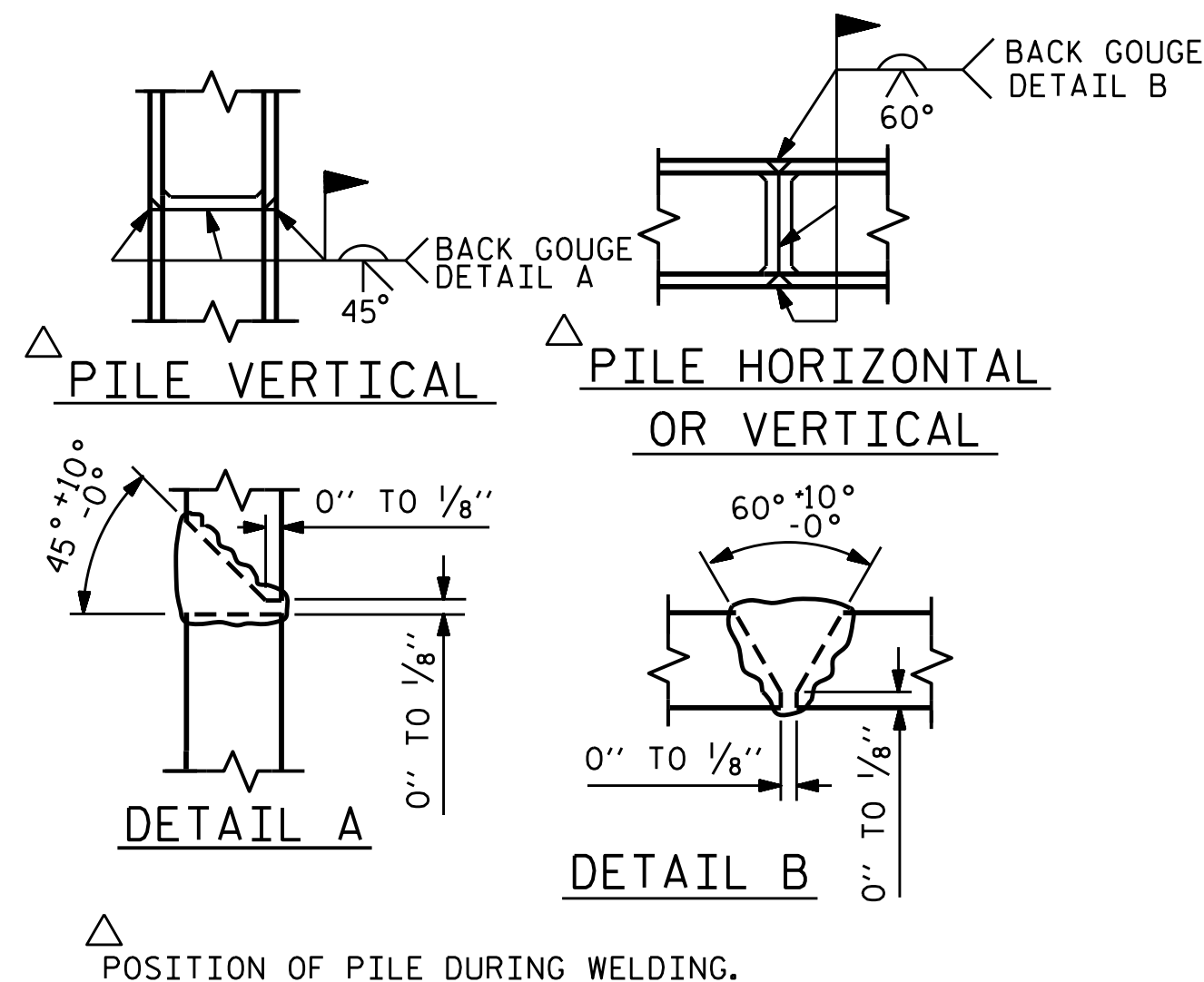


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

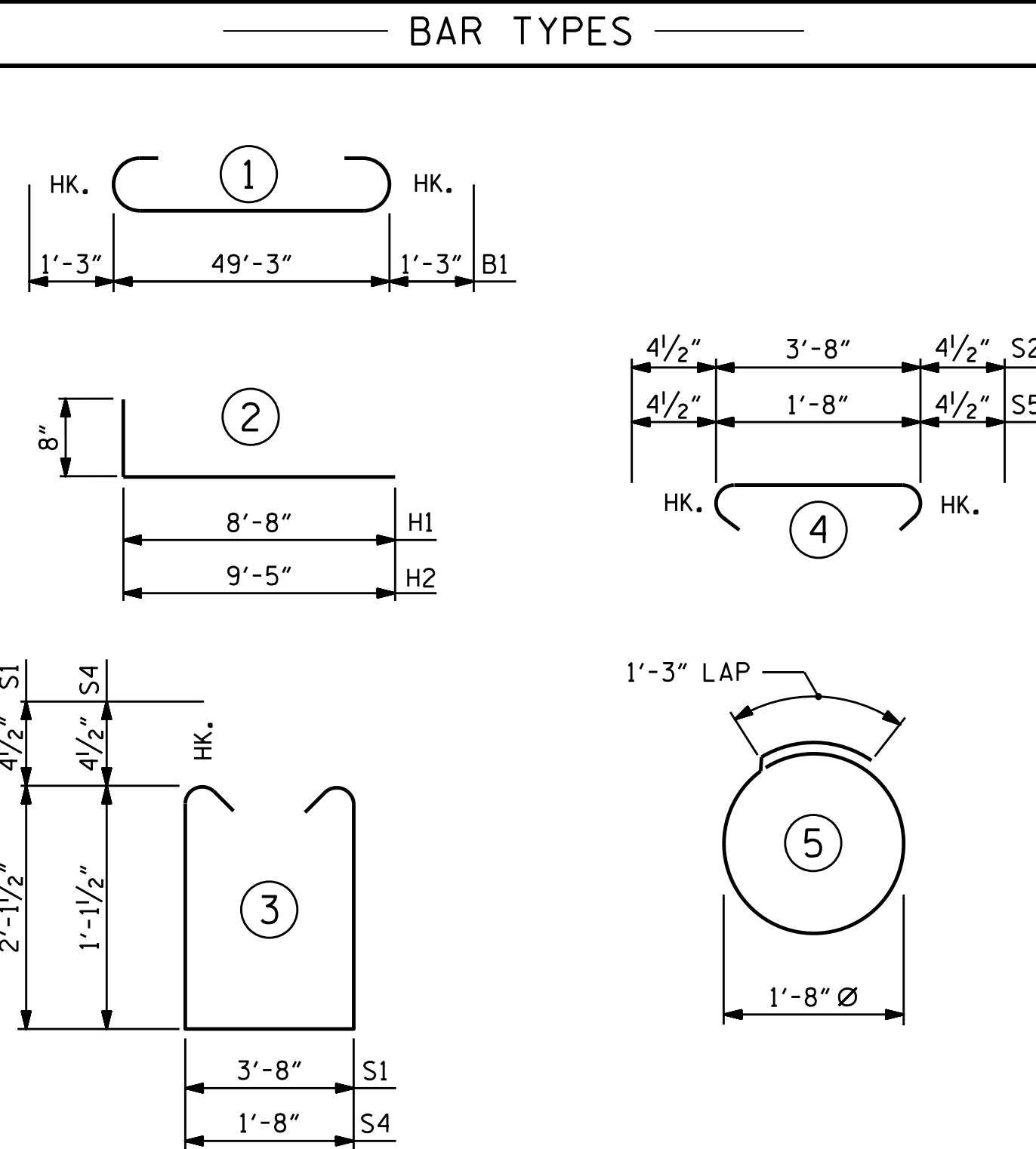
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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



ALL BAR DIMENSIONS ARE OUT TO OUT.

END BENT 1		END BENT 2	
HP 12 X 53 STEEL PILES	NO.: 7 LIN. FT. 350	HP 12 X 53 STEEL PILES	NO.: 7 LIN. FT. 420
PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	NO.: 7	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	NO.: 7
STEEL PILE POINTS	NO.: 7	STEEL PILE POINTS	NO.: 7
PILE REDRIVES	NO.: 4	PILE REDRIVES	NO.: 4
18" GALVANIZED STEEL SHEET PILES		18" GALVANIZED STEEL SHEET PILES	
PZ27 - NO. = 45	SO. FT. = 1798.0	PZ27 - NO. = 45	SO. FT. = 1780.0
PZ90 - NO. = 2	SO. FT. = 7.0	PZ90 - NO. = 2	SO. FT. = 7.0
TOTAL NO. = 47	SO. FT. = 1805.0	TOTAL NO. = 47	SO. FT. = 1787.0

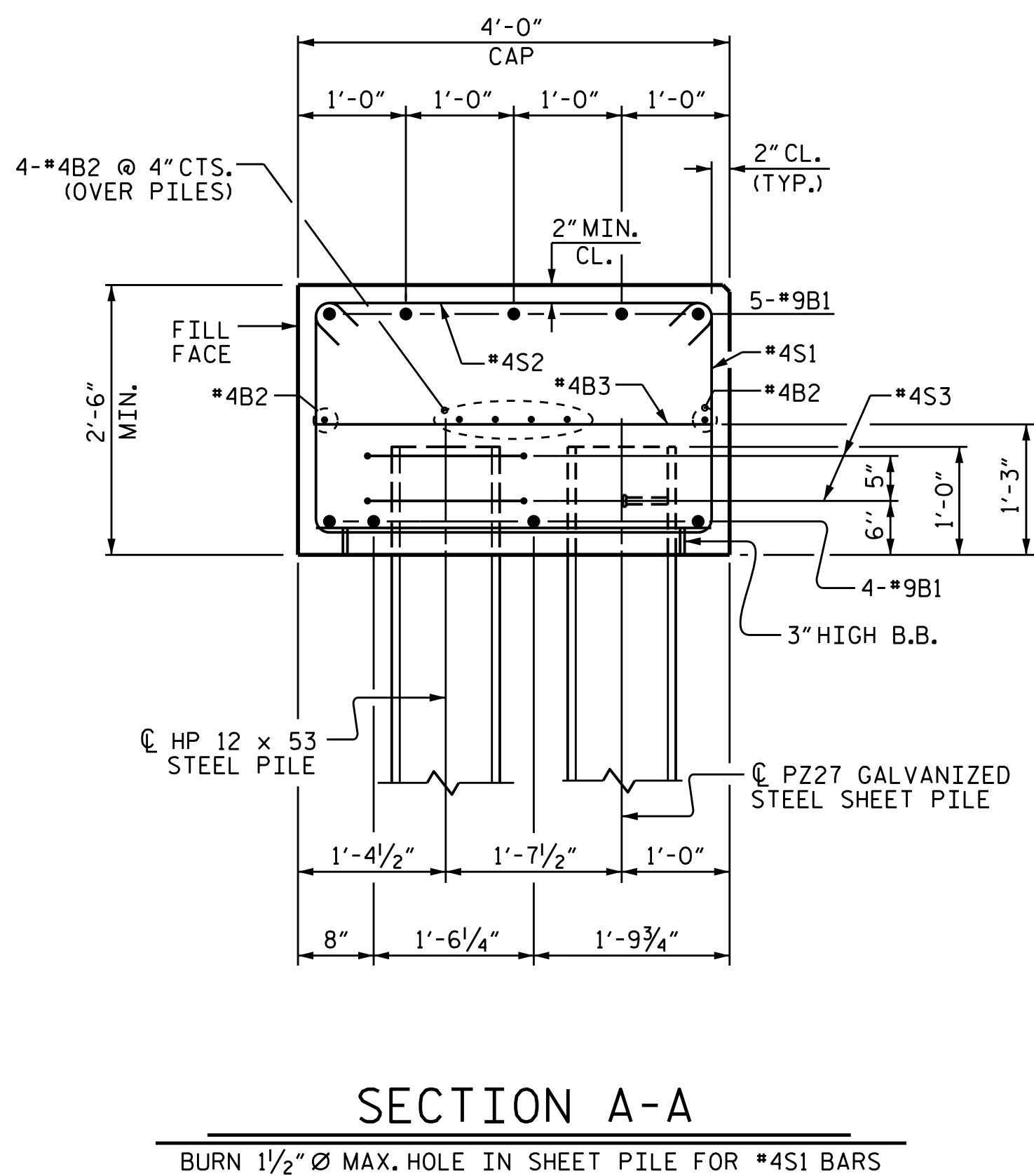
BILL OF MATERIAL					
FOR ONE END BENT (2 REQ'D.)					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	9	#9		51'-9"	1584
B2	12	#4	STR	25'-10"	207
B3	10	#4	STR	3'-8"	25
H1	5	#4		9'-4"	31
H2	5	#4		10'-1"	34
K1	8	#4	STR	3'-9"	20
S1	60	#4		8'-8"	347
S2	60	#4		4'-5"	177
S3	14	#4		6'-6"	61
S4	20	#4		4'-8"	62
S5	20	#4		2'-5"	32
V1	20	#4	STR	4'-11"	66

REINFORCING STEEL (FOR ONE END BENT) 2,646 LBS.

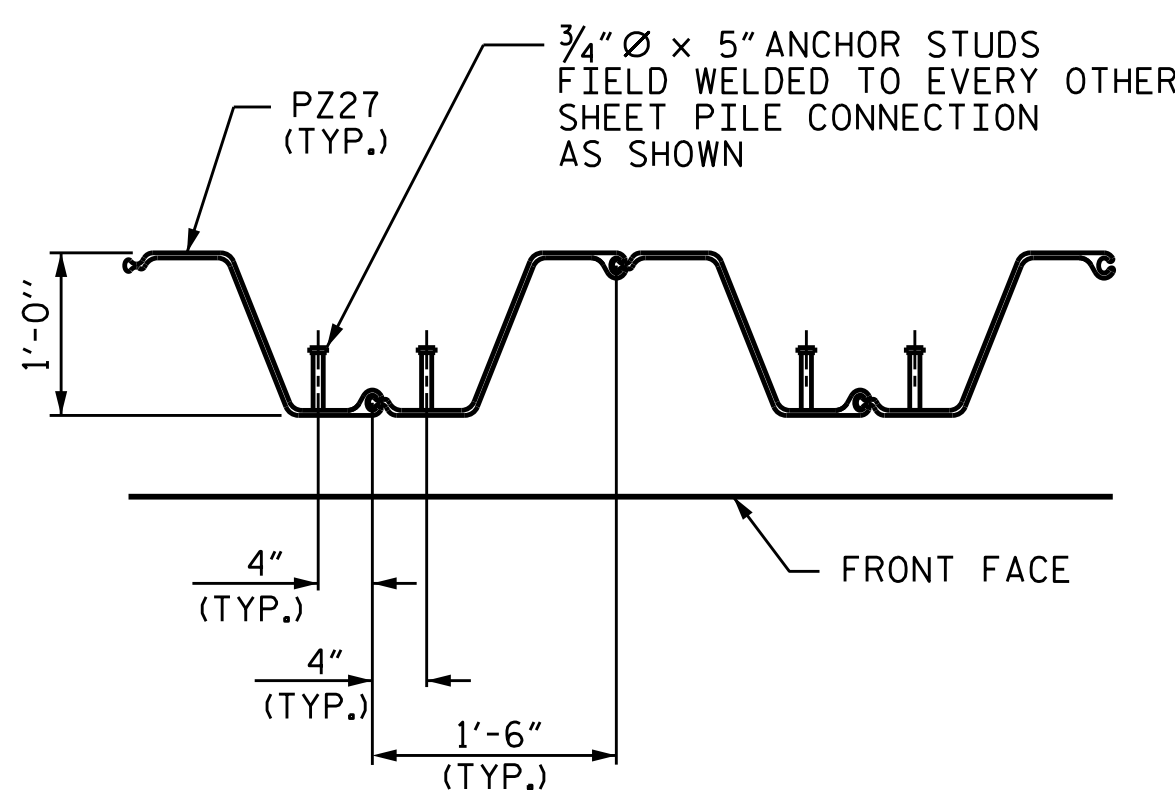
CLASS A CONCRETE BREAKDOWN (FOR ONE END BENT)

POUR #1 CAP 18.4 C.Y.
POUR #2 WINGS & COPINGS 3.6 C.Y.

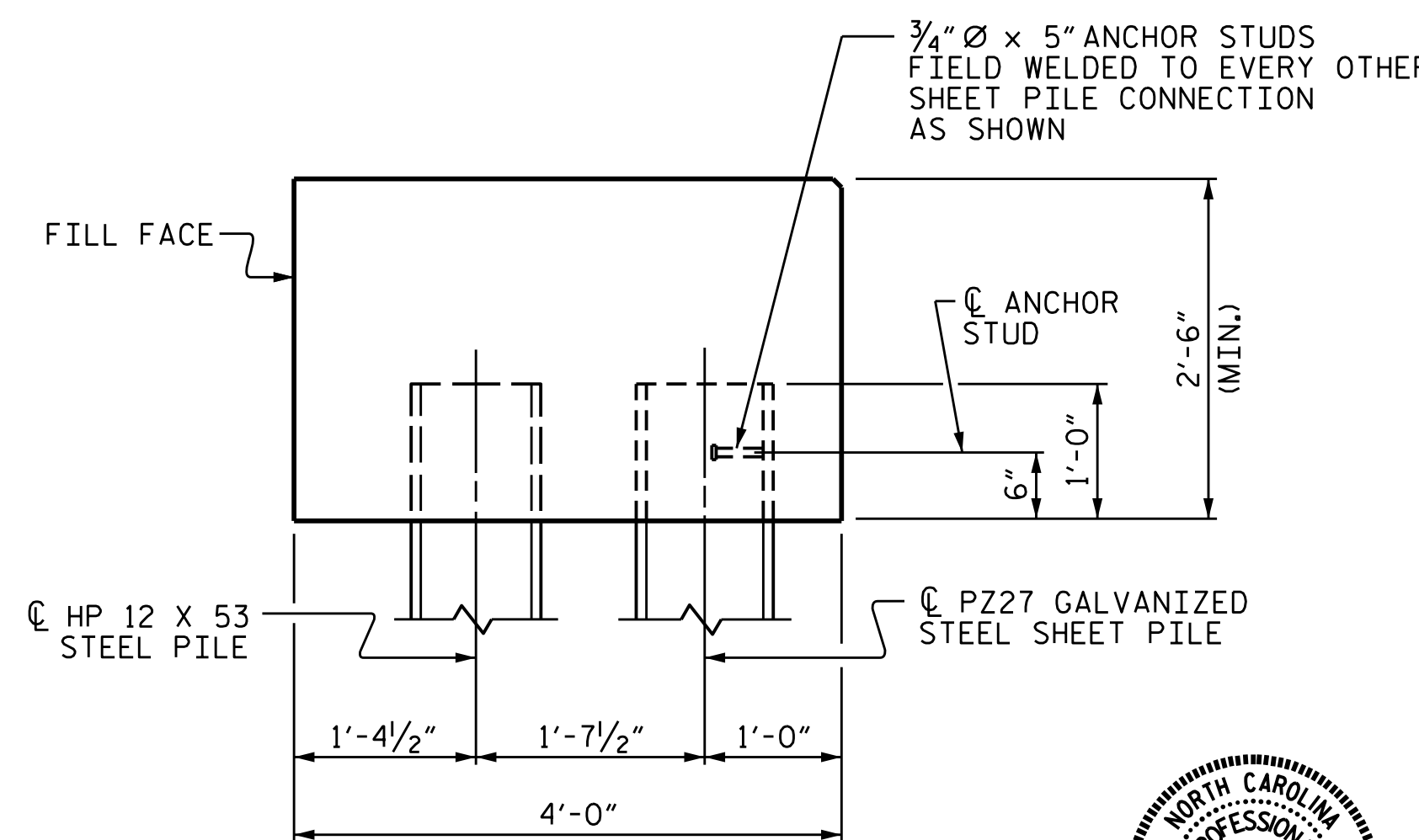
TOTAL CLASS A CONCRETE 22.0 C.Y.



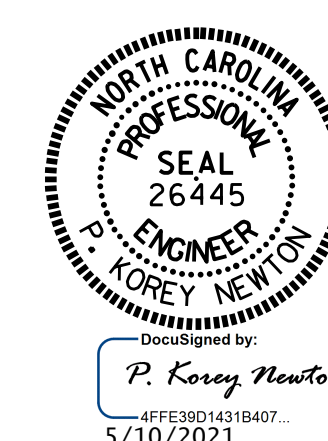
SECTION A-A



PLAN



SECTION



PROJECT NO. B-5642
BRUNSWICK COUNTY
STATION: 18+30.00 -L-

SHEET 4 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUBSTRUCTURE
END BENTS 1 & 2
DETAILS

DRAWN BY: M.K. BEARD DATE: 02/2020
CHECKED BY: D. SHACKELFORD DATE: 04/2020
DESIGN ENGINEER OF RECORD: W. SMITH DATE: 4/22/21

10-MAY-2021 12:39
J:\Structures\Plans\B5642.SMU. E*.090065.dgn
pknewton

SHEET PILE ANCHOR STUD DETAILS

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	DATE:	S-12
1			3		TOTAL SHEETS 14
2			4		