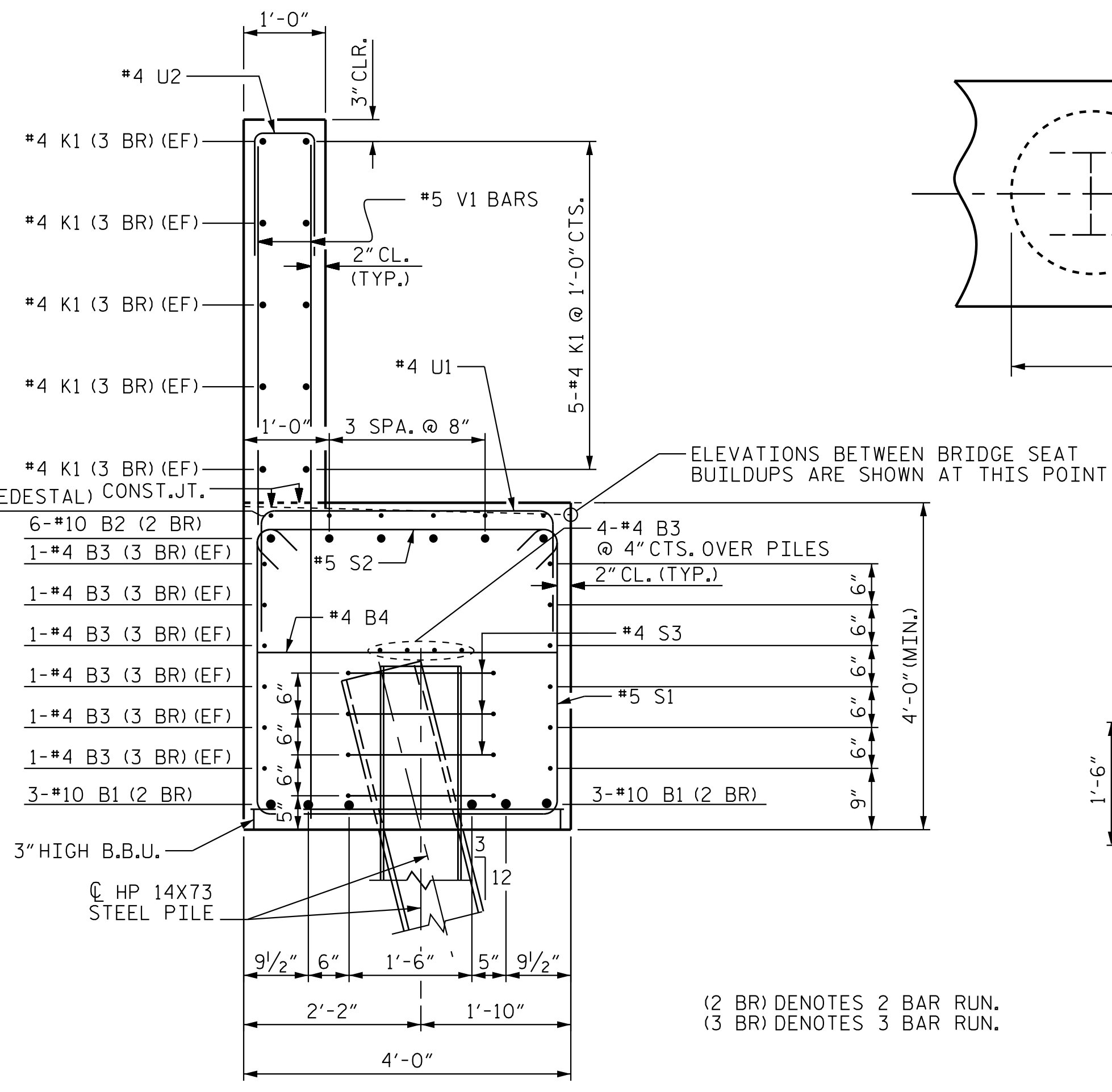


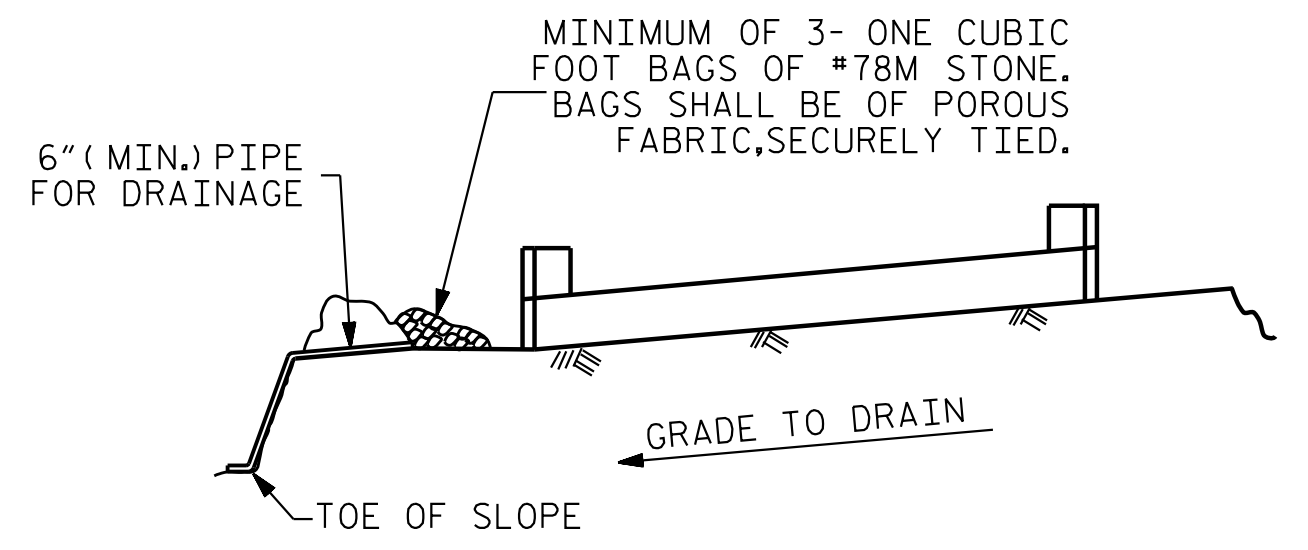
**PILE SPLICE DETAILS**

| PILE | CUTOFF EL. |
|------|------------|
| 1    | 759.07     |
| 2    | 759.44     |
| 3    | 759.82     |
| 4    | 760.20     |
| 5    | 760.57     |
| 6    | 760.95     |
| 7    | 761.32     |
| 8    | 761.70     |
| 9    | 762.07     |
| 10   | 762.45     |
| 11   | 762.83     |
| 12   | 763.20     |
| 13   | 763.58     |
| 14   | 763.95     |
| 15   | 764.33     |
| 16   | 758.86     |
| 17   | 764.50     |



**SECTION A-A**

ANCHOR BOLTS NOT SHOWN FOR CLARITY SEE "END BENT 2" SHEET 1 OF 4.

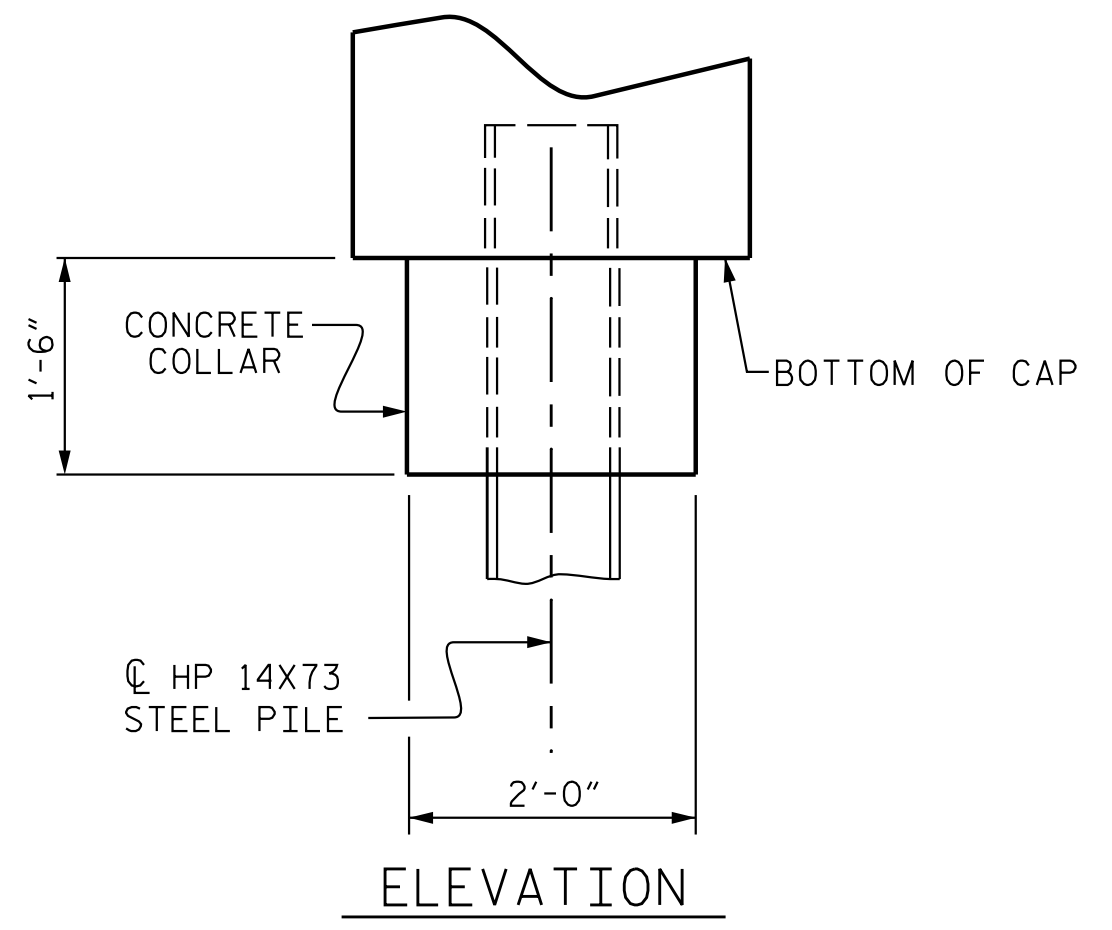
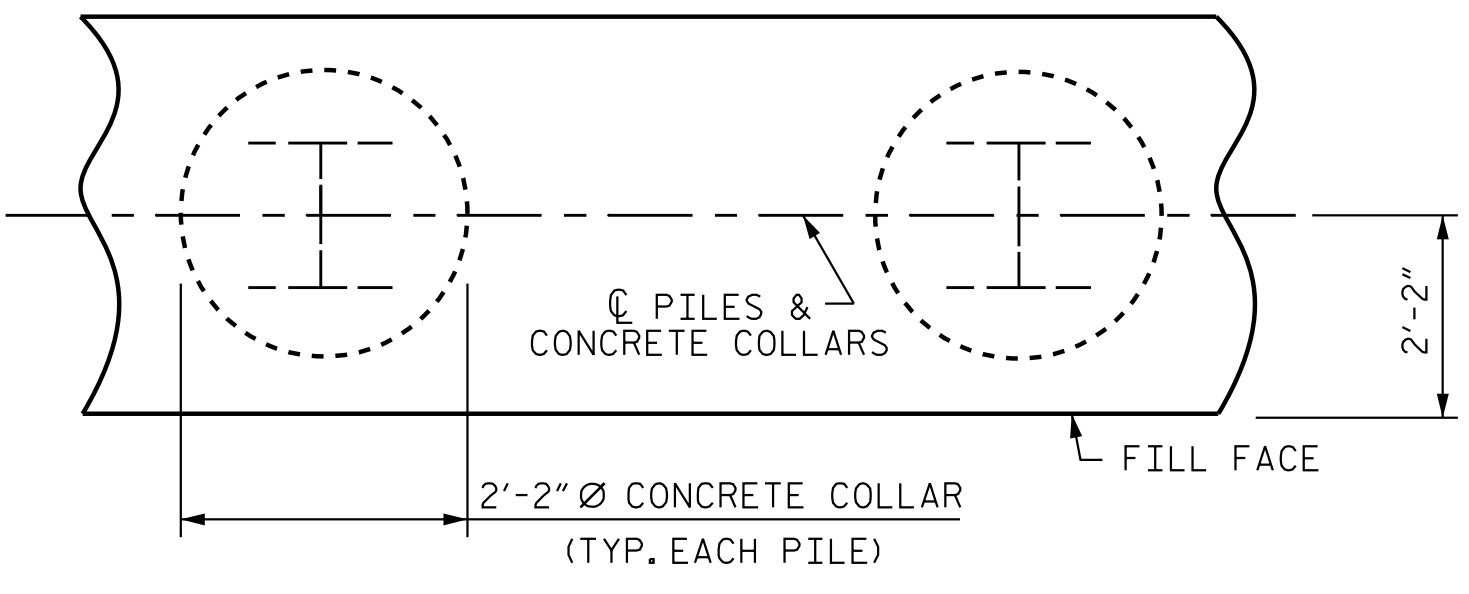


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

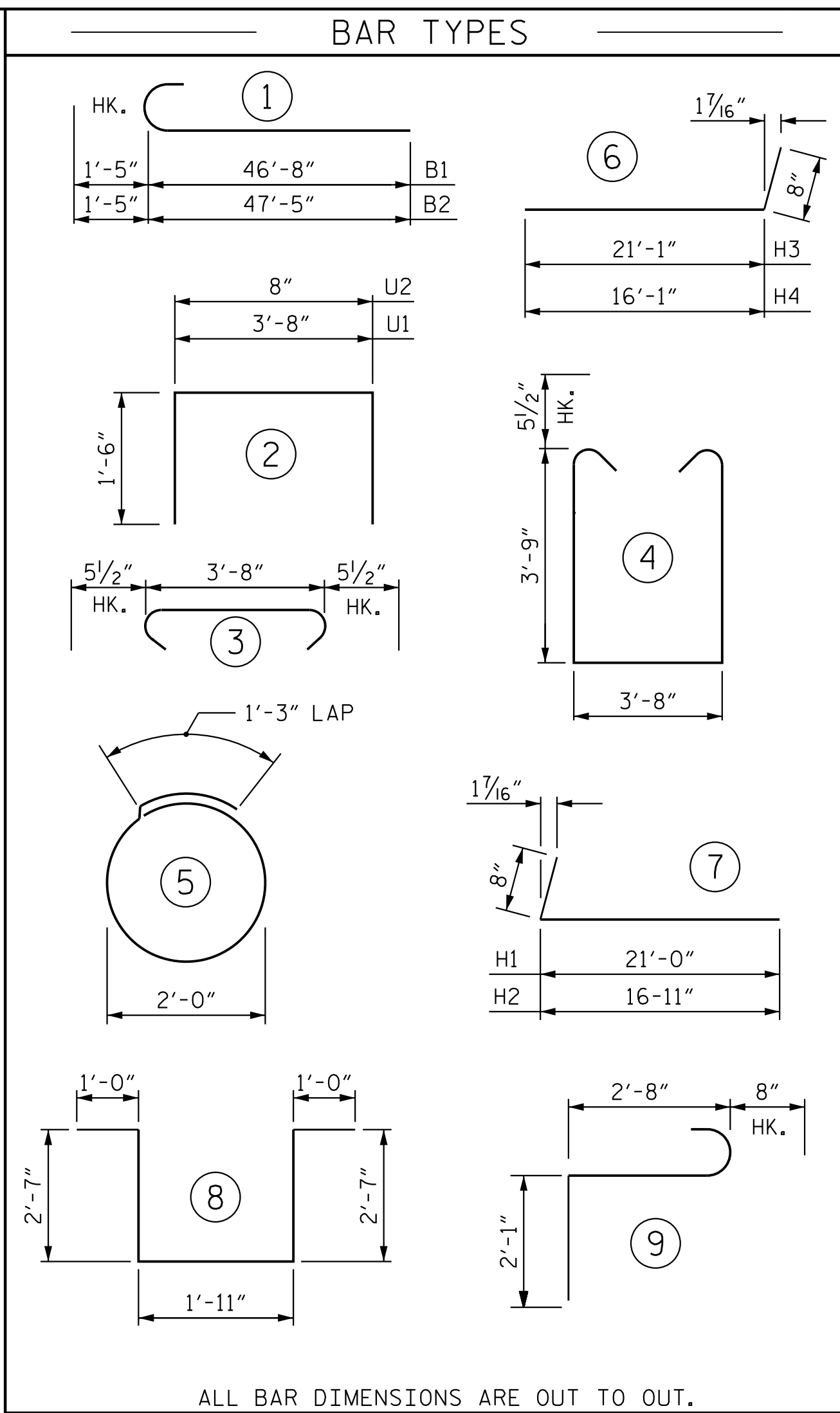
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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



**CORROSION PROTECTION FOR STEEL PILES DETAIL**



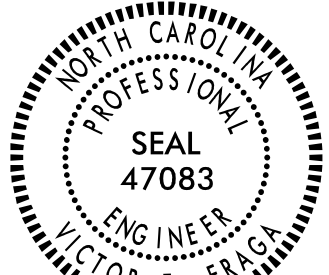
| BILL OF MATERIAL                           |     |      |      |           |             |
|--|-----|------|------|-----------|-------------|
| END BENT 1                                 |     |      |      |           |             |
| BAR  | NO. | SIZE | TYPE | LENGTH    | WEIGHT      |
| B1   | 12  | #10  | 1    | 48'-1"    | 2,483       |
| B2   | 12  | #10  | 1    | 48'-10"   | 2,522       |
| B3   | 48  | #4   | STR  | 31'-3"    | 1,002       |
| B4   | 18  | #4   | STR  | 3'-6"     | 42          |
| B5   | 54  | #4   | STR  | 4'-3"     | 153         |
|  |     |      |      |           |             |
| H1   | 10  | #4   | 7    | 21'-8"    | 145         |
| H2   | 16  | #4   | 7    | 17'-7"    | 188         |
| H3   | 10  | #4   | 6    | 20'-9"    | 139         |
| H4   | 16  | #4   | 6    | 16'-9"    | 179         |
|  |     |      |      |           |             |
| K1   | 30  | #4   | STR  | 31'-3"    | 626         |
| K2   | 2   | #4   | STR  | 2'-7"     | 3           |
| K3   | 2   | #4   | STR  | 2'-4"     | 3           |
| K4   | 2   | #4   | STR  | 2'-8"     | 4           |
| K5   | 2   | #4   | STR  | 2'-5"     | 3           |
|  |     |      |      |           |             |
| S1   | 133 | #5   | 3    | 12'-1"    | 1,676       |
| S2   | 118 | #5   | 4    | 4'-7"     | 564         |
| S3   | 60  | #4   | 5    | 7'-0"     | 281         |
| S4   | 6   | #6   | 8    | 9'-1"     | 82          |
| S5   | 6   | #6   | 9    | 5'-5"     | 49          |
|  |     |      |      |           |             |
| U1   | 81  | #4   | 2    | 6'-8"     | 361         |
| U2   | 83  | #4   | 2    | 3'-8"     | 203         |
|  |     |      |      |           |             |
| V1   | 166 | #5   | STR  | 7'-1"     | 1,226       |
| V2   | 16  | #5   | STR  | 8'-9"     | 146         |
| V3   | 34  | #5   | STR  | 10'-6"    | 372         |
| V4   | 32  | #5   | STR  | 9'-11"    | 331         |
| REINFORCING STEEL                          |     |      |      |           | 12,783 LBS. |
| CLASS A CONCRETE BREAKDOWN                 |     |      |      |           |             |
| POUR #1 CAP, LOWER PART OF WINGS & COLLARS |     |      |      | 65.3 C.Y. |             |
| POUR #2 UPPER PART OF WINGS & BACKWALL     |     |      |      | 25.0 C.Y. |             |
| TOTAL CLASS A CONCRETE                     |     |      |      |           | 90.3 C.Y.   |

**PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION**

PROJECT NO. R-2707D  
CLEVELAND COUNTY  
STATION: 36+78.38 -RAMP A-

SHEET 4 OF 4

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
SUBSTRUCTURE  
END BENT 2  
DETAILS



DocuSigned by:  
Victor E. Fraga  
12/16/2023

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

| REVISIONS |     |       |     |     |       | SHEET NO.       |
|-----------|-----|-------|-----|-----|-------|-----------------|
| NO.       | BY: | DATE: | NO. | BY: | DATE: | S4-39           |
| 1         |     |       | 3   |     |       | TOTAL SHEETS 43 |
| 2         |     |       | 4   |     |       |                 |



DRAWN BY : J. B. GEILE DATE : 12/16/22  
CHECKED BY : V. E. FRAGA DATE : 01/26/23  
DESIGN ENGINEER OF RECORD : V. E. FRAGA DATE : 05/09/23

2023-05-05 19:21:48 vfraga  
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