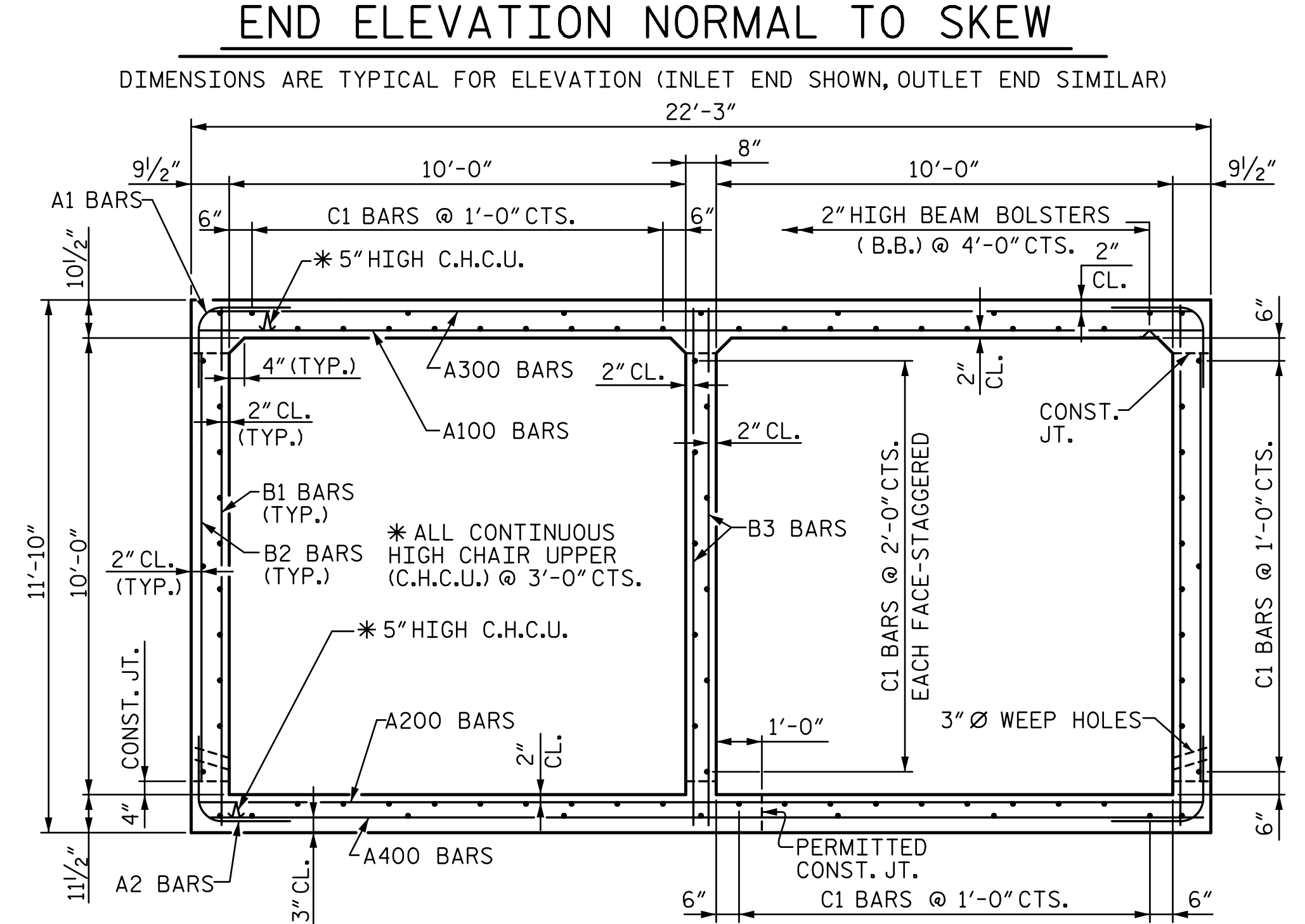
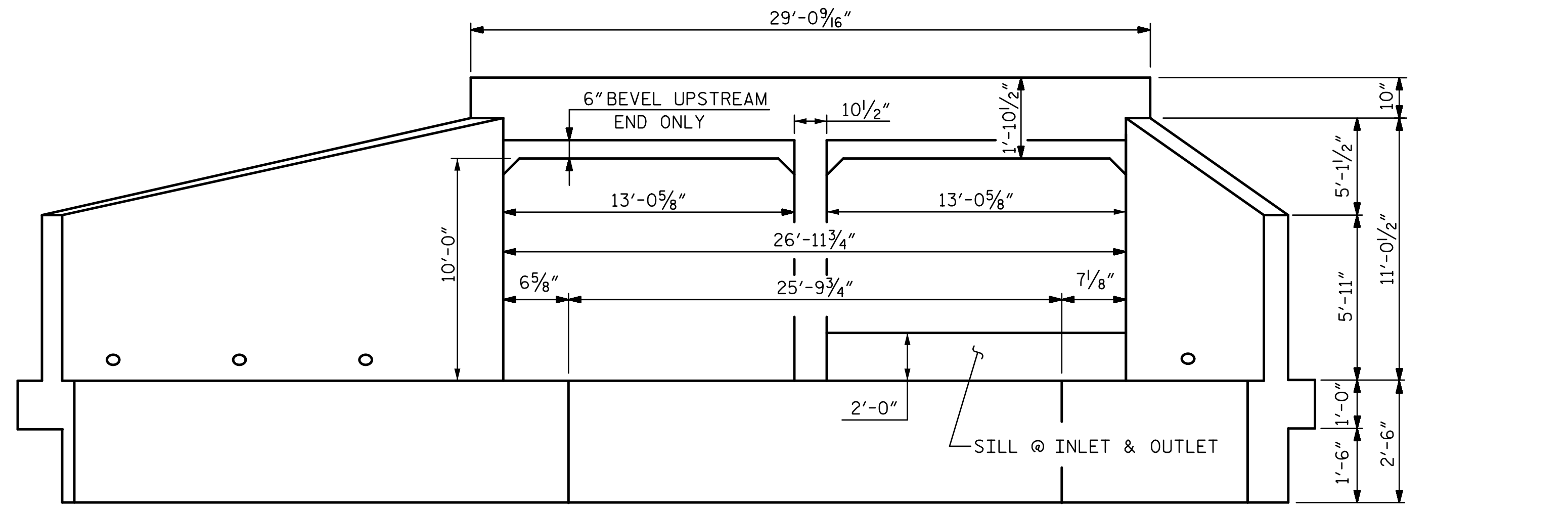
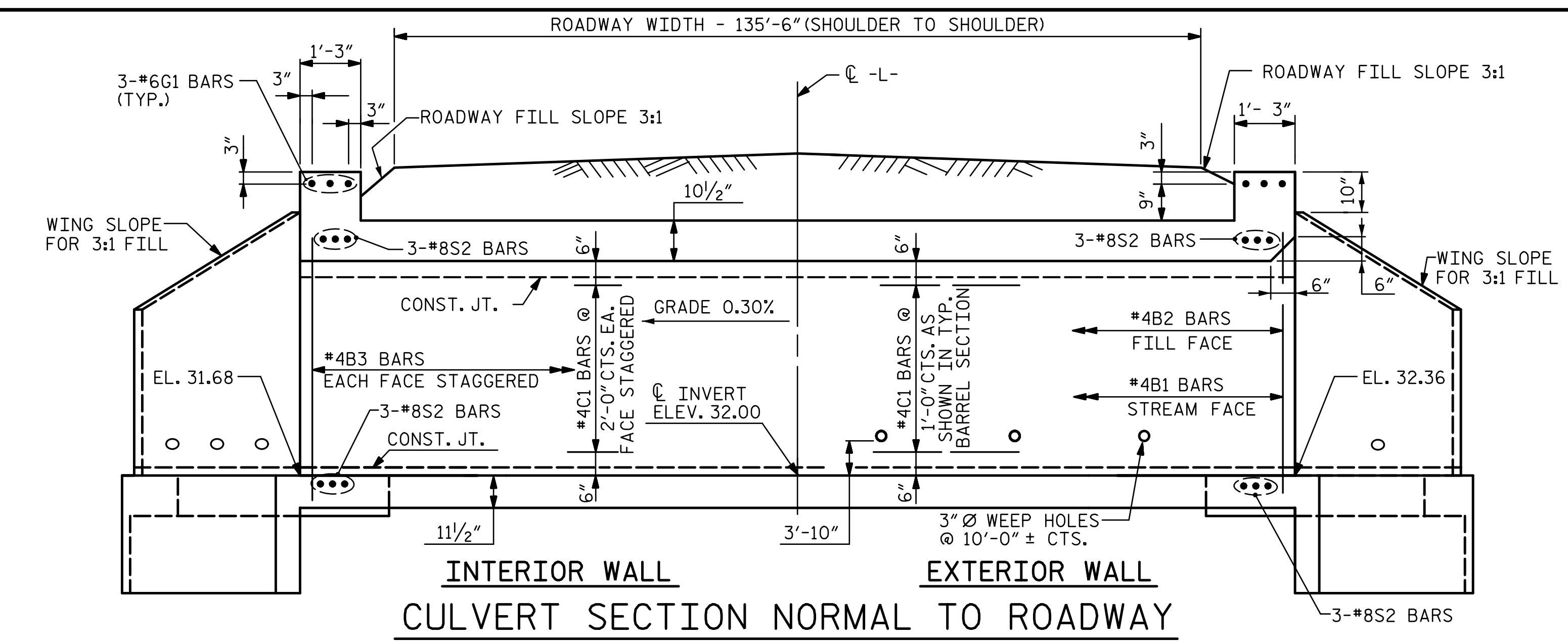


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RIGHT ANGLE SECTION OF BARREL
THERE ARE 86 "C" BARS IN SECTION OF BARREL.

BILL OF REINFORCING FOR BARREL

| MARK | NO. | SIZE | TYPE | LENGTH | WEIGHT | MARK | NO. | SIZE | TYPE | LENGTH | WEIGHT | MARK | NO. | SIZE | TYPE | LENGTH | WEIGHT |
|------|-----|------|------|---------|--------|------|-----|------|------|---------|--------|--|-----|------|------|---------|--------|
| A1 | 902 | #6 | ① | 6'-4" | 8,580 | A221 | 2 | #4 | STR | 9'-6" | 13 | A412 | 2 | #6 | STR | 14'-10" | 20 |
| A2 | 902 | #6 | ① | 6'-4" | 8,580 | A222 | 2 | #4 | STR | 8'-10" | 12 | A413 | 2 | #6 | STR | 14'-3" | 19 |
| A100 | 457 | #4 | STR | 21'-11" | 6,691 | A223 | 2 | #4 | STR | 8'-3" | 11 | A414 | 2 | #6 | STR | 13'-8" | 18 |
| A101 | 2 | #4 | STR | 21'-5" | 29 | A224 | 2 | #4 | STR | 7'-8" | 10 | A415 | 2 | #6 | STR | 13'-1" | 17 |
| A102 | 2 | #4 | STR | 20'-11" | 28 | A225 | 2 | #4 | STR | 7'-1" | 9 | A416 | 2 | #6 | STR | 12'-5" | 17 |
| A103 | 2 | #4 | STR | 20'-4" | 27 | A226 | 2 | #4 | STR | 6'-6" | 9 | A417 | 2 | #6 | STR | 11'-10" | 16 |
| A104 | 2 | #4 | STR | 19'-10" | 26 | A227 | 2 | #4 | STR | 5'-11" | 8 | A418 | 2 | #6 | STR | 11'-3" | 15 |
| A105 | 2 | #4 | STR | 19'-3" | 26 | A228 | 2 | #4 | STR | 5'-4" | 7 | A419 | 2 | #6 | STR | 10'-8" | 14 |
| A106 | 2 | #4 | STR | 18'-8" | 25 | A229 | 2 | #4 | STR | 4'-8" | 6 | A420 | 2 | #6 | STR | 10'-1" | 13 |
| A107 | 2 | #4 | STR | 18'-2" | 24 | A230 | 2 | #4 | STR | 4'-1" | 5 | A421 | 2 | #6 | STR | 9'-6" | 13 |
| A108 | 2 | #4 | STR | 17'-7" | 23 | A231 | 2 | #4 | STR | 3'-6" | 5 | A422 | 2 | #6 | STR | 8'-10" | 12 |
| A109 | 2 | #4 | STR | 17'-1" | 23 | A232 | 2 | #4 | STR | 2'-11" | 4 | A423 | 2 | #6 | STR | 8'-3" | 11 |
| A110 | 2 | #4 | STR | 16'-6" | 22 | A233 | 2 | #4 | STR | 2'-4" | 3 | A424 | 2 | #6 | STR | 7'-8" | 10 |
| A111 | 2 | #4 | STR | 16'-0" | 21 | A234 | 2 | #4 | STR | 1'-9" | 2 | A425 | 2 | #6 | STR | 7'-1" | 9 |
| A112 | 2 | #4 | STR | 15'-5" | 21 | A300 | 419 | #6 | STR | 21'-11" | 6,134 | A426 | 2 | #6 | STR | 6'-6" | 9 |
| A113 | 2 | #4 | STR | 14'-11" | 20 | A301 | 2 | #6 | STR | 21'-5" | 29 | A427 | 2 | #6 | STR | 5'-11" | 8 |
| A114 | 2 | #4 | STR | 14'-4" | 19 | A302 | 2 | #6 | STR | 20'-9" | 28 | A428 | 2 | #6 | STR | 5'-4" | 7 |
| A115 | 2 | #4 | STR | 13'-9" | 18 | A303 | 2 | #6 | STR | 20'-2" | 27 | A429 | 2 | #6 | STR | 4'-8" | 6 |
| A116 | 2 | #4 | STR | 13'-3" | 18 | A304 | 2 | #6 | STR | 19'-7" | 26 | A430 | 2 | #6 | STR | 4'-1" | 5 |
| A117 | 2 | #4 | STR | 12'-8" | 17 | A305 | 2 | #6 | STR | 19'-0" | 25 | A431 | 2 | #6 | STR | 3'-6" | 5 |
| A118 | 2 | #4 | STR | 12'-2" | 16 | A306 | 2 | #6 | STR | 18'-5" | 25 | A432 | 2 | #6 | STR | 2'-11" | 4 |
| A119 | 2 | #4 | STR | 11'-7" | 15 | A307 | 2 | #6 | STR | 17'-10" | 24 | A433 | 2 | #6 | STR | 2'-4" | 3 |
| A120 | 2 | #4 | STR | 11'-1" | 15 | A308 | 2 | #6 | STR | 17'-3" | 23 | A434 | 2 | #6 | STR | 1'-9" | 2 |
| A121 | 2 | #4 | STR | 10'-6" | 14 | A309 | 2 | #6 | STR | 16'-7" | 22 | B1 | 456 | #4 | STR | 11'-5" | 3,478 |
| A122 | 2 | #4 | STR | 10'-0" | 13 | A310 | 2 | #6 | STR | 16'-0" | 21 | B2 | 994 | #4 | STR | 9'-4" | 6,197 |
| A123 | 2 | #4 | STR | 9'-5" | 13 | A311 | 2 | #6 | STR | 15'-5" | 21 | B3 | 458 | #4 | STR | 11'-5" | 3,493 |
| A124 | 2 | #4 | STR | 8'-10" | 12 | A312 | 2 | #6 | STR | 14'-10" | 20 | C1 | 688 | #4 | STR | 30'-0" | 13,788 |
| A125 | 2 | #4 | STR | 8'-4" | 11 | A313 | 2 | #6 | STR | 14'-3" | 19 | D1 | 6 | #6 | STR | 2'-5" | 22 |
| A126 | 2 | #4 | STR | 7'-9" | 10 | A314 | 2 | #6 | STR | 13'-8" | 18 | G1 | 6 | #6 | STR | 28'-7" | 258 |
| A127 | 2 | #4 | STR | 7'-3" | 10 | A315 | 2 | #6 | STR | 13'-1" | 17 | S2 | 12 | #8 | STR | 28'-7" | 916 |
| A128 | 2 | #4 | STR | 6'-8" | 9 | A316 | 2 | #6 | STR | 12'-5" | 17 | TOTAL BARREL REINFORCING STEEL = 89,168 LBS. | | | | | |
| A129 | 2 | #4 | STR | 6'-2" | 8 | A317 | 2 | #6 | STR | 11'-10" | 16 | BAR TYPES | | | | | |
| A130 | 2 | #4 | STR | 5'-7" | 7 | A318 | 2 | #6 | STR | 11'-3" | 15 | ALL BAR DIMENSIONS ARE OUT TO OUT. | | | | | |
| A131 | 2 | #4 | STR | 5'-1" | 7 | A319 | 2 | #6 | STR | 10'-8" | 14 | VERTICAL LEG | | | | | |
| A132 | 2 | #4 | STR | 4'-6" | 6 | A320 | 2 | #6 | STR | 10'-1" | 13 | ① | | | | | |
| A133 | 2 | #4 | STR | 3'-11" | 5 | A321 | 2 | #6 | STR | 9'-6" | 13 | 6" R. | | | | | |
| A134 | 2 | #4 | STR | 3'-5" | 5 | A322 | 2 | #6 | STR | 8'-10" | 12 | 3'-3 1/2" | | | | | |
| A135 | 2 | #4 | STR | 2'-10" | 4 | A323 | 2 | #6 | STR | 8'-3" | 11 | 3'-3 1/2" | | | | | |
| A136 | 2 | #4 | STR | 2'-4" | 3 | A324 | 2 | #6 | STR | 7'-8" | 10 | 9 1/2" | | | | | |
| A137 | 2 | #4 | STR | 1'-9" | 2 | A325 | 2 | #6 | STR | 7'-1" | 9 | 9 1/2" | | | | | |
| A200 | 419 | #4 | STR | 21'-11" | 6,134 | A326 | 2 | #6 | STR | 6'-6" | 9 | A1 2'-3" | | | | | |
| A201 | 2 | #4 | STR | 21'-5" | 29 | A327 | 2 | #6 | STR | 5'-11" | 8 | A2 2'-3" | | | | | |
| A202 | 2 | #4 | STR | 20'-9" | 28 | A328 | 2 | #6 | STR | 5'-4" | 7 | | | | | | |
| A203 | 2 | #4 | STR | 20'-2" | 27 | A329 | 2 | #6 | STR | 4'-8" | 6 | | | | | | |
| A204 | 2 | #4 | STR | 19'-7" | 26 | A330 | 2 | #6 | STR | 4'-1" | 5 | | | | | | |
| A205 | 2 | #4 | STR | 19'-0" | 25 | A331 | 2 | #6 | STR | 3'-6" | 5 | | | | | | |
| A206 | 2 | #4 | STR | 18'-5" | 25 | A332 | 2 | #6 | STR | 2'-11" | 4 | | | | | | |
| A207 | 2 | #4 | STR | 17'-10" | 24 | A333 | 2 | #6 | STR | 2'-4" | 3 | | | | | | |
| A208 | 2 | #4 | STR | 17'-3" | 23 | A334 | 2 | #6 | STR | 1'-9" | 2 | | | | | | |
| A209 | 2 | #4 | STR | 16'-7" | 22 | A400 | 419 | #6 | STR | 21'-11" | 6,134 | | | | | | |
| A210 | 2 | #4 | STR | 16'-0" | 21 | A401 | 2 | #6 | STR | 21'-5" | 29 | | | | | | |
| A211 | 2 | #4 | STR | 15'-5" | 21 | A402 | 2 | #6 | STR | 20'-9" | 28 | | | | | | |
| A212 | 2 | #4 | STR | 14'-10" | 20 | A403 | 2 | #6 | STR | 20'-2" | 27 | | | | | | |
| A213 | 2 | #4 | STR | 14'-3" | 19 | A404 | 2 | #6 | STR | 19'-7" | 26 | | | | | | |
| A214 | 2 | #4 | STR | 13'-8" | 18 | A405 | 2 | #6 | STR | 19'-0" | 25 | | | | | | |
| A215 | 2 | #4 | STR | 13'-1" | 17 | A406 | 2 | #6 | STR | 18'-5" | 25 | | | | | | |
| A216 | 2 | #4 | STR | 12'-5" | 17 | A407 | 2 | #6 | STR | 17'-10" | 24 | | | | | | |
| A217 | 2 | #4 | STR | 11'-10" | 16 | A408 | 2 | #6 | STR | 17'-3" | 23 | | | | | | |
| A218 | 2 | #4 | STR | 11'-3" | 15 | A409 | 2 | #6 | STR | 16'-7" | 22 | | | | | | |
| A219 | 2 | #4 | STR | 10'-8" | 14 | A410 | 2 | #6 | STR | 16'-0" | 21 | | | | | | |
| A220 | 2 | #4 | STR | 10'-1" | 13 | A411 | 2 | #6 | STR | 15'-5" | 21 | | | | | | |

| BAR | SIZE | SPLICE LENGTH |
|-----|------|---------------|
| B2 | #4 | 1'-9" |
| C1 | #4 | 1'-9" |

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DOUBLE 10'-0" X 10'-0"
CONCRETE BOX CULVERT
130°-00'-00" SKEW

PROJECT NO. U-4751
NEW HANOVER COUNTY
STATION: 151+41.00 -L-
SHEET 3 OF 7

DESIGNED BY: B. CURRY
SEAL: 036940
ENGINEER: B. CURRY
7/12/2017

STV ENGINEERS, INC.
100 years
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-5991

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

TOTAL SHEETS: 7

DRAWN BY: BMC DATE: 5-17
CHECKED BY: MLO DATE: 5-17
DESIGN ENGINEER OF RECORD: B. CURRY DATE: 5-17