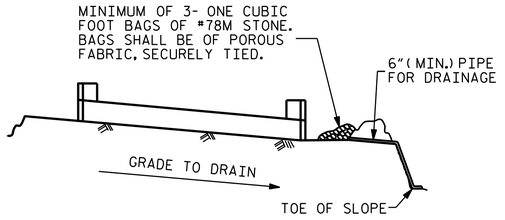
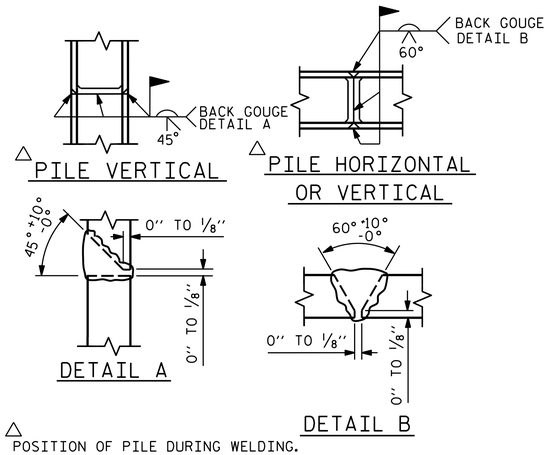


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

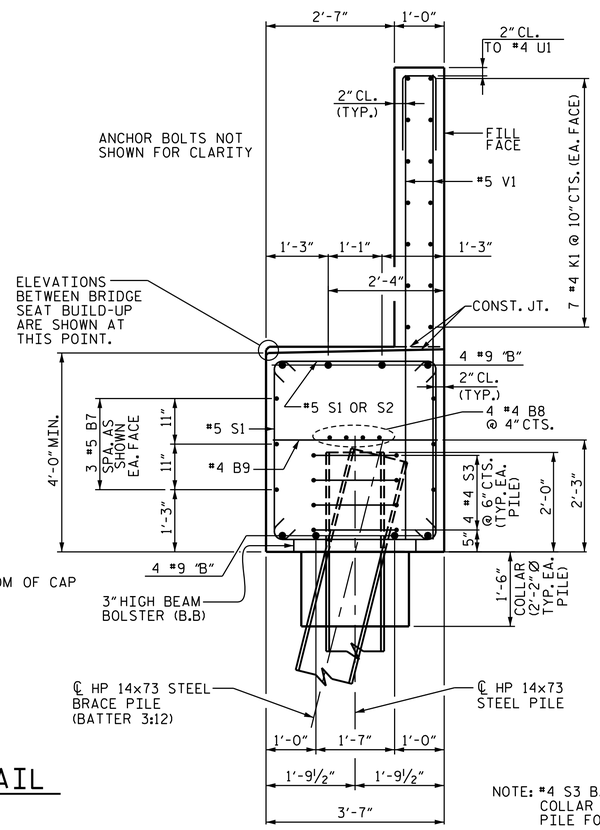
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



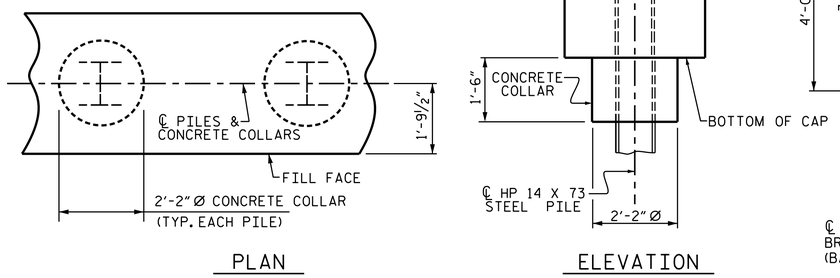
△ POSITION OF PILE DURING WELDING.

PILE SPLICE DETAILS



NOTE: #4 S3 BARS AND CONCRETE COLLAR NOT SHOWN ON BRACE PILE FOR CLARITY.

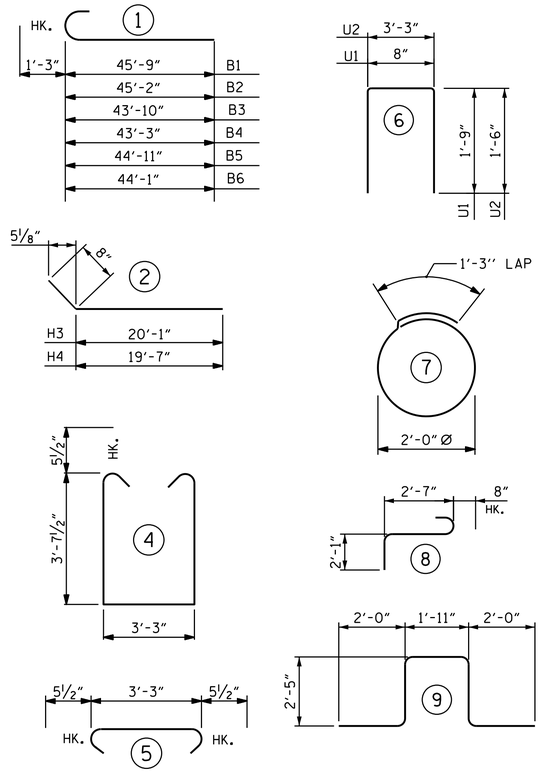
SECTION THRU CAP



CORROSION PROTECTION FOR STEEL PILES DETAIL

BAR TYPES

ALL BAR DIMENSIONS ARE OUT TO OUT.



BILL OF MATERIAL

END BENT 1 STAGE I

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	2	#9	1	47'-0"	320
B2	1	#9	1	46'-5"	158
B3	1	#9	1	45'-1"	153
B4	2	#9	1	44'-6"	303
B5	1	#9	1	46'-2"	157
B6	1	#9	1	45'-4"	154
B7	12	#5	STR.	25'-6"	319
B8	8	#4	STR.	24'-6"	131
B9	11	#4	STR.	3'-3"	24
B10	8	#4	STR.	6'-10"	37
B11	4	#4	STR.	13'-5"	36
B12	4	#4	STR.	5'-6"	15
H3	17	#4	2	20'-9"	236
H4	17	#4	2	20'-3"	230
K1	28	#4	STR.	24'-9"	463
K11	4	#4	STR.	3'-1"	8
S1	86	#5	4	11'-5"	1024
S2	46	#5	5	4'-2"	200
S3	24	#4	7	7'-7"	122
S4	3	#6	9	10'-9"	48
S5	3	#6	8	5'-4"	24
U1	41	#4	6	4'-2"	114
U2	22	#4	6	6'-3"	92
V1	82	#5	STR.	9'-11"	848
V2	49	#5	STR.	11'-11"	609

REINFORCING STEEL 5,825 LBS.

CLASS A CONCRETE BREAKDOWN

POUR #1 CAP, LOWER PART OF WING & COLLARS 31.3 C.Y.

POUR #2 BACKWALL AND UPPER PART OF WING 15.1 C.Y.

TOTAL CLASS A CONCRETE 46.4 C.Y.

HP 14 X 73 STEEL PILES
NO: 7 LIN. FT.= 175

PILE DRIVING EQUIPMENT SETUP FOR HP 14 x 73 STEEL PILES
EACH = 7

PROJECT NO. R-2566BA
WATAUGA COUNTY
STATION: 164+30.00-L-

SHEET 5 OF 10

NORTH CAROLINA PROFESSIONAL SEAL 20125 ENGINEER
MARSHALL A. CHEEK, JR.
9/30/2021 | 1:43 PM EDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

END BENT 1
STAGE I DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-55
1			3			TOTAL SHEETS
2			4			79

DRAWN BY :	NMW	DATE :	3/19
CHECKED BY :	RAR	DATE :	6/19
DESIGN ENGINEER OF RECORD :	TBE	DATE :	6/19