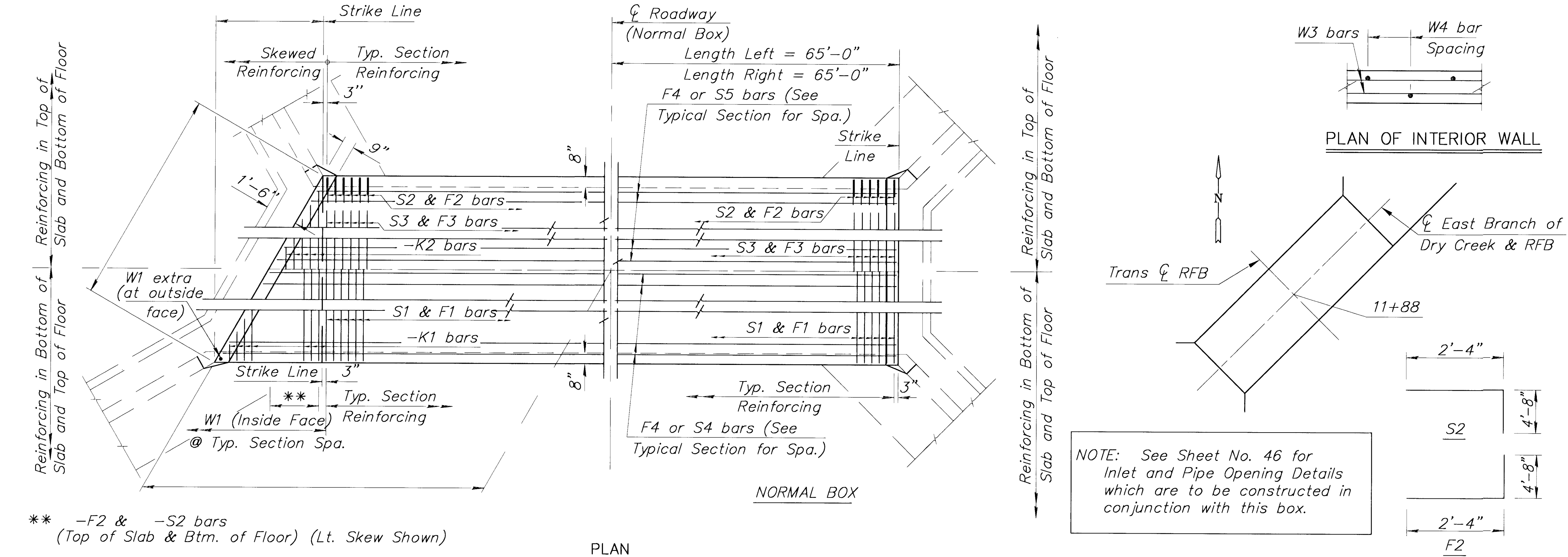
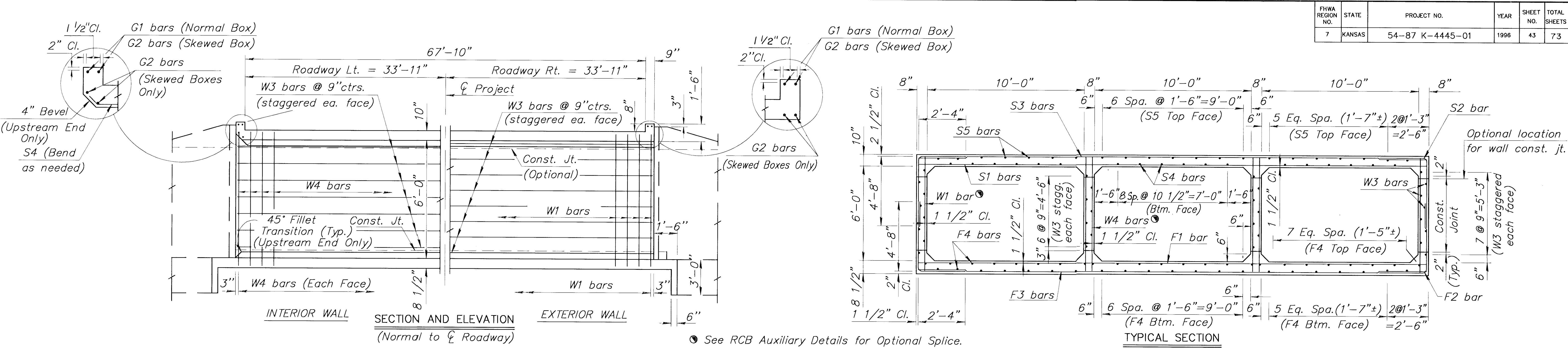


VERSION: 5.0.0 COMPILED: 9/01/94

| DESIGN    | DATE | DATE | DATE | DATE | DATE |
|-----------|------|------|------|------|------|
| DESIGN    | DATE | DATE | DATE | DATE | DATE |
| DETAILS   | DATE | DATE | DATE | DATE | DATE |
| TRACING   | DATE | DATE | DATE | DATE | DATE |
| RETRACTED | DATE | DATE | DATE | DATE | DATE |

Drawn By : \$\$\$USERNAME\$\$\$  
DGN File : \$\$\$DGNFILE\$\$\$  
Plotted : \$\$\$SYTIME\$\$\$



**GENERAL NOTES**

**LOADING:** HS20-44 AASHTO Specifications, 1983 Edition.

**UNIT STRESSES:** Class AAA 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:** Class AAA Concrete shall be used throughout. Bevel all exposed edges with a  $3/4"$  triangular moulding. Where Class AAA 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 Class AAA Concrete. Excavation for RCB Bridges shall be paid for as Class III Excavation.

**SEAL COURSE:** A Seal Course may be required by the Engineer. The Seal Course shall be unreinforced Concrete (Commercial Grade) to a minimum depth of 3 inches or as determined by the Engineer. Concrete for the seal course shall be paid for at the unit price of Class AAA Concrete.

**FOUNDATION STABILIZATION:** Foundation Stabilization may be required as directed by the Engineer. The depth of Foundation Stabilization shall be determined by the Engineer. Foundation Stabilization shall be paid for at the determined Unit Price set for Foundation Stabilization. See Auxiliary Details.

**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.

**GRANULAR BACKFILL (WINGWALLS):** Special backfill procedures may be required at the direction of the Engineer. See Auxiliary Details Sheet.

**STRIKE LINE:** Wingwalls and that portion of the RCB outside the Strike Line shall be constructed level. Footing for wingwalls shall be constructed with the culvert floor. See wingwall detail sheet.

| CULVERT SUMMARY     |                     |                 |                 |      |            |             |             |            |                   |                   |                  |                  |                       |              |              |
|---------------------|---------------------|-----------------|-----------------|------|------------|-------------|-------------|------------|-------------------|-------------------|------------------|------------------|-----------------------|--------------|--------------|
| Flow Line Elev. Lt. | Flow Line Elev. Rt. | Crown Gr. Elev. | Design Fill Ht. | Skew | Left Wings | Right Wings | Scour Apron | Soil Saver | Granular Backfill | Concrete          |                  |                  | Reinf. Steel (Gr. 60) |              |              |
|                     |                     |                 |                 |      |            |             |             |            |                   | Barrel (Cu. Yds.) | Wings (Cu. Yds.) | Total (Cu. Yds.) | Barrel (Lbs.)         | Wings (Lbs.) | Total (Lbs.) |
| 1329.50             | 1329.38             | 1337.23         | 2 ft.           | 0°   | FLARED     | SPECIAL     | NO          | NO         | NO                | 327.9             | 29.5             | 357.4            | 68,490                | 2,380        | 70,870       |

| BAR SCHEDULE |        |     |        |      |        |     |        |      |        |     |        |      |      |        |        |        |     |        |      |        |     |        |      |        |        |        |      |  |
|--------------|--------|-----|--------|------|--------|-----|--------|------|--------|-----|--------|------|------|--------|--------|--------|-----|--------|------|--------|-----|--------|------|--------|--------|--------|------|--|
| F1           |        |     |        | F2 * |        |     |        | F3   |        |     |        | F4   |      |        |        | S1     |     |        |      | S2 *   |     |        |      | S3     |        |        |      |  |
| Size         | Spa.   | No. | Length | Size | Spa.   | No. | Length | Size | Spa.   | No. | Length | Size | No.  | Length | Size   | Spa.   | No. | Length | Size | Spa.   | No. | Length | Size | Spa.   | No.    | Length | Size |  |
| 4            | 5 1/2" | 284 | 32'-4" | 5    | 5 1/2" | 568 | 7'-0"  | 6    | 5 1/2" | 284 | 32'-4" | 4    | 180  | 33'-5" | 5      | 5 1/2" | 284 | 32'-4" | 5    | 5 1/2" | 568 | 7'-0"  | 6    | 5 1/2" | 284    | 32'-4" | 4    |  |
| K1           |        |     |        | K2   |        |     |        | W1   |        |     |        | W2   |      |        |        | W3     |     |        |      | W4     |     |        |      | G1     |        |        |      |  |
| Size         | Spa.   | No. | Length | Size | Spa.   | No. | Length | Size | Spa.   | No. | Length | Size | Spa. | No.    | Length | Size   | No. | Length | Size | Spa.   | No. | Length | Size | No.    | Length | Size   | No.  |  |
| -            | -      | -   | *      | -    | -      | -   | *      | 4    | 11"    | 284 | 7'-3"  | -    | -    | -      | -      | 4      | 120 | 33'-5" | 5    | 11"    | 568 | 7'-3"  | 5    | 4      | 32'-4" | -      |      |  |

\* See Bending Diagram

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

| SUMMARY OF QUANTITIES               |             |
|-------------------------------------|-------------|
| Class AAA Concrete                  | 357.4 C.Y.  |
| Class AAA Concrete †                | 48.8 C.Y.   |
| Class III Excavation                | 1,317 C.Y.  |
| Reinforcing Steel (Gr. 60)          | 70,870 Lbs. |
| Reinforcing Steel (Epoxy Coated)    | 0 Lbs.      |
| Foundation Stabilization (Set)      | 195 C.Y.    |
| Granular Backfill (Wingwalls) (Set) | 57 C.Y.     |

|                                             |            |            |           |       |
|---------------------------------------------|------------|------------|-----------|-------|
| NO.                                         | DATE       | REVISIONS  | BY        | APP'D |
|                                             |            |            |           |       |
| KANSAS DEPARTMENT OF TRANSPORTATION         |            |            |           |       |
| STA. 57+50.28                               |            |            |           |       |
| TRIPLE 10' x 6' RFB (Pinecrest)             |            |            |           |       |
| (45° ROTATION LT.)                          |            |            |           |       |
| Std. No. 340.00F                            |            |            |           |       |
| SEDGWICK CO.                                |            |            |           |       |
| FHWA APPROVAL 6-5-91 APP'D KENNETH F. HURST |            |            |           |       |
| DESIGNED                                    | DETAILED   | QUANTITIES | TRACED    |       |
| DESIGN CK.                                  | DETAIL CK. | QUAN. CK.  | TRACE CK. |       |