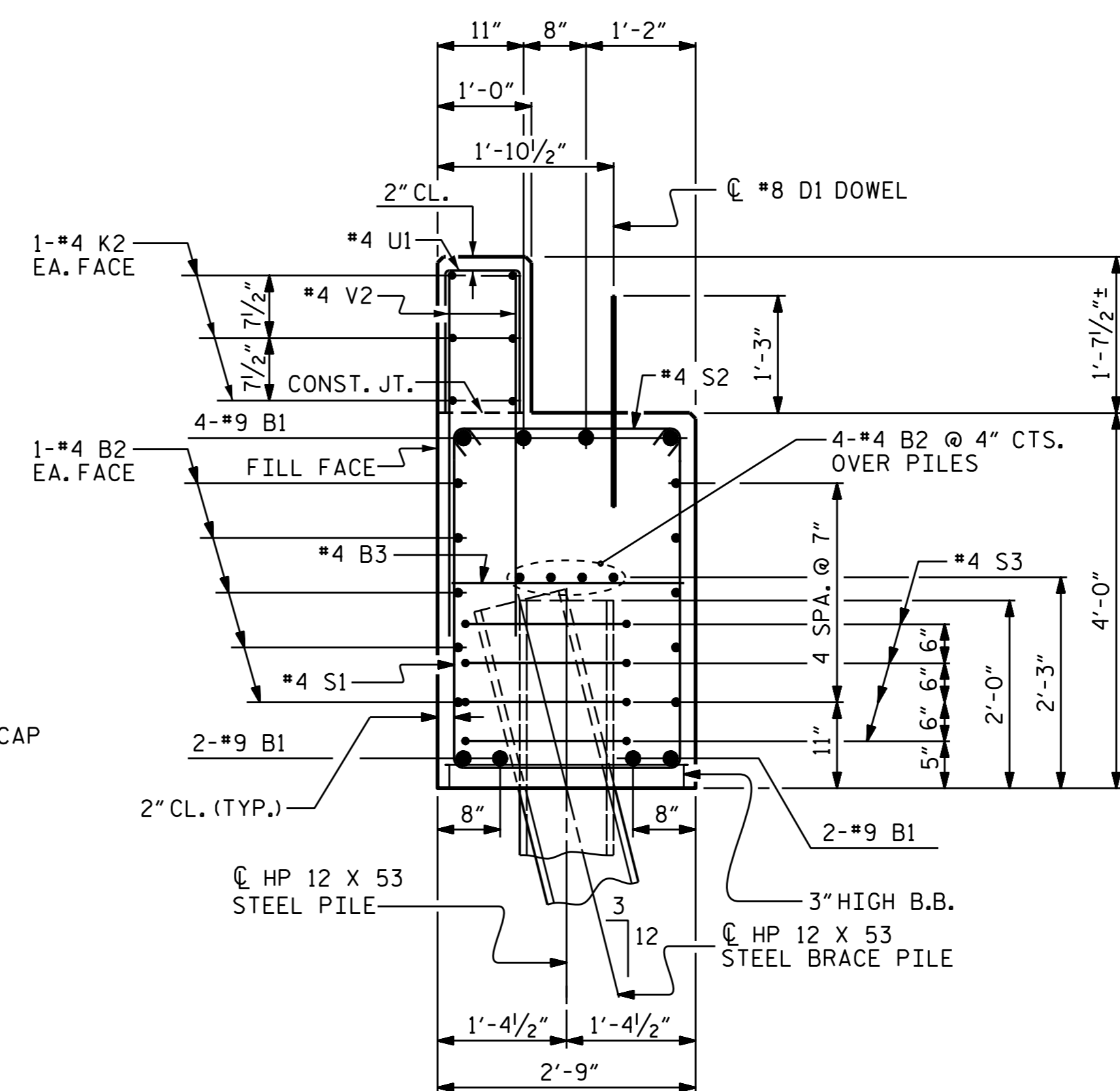


PILE SPLICE DETAILS



END BENT 1		END BENT 2	
HP 12 X 53 STEEL PILES	NO: 7	HP 12 X 53 STEEL PILES	NO: 7
STEEL PILE POINTS	EA. 7	STEEL PILE POINTS	EA. 7
PILE REDRIVES	EA. 4	PILE REDRIVES	EA. 4
LIN. FT. 385		LIN. FT. 475	

BILL OF MATERIAL FOR ONE END BENT (2 REQ'D)					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#9	1	41'-0"	1115
B2	28	#4	STR	20'-7"	385
B3	10	#4	STR	2'-5"	16
D1	22	#8	STR	2'-3"	132
H1	48	#5	2	11'-4"	567
K1	12	#4	STR	3'-2"	25
K2	12	#4	STR	20'-7"	165
S1	50	#4	3	10'-5"	348
S2	50	#4	4	3'-2"	106
S3	28	#4	5	6'-6"	122
U1	33	#4	6	3'-7"	79
V1	60	#4	STR	7'-2"	287
V2	66	#4	STR	5'-3"	231
REINFORCING STEEL (FOR ONE END BENT)					3578 LBS.
CLASS A CONCRETE BREAKDOWN (FOR ONE END BENT)					
POUR #1 CAP, LOWER PART OF WINGS & COLLARS				20.1 C.Y.	
POUR #2 BACKWALL & UPPER PART OF WINGS				5.5 C.Y.	
TOTAL CLASS A CONCRETE				25.6 C.Y.	



SECTION A-A

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



DocuSigned by: **Ting Fang**
E7208400977435 5/10/2016

PROJECT NO. B-4967
SCOTLAND & HOKE COUNTY
STATION: 16+74.50 -L-

SHEET 4 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENTS 1 & 2
DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-19
1			3			TOTAL SHEETS
2			4			23

ASSEMBLED BY : H. B. DESAI	DATE : 11-19-14
CHECKED BY : E. I. OMILE	DATE : 12-16-14
DRAWN BY : WJH 12/11	REV. 8/14
CHECKED BY : AAC 12/11	MAA/TMG