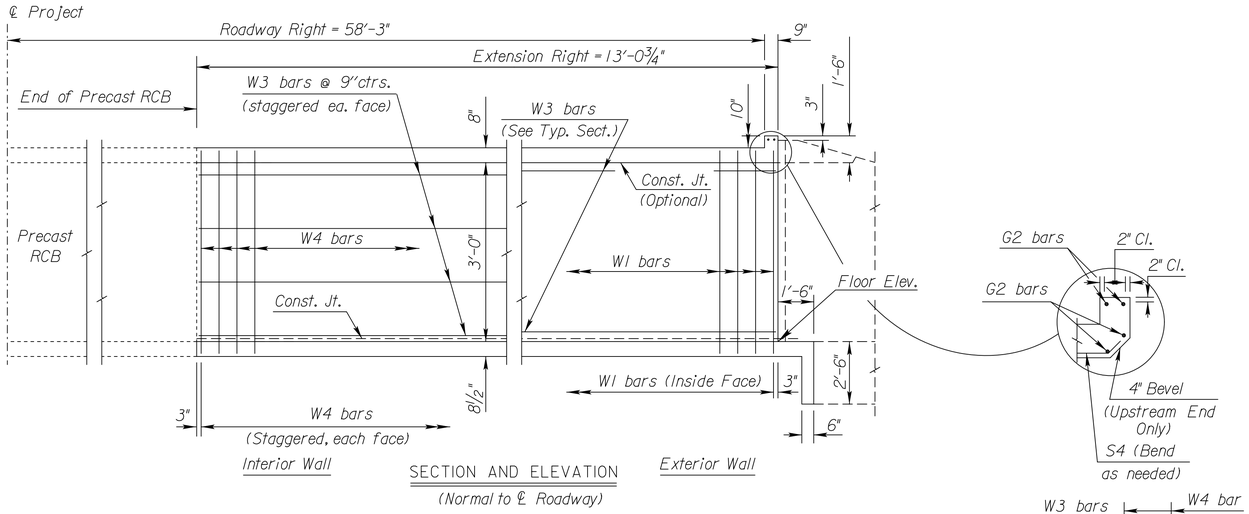
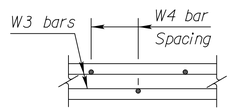
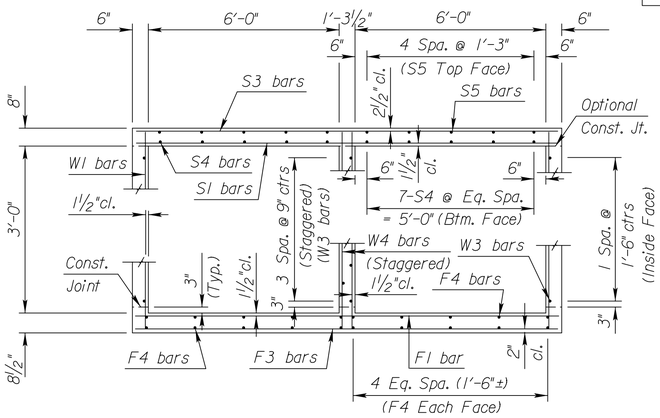
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84692	2013	92	193



SECTION AND ELEVATION
(Normal to ℄ Roadway)



PLAN OF INTERIOR WALL



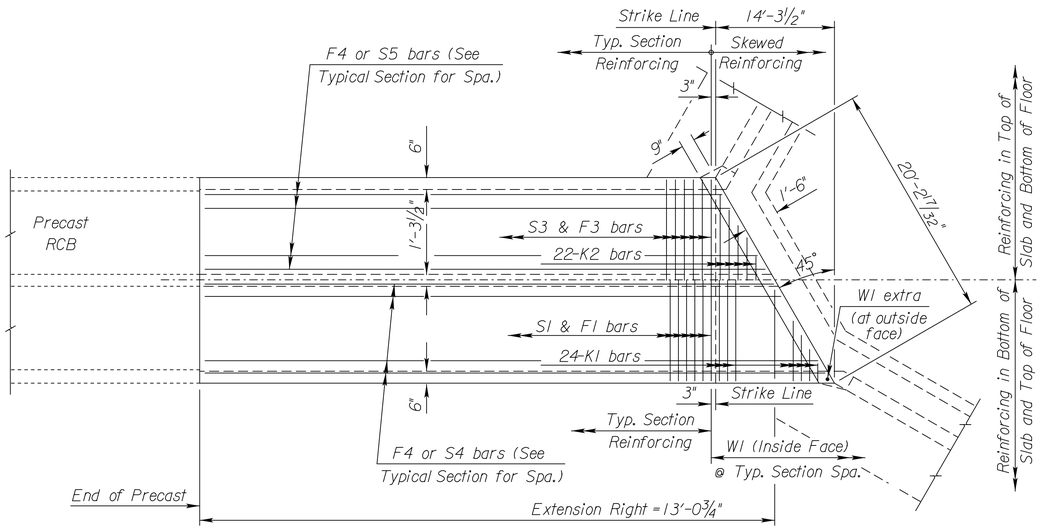
TYPICAL SECTION

See Standard No. RD 080 for additional details.

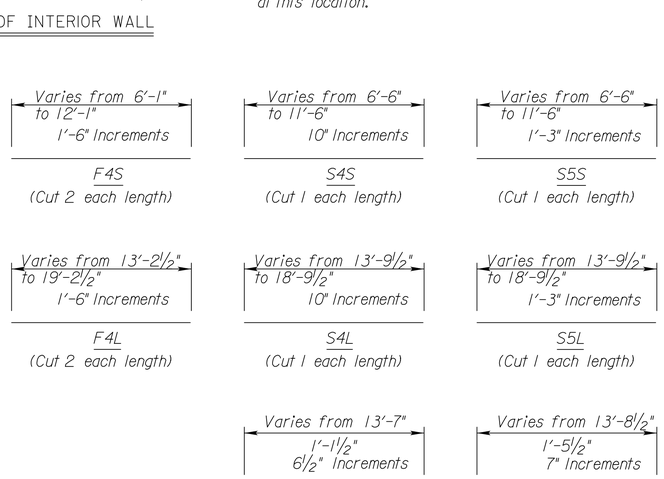
Note: Use only cast-in-place construction at this location.

GENERAL NOTES

LOADING: HS20-44 AASHTO Specifications, 1983 Edition.
UNIT STRESSES: Grade 4.0 Concrete; f'c = 4,000 p.s.i.
Reinforcing Steel; fy = 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 ¾inch 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. All steel shall be epoxy coated, with exception to the precast sections and welded wire fabric.
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.
SEAL COURSE: A Seal Course shall be constructed below the R.C.B. as shown in the Plans. The Seal Course below Precast Sections shall consist of 6" of crushed rock conforming to ASTM C-33, Gradation No. 67, and shall meet the requirements for Portland Cement Concrete Pavement Coarse Aggregate, Section P-501. Cast-in-Place Sections will also require the same seal course as the precast sections.
FOUNDATION STABILIZATION: The Foundation Stabilization quantity has been calculated to the limits shown on the "RCB Auxiliary Details" sheet. The depth may be increased by the Engineer. The Contractor may underrun Foundation Stabilization under the barrel if founded on firm material and with the Engineer's approval. Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.
QUANTITIES: The quantities shown in the Culvert Summary include apron and/or soil saver quantities when their construction is required by the plans. Engineer. See Auxiliary
GRANULAR BACKFILL (WINGWALLS): Special backfill procedures may be required at the direction of the 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.



PLAN



BENDING DIAGRAM

All Dimensions are out to out of bars.

⧗For design purposes ONLY. Do NOT use for Construction — CULVERT SUMMARY — ◔includes any welded wire fabric

	Floor Elev.	Crown Gr. Elev.	⧗Design Fill Ht.	Skew LT	Wings	Scour Apron	Soil Saver	Concrete Barrel (Cu.Yds.)	Concrete Wings (Cu.Yds.)	Concrete Total (Cu.Yds.)	Reinf. Steel (Gr. 60) Barrel (Lbs.)	Reinf. Steel (Gr. 60) ◔Wings (Lbs.)	Reinf. Steel (Gr. 60) Total (Lbs.)
Ext.Rt.	1320.47	1327.52	0	45	FLARED	YES	NO	13.27	8.31	21.58	2398	463	2861

✱See Bending Diagram

BAR SCHEDULE

	F1 Size	F1 Spa.	F1 No.	F1 Length	F3 Size	F3 Spa.	F3 No.	F3 Length	F4L Size	F4L No.	F4L Length	F4S Size	F4S No.	F4S Length	S1 Size	S1 Spa.	S1 No.	S1 Length	S3 Size	S3 Spa.	S3 No.	S3 Length	S4L Size	S4L No.	S4L Length	S4S Size	S4S No.	S4S Length	S5L Size	S5L No.	S5L Length
Ext.Rt.	6	6½"	11	13'-11"	5	7"	10	13'-11"	4	10	✱	4	10	✱	6	6½"	11	13'-11"	5	7"	10	13'-11"	5	7	✱	5	7	✱	4	5	✱

	K1 Size	K1 Spa.	K1 No.	K1 Length	K2 Size	K2 Spa.	K2 No.	K2 Length	W1 Size	W1 Spa.	W1 No.	W1 Length	W3L Size	W3L No.	W3L Length	W3S Size	W3S No.	W3S Length	W4 Size	W4 Spa.	W4 No.	W4 Length	G2 Size	G2 No.	G2 Length	S5S Size	S5S No.	S5S Length
Ext.Rt.	6	6½"	48	✱	5	7"	44	✱	4	9"	35	4'-1"	4	4	19'-10"	4	4	5'-7"	4	9"	18	4'-1"	6	4	19'-9"	4	5	✱

✱✱For Information Only

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

SUMMARY OF QUANTITIES ✱✱	
Concrete (Grade 4.0)	21.6 C.Y.
Reinforcing Steel (Gr. 60)	2860 Lbs.

NO.	DATE	REVISIONS	BY	APP'D
1				

KANSAS DEPARTMENT OF TRANSPORTATION
Sta. 153+46
DOUBLE 6 ft x 3 ft RCB
EXT. RT. (45*SKEW LT.)

BR 2.6.3 P — Sedgwick Co.

FHWA APPROVAL	6-5-9	APP'D	KENNETH F. HURST
DESIGNED	DETAILED	QUANTITIES	CADD
DESIGN CK.	DETAIL CK.	QUAN. CK.	CADD CK.

Plotted By: svb | Plot Location:
File: I:\2008\08207\Bridge\Final\08207 - 2-6x3 skew 45 left RCB (Box).dgn
Plot Date: 8/20/2013