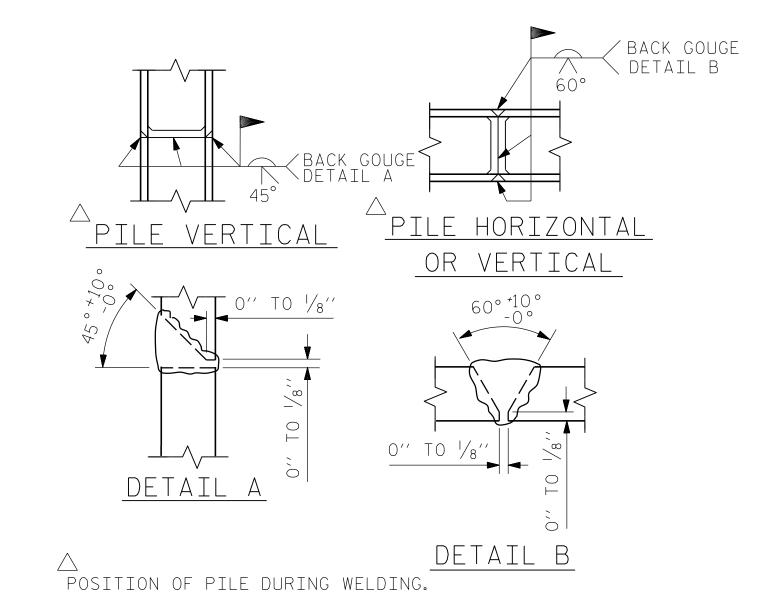


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

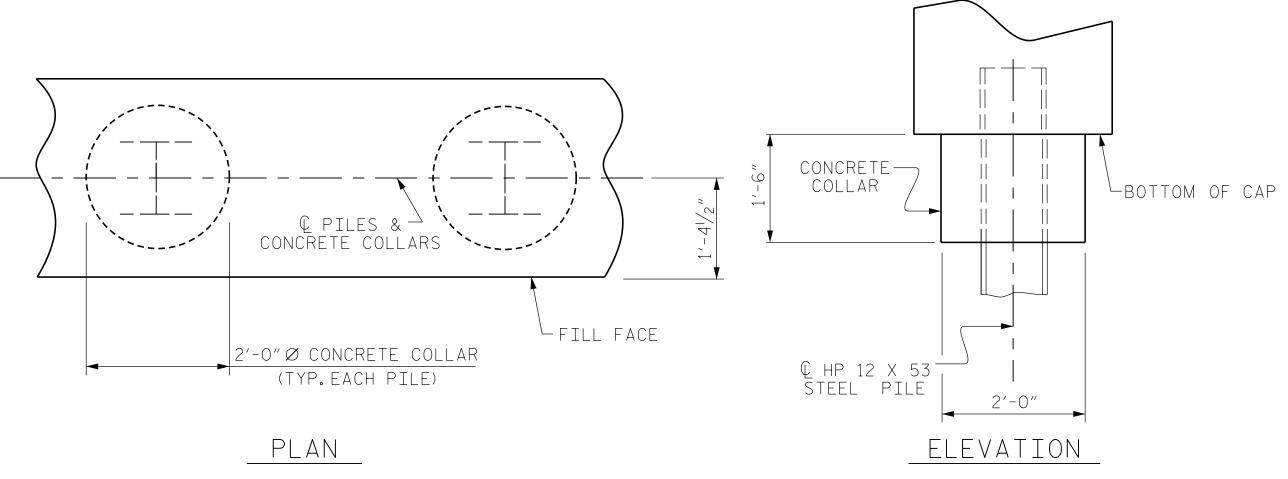
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETER-MINES THAT THEY HAVE DETERIORATED AND LOST THEIR 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



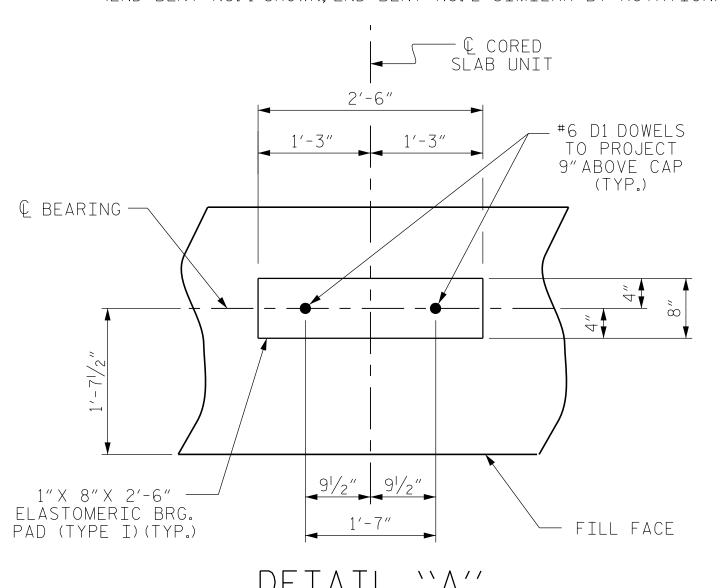
## PILE SPLICE DETAILS



## BAR TYPES BILL OF MATERIAL FOR ONE END BENT BAR | NO. | SIZE | TYPE | LENGTH | WEIGHT (2) B1 | #9 38′-0″ 1034 B2 16 #4 | STR | 19'-1" 204 B3 9 #4 | STR | 2'-5" 15 7'-2" D1 | 20 | #6 | STR | 1'-6" 45 H1 24 #4 2 7′-10″ 126 K1 | 12 | #4 | STR | 2'-11" 23 2'-5" S1 | 46 | #4 7′-5″ 228 1 46 1 S2 #4 3'-2" 97 S3 | 10 | #4 5 6'-6" 43 V1 | 48 | #4 | STR | 4'-8" 150 REINFORCING STEEL 1965 LBS (FOR ONE END BENT) CLASS A CONCRETE BREAKDOWN (FOR END BENT 1) 2'-5" POUR #1 CAP, LOWER PART 11.2 C.Y. 1′-8″∅ OF WINGS & COLLARS POUR #2 UPPER PART OF 1.8 C.Y. ALL BAR DIMENSIONS ARE OUT TO OUT. WINGS TOTAL CLASS A CONCRETE END BENT No. 1 END BENT No.2 13.0 C.Y. HP 12 X 53 STEEL PILES HP 12 X 53 STEEL PILES CLASS A CONCRETE BREAKDOWN (END BENT 2) LIN. FT.= 400 NO: 5 LIN. FT.= 425 NO: 5 POUR #1 CAP, LOWER PART 11.2 C.Y. PILE DRIVING EQUIPMENT PILE DRIVING EQUIPMENT OF WINGS & COLLARS SETUP FOR SETUP FOR HP 12 X 53 STEEL PILES HP 12 X 53 STEEL PILES POUR #2 UPPER PART OF 2.0 C.Y. PILE REDRIVES NO: 5 PILE REDRIVES NO: 5 | TOTAL CLASS A CONCRETE 13.2 C.Y.

## CORROSION PROTECTION FOR STEEL PILES DETAIL

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



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

€ #6 D1 DOWEL FILL FACE 4-#9 B1 — 4-#4 B2 @ 4′′CTS. OVER PILES #4 B2 (EA.FACE) #4 S1 —— #4 B2 (EA.FACE) 2-#9 B1 2" CL. (TYP.) 2-#9 B1 ──3′′ HIGH B.B. © HP 12 X 53 -STEEL PILE 1'-41/2'' 1'-41/2'' 2'-9''

SECTION A-A

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED PROJECT NO. BR-0117

NORTHAMPTON COUNTY

STATION: 14+26.35 -L-

SHEET 4 OF 4

SEAL 043777

& ASSOCIATES

301 FAYETTEVILLE ST., SUITE 1500

RALEIGH, NC 27601 (919) 882-7839

NC FIRM LICENSE: C-1506

DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

END BENT No.1 & 2 DETAILS

REVISIONS

SHEET NO.

SOLUTION BY: DATE: S-15

SOLUTION SHEET NO.

10.

SOLUTION SHEET NO.

10.

SOLUTION SHEET NO.

SOLUTION SHEET NO.

10.

SOLUTION SHEET NO.

SOLUTION SHEET NO.

10.

SOLUTION SHEET NO.

10.

SOLUTION SHEET NO.

SOLUTION SHEET NO.

SOLUTION SHEET NO.

SOLUTION SHEET NO.

10.

SOLUTION SHEET NO.

10.

SOLUTION SHEET NO.

10.

SOLUTION SHEET NO.

10.

SOLUTION SHEET NO.

10.

SOLUTION SHEET NO.

SOLUTION SHEET NO.

10.

SOLUTION SHEET NO.

SOLUTION SHEET SHEET NO.

SOLUTION SHEET SHEET SHEET SHEET SHEET

2/21/2020 BR-0117\_SMU\_E04\_650052.dgn iduke

DESIGN ENGINEER OF RECORD:

DRAWN BY: DGE 12/09

CHECKED BY : MKT 01/10

JACOB H. DUKE DATE: 01/2020

REV. 4/17 MAA/THC

ASSEMBLED BY: DIEGO A. AGUIRRE DATE: 01/2020

CHECKED BY: FIDEL L.FLORES DATE: 01/2020