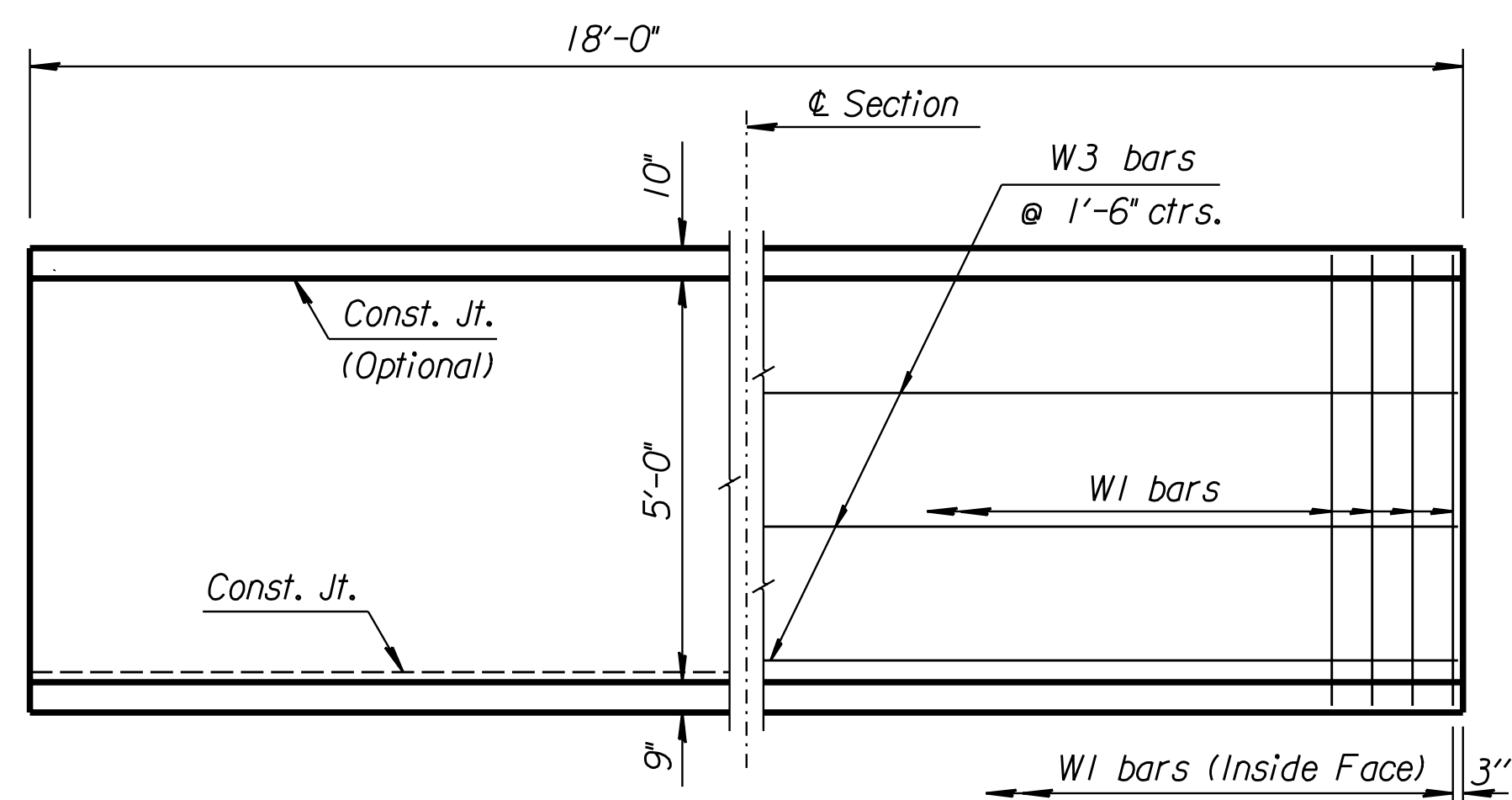


VERSION: 5.1.0 COMPILED: 03/01/95

CO. CHECK	DATE
DESIGN	DATE
DETAIL	DATE
REVISIONS	DATE
RETRACTED	DATE

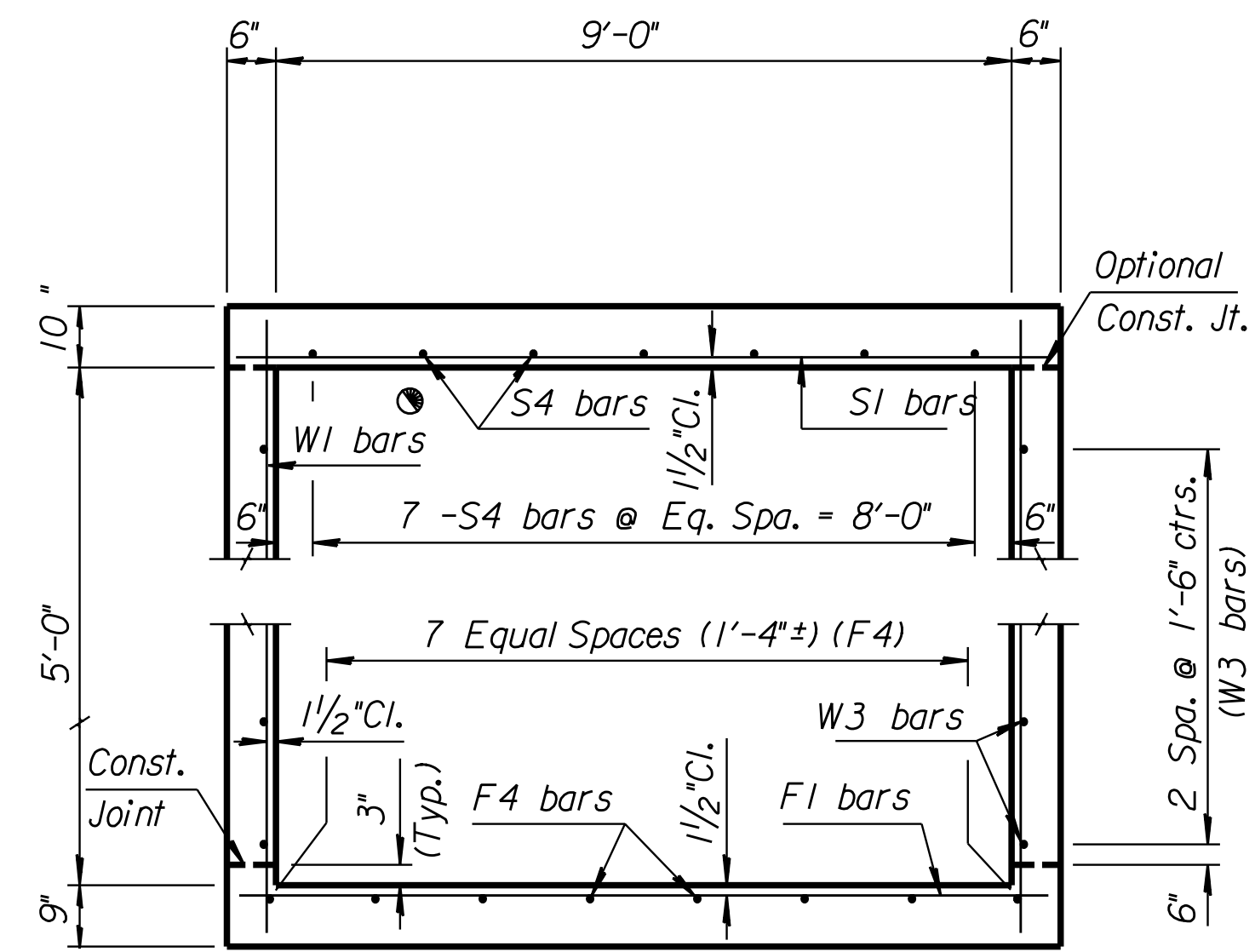
Drawn By: KDOT/RAS
 DGN File: 2004/04/06/newplans/9x5rcb.dgn
 Plotted: rrs 3-11-2004 View=

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	468-83775	2004	20	31

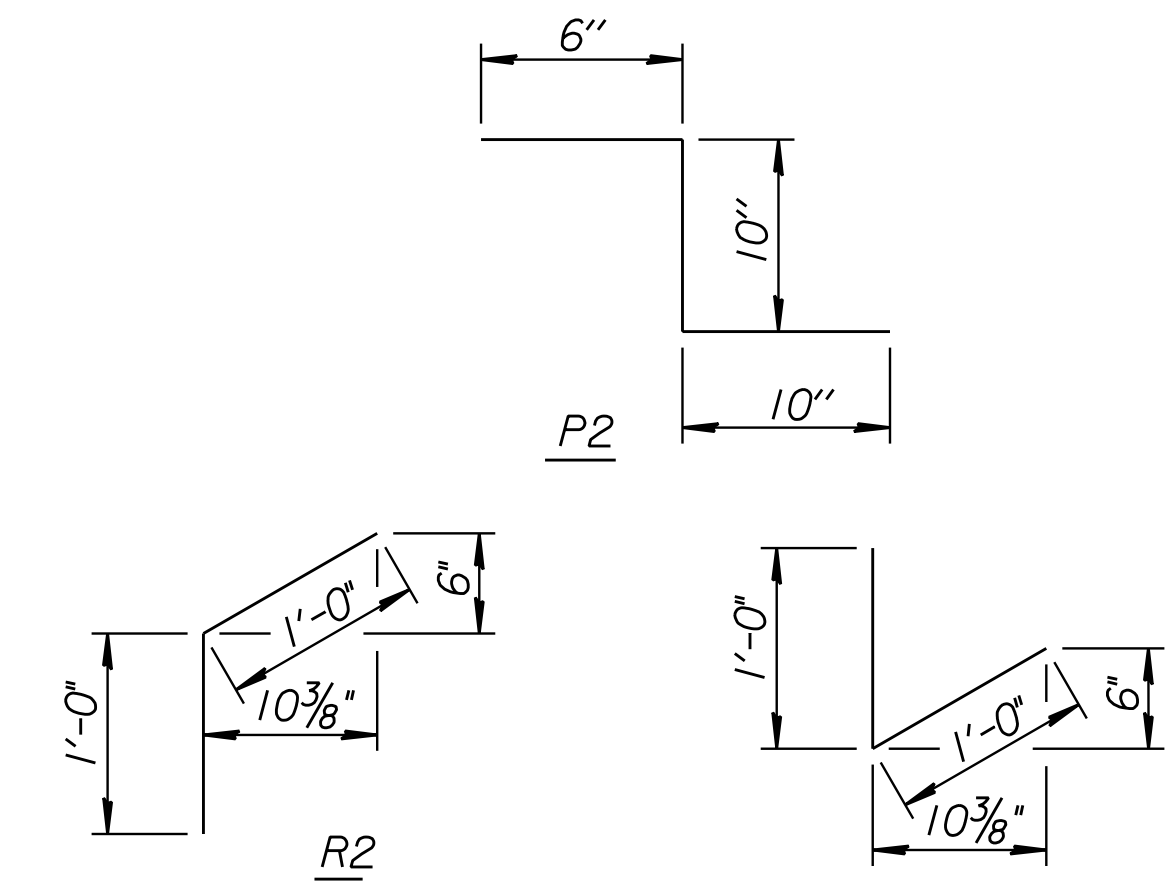


SECTION AND ELEVATION
(Along RCB)

See RCB Auxillary Details for Optional Splice.
 Note: Use only cast-in-place construction at this location.



TYPICAL SECTION



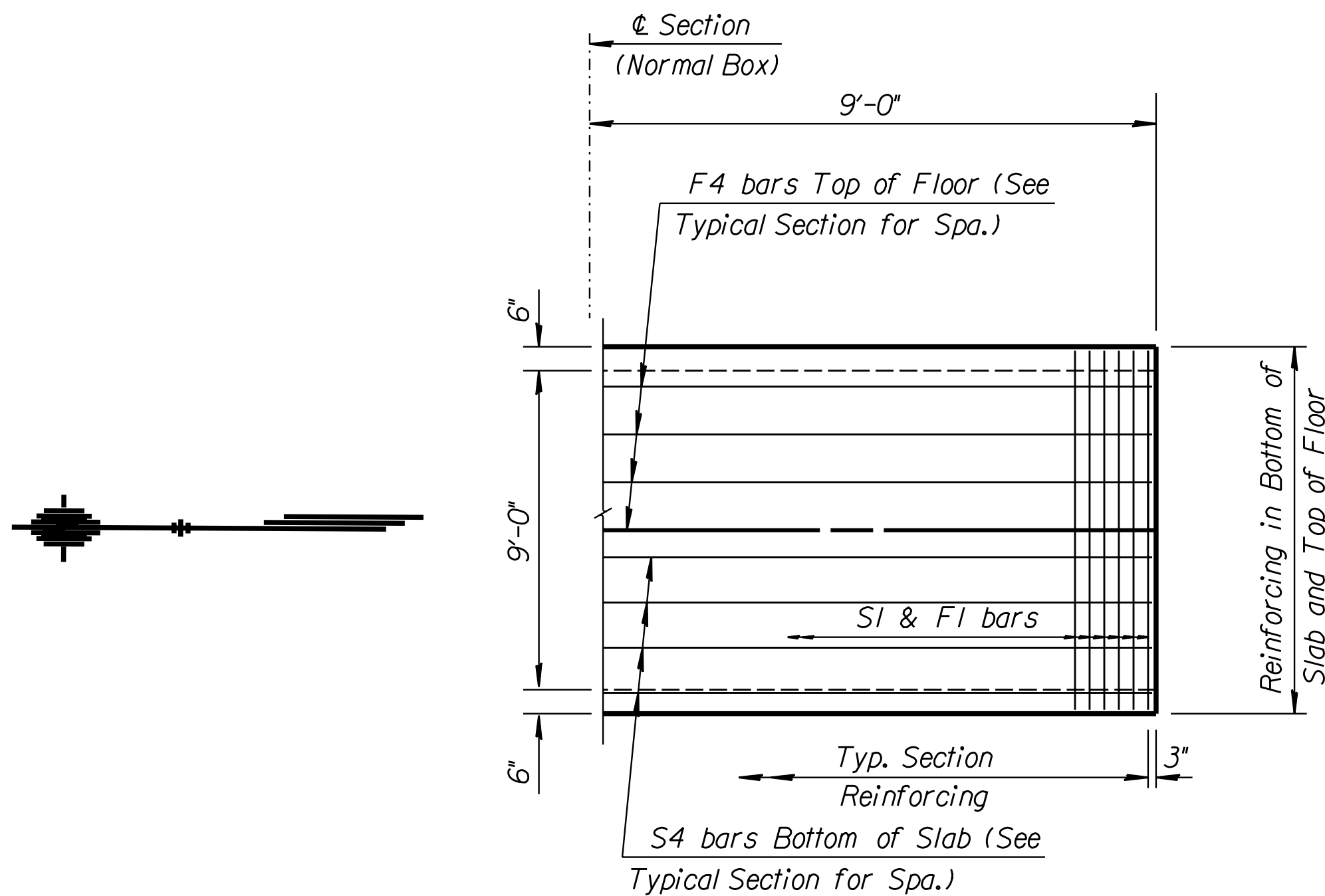
BENDING DIAGRAM

All Dimensions are out to out of bars.

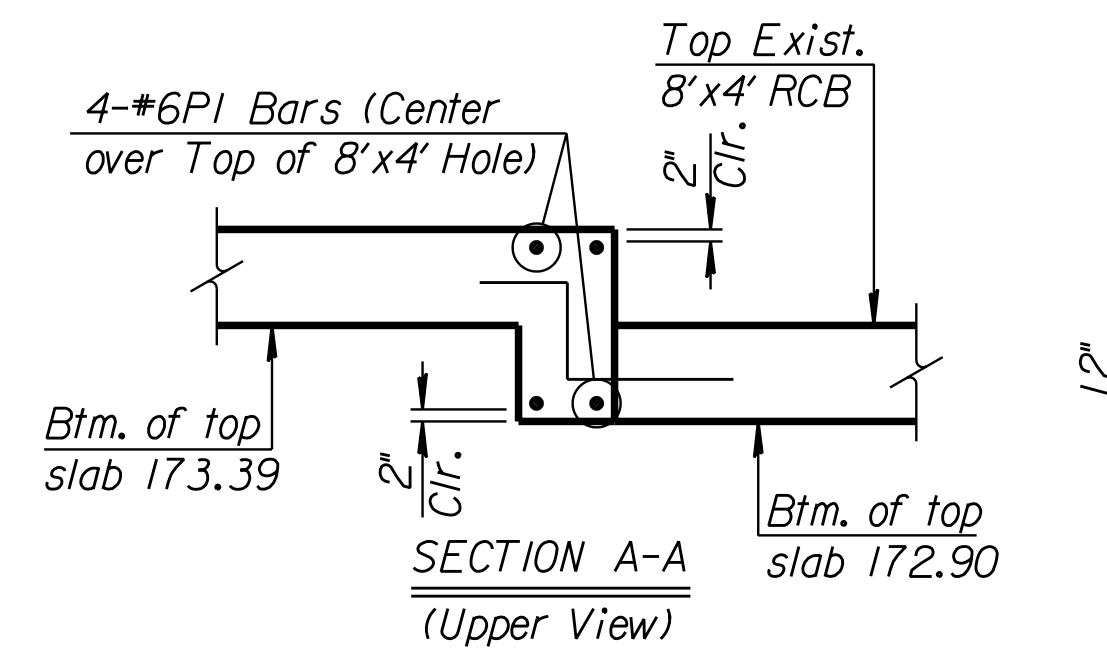
GENERAL NOTES

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 (AE) shall be used throughout. Bevel all exposed edges with a $\frac{3}{4}$ inch triangular moulding.

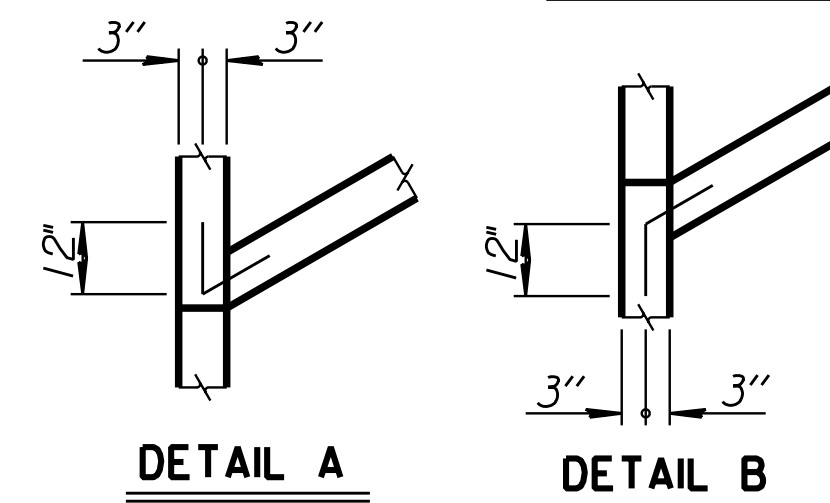
REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise noted.
EXCAVATION: Excavation shall not be paid for directly but shall be subsidiary to Class AAA Concrete.
QUANTITIES: The quantities shown in 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.
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.
PAYMENT: "Cast-in-place 9'x5' RCB" shall be bid per L.F. which shall include all labor, material, excavation, concrete, reinforcing steel, drilling and grouting, seal course, backfill, flowable fill and all other incidentals necessary to complete the work. Quantities are for information only.



NORMAL BOX

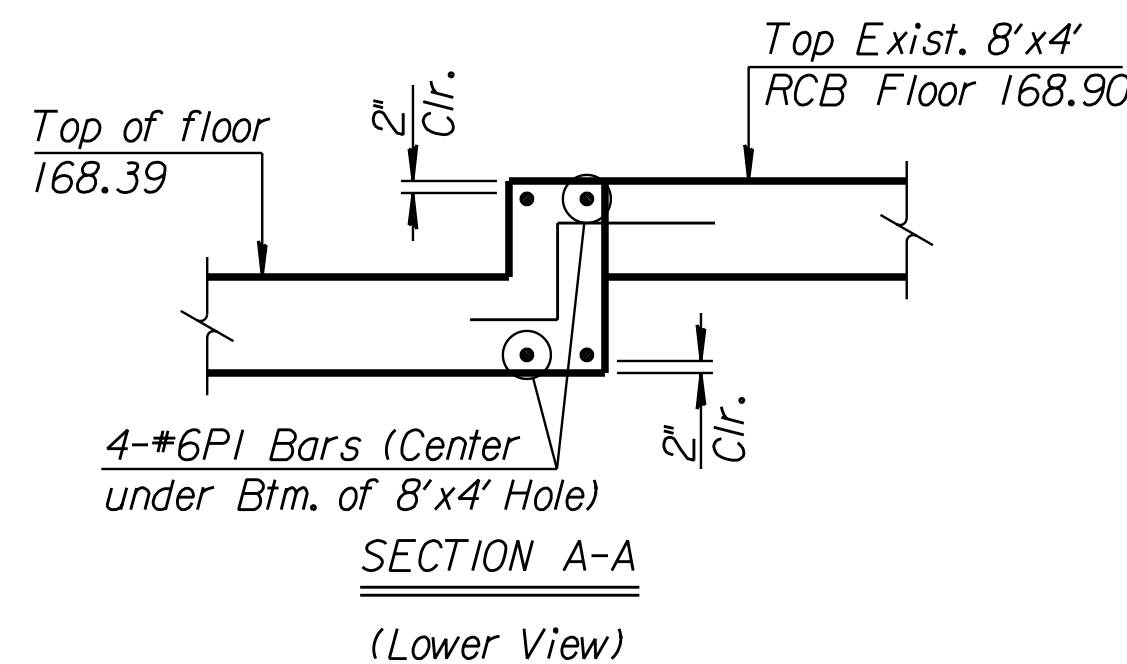


SECTION A-A (Upper View)

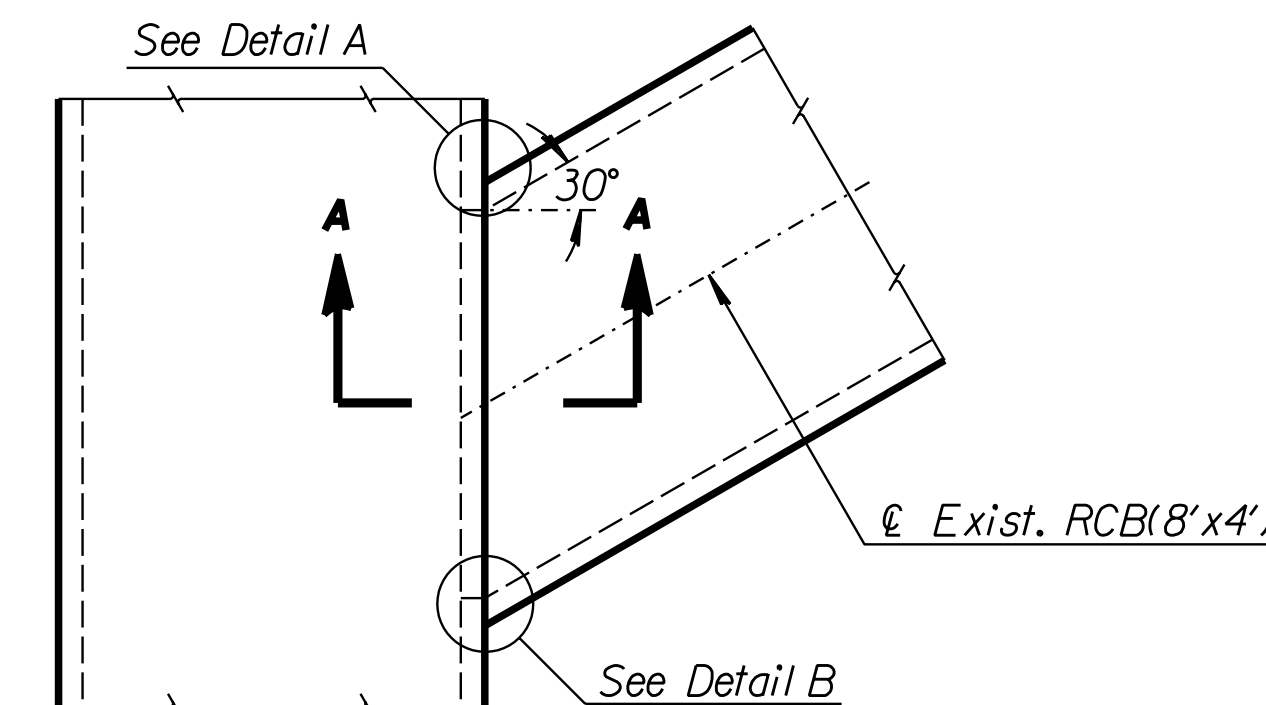


DETAIL A

DETAIL B



SECTION A-A (Lower View)



PLAN

Note: Drill and grout R1, R2 & P2 6" minimum into exist. 8'x4' RCB.

Note: See Sht. No. 21 for additional details.

CULVERT SUMMARY															
Flow Line Elev. Lt.	Flow Line Elev. Rt.	Crown Gr. Elev.	Design Fill Ht.	Skew RT	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.)
168.41	168.38	176.19	2	0	N.A.	N.A.	NO	NO	NO	13.21	0.00	13.21	2,086.7	0.00	2,086.7

* See Bending Diagram

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

BAR SCHEDULE																																							
F1					F3					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	Spa.	No.	Length		Size	Spa.	No.	Length						
6	5"	49	9'-8"	-	-	-	-	-	-	4	8	17'-8"	6	5"	49	9'-8"	-	-	-	-	-	-	-	-	-	-	-	4	7	17'-8"	-	-	-	-	-	-	-		
R1					R2					W1					W3					P1					P2														
4	12"	6	2'-0"	4	4	12"	6	2'-0"	4	4	9"	50	6'-3"	-	-	-	-	-	-	4	6	17'-8"	-	-	-	-	-	-	-	6	8	13'-6"	-	-	4	12"	20	2'-2"	-

SUMMARY OF QUANTITIES	
Class AAA Concrete	----- C.Y.
Class AAA Concrete (AE)	13.2 C.Y.
Class III Excavation	----- C.Y.
Reinforcing Steel (Gr. 60)	2,090 Lbs.
Reinforcing Steel (Epoxy Coated)	----- Lbs.

NO.	DATE	REVISIONS	BY	APP'D
KANSAS DEPARTMENT OF TRANSPORTATION St.d. I22+64.20 SINGLE 9' x 5' RCB				
St.d. No. 109-05			SEDGWICK CO.	
DESIGNED	DETAILED	QUANTITIES	TRACED	KENNETH F. HURST
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.	