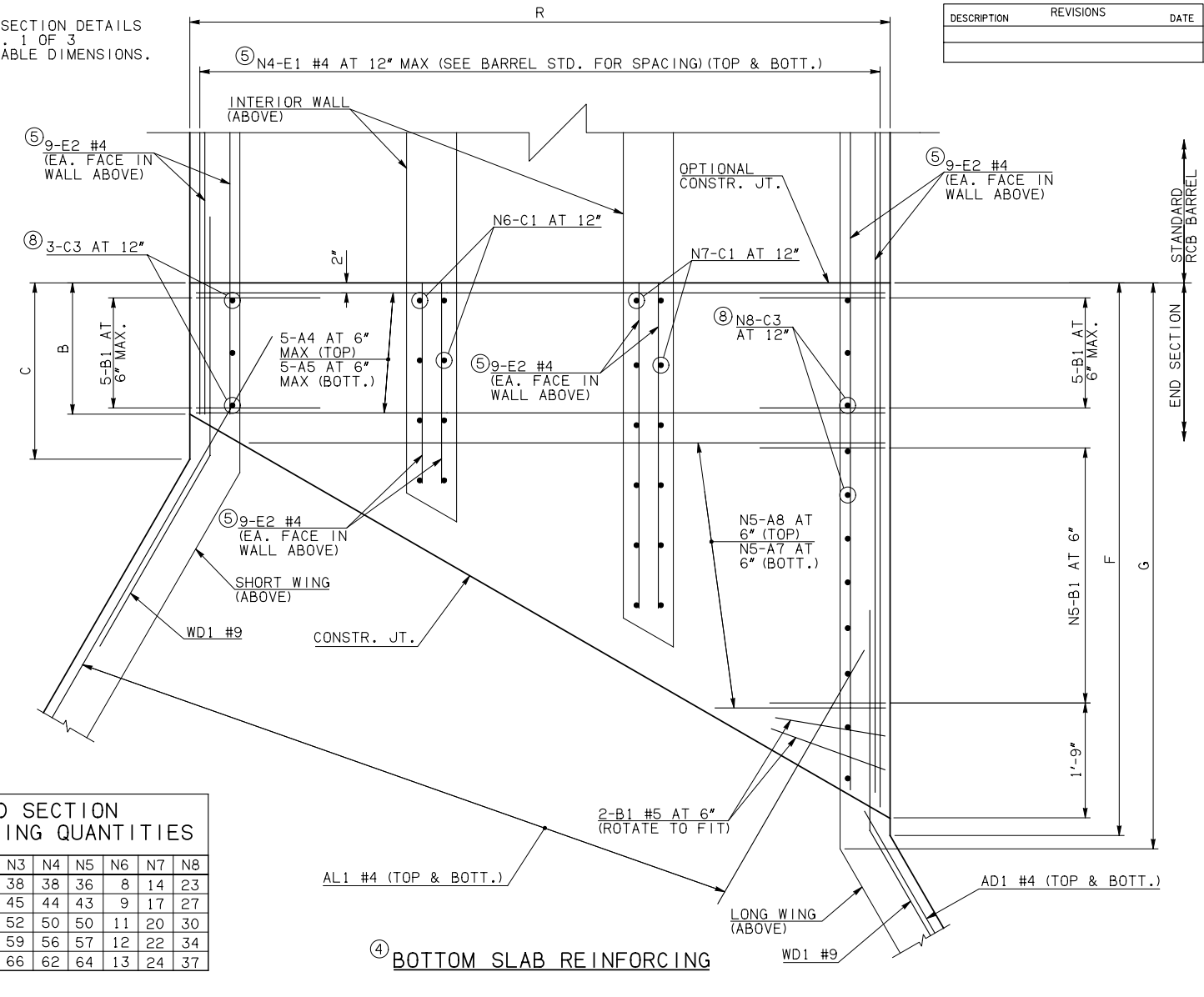
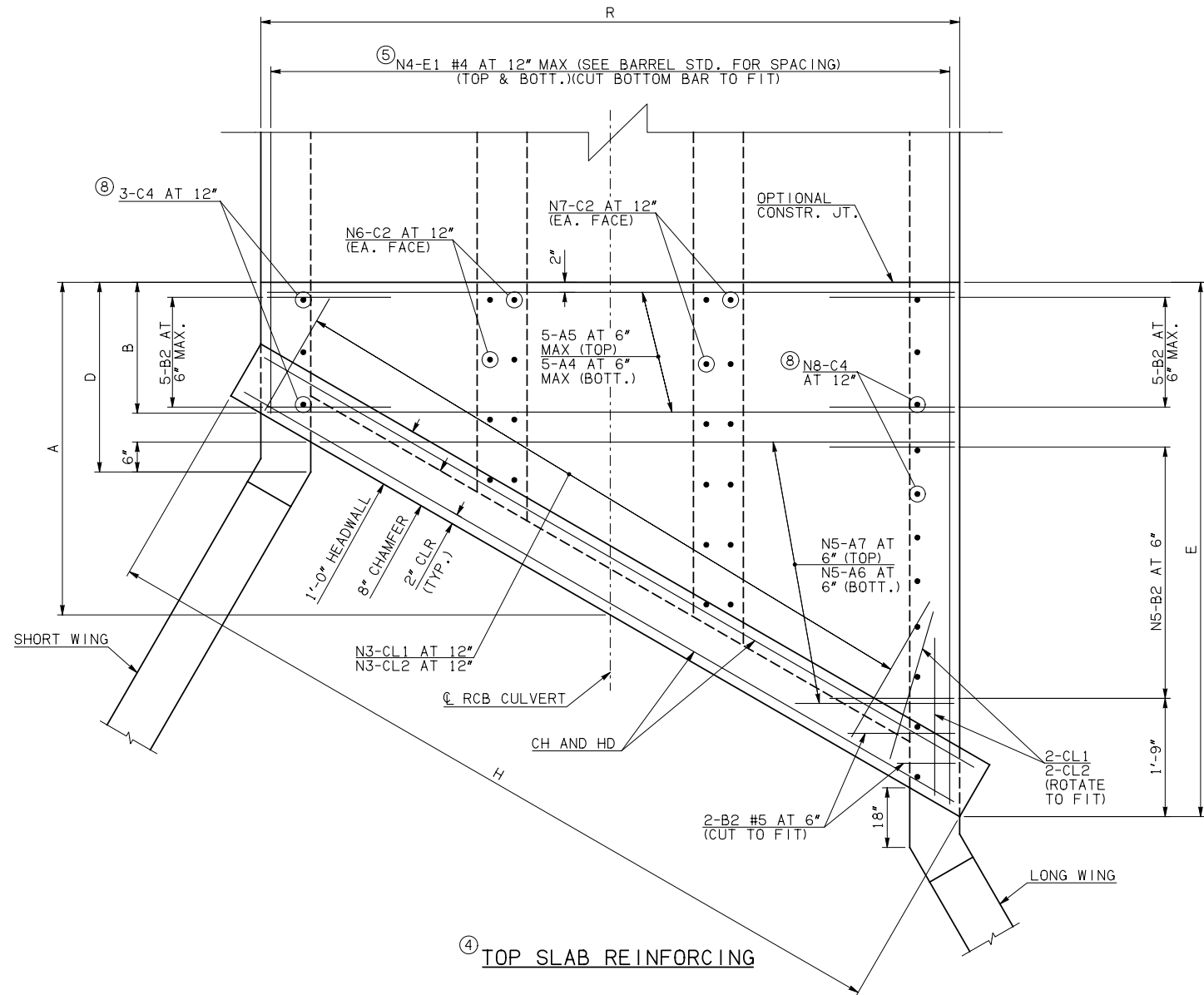


| DESCRIPTION | REVISIONS | DATE |
|-------------|-----------|------|
| | | |

NOTE: SEE END SECTION DETAILS SHEET NO. 1 OF 3 FOR VARIABLE DIMENSIONS.



END SECTION REINFORCING QUANTITIES

| SPAN | N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 |
|------|----|----|----|----|----|----|----|----|
| 10' | 19 | 13 | 38 | 38 | 36 | 8 | 14 | 23 |
| 12' | 23 | 9 | 45 | 44 | 43 | 9 | 17 | 27 |
| 14' | 27 | 5 | 52 | 50 | 50 | 11 | 20 | 30 |
| 16' | 31 | 1 | 59 | 56 | 57 | 12 | 22 | 34 |
| 18' | 2 | 30 | 66 | 62 | 64 | 13 | 24 | 37 |

END CONNECTION BAR LIST
(VARIABLE QUANTITIES AND LENGTHS)

| MARK | FORM | 10' SPAN | | | | 12' SPAN | | | | 14' SPAN | | | | 16' SPAN | | | | 18' SPAN | | | |
|------|------|----------|------|-----------------|------------------------------|----------|------|-----------------|-------------------------------|----------|------|-----------------|-------------------------------|----------|------|-----------------|---------------------------------|----------|------|-----------------|-------------------------------|
| | | SIZE | QTY. | LENGTH | REMARKS | SIZE | QTY. | LENGTH | REMARKS | SIZE | QTY. | LENGTH | REMARKS | SIZE | QTY. | LENGTH | REMARKS | SIZE | QTY. | LENGTH | REMARKS |
| A4 | STR | #5 | 10 | 33'-8" | | #6 | 10 | 39'-8" | | #7 | 10 | 45'-8" | | #7 | 10 | 51'-10" | | #8 | 10 | 58'-0" | |
| A5 | STR | #7 | 10 | 33'-8" | | #8 | 10 | 39'-8" | | #8 | 10 | 45'-8" | | #8 | 10 | 51'-10" | | #9 | 10 | 58'-0" | |
| A6 | STR | #7 | 36 | 16'-6" AVG. | 1'-4" TO 31'-8" | #7 | 43 | 19'-6 1/2" AVG. | 1'-4" TO 37'-9" | #7 | 50 | 22'-6 1/2" AVG. | 1'-4" TO 43'-9" | #8 | 57 | 25'-7" AVG. | 1'-4" TO 49'-10" | #8 | 64 | 28'-7 1/2" AVG. | 1'-4" TO 55'-11" |
| A7 | STR | #8 | 72 | 17'-8" AVG. | 2'-6" TO 32'-10" | #9 | 86 | 20'-8" AVG. | 2'-6" TO 38'-10" | #9 | 100 | 23'-8 1/2" AVG. | 2'-6" TO 44'-11" | #9 | 114 | 26'-9" AVG. | 2'-6" TO 51'-0" | #10 | 128 | 29'-9 1/2" AVG. | 2'-6" TO 57'-1" |
| A8 | STR | #7 | 36 | 17'-8" AVG. | 2'-6" TO 32'-10" | #7 | 43 | 20'-8" AVG. | 2'-6" TO 38'-10" | #7 | 50 | 23'-8 1/2" AVG. | 2'-6" TO 44'-11" | #8 | 57 | 26'-9" AVG. | 2'-6" TO 51'-0" | #8 | 64 | 29'-9 1/2" AVG. | 2'-6" TO 57'-1" |
| B1 | BNT | #5 | 48 | 4'-11" | | #6 | 55 | 5'-6" | | #6 | 62 | 5'-0" | | #6 | 69 | 5'-7" | | #6 | 76 | 6'-2" | |
| B2 | BNT | #5 | 48 | 12'-3" | | #6 | 55 | 12'-6" | | #6 | 62 | 12'-0" | | #6 | 69 | 12'-6" | | #6 | 76 | 13'-1" | |
| C1 | STR | #4 | 44 | 2'-2" | | #4 | 52 | 2'-3" | | #5 | 62 | 2'-8" | | #5 | 68 | 2'-9" | | #5 | 74 | 2'-10" | |
| C2 | STR | #4 | 44 | 9'-10" | | #4 | 52 | 9'-11" | | #5 | 62 | 10'-0" | | #5 | 68 | 10'-1" | | #5 | 74 | 10'-2" | |
| C3 | STR | #5 | 26 | 2'-6" | | #4 | 30 | 2'-3" | | #4 | 33 | 2'-4" | | #4 | 37 | 2'-5" | | #4 | 40 | 2'-6" | |
| C4 | STR | #5 | 26 | 9'-10" | | #4 | 30 | 9'-11" | | #4 | 33 | 10'-0" | | #4 | 37 | 10'-1" | | #4 | 40 | 10'-2" | |
| E1 | STR | #4 | 152 | 11'-9 1/2" AVG. | 2'-1" TO 21'-6" | #4 | 176 | 13'-9 1/2" AVG. | 2'-4" TO 25'-3" | #4 | 200 | 15'-9" AVG. | 2'-7" TO 28'-11" | #4 | 224 | 17'-9 1/2" AVG. | 2'-10" TO 32'-9" | #4 | 248 | 18'-9" AVG. | 2'-0" TO 35'-6" |
| E2 | STR | #4 | 72 | 11'-2 1/2" AVG. | 2'-1", 7'-8", 14'-0", 21'-1" | #4 | 72 | 13'-2 1/2" AVG. | 2'-4", 9'-1", 16'-7", 24'-10" | #4 | 72 | 15'-2 1/2" AVG. | 2'-7", 10'-6", 19'-2", 28'-7" | #4 | 72 | 17'-2 1/2" AVG. | 2'-10", 11'-11", 21'-9", 32'-4" | #4 | 72 | 18'-2" AVG. | 2'-0", 12'-4", 23'-3", 35'-0" |

QUANTITIES

| ITEM | UNIT | 10' SPAN | 12' SPAN | 14' SPAN | 16' SPAN | 18' SPAN |
|-------------------|------|----------|----------|----------|----------|----------|
| CLASS AA CONCRETE | CY | 158.50 | 185.70 | 216.80 | 253.80 | 288.60 |
| REINFORCING STEEL | LB | 23130.00 | 29420.00 | 35120.00 | 43370.00 | 54380.00 |

NOTE: QUANTITIES ABOVE ARE FOR ONE END SECTION, WHICH IS COMPRISED OF ONE END CONNECTION, ONE HEADWALL, ONE APRON, AND TWO WINGWALLS.

- NOTES: ③ QUANTITY SHOWN REPRESENTS TWO SETS.
 ④ FOR FURTHER INFORMATION REGARDING END SECTION A, B, C, AND E BARS REFER TO RCB CULVERT - BARREL DETAILS.
 ⑤ LENGTHS OF E1 & E2 BARS SHOWN ARE ADDITIONAL LENGTHS REQUIRED FOR THE END SECTION. LAP SPLICES, AS REQUIRED, SHALL BE IN ACCORDANCE WITH RCB BARREL STANDARD NOTES.
 ⑥ 4-SETS OF N4-E1 BARS REQUIRED
 ⑦ 4-SETS OF 18-E2 BARS REQUIRED WITH LENGTHS AS SHOWN CORRESPONDING TO SHORT EXTERIOR WALL, INTERIOR WALLS, AND LONG EXTERIOR WALL.
 ⑧ C3 AND C4 BAR SIZE AND SPACING MAY DIFFER FROM BARREL SECTION.

APPROVED BY BRIDGE ENGINEER *Robert J. Nisch* DATE 4/09/09

OKLAHOMA DEPT. OF TRANSPORTATION
BRIDGE STANDARD (ENGLISH)
 RCB CULVERTS - END SECTION DETAILS
 TRIPLE CELL - 9'-0" HEIGHT - 30°
 SHEET NO. 2 OF 3

1999 SPECIFICATIONS RCB-E3-H9-30-2 OOE B-766E