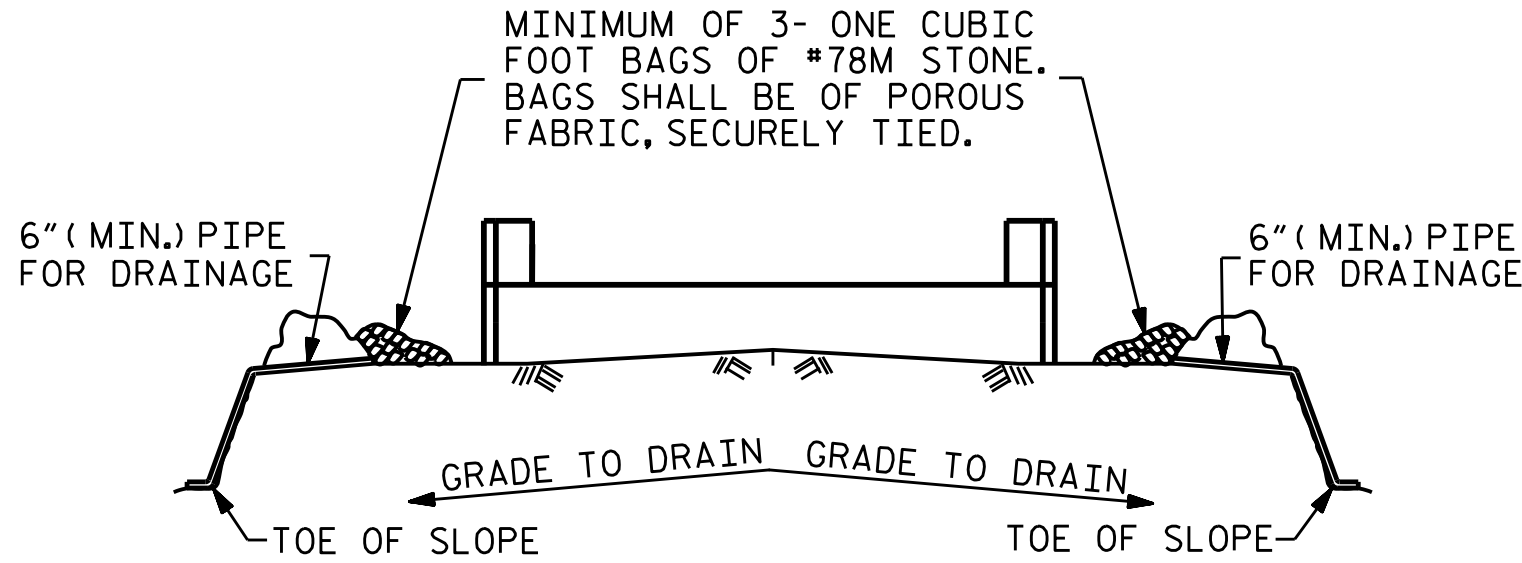


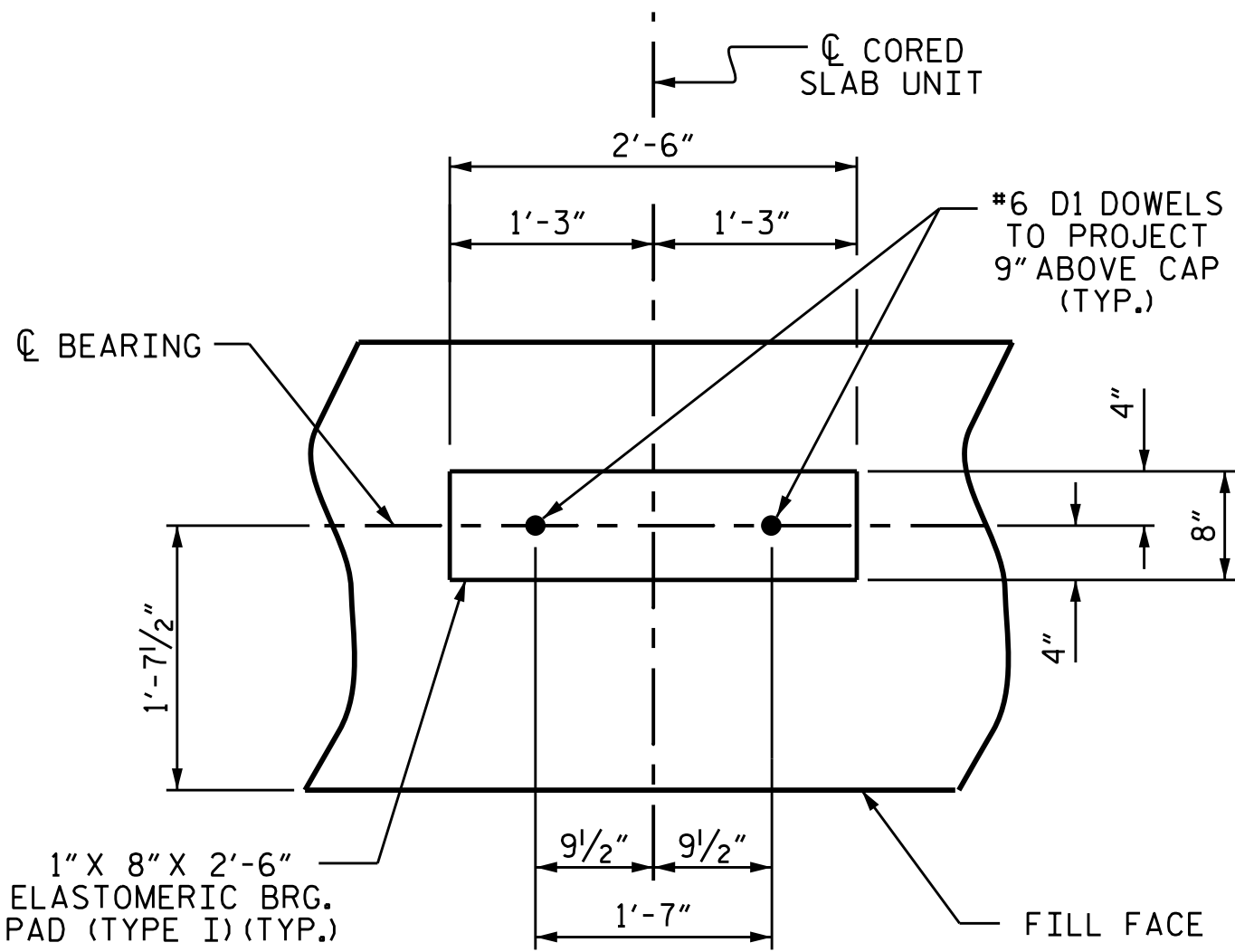


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

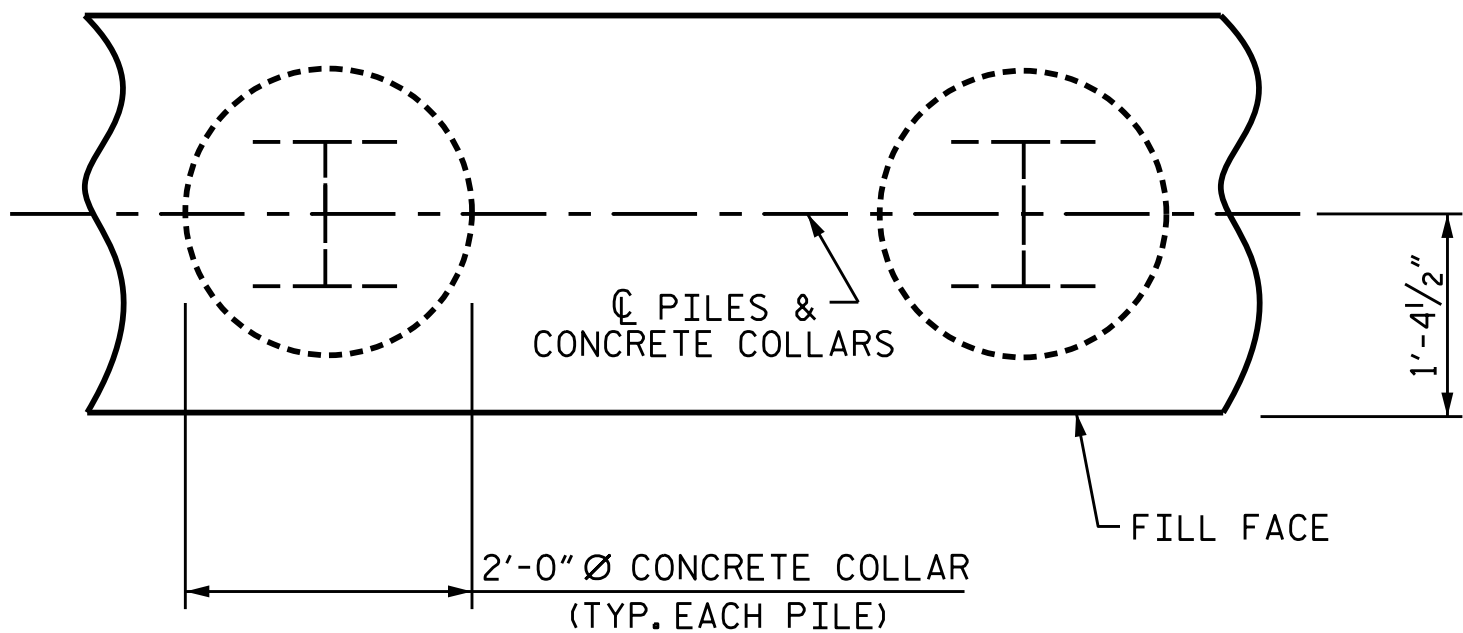
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



DETAIL "A"

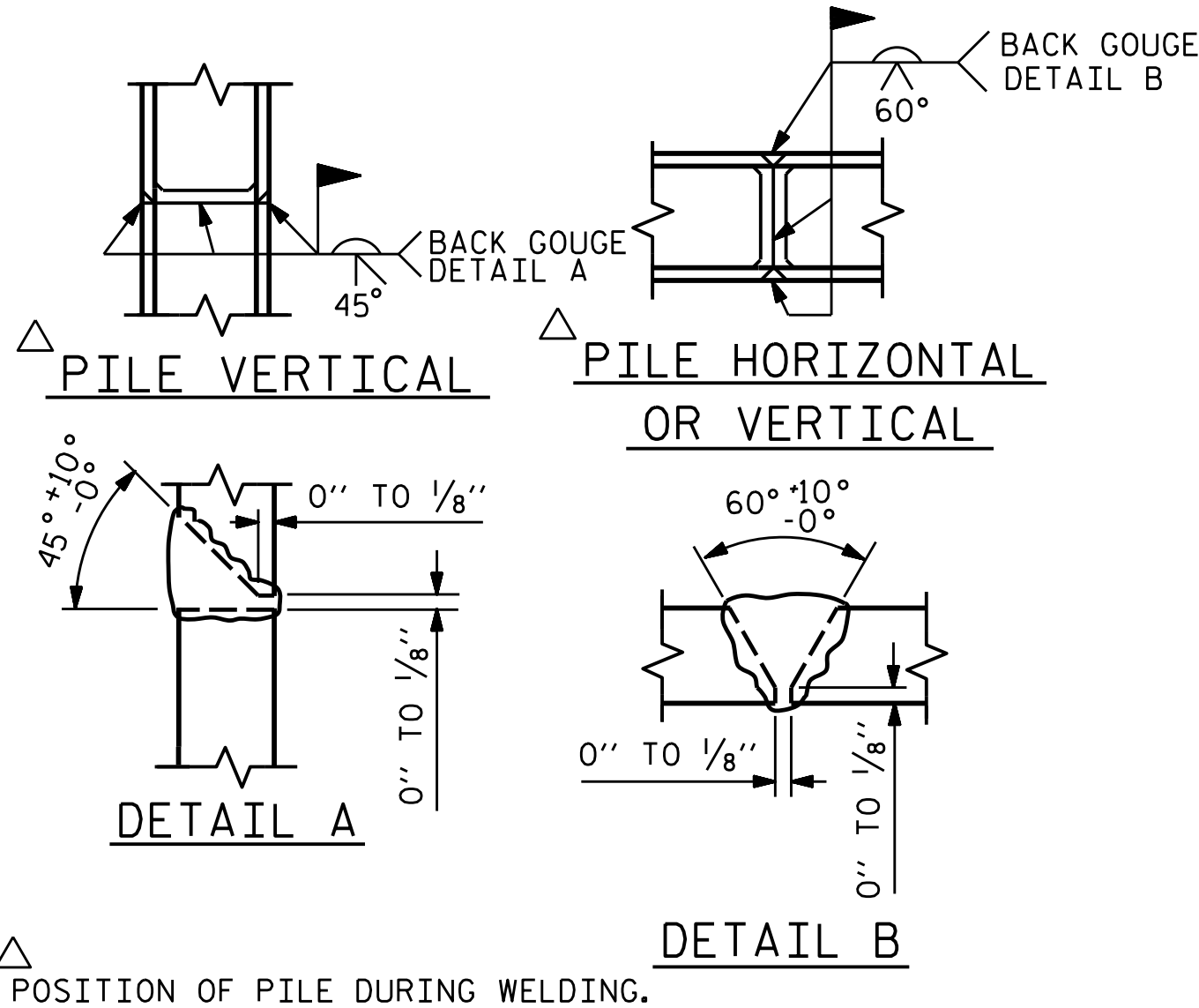
(END BENT No. 1 SHOWN, END BENT No. 2 SIMILAR BY ROTATION)



PLAN

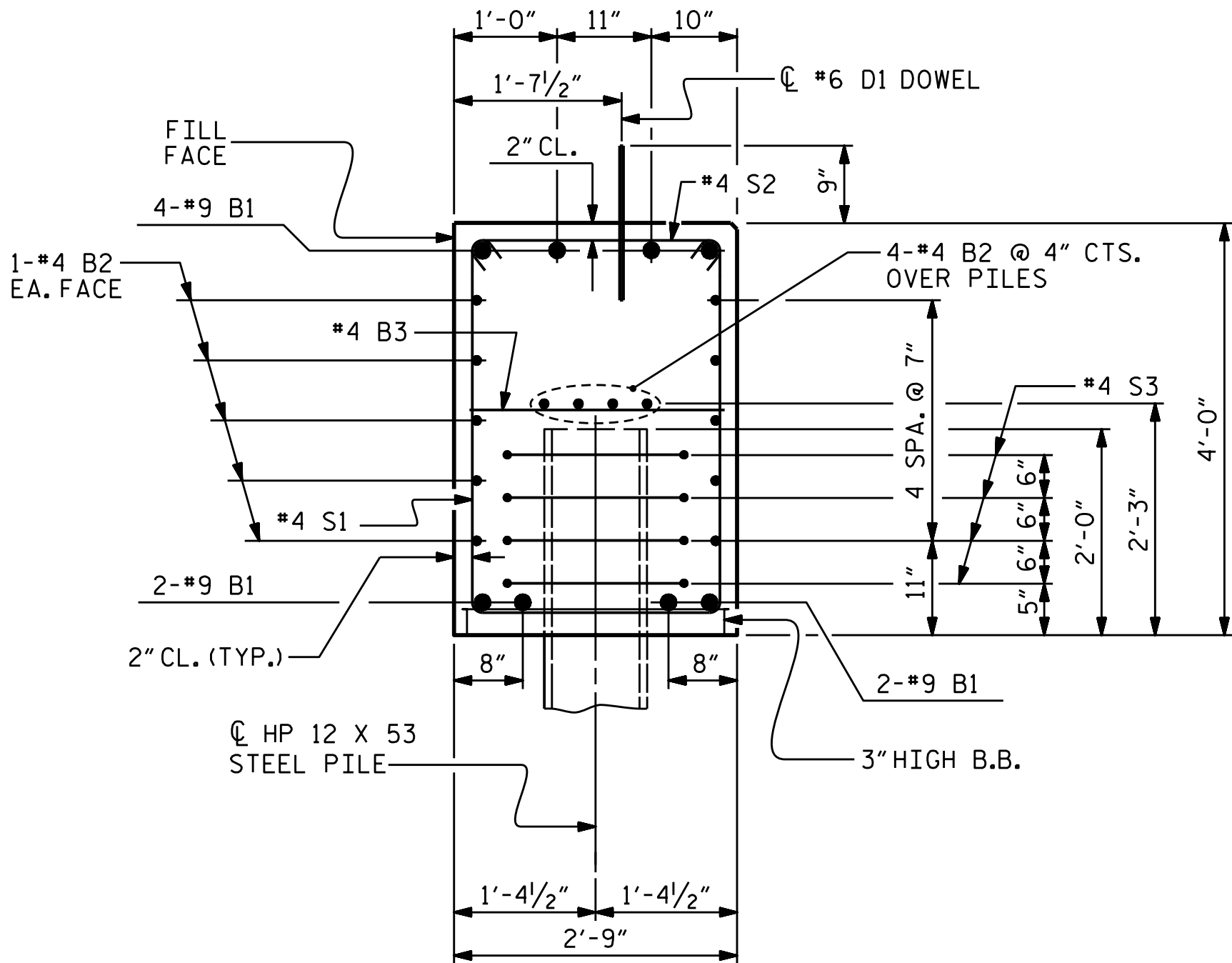
CORROSION PROTECTION FOR STEEL PILES DETAIL

(END BENT No. 1 SHOWN, END BENT No. 2 SIMILAR BY ROTATION)



PILE SPLICE DETAILS

BAR TYPES				BILL OF MATERIAL					
FOR ONE END BENT									
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT				
B1	8	#9	1	41'-0"	1115				
B2	28	#4	STR	20'-7"	385				
B3	10	#4	STR	2'-5"	16				
D1	22	#6	STR	1'-6"	50				
H1	40	#4	2	9'-4"	249				
K1	16	#4	STR	2'-11"	31				
S1	50	#4	3	10'-5"	348				
S2	50	#4	4	3'-2"	106				
S3	28	#4	5	6'-6"	122				
V1	52	#4	STR	6'-2"	214				
REINFORCING STEEL (FOR ONE END BENT)						2636 LBS.			
CLASS A CONCRETE BREAKDOWN (FOR ONE END BENT)									
POUR #1 CAP, LOWER PART OF WINGS & COLLARS						19.5 C.Y.			
POUR #2 UPPER PART OF WINGS						2.1 C.Y.			
TOTAL CLASS A CONCRETE						21.6 C.Y.			



SECTION A-A

(CONCRETE COLLAR NOT SHOWN FOR CLARITY. SEE "CORROSION PROTECTION FOR STEEL PILES DETAIL.")

PROJECT NO. B-4950
CUMBERLAND COUNTY
STATION: 13+98.00 -L-

SHEET 4 OF 4

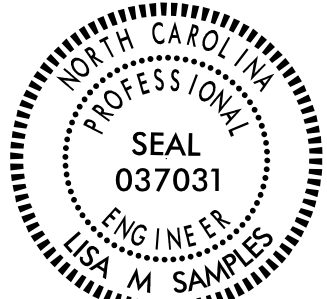
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

END BENT No. 1 & 2
DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-18
2			4			
TOTAL SHEETS 24						

DocuSigned by:
Lisa M. Samples
0965C009A8B446C
1/16/2017



ms consultants, inc.
920 Main Campus Drive
Suite 430
Raleigh, NC 27606
NC License Number : C-3239

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

ASSEMBLED BY : J.M. KEPICH	DATE : 11/16
CHECKED BY : L.M. SAMPLES	DATE : 11/16
DRAWN BY : WJH	12/11
CHECKED BY : AAC	12/11

*****SYSTEM*****
*****DCN*****
*****USERNAME*****