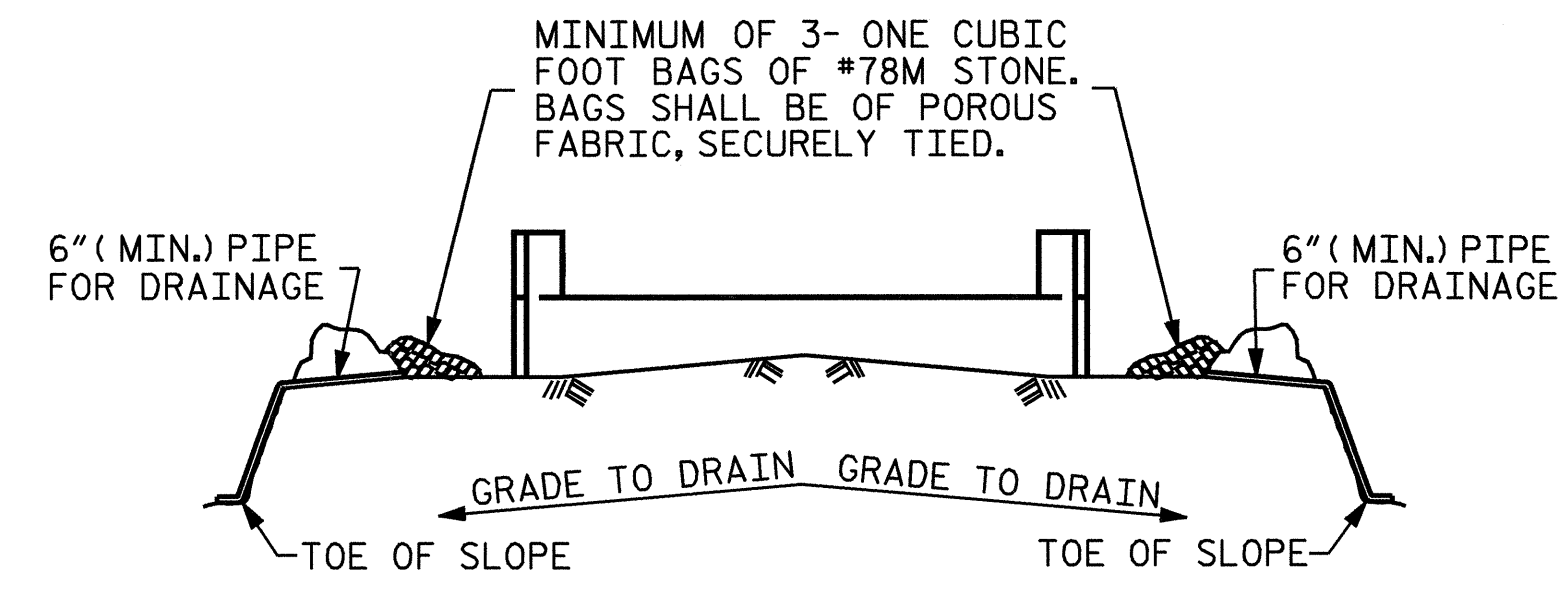


SECTION A-A



MINIMUM OF 3- ONE CUBIC FOOT BAGS OF #78M STONE. BAGS SHALL BE OF POROUS FABRIC, SECURELY TIED.

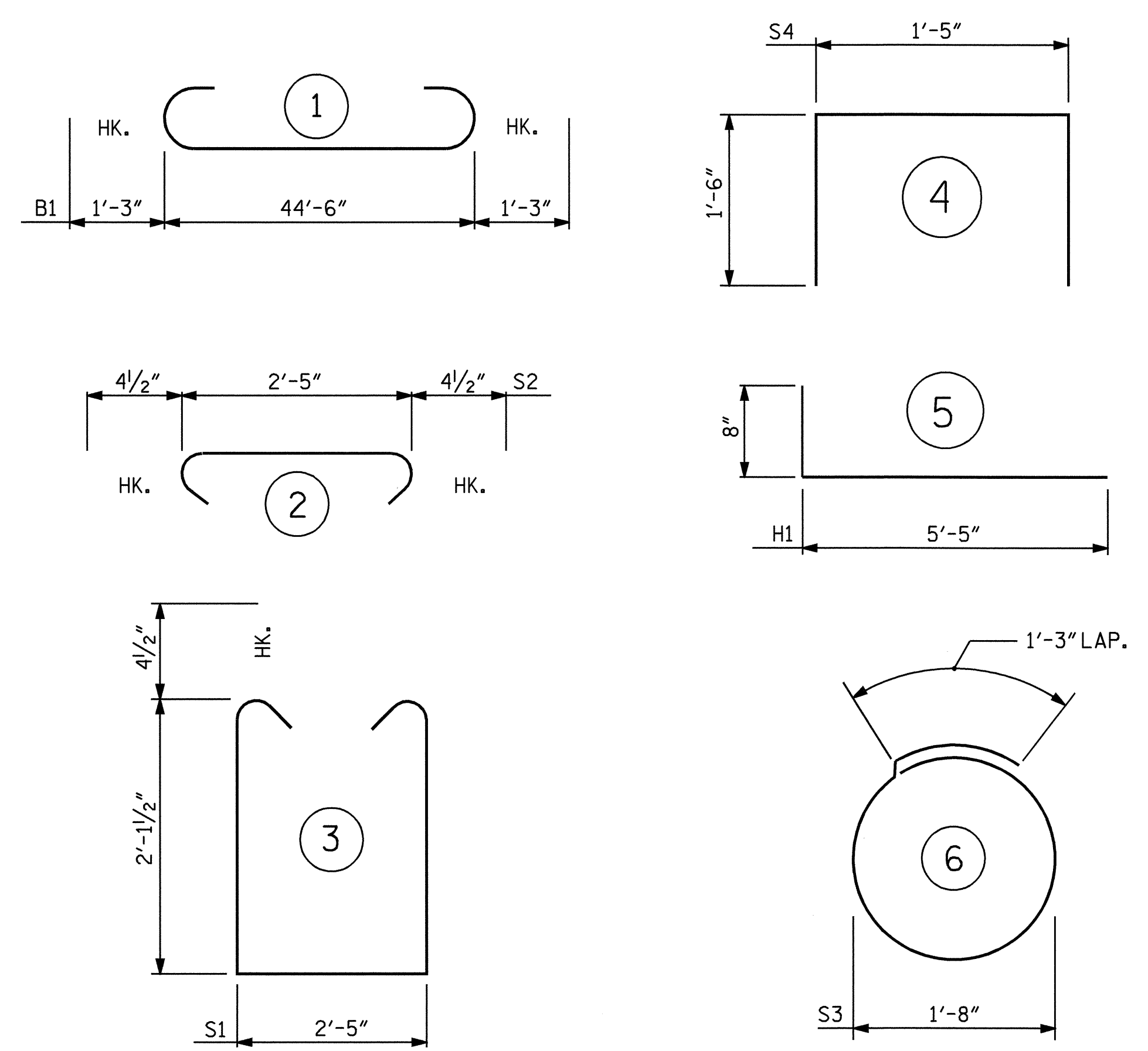
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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

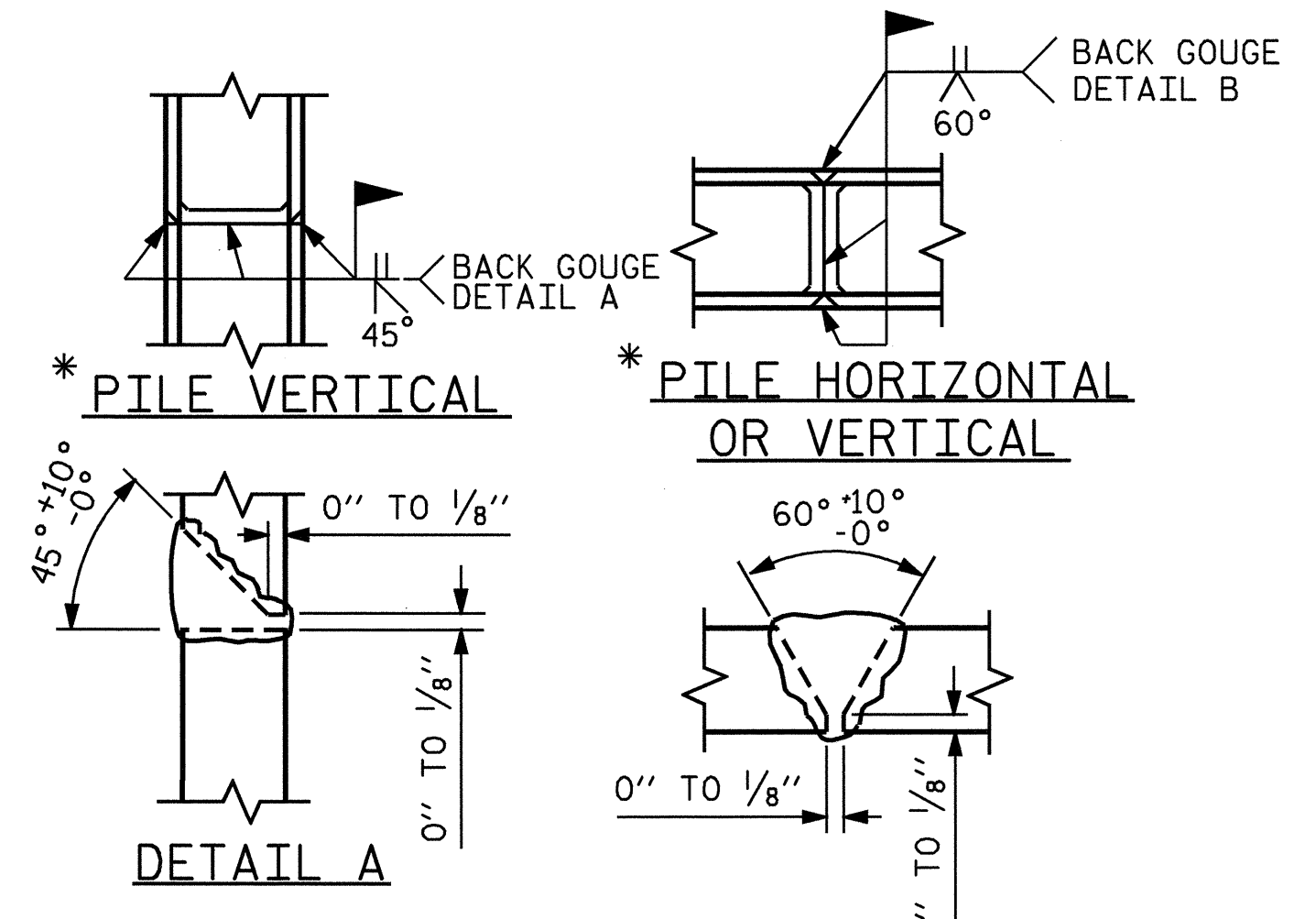
| BAR NO. | SIZE | TYPE | LENGTH | WEIGHT |
|---------------------|------|------|--------|----------|
| B1 | #9 | 1 | 47'-0" | 1278 |
| B2 | #6 | STR | 44'-8" | 134 |
| B3 | #4 | STR | 23'-7" | 126 |
| B4 | #4 | STR | 2'-5" | 19 |
| D1 | #6 | STR | 1'-6" | 59 |
| H1 | #4 | 5 | 6'-1" | 98 |
| K1 | #4 | STR | 3'-1" | 25 |
| S1 | #4 | 3 | 7'-5" | 218 |
| S2 | #4 | 2 | 3'-2" | 93 |
| S3 | #4 | 6 | 6'-6" | 69 |
| S4 | #4 | 4 | 4'-5" | 12 |
| V1 | #4 | STR | 4'-8" | 125 |
| REINFORCING STEEL = | | | | 2256 LBS |

CLASS "A" CONCRETE BREAKDOWN

| | |
|-------------------------------|-----------|
| POUR #1 CAP & BOTTOM OF WINGS | 12.3 C.Y. |
| POUR #2 TOP PART OF WINGS | 1.6 C.Y. |
| POUR #3 LATERAL GUIDES | 0.1 C.Y. |
| CLASS "A" CONCRETE TOTAL | 14.0 C.Y. |

HP 12 X 53 STEEL PILES

| | | |
|-------|----------|-----|
| NO. 8 | LIN. FT. | 360 |
|-------|----------|-----|



* POSITION OF PILE DURING WELDING. PILE SPLICE DETAILS

PROJECT NO. B-3848
 GUILFORD COUNTY
 STATION: 13+54.50 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 END BENT #1



DRAWN BY : J.B. WILSON/M.G. S. DATE : 4/11/05
 CHECKED BY : D.A. GLADDEN DATE : 7/20/05

| REVISIONS | | | | | | SHEET NO. |
|-----------|-----|-------|-----|-----|-------|--------------|
| NO. | BY: | DATE: | NO. | BY: | DATE: | TOTAL SHEETS |
| 1 | | | 3 | | | 27 |
| 2 | | | 4 | | | |