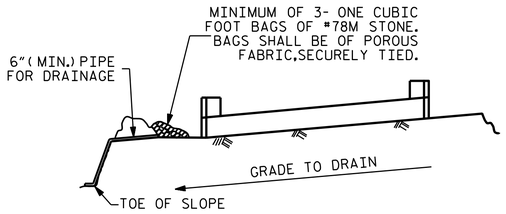
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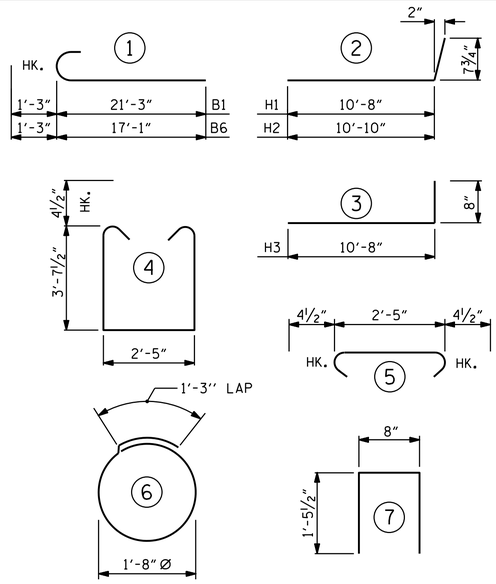
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL — STAGE I

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#9	1	22'-6"	612
B2	14	#4	STR	21'-3"	199
B3	5	#4	STR	2'-5"	8
D1	10	#8	STR	2'-3"	60
H1	12	#5	2	11'-4"	142
H2	12	#5	2	11'-6"	144
K1	6	#4	STR	3'-3"	13
K2	6	#4	STR	21'-3"	85
S1	25	#4	4	10'-5"	174
S2	25	#4	5	3'-2"	53
S3	12	#4	6	6'-6"	52
U1	17	#4	7	3'-7"	41
V1	32	#4	STR	7'-2"	153
V2	34	#4	STR	5'-3"	119

REINFORCING STEEL (END BENT 1 - STAGE I) 1855 LBS.

CLASS A CONCRETE BREAKDOWN

POUR #1	CAP & LOWER PART OF WINGS	9.3 C.Y.
POUR #2	BACKWALL & UPPER PART OF WINGS	2.6 C.Y.
TOTAL CLASS A CONCRETE		11.9 C.Y.

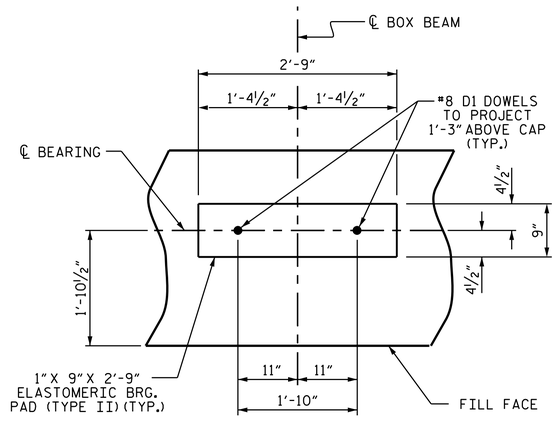
BILL OF MATERIAL — STAGE II

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B3	4	#4	STR	2'-5"	6
B6	8	#9	1	17'-4"	471
B7	14	#4	STR	16'-1"	150
D1	10	#8	STR	2'-3"	60
H3	24	#5	3	11'-4"	284
K1	6	#4	STR	3'-3"	13
K3	6	#4	STR	16'-1"	64
S1	23	#4	4	10'-5"	160
S2	23	#4	5	3'-2"	49
S3	8	#4	6	6'-6"	35
U1	15	#4	7	3'-7"	36
V1	30	#4	STR	7'-2"	144
V2	30	#4	STR	5'-3"	105

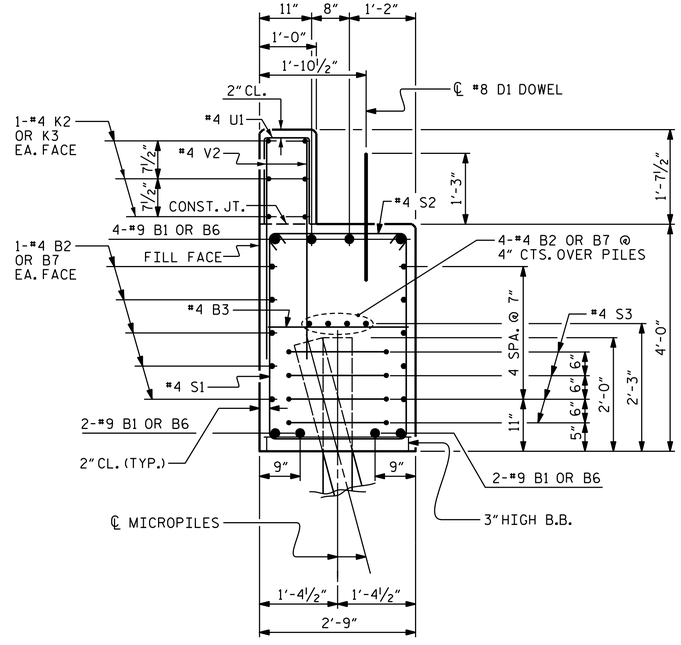
REINFORCING STEEL (END BENT 1 - STAGE II) 1577 LBS.

CLASS A CONCRETE BREAKDOWN

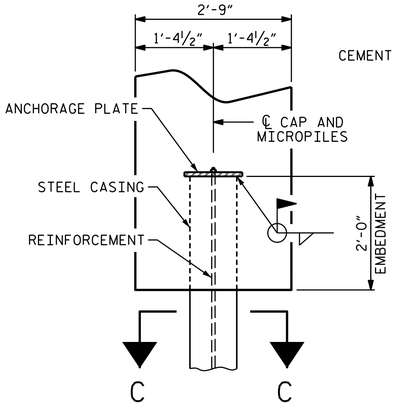
POUR #3	CAP & LOWER PART OF WINGS	8.5 C.Y.
POUR #4	BACKWALL & UPPER PART OF WINGS	2.6 C.Y.
TOTAL CLASS A CONCRETE		11.1 C.Y.



DETAIL "A"

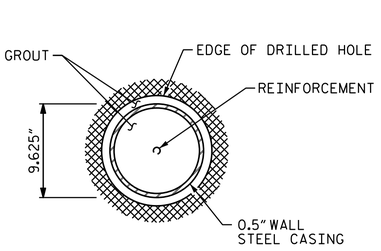


SECTION A-A



MICROPILE DETAIL

(TYP. EA. MICROPILE)



SECTION C-C

PROJECT NO. BP14-R014

SWAIN COUNTY

STATION: 12+45.82 -L-

SHEET 4 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

END BENT 1 DETAILS

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA PROFESSIONAL SEAL 044167 7/20/2026 ENGINEER ELIZABETH F. LAWES

DocuSigned by: Elizabeth F. Lawes 935E64223CD547C...

WSP USA Inc.
434 FAYETTEVILLE STREET
SUITE 1500
RALEIGH, NC 27601
TEL: 1.919.836.4040

LICENSE NO. F-0165

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-18
1			3			TOTAL SHEETS
2			4			25

DESIGNED BY:	E.LAWES	DATE : OCT 2024
DRAWN BY:	E.LAWES	DATE : APR 2026
CHECKED BY:	P.GALLAGHER	DATE : APR 2026
DESIGN ENGINEER OF RECORD:	E.LAWES	DATE : APR 2026

7/20/2026
401_033_BP14_R014_SMU_EB104_17.dgn