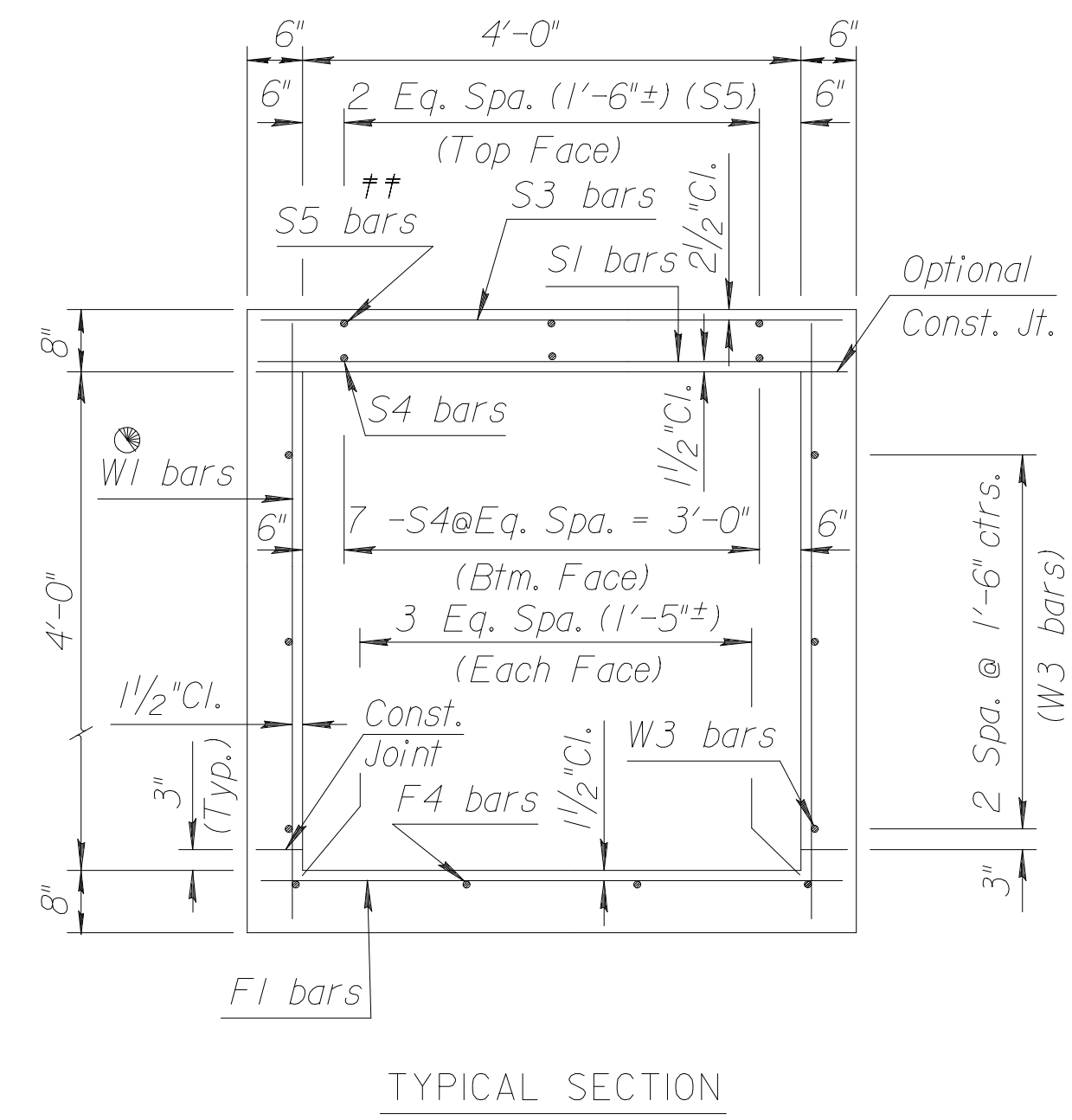
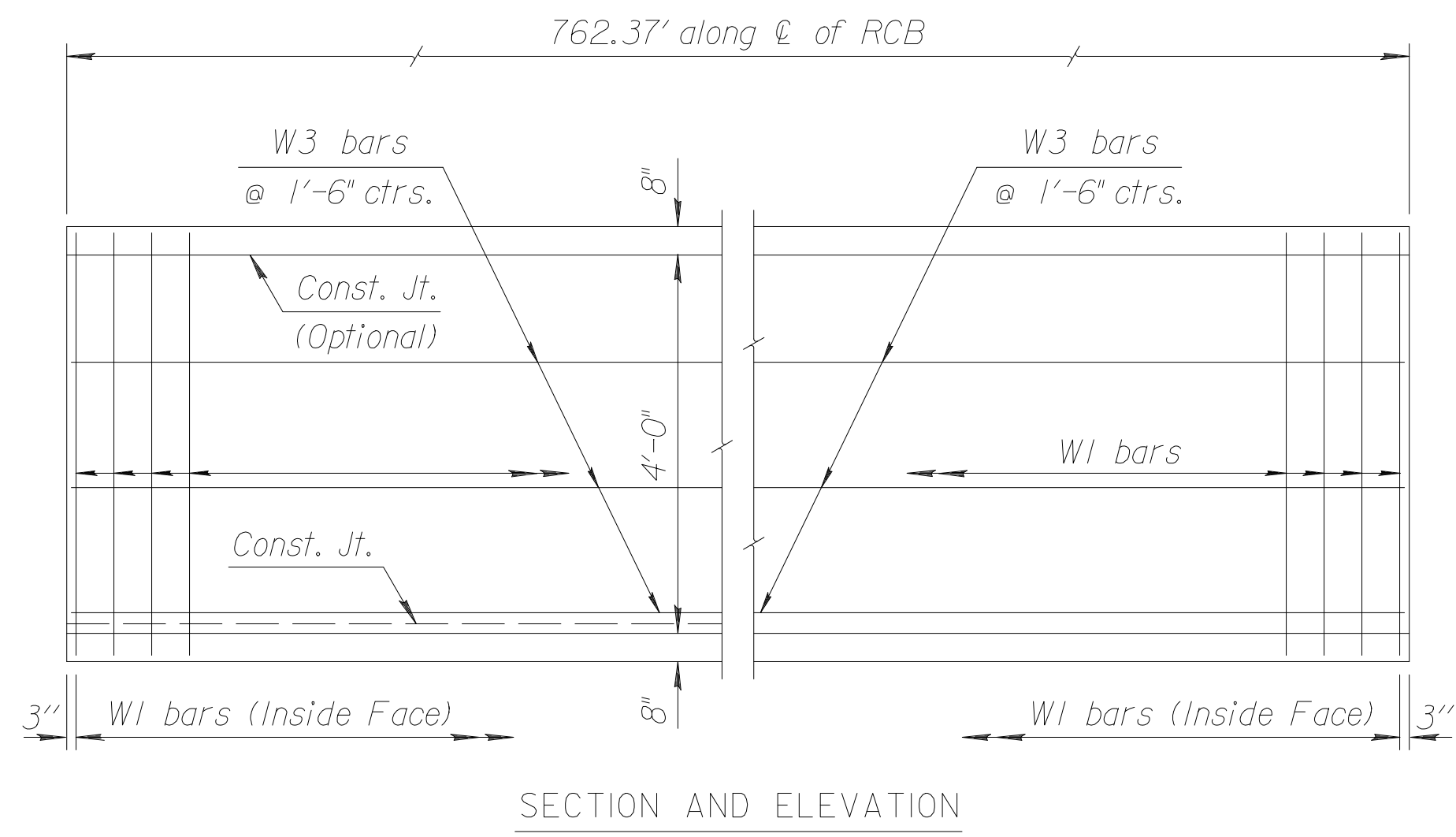
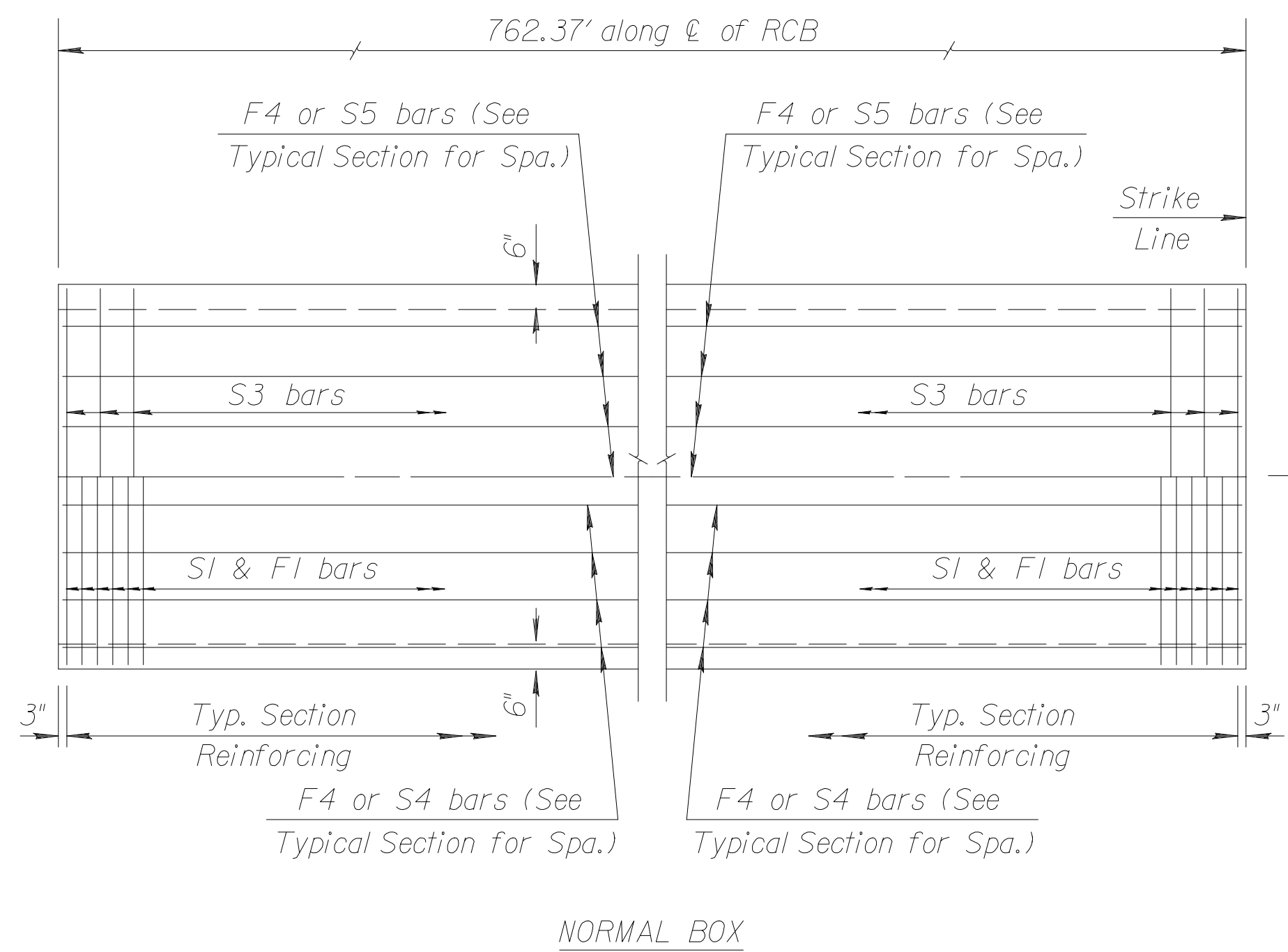


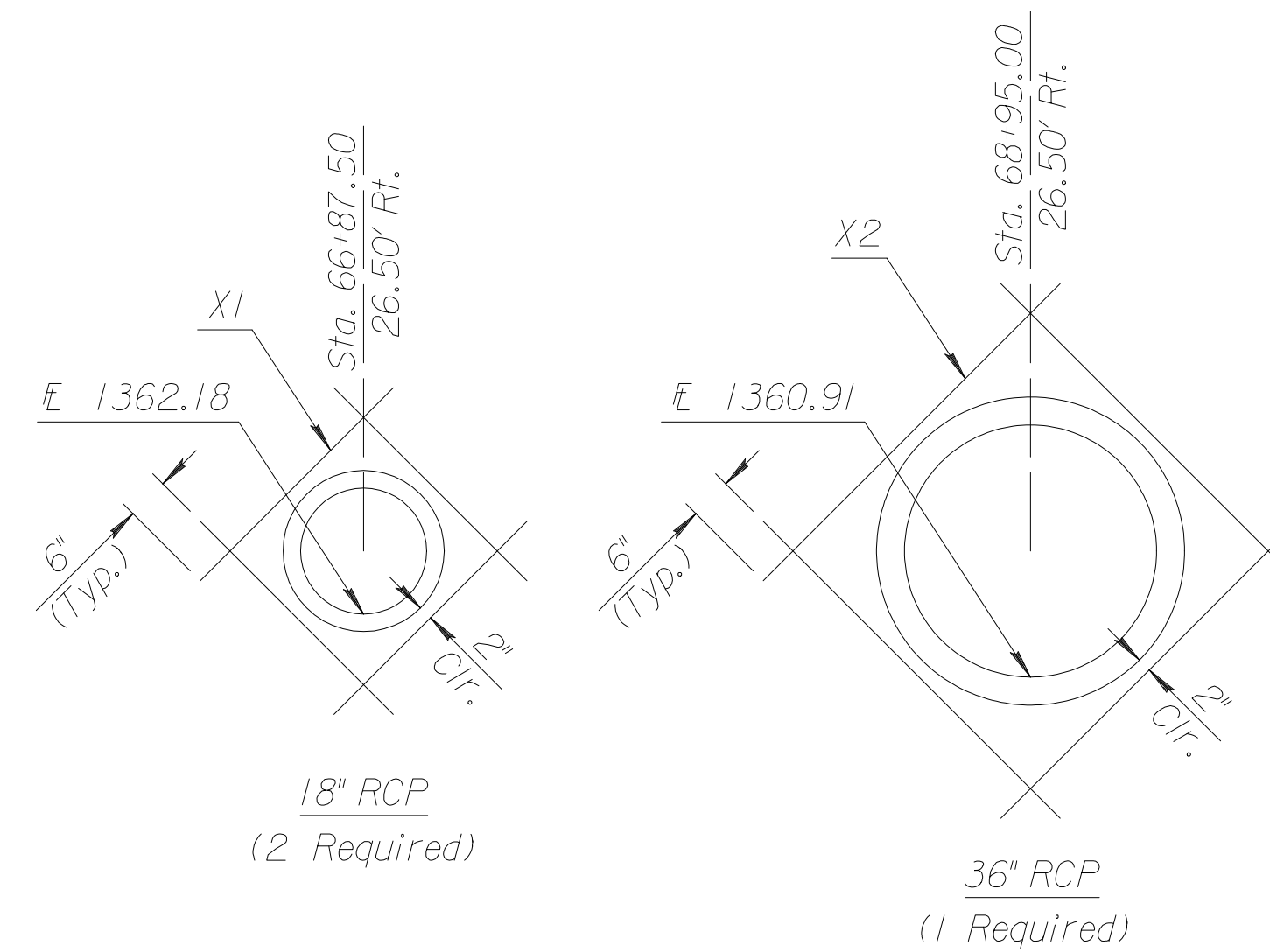
| | | | | |
|--------|-------------|------|-----------|--------------|
| STATE | PROJECT NO. | YEAR | SHEET NO. | TOTAL SHEETS |
| KANSAS | 472-84004 | 2005 | 93 | 215 |



See RCB Auxillary Details for Optional Splice.
 Note:
 S3 bars omitted unless grade box or slab thickness is greater than or equal to 12".
 †† Omit S5 bars when S3 bars are omitted



Reinforcing in Top of Slab and Bottom of Floor



See Sh.107 for added F1 & S1 bars at beginning and end of RCB at abutting locations.

GENERAL NOTES

LOADING: HS20-44 AASHTO Specifications, 1983 Edition.
UNIT STRESSES: Grade 4.0 Concrete; $f'c = 4,000$ p.s.i.
 Reinforcing Steel; $f_y = 60,000$ p.s.i.
FILL HEIGHT: Unless otherwise noted, the Design Fill Height is measured from the riding surface at the culvert and shall include the surfacing.
CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a 3/4 inch triangular moulding. Where Grade 4.0 Concrete (AE) is specified, it shall be placed in the top slab above the Construction Joint.
REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise noted.
EXCAVATION: Excavation for culverts less than bridge length shall not be paid for directly but shall be subsidiary to Grade 4.0 Concrete. Excavation for RCB Bridges shall be paid for as Class III Excavation.
QUANTITIES: The quantities shown in the Culvert Summary include apron and/or soil saver quantities when their construction is required by the plans. Payment for additional quantities that result from including seal course and/or floating apron, as a change in original plans, shall be made at the Unit Price bid for the various items involved.

Plotted By: rcs
 File: i:\2004\04219\FINAL\04219-000_C-4\RCBStormEKM(V1).dgn
 Plot Date: 9-27-2005

CULVERT SUMMARY

| Flow Line Elev. Lt. | Flow Line Elev. Rt. | Crown Gr. Elev. 1368.42 Lt. | Design Fill Ht. | Skew | Left Wings | Right Wings | Scour Apron | Soil Saver | Concrete | | | Reinf. Steel (Gr. 60) | | |
|---------------------|---------------------|-----------------------------|-----------------|------|------------|-------------|-------------|------------|------------------|-----------------|-----------------|-----------------------|--------------|--------------|
| | | | | | | | | | Barrel (Cu.Yds.) | Wings (Cu.Yds.) | Total (Cu.Yds.) | Barrel (Lbs.) | Wings (Lbs.) | Total (Lbs.) |
| 1361.40 | 1359.41 | 1366.52 Rt. | 2 | 0 | NONE | NONE | NO | NO | 301.18 | 0 | 301.18 | 31,937.28 | 0 | 31,937.28 |

BAR SCHEDULE

| F1 | | | | F4 | | | | S1 | | | | S3 | | | | S4 | | | S5 | | | | | | | | | | | | | |
|------|------|------|--------|------|------|-----|--------|------|------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|-----|--------|------|-----|--------|-----|---|-------|--------|-----|-----|-----|
| Size | Spa. | No. | Length | Size | Spa. | No. | Length | Size | Spa. | No. | Length | Size | Spa. | No. | Length | Size | Spa. | No. | Length | Size | No. | Length | Size | No. | Length | | | | | | | |
| 5 | 5/2" | 1670 | 4'-8" | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 4 | 80 | 39'-5" | 5 | 5/2" | 1670 | 4'-8" | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 4 | 140 | 39'-5" | N/A | N/A | N/A |
| W1 | | | | W3 | | | | G1 | | | | X1 | | | X2 | | | | | | | | | | | | | | | | | |
| Size | Spa. | No. | Length | Size | Spa. | No. | Length | Size | No. | Length | Size | No. | Length | Size | No. | Length | Size | No. | Length | Size | No. | Length | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 4 | 9" | 2034 | 4'-11" | N/A | N/A | N/A | N/A | 4 | 120 | 39'-5" | N/A | N/A | N/A | N/A | 5 | 8 | 3'-3" | 5 | 4 | 5'-0" | | | | |

| Minimum Splice Lengths | |
|------------------------|-------|
| #4 | 1'-4" |
| #5 | 1'-8" |
| #6 | 2'-0" |

| SUMMARY OF QUANTITIES (For Information only) | |
|--|-------------|
| Concrete (Grade 4.0) | 0 C.Y. |
| Concrete (Grade 4.0)(AE) | 301.2 C.Y. |
| Reinforcing Steel (Gr. 60) | 0 Lbs. |
| Reinforcing Steel (Epoxy Coated) | 31,940 Lbs. |
| Class III Excavation | — C.Y. |

| NO. | DATE | REVISIONS | BY | APP'D |
|---|------------|------------|-----------|------------------|
| KANSAS DEPARTMENT OF TRANSPORTATION Storm Sewer Line 100 SINGLE 4 ft x 4 ft RCB | | | | |
| BR 14.4 P | | | | Sedgwick Co. |
| DESIGNED | TRACED | QUANTITIES | APP'D | KENNETH F. HURST |
| DESIGN CK. | DETAIL CK. | QUAN. CK. | TRACE CK. | |