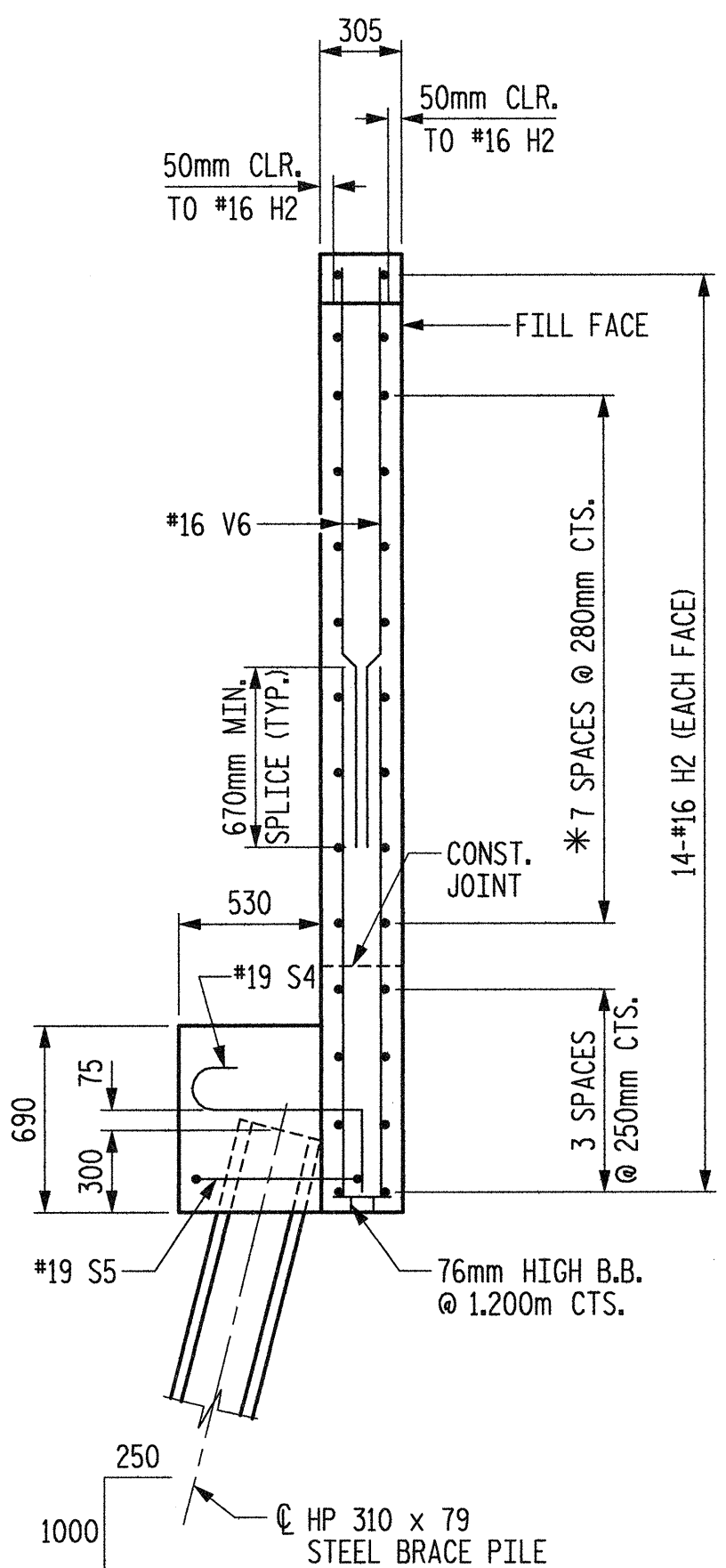
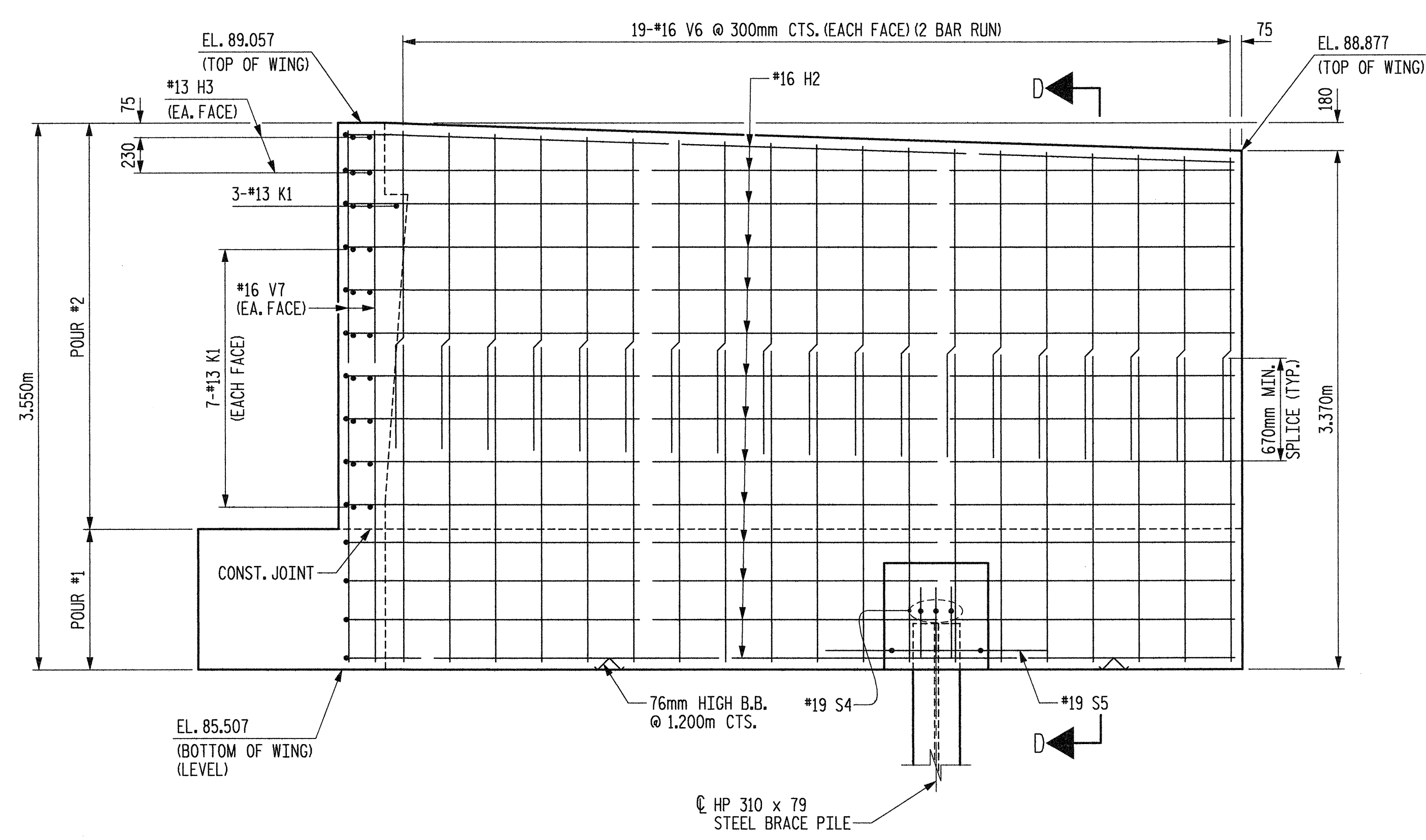


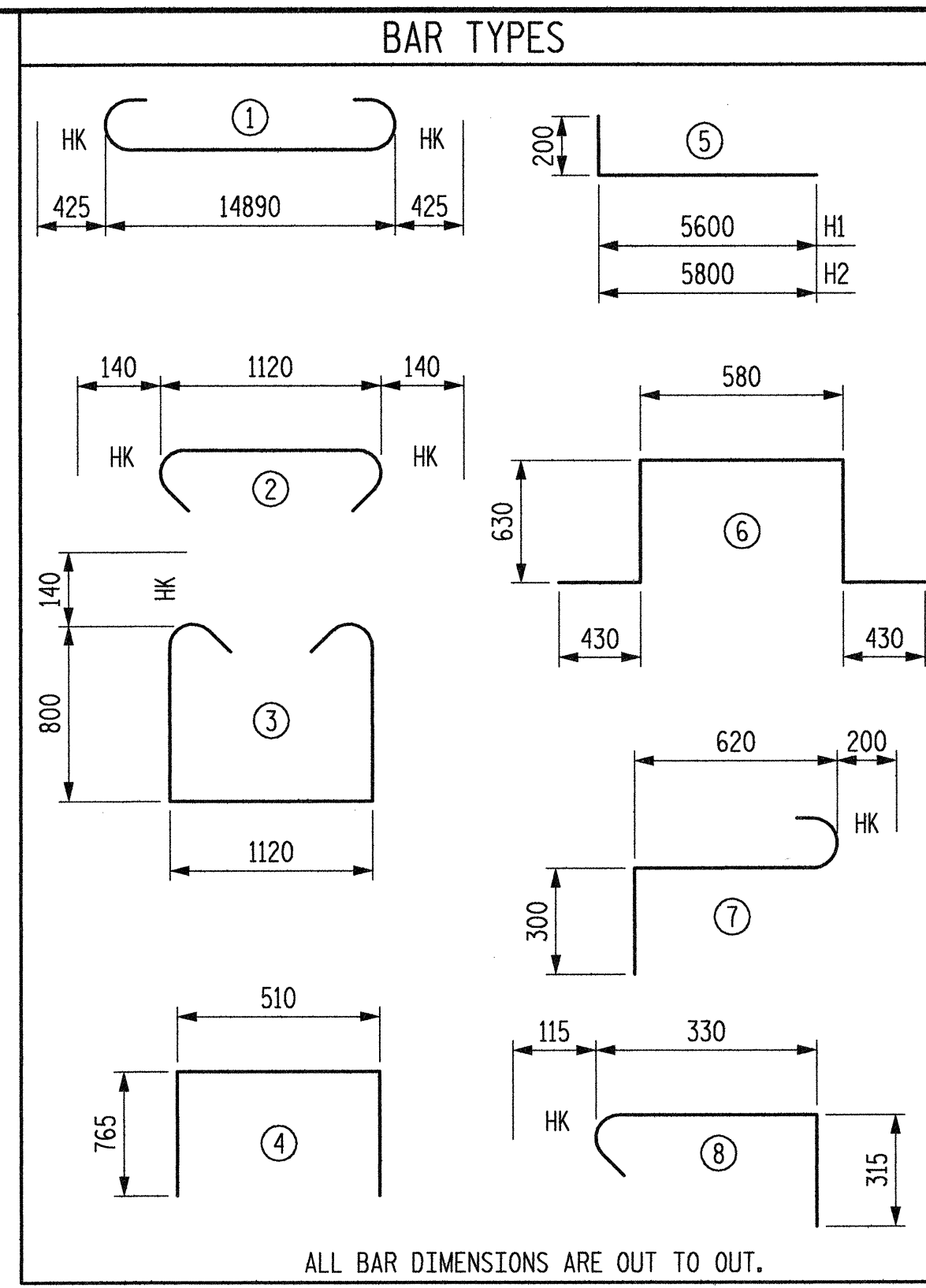
\*NOTE: MATCH "H" BARS IN THE WING TO THE #13 K1 BARS IN THE BACKWALL. "K" BARS SHOULD EXTEND FROM WING TO WING.



SECTION D-D



VIEW B-B

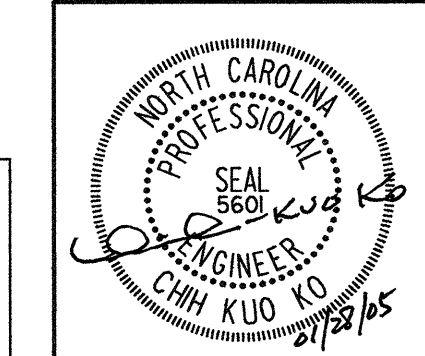
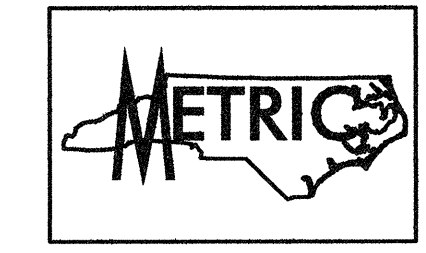


ALL BAR DIMENSIONS ARE OUT TO OUT.

| BILL OF MATERIAL                  |     |      |      |                 |                   |
|-----------------------------------|-----|------|------|-----------------|-------------------|
| END BENT #2                       |     |      |      |                 |                   |
| BAR                               | NO. | SIZE | TYPE | LENGTH          | WEIGHT            |
| B1                                | 10  | 32   | 1    | 15740           | 1008              |
| B2                                | 4   | 19   | STR  | 14900           | 133               |
| B3                                | 16  | 13   | STR  | 7820            | 124               |
| B4                                | 13  | 13   | STR  | 1120            | 14                |
| D1                                | 8   | 13   | STR  | 1000            | 8                 |
| H1                                | 28  | 16   | 5    | 5800            | 252               |
| H2                                | 28  | 16   | 5    | 6000            | 261               |
| H3                                | 8   | 13   | STR  | 880             | 7                 |
| K1                                | 34  | 13   | STR  | 7820            | 264               |
| S1                                | 56  | 16   | 3    | 3000            | 261               |
| S2                                | 56  | 16   | 2    | 1400            | 122               |
| S3                                | 48  | 13   | 8    | 760             | 36                |
| S4                                | 6   | 19   | 7    | 1120            | 15                |
| S5                                | 2   | 19   | 6    | 2700            | 12                |
| U1                                | 42  | 13   | 4    | 2040            | 85                |
| V1                                | 86  | 16   | STR  | 3000            | 400               |
| V2                                | 2   | 16   | STR  | 540             | 2                 |
| V3                                | 2   | 16   | STR  | 1840            | 6                 |
| V4                                | 72  | 16   | STR  | 2020            | 226               |
| V5                                | 10  | 16   | STR  | 3360            | 52                |
| V6                                | 76  | 16   | STR  | 2060            | 243               |
| V7                                | 10  | 16   | STR  | 3440            | 53                |
| REINFORCING STEEL                 |     |      |      |                 | 3584 kg           |
| CLASS A CONCRETE BREAKDOWN        |     |      |      |                 |                   |
| POUR #1 (CAP & WING)              |     |      |      | 20.7 CU. METERS |                   |
| POUR #2 (BACKWALL & WING)         |     |      |      | 20.8 CU. METERS |                   |
| TOTAL CLASS A CONCRETE            |     |      |      | 41.5 CU. METERS |                   |
| HP 310 x 79 STEEL PILES<br>NO. 16 |     |      |      |                 | 216.0 LIN. METERS |

PROJECT NO. R-2552AA  
 WAKE-JOHNSTON COUNTY  
 STATION: 28+31.359 -11Y1-

SHEET 3 OF 3



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

Plans prepared by:  
**KO & ASSOCIATES, P.C.**  
 Consulting Engineers  
 1011 SCHAUB DR., SUITE #202  
 RALEIGH, N.C. 27606  
 For Division of Highways

| REVISIONS |     |       |     |     |       | SHEET NO.        |
|-----------|-----|-------|-----|-----|-------|------------------|
| NO.       | BY: | DATE: | NO. | BY: | DATE: |                  |
| 1         |     |       | 3   |     |       | S-134            |
| 2         |     |       | 4   |     |       | TOTAL SHEETS 429 |

DWG. NO. 51

PLOT: 01/27/2005  
 FILE NAME: r:\2552aa.dwg - 83.dgn  
 04/2/05 PM 10:48:00  
 KO & ASSOCIATES, P.C.

DRAWN BY: B.E. LANNING DATE: JAN. 2005  
 CHECKED BY: J.C. KO / A.K. ORR DATE: JAN. 2005