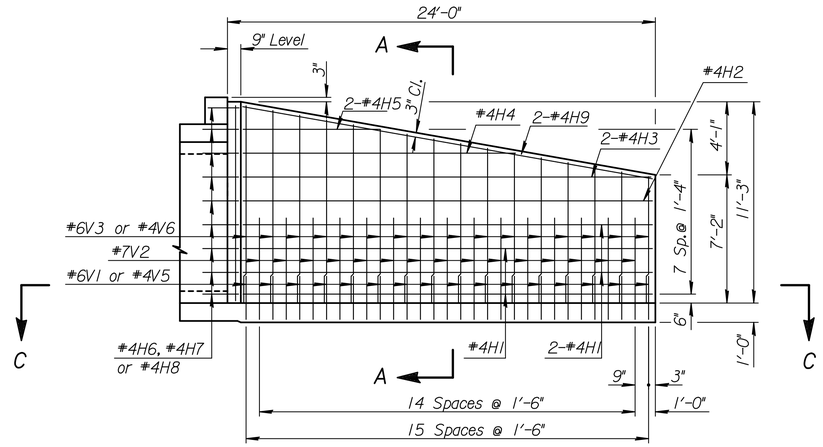
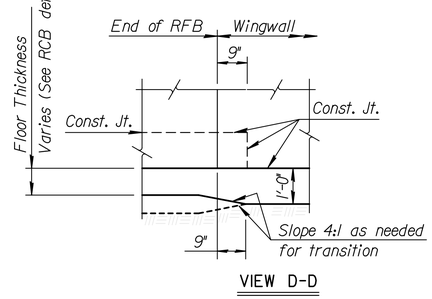
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84834	2009	6	19

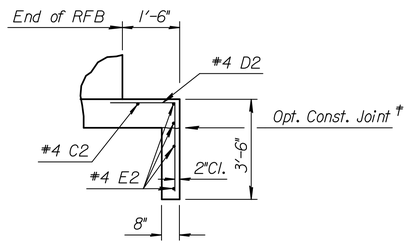


ELEVATION OF WINGWALL

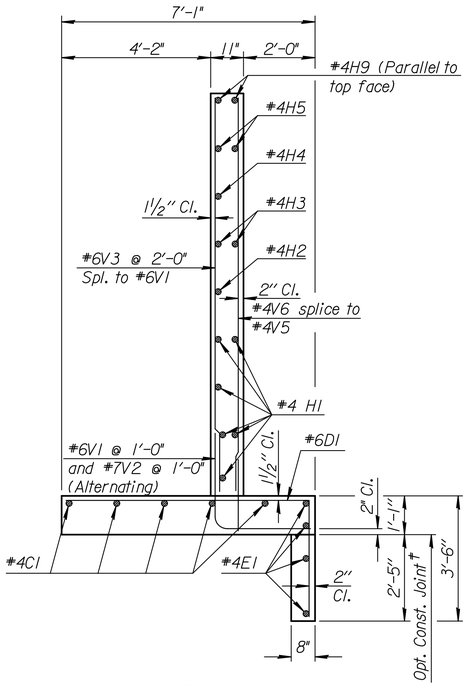
(Backface Shown)



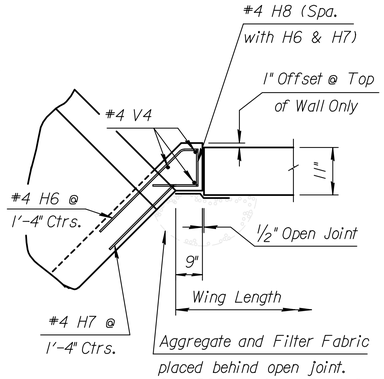
VIEW D-D



SECTION E-E

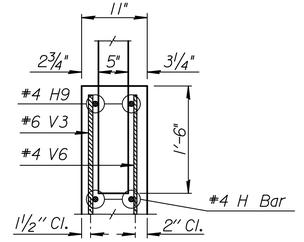


SECTION A-A



WINGWALL JOINT DETAIL

(Plan View)



POST EMBEDMENT DETAIL

(For post location see Sh. No. 8)

GENERAL NOTES

UNIT STRESSES: Grade 4.0 Concrete; f'c = 4,000 p.s.i.
Reinforcing Steel; fy = 60,000 p.s.i.

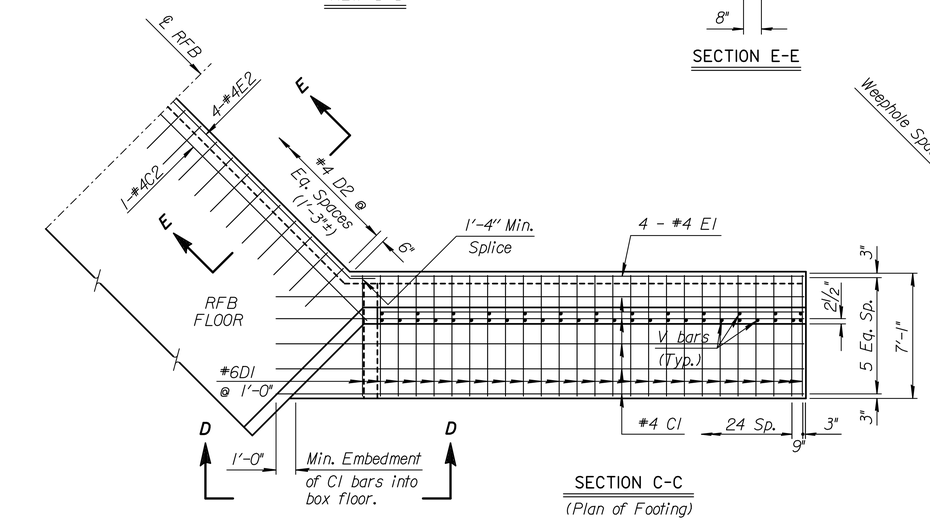
CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a ¾inch triangular moulding.

REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. Welded Wire Fabric shall conform to ASTM A185. All dimensions relative to reinforcing steel shall be to center-line of bar unless otherwise noted.

QUANTITIES: Wingwall Quantities include all quantities outside the neat lines of the box, excluding the hubguard.

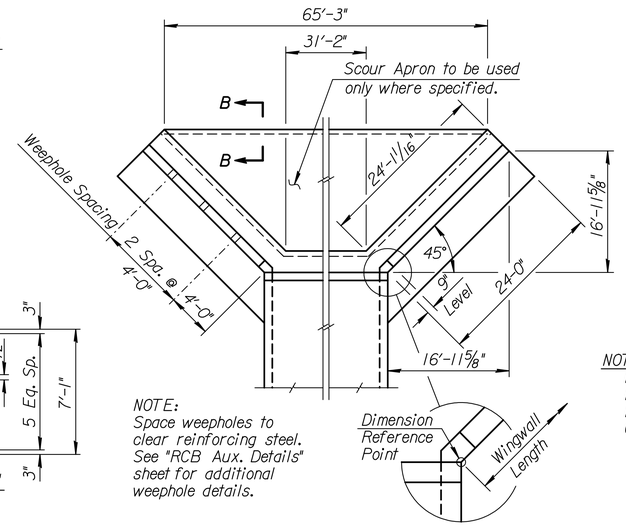
APRON: A 5" concrete slab shall be constructed between the downstream wings in locations subject to scour only when specified on the plans or by the Engineer. Wire Reinforcing mesh shall be electrically welded and shall be composed of 6 x 6-W1.4 x W1.4 welded wire fabric and shall be classified as pounds of reinforcing.

FOUNDATION AND BACKFILL MATERIAL: Soils judged as high plasticity clays, fat clays, expansive clays, or organic clays are unsuitable for foundation and/or backfill material for wingwalls and will not be used. Where these conditions exist, Foundation Stabiliation and/or Granular Backfill (Wingwalls) shall be used as determined by the Engineer. See "RCB Auxiliary Details" sheet for additional details.



SECTION C-C

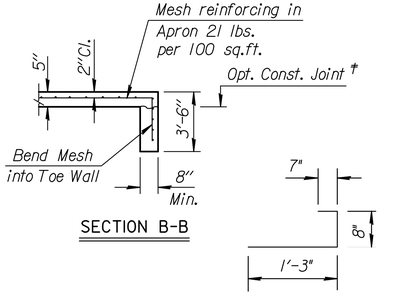
(Plan of Footing)



NOTE:
Space weepholes to clear reinforcing steel. See "RCB Aux. Details" sheet for additional weephole details.

WING DIMENSIONS FOR NORMAL BOX

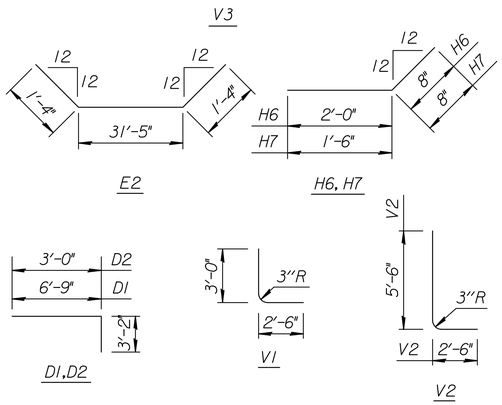
(4:1 Embankment Slope)



SECTION B-B

NOTE:
EF = Each Face
NS = Near Side
FS = Far Side
CJ = Const. Joint

	Var. 6'-10" to 11'-0"	
V3 V6	by equal increments (3¼" ±)	2 Req'd. each length



BENDING DIAGRAM

(All dimensions are out to out of bars.)

Quantities listed below are included in the Summary of Quantities shown on the RCB details. Apron is on Downstream side only and Soil Saver is on Upstream side only.

WINGWALL QUANTITIES (One End Only)	
Concrete (Grade 4.0):	
Wingwalls	36.75 CY.
Apron	17.58 CY.
Soil Saver	19.28 CY.
Reinforcing Steel (Wings)	3268 Lbs.
Reinforcing Steel (Soil Saver)	432 Lbs.
Welded Wire Fabric (Apron)	217 Lbs.

NOTE: Reinforcing Bar List is for both wings at one end of box only.

✱ See Bending Diagram

	Mark	#4C1	#4C2	#6D1	#4D2	#4E1	#4E2	#4H1	#4H2	#4H3	#4H4	#4H5	#4H6	#4H7	#4H8	#4H9	#6V1	#7V2	#6V3	#4V4	#4V5	#4V6
0° Skew	Number	10	1	52 ✱	26 ✱	8	4 ✱	12	2	4	2	4	18✱	18 ✱	18 ✱	4	32 ✱	30✱	32	6	32	32
	Length	29'-0"	35'-0"	9'-11"	6'-2"	24'-1"	34'-1"	22'-11"	22'-11"	22'-11"	15'-2"	7'-8"	2'-8"	2'-2"	2'-6"	23'-3"	5'-6"	8'-0"	✱	11'-1"	3'-0"	✱

NO.	DATE	REVISIONS	BY	APP'D

CITY OF WICHITA

Br. No. 4340087000027I Sta. 1+84.05

10 ft Rise (0°SKEW)

~~BR 10.00.09~~ Sedgwick Co.

FHWA APPROVAL		6-5-91 APP'D	KENNETH F. HURST
DESIGNED	DETAILED	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK.

Sh. No. 6

Plotted By: rjm
Plot Location: $K\DOT\GRP\
File: i:\2009\09430\Office Check\09430-2-16x9_Wings.dgn
Plot Date: 11/9/2009