

END BENT TIEBACK FORCE

COMPONENT	"P" (K / FT.)	"Y" (FT.)
WIND ON STRUCTURE (WS)	0.10	3.514
WIND ON LIVE LOAD (WL)	0.05	3.514
BRAKING FORCE (BR)	0.57	3.514
THERMAL FORCE (TU)	0.21	3.514
EARTH FORCE (EH)	1.28	2.684
LIVE LOAD SURCHARGE (LS)	1.27	4.025

NOTE:
"P" IS UNFACTORED SERVICE LOAD NORMAL TO FILL FACE.

BILL OF MATERIAL

END BENT 1

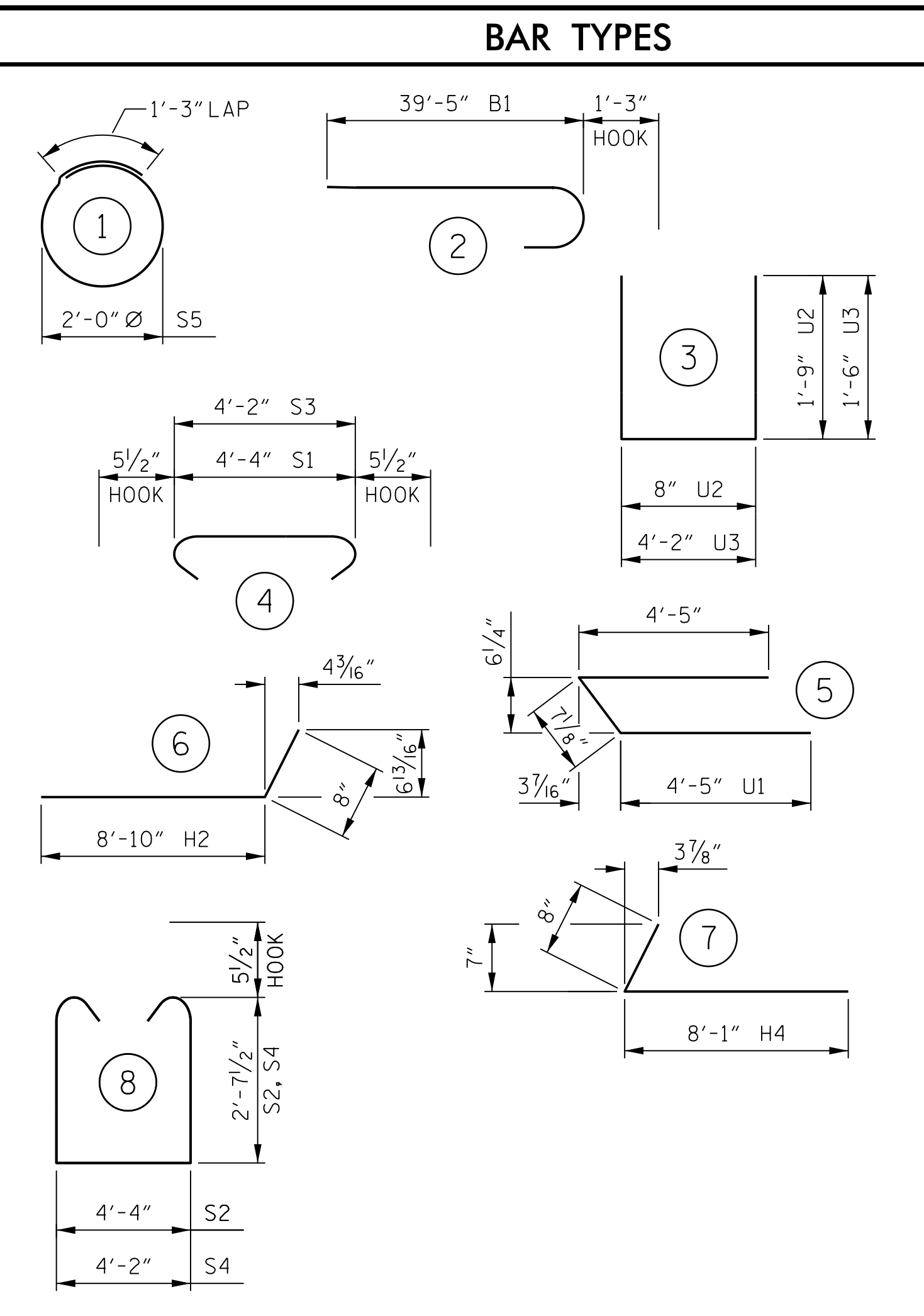
BAR No.	SIZE	TYPE	LENGTH	WEIGHT	
B1	24	#9	2	40'-8"	3,318
B2	8	#5	STR	33'-8"	281
B3	16	#4	STR	4'-2"	45
B4	8	#4	STR	33'-2"	177
B5	6	#4	STR	6'-0"	24
B6	24	#4	STR	9'-6"	152
B7	6	#4	STR	13'-6"	54
H1	8	#5	STR	8'-7"	72
H2	14	#5	6	9'-6"	139
H3	6	#5	STR	7'-9"	48
H4	14	#5	7	8'-9"	128
K1	20	#4	STR	31'-8"	423
S1	6	#5	4	5'-3"	33
S2	6	#5	8	10'-6"	66
S3	66	#5	4	5'-1"	350
S4	66	#5	8	10'-4"	711
S5	24	#4	1	7'-7"	122
U1	4	#4	5	9'-6"	25
U2	51	#4	3	4'-2"	142
U3	43	#4	3	7'-2"	206
V1	28	#5	STR	9'-6"	277
V2	102	#5	STR	7'-9"	824
V3	28	#5	STR	8'-11"	260

REINFORCING STEEL 7,755 LBS.

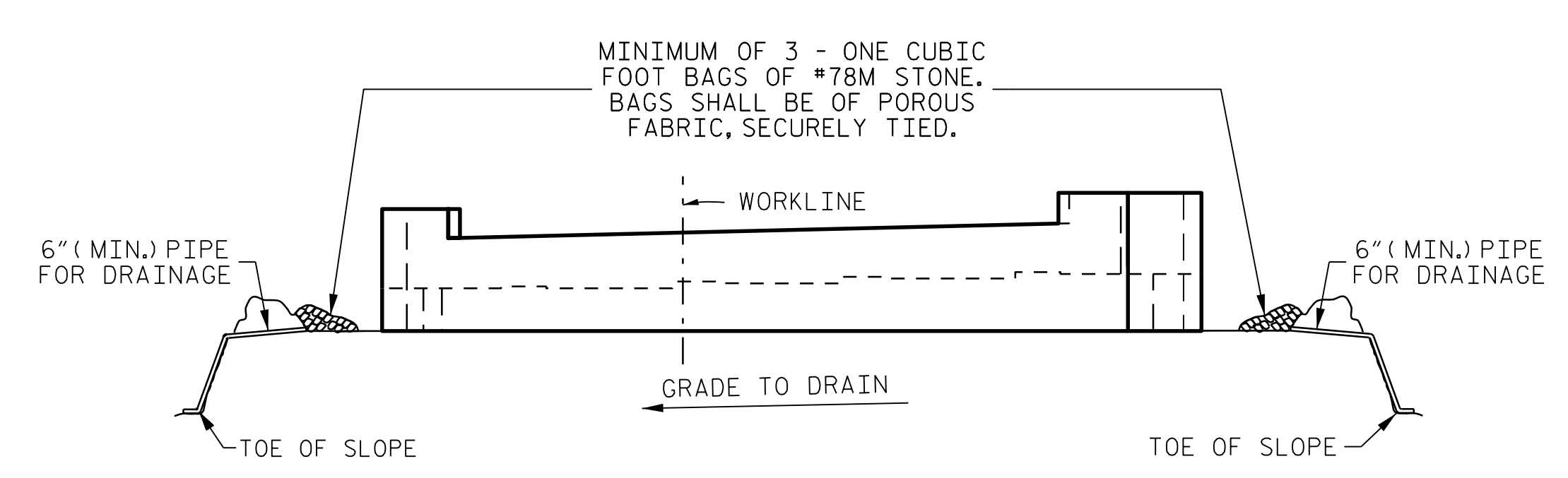
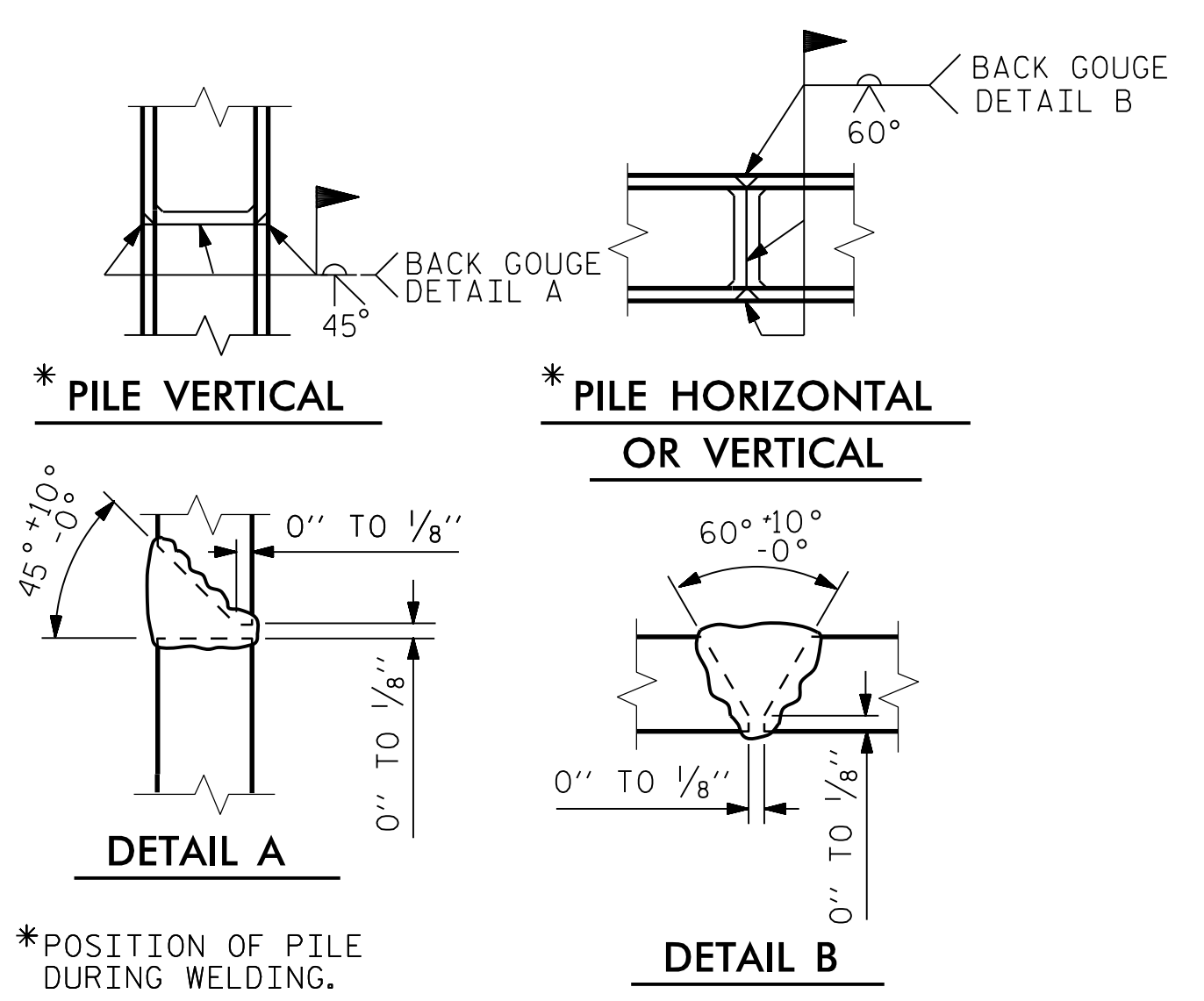
CLASS "A" CONCRETE
POUR 1 COLLARS, CAP AND LOWER WINGS 57.0 CU. YDS.
POUR 2 BACKWALL AND UPPER WINGS 14.5 CU. YDS.
TOTAL 71.5 CU. YDS.

HP 14 x 73 STEEL PILES
12 REQUIRED 630.0 LIN. FT.

PILE DRIVING EQUIPMENT SETUP FOR HP14X73 STEEL PILES 12 EACH



ALL BAR DIMENSIONS ARE OUT TO OUT.



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 FOR THE SEVERAL PAY ITEMS.

PROJECT NO. I-4729A
POLK COUNTY
STATION: 21+44.22 -RP F-

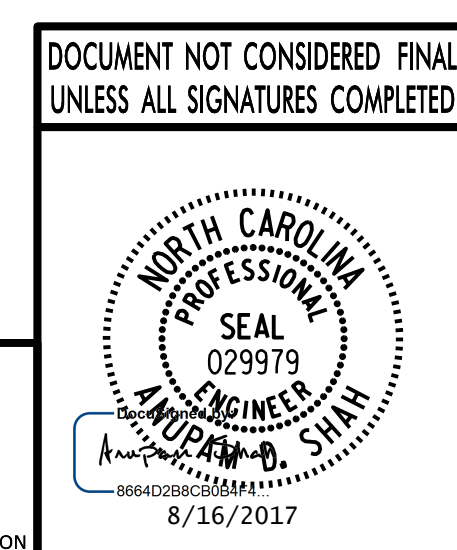
SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENT 1

REVISIONS					
No.	BY:	DATE:	No.	BY:	DATE:
1			3		
2			4		

SHEET No. S2-22
TOTAL SHEETS 31
STR. #2



PLANS PREPARED BY:
PARSONS
5540 CenterView Drive, Suite 217
Raleigh, NC 27606-3386
NC LICENSE No. F-0246

DRAWN BY: M. CLAREY / T. DEIMERS	DATE: 7-17
CHECKED BY: D. PRETORIUS	DATE: 7-17
DESIGN ENGINEER: D. PRETORIUS	DATE: 7-17