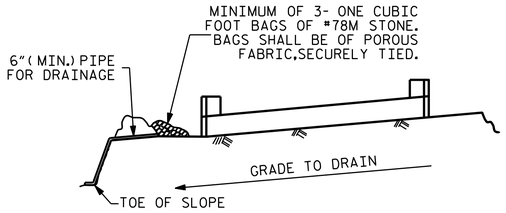
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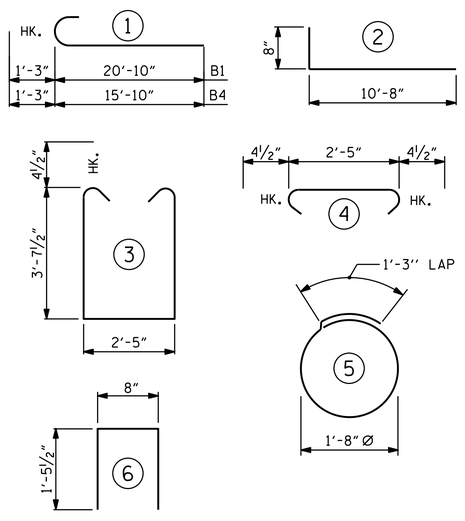
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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'-1"	601
B2	14	#4	STR	20'-10"	195
B3	5	#4	STR	2'-5"	8
D1	10	#8	STR	2'-3"	60
H1	24	#5	2	11'-4"	284
K1	6	#4	STR	2'-11"	12
K2	6	#4	STR	20'-10"	84
S1	24	#4	3	10'-5"	167
S2	24	#4	4	3'-2"	51
S3	12	#4	5	6'-6"	52
U1	17	#4	6	3'-7"	41
V1	30	#4	STR	7'-2"	144
V2	34	#4	STR	5'-3"	119

REINFORCING STEEL (END BENT 2 - STAGE I) 1818 LBS.

CLASS A CONCRETE BREAKDOWN (STAGE I)

POUR #1	BACKWALL & UPPER PART OF WINGS	9.2 C.Y.
POUR #2	CAP, LOWER PART OF WINGS	2.7 C.Y.
TOTAL CLASS A CONCRETE		11.9 C.Y.

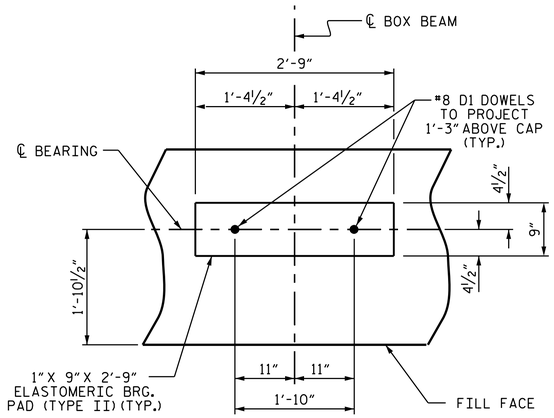
BILL OF MATERIAL — STAGE II

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B3	4	#4	STR	2'-5"	6
B4	8	#9	1	17'-1"	465
B5	14	#4	STR	15'-10"	148
D1	10	#8	STR	2'-3"	60
H1	24	#5	2	11'-4"	284
K3	6	#4	STR	15'-10"	63
S1	22	#4	3	10'-5"	153
S2	22	#4	4	3'-2"	47
S3	8	#4	5	6'-6"	35
U1	15	#4	6	3'-7"	36
V1	30	#4	STR	7'-2"	144
V2	30	#4	STR	5'-3"	105

REINFORCING STEEL (END BENT 2 - STAGE II) 1558 LBS.

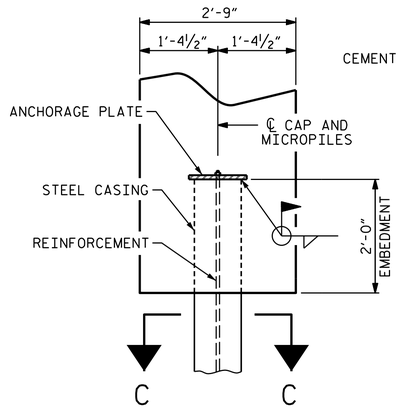
CLASS A CONCRETE BREAKDOWN (STAGE II)

POUR #3	BACKWALL & UPPER PART OF WINGS	8.4 C.Y.
POUR #4	CAP, LOWER PART OF WINGS	2.6 C.Y.
TOTAL CLASS A CONCRETE		11.0 C.Y.



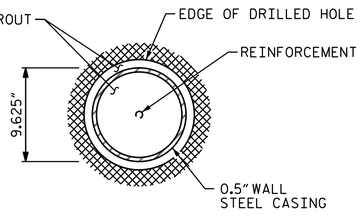
DETAIL "A"

(END BENT 1 SHOWN, END BENT 2 SIMILAR BY ROTATION)



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 2 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 935E84223CD547C...

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-22
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

WSP USA Inc.
434 FAYETTEVILLE STREET
SUITE 1500
RALEIGH, NC 27601
TEL: 1.919.836.4040
LICENSE NO. F-0165

7/20/2026
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