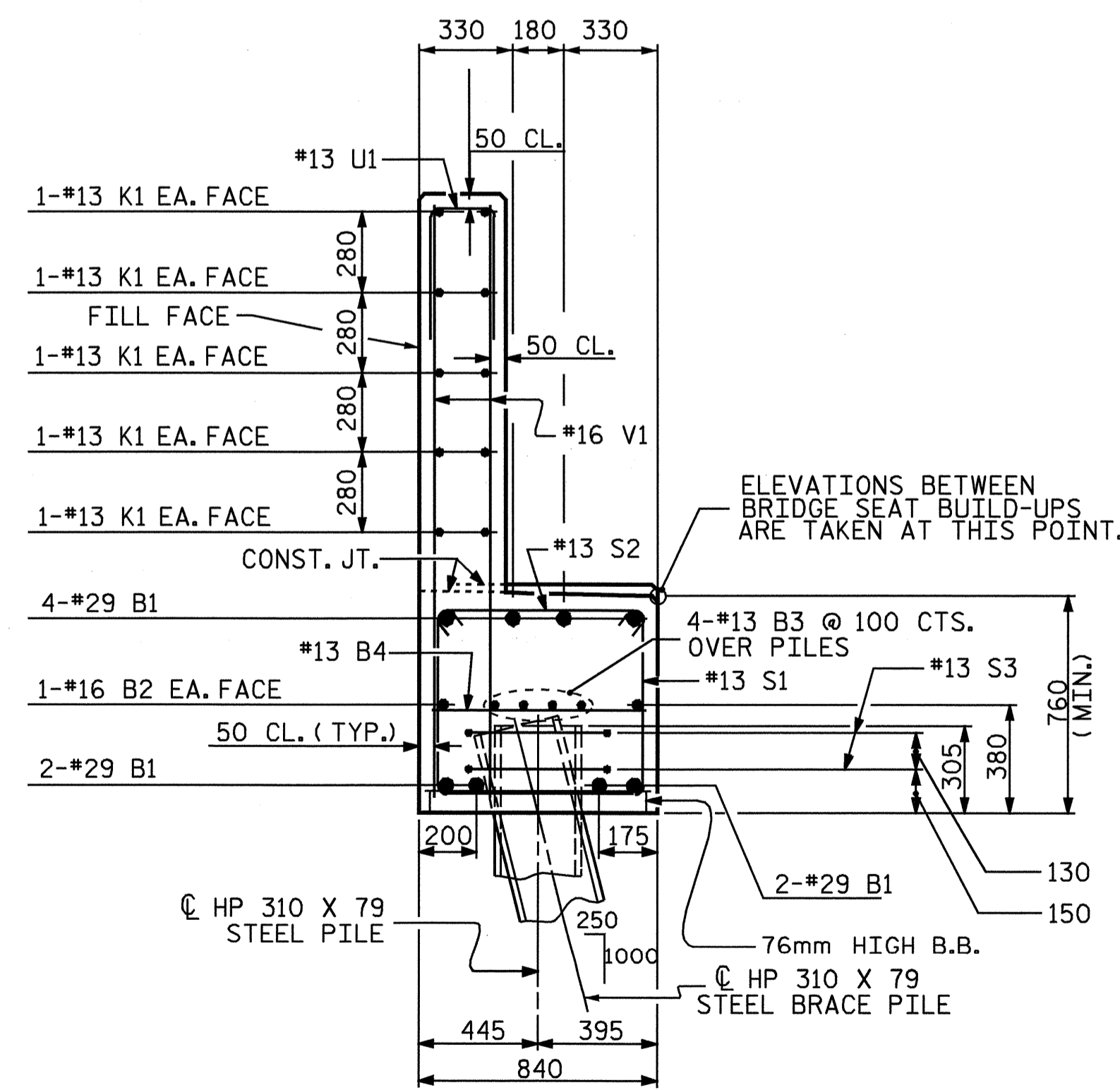


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

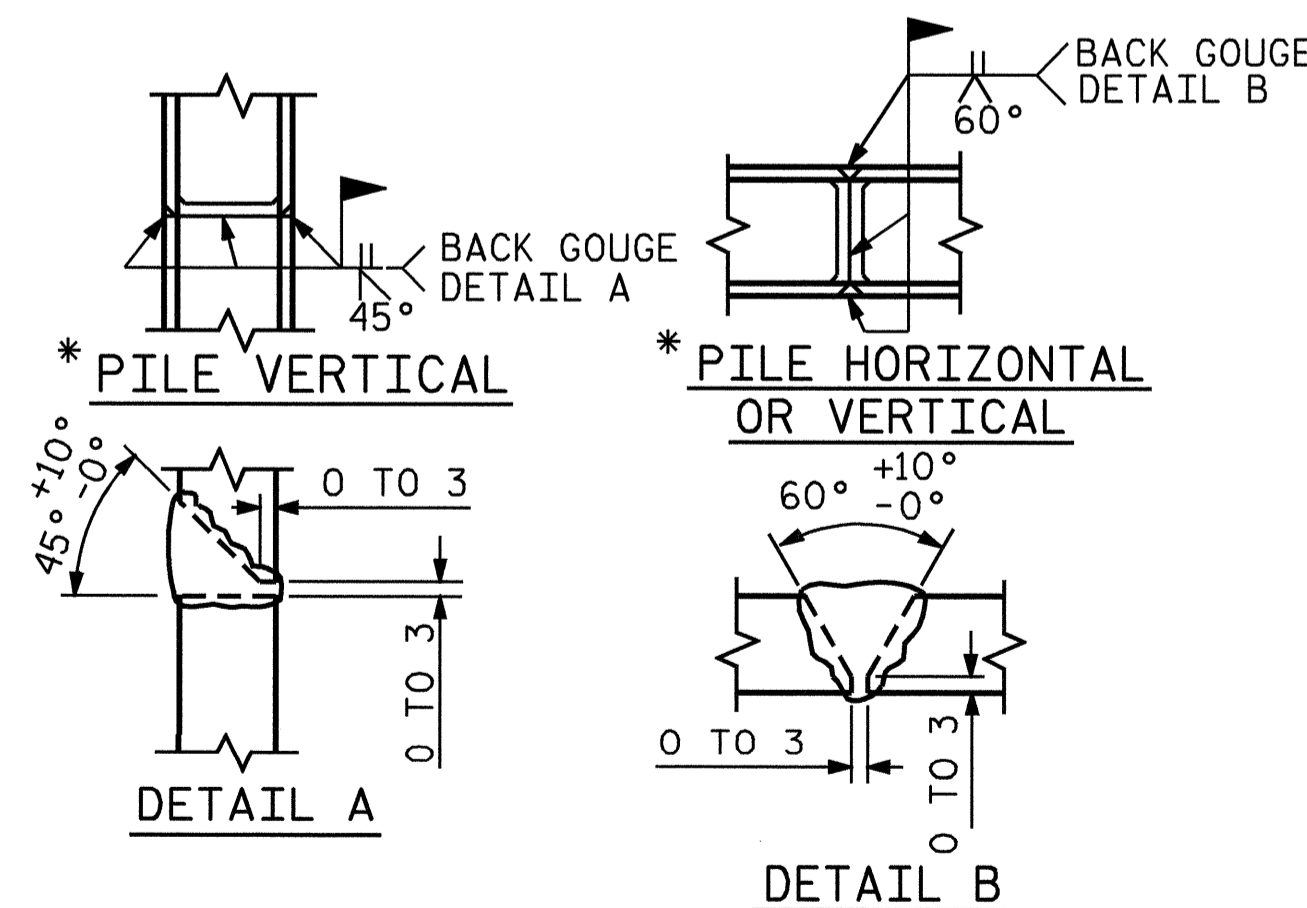
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

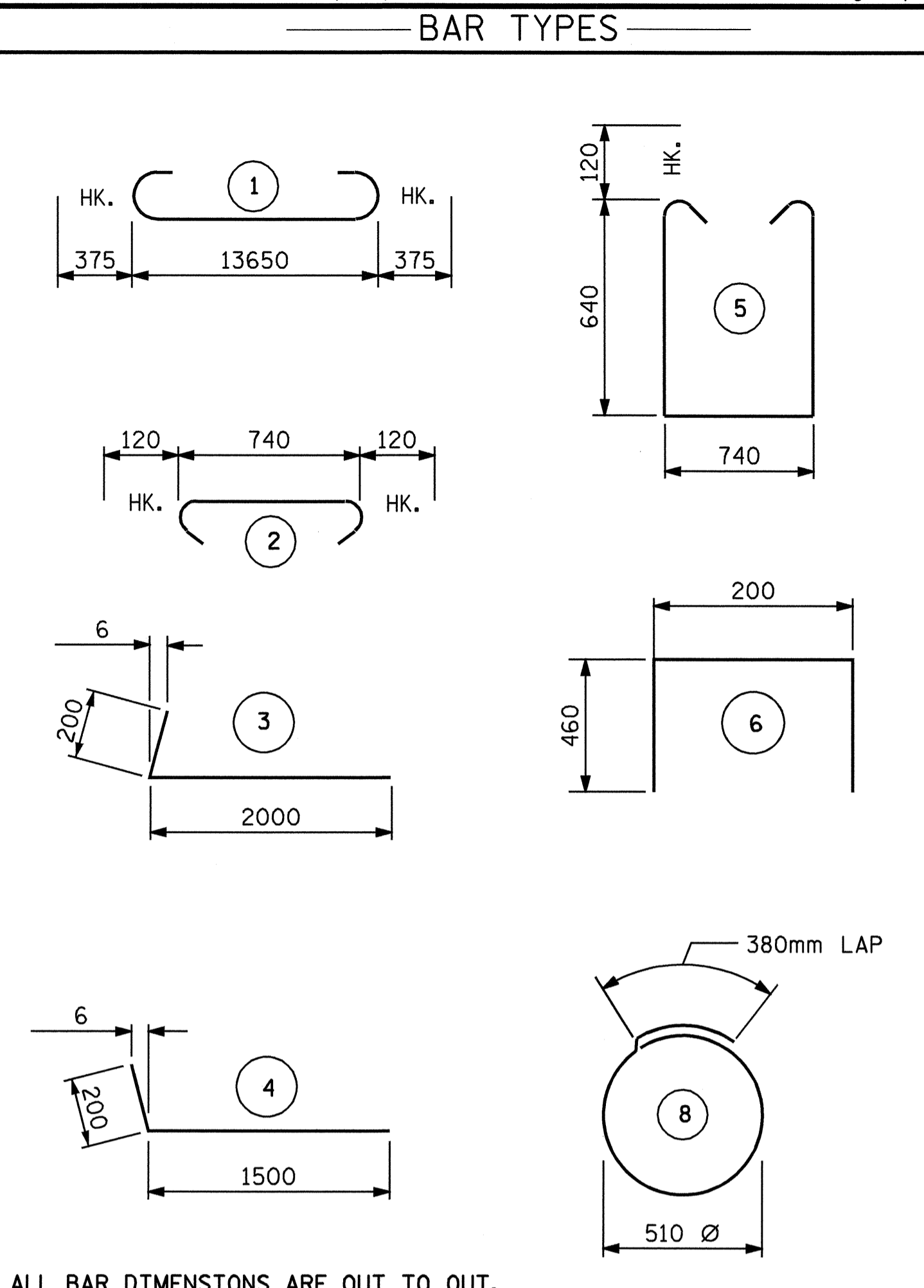


SECTION A-A



PILE SPLICE DETAILS

* POSITION OF PILE DURING WELDING.

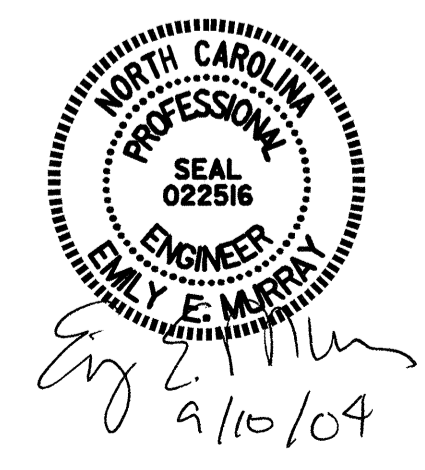


ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

| END BENT #2 | | | | | |
|---|-----|------|------|--------------|---------|
| BAR | NO. | SIZE | TYPE | LENGTH | WEIGHT |
| B1 | 8 | #29 | 1 | 14400 | 583 |
| B2 | 2 | #16 | STR | 13700 | 43 |
| B3 | 8 | #13 | STR | 7220 | 57 |
| B4 | 12 | #13 | STR | 740 | 9 |
| H1 | 20 | #16 | 3 | 2200 | 68 |
| H2 | 20 | #16 | 4 | 1700 | 53 |
| K1 | 20 | #13 | STR | 7220 | 144 |
| K2 | 8 | #13 | STR | 860 | 7 |
| S1 | 42 | #13 | 5 | 2260 | 94 |
| S2 | 42 | #13 | 2 | 980 | 41 |
| S3 | 18 | #13 | 8 | 1980 | 35 |
| U1 | 40 | #13 | 6 | 1120 | 45 |
| V1 | 80 | #16 | STR | 1960 | 243 |
| V2 | 22 | #16 | STR | 2280 | 78 |
| V3 | 20 | #16 | STR | 2380 | 74 |
| REINFORCING STEEL | | | | = | 1574 KG |
| CLASS A CONCRETE BREAKDOWN | | | | | |
| POUR #1 (CAP, LOWER PART OF WINGS) | | | | 9.8 | CU. M. |
| POUR #2 (BACKWALL AND UPPER PART OF WING) | | | | 7.6 | CU. M. |
| TOTAL | | | | 17.4 | CU. M. |
| HP 310 X 79 STEEL PILES | | | | | |
| NO. 9 | | | | METERS 112.5 | |
| STEEL PILE POINTS | | | | EA. 5 | |

DRAWN BY : ZION J. RORIE DATE : 6/22/04
 CHECKED BY : M. RORIE DATE : 7/6/04



PROJECT NO. R-2206
 LINCOLN-CATAWBA COUNTY
 STATION: 245+91.502 -L-

SHEET 3 OF 3

| STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH | | | | | |
|--|-----|-------|-----|-----|---------------------|
| SUBSTRUCTURE END BENT #2 LEFT LANE | | | | | |
| REVISIONS | | | | | SHEET NO. |
| NO. | BY: | DATE: | NO. | BY: | DATE: |
| 1 | | | 3 | | |
| 2 | | | 4 | | |
| | | | | | TOTAL SHEETS 374 |