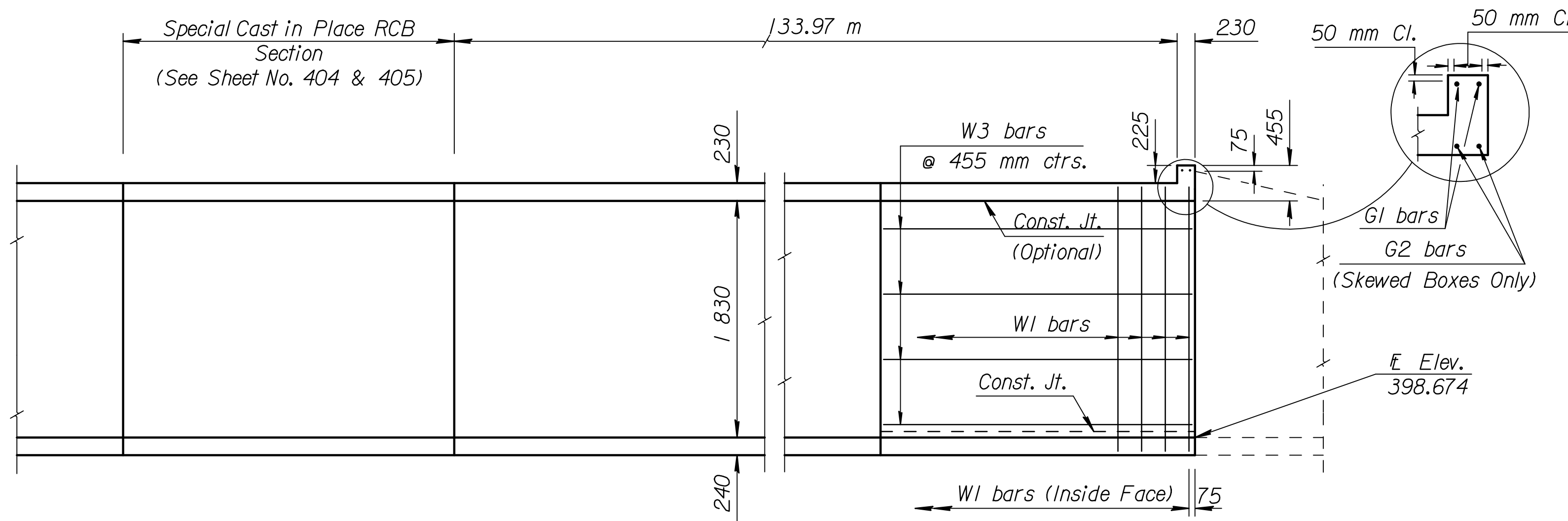
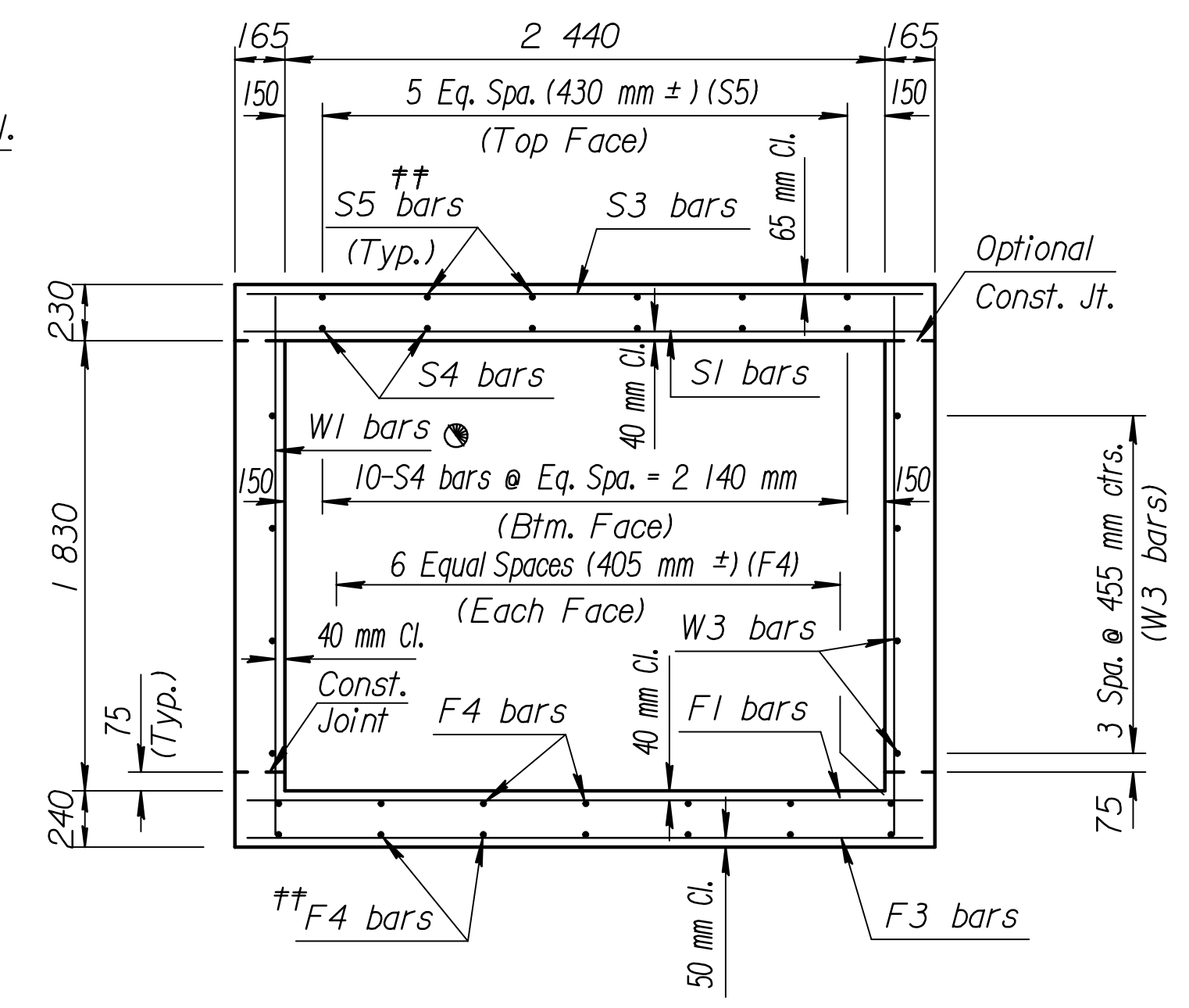


STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	54-87 K-6657-01	2002	408	1122



SECTION AND ELEVATION
(Normal to Roadway)



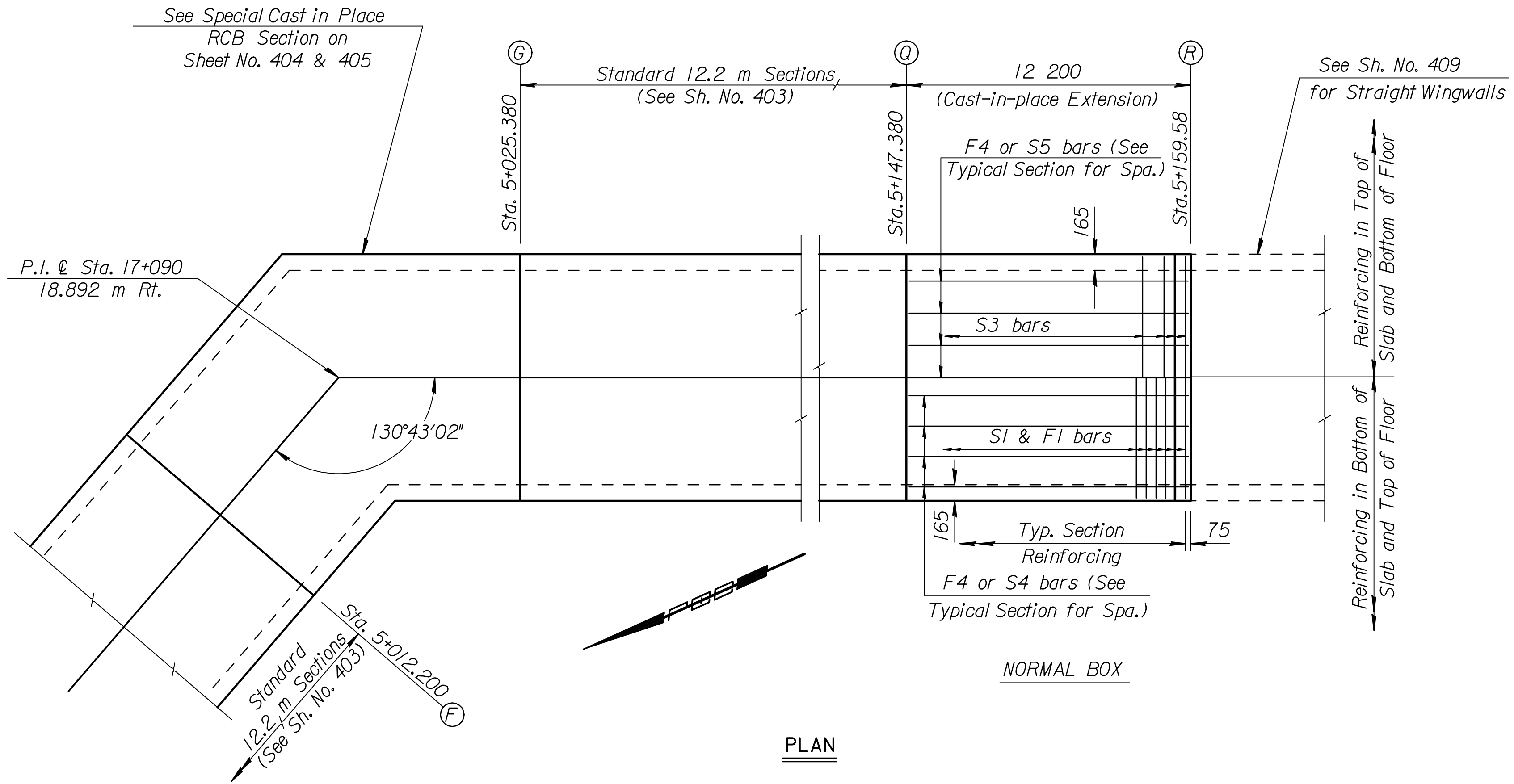
TYPICAL SECTION

See RCB Auxillary Details for Optional Splice.
Note:
S3 bars omitted unless grade box or slab thickness is greater than or equal to 305 mm.
Note:
F3 bars omitted unless floor thickness is greater than or equal to 305 mm.
** Omit S5 bars when S3 bars are omitted and omit the bottom layer of F4 bars when F3 bars are omitted.

GENERAL NOTES

DESIGN SPECIFICATION: AASHTO Specifications, 1983 Edition
DESIGN LOADING: MS18-44
UNIT STRESSES: Class AAA Concrete $f'c = 28$ MPa
Reinforcing Steel $f_y = 420$ MPa
FILL HEIGHT: Unless otherwise noted, the Design Fill Height is measured from the riding surface at the culvert and includes the surfacing.
CONSTRUCTION: R.C.B.'s shown are for cast-in-place construction. The Contractor has the option of constructing either cast-in-place or precast R.C.B.'s. Payment for the structure will be the same regardless of which option is used for construction. See Sheet No. 432 for Precast Concrete Box Culvert Details.
CONCRETE: Use concrete conforming to Class AAA Concrete. Bevel all exposed edges with a 20 mm triangular molding. Where Class AAA(AE) is specified, place this concrete in the top slab above the Construction Joint.
REINFORCING: Use reinforcing steel conforming to ASTM A615M, Grade 420. All dimensions relative to reinforcing steel are to the centerline of the 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: The Engineer may require a seal course. The seal course shall be unreinforced Concrete (Commercial Grade) with a minimum depth of 75 mm or as determined by the Engineer. Concrete for the seal course shall be paid for at the unit price set for Concrete for Seal Course.
FOUNDATION STABILIZATION: The Engineer may require Foundation Stabilization. The Engineer shall determine the depth of Foundation Stabilization. Foundation Stabilization shall be paid for at the unit price set for Foundation Stabilization. See the "Auxiliary Details" sheet.
QUANTITIES: The quantities shown in the Culvert Summary include apron and/or soil saver quantities when they are required by the plans. Payment for additional quantities that result from including a seal course and/or a floating apron, as a change in the original plans, shall be made at the unit price bid for the various items involved.
GRANULAR BACKFILL (WINGWALLS): The Engineer may require special backfill procedures. See the "Auxiliary Details" sheet.

DATE	DATE	DATE	DATE	DATE	DATE
DESIGN	DESIGN	DESIGN	DESIGN	DESIGN	DESIGN
QUANTITIES	QUANTITIES	QUANTITIES	QUANTITIES	QUANTITIES	QUANTITIES
TRACING	TRACING	TRACING	TRACING	TRACING	TRACING
RETRACTED	RETRACTED	RETRACTED	RETRACTED	RETRACTED	RETRACTED



PLAN

NORMAL BOX

CULVERT SUMMARY											Concrete			Reinf. Steel (Gr. 420)		
Flow Line Elev. Lt. (m)	Flow Line Elev. Rt. (m)	Crown Gr. Elev. (m)	Design Fill Ht. (m)	Skew N/A	Left Wings	Right Wings	Scour Apron	Soil Saver	Granular Backfill	Barrel (m ³)	Wings (m ³)	Total (m ³)	Barrel (kg)	Wings (kg)	Total (kg)	
400.720	398.674	403.044	0.61	0	FLARED	STRAIGHT	NO	NO	NO	23.4	5.7	29.1	1 631	335	1 966	

Minimum Splice Lengths	
#12	405
#15	510
#20	610

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				
20	150	81	2 670					12	7	12	100	20	150	81	2 670									15	10	12	100				
K1				K2				W1				W3				G1				G2											
								12	230	106	2 210					12	8	12	100					15	2	2	670				

RECORD DRAWING

NO.	DATE	REVISIONS	BY	APP'D
KANSAS DEPARTMENT OF TRANSPORTATION Sta. 17+090 2.440 m x 1.830 m RCB 12 200 EXTENSION (RIGHT)				
BR 18-6 P 51 FHWA APPROVAL DESIGNED DESIGN CK.			6-5-91 APP'D QUANTITIES TRACED TRACE CK.	
Sedgwick			KENNETH F. HURST	

Plotted By: will Scale 1:1000
 1/1997/97362/As-Builts/dgn/s/Vol 2/SN 408-KDOT_Sid-17090.c.dgn Last Rev: 8-28-07 By: gdr