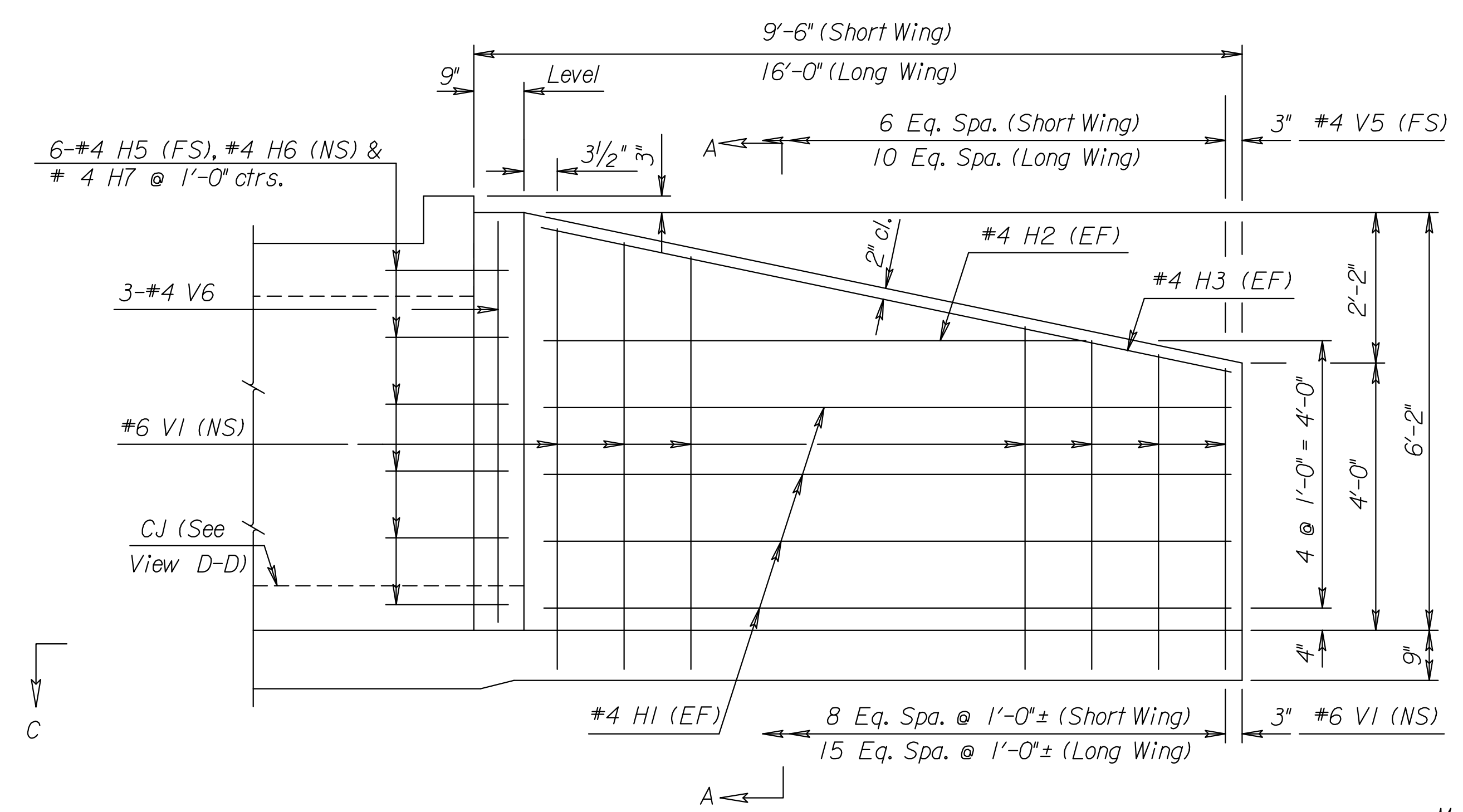


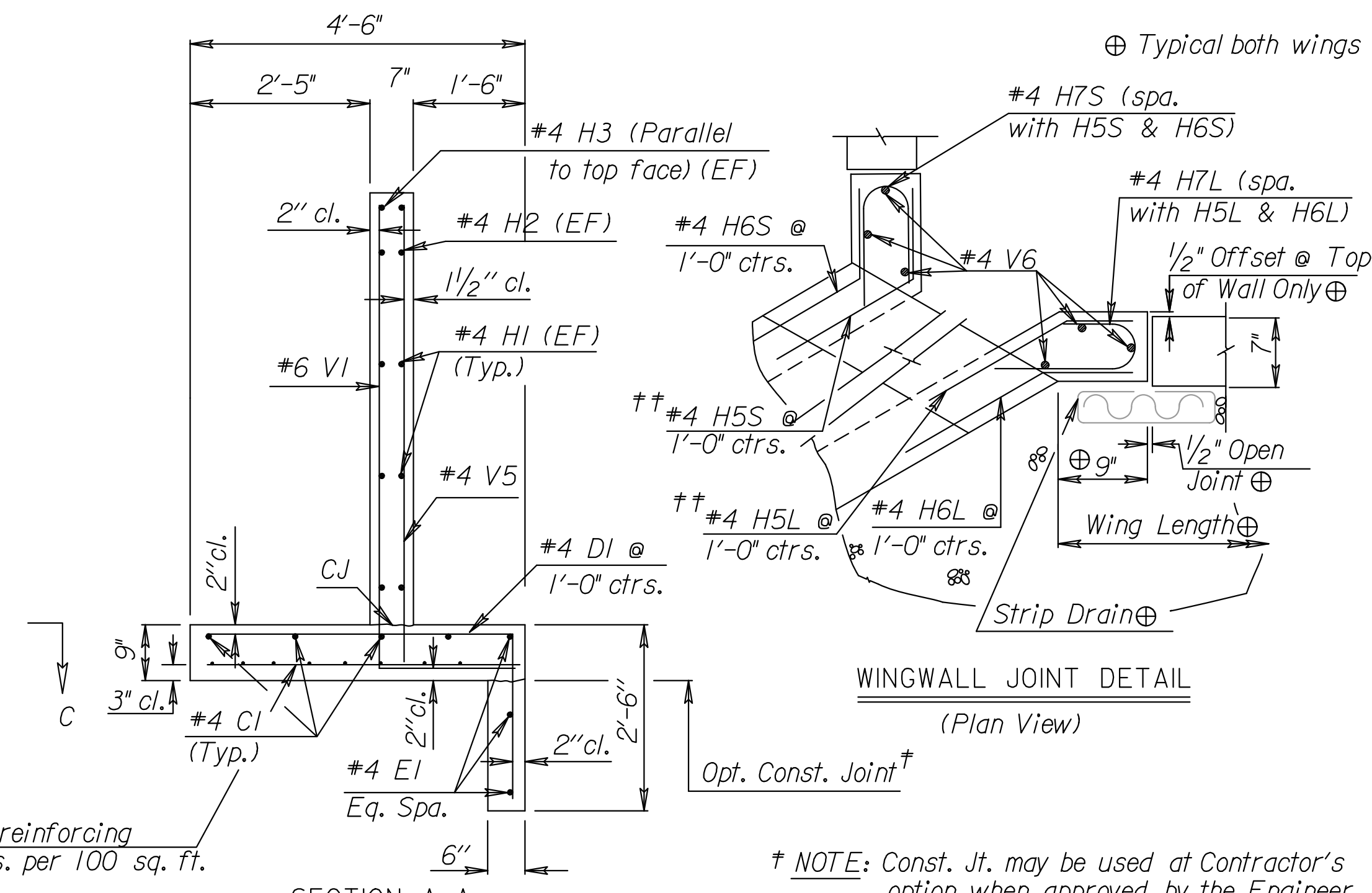
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	15120-001	2015	31	36

**GENERAL NOTES**

**DESIGN SPECIFICATION:** AASHTO LRFD Spec., 2007 Ed., 2009 Int.  
**DESIGN LOADING:** HL93  
**UNIT STRESSES:** Grade 4.0 Concrete;  $f'c = 4,000$  p.s.i.  
 Reinforcing Steel;  $f_y = 60,000$  p.s.i.  
**CONCRETE:** Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a  $\frac{3}{4}$ " triangular mauling.  
**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 centerline of bar unless otherwise noted. Wire Reinforcing mesh shall be electrically welded and shall be composed of 6 x 6- W6 x W6 welded wire fabric and shall be classified as pounds of reinforcing and included in the total quantity for the bid item Reinforcing Steel (Gr. 60)  
**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.  
**BACKFILL MATERIAL:** Use Granular Backfill material meeting the requirements of SB-1, SB-2, SCA-2, SCA-3 or SCA-5. Backfill all wings to limits shown on the "RCB Auxiliary Sheet"  
**FILTER FABRIC:** Separate in-situ material from granular backfill with approved filter fabric complying with Section 1710. Filter Fabric is subsidiary to "Granular Backfill".  
**FOUNDATION STABILIZATION:** Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.



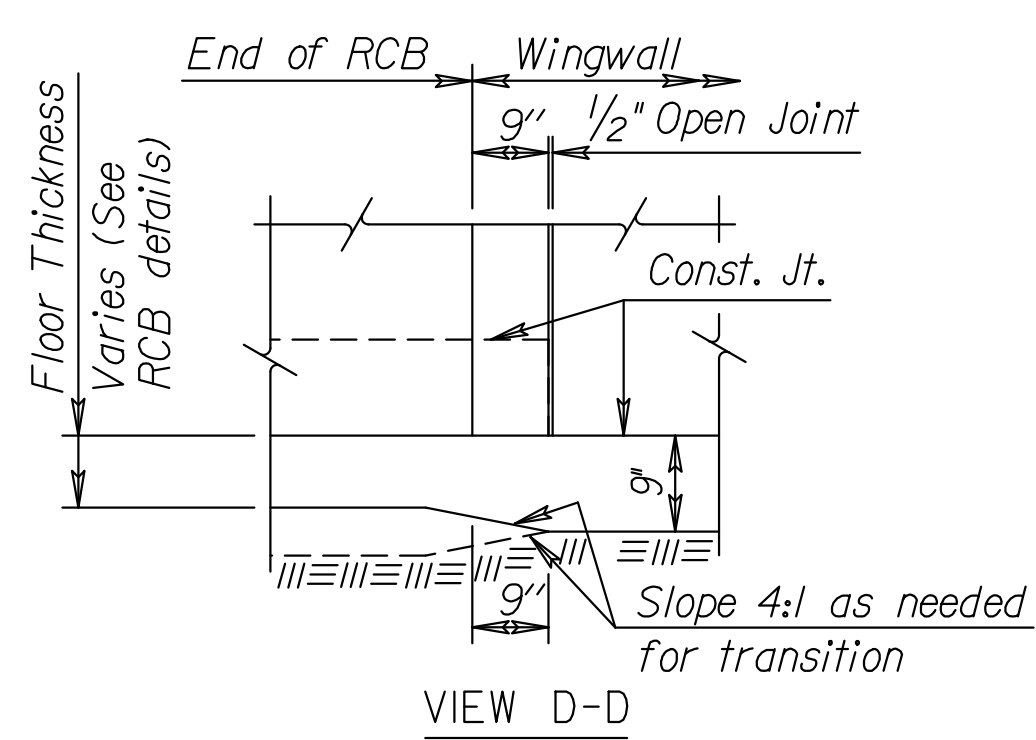
**ELEVATION OF WINGWALL**  
(Backface Shown)



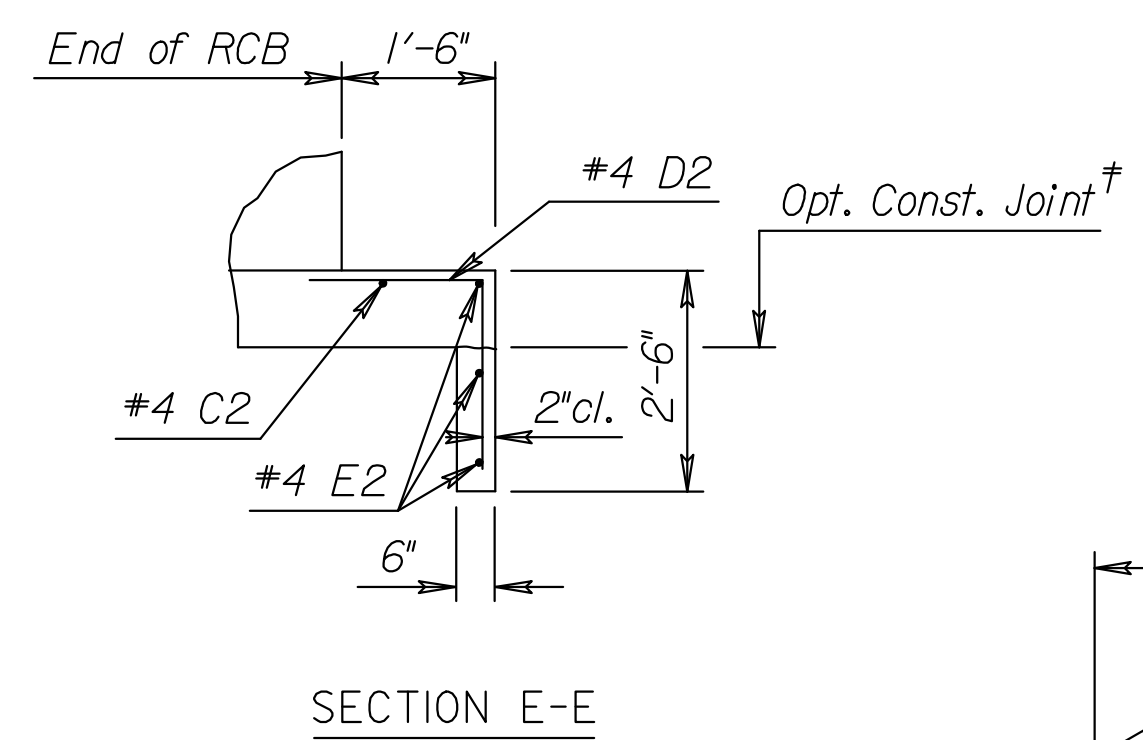
**SECTION A-A**

**WINGWALL JOINT DETAIL**  
(Plan View)

† NOTE: Const. Jt. may be used at Contractor's option when approved by the Engineer. DI bars or mesh may be spliced thus: Minimum overlap shall be 1'-3". No increase in quantities or cost shall be allowed when Contractor elects this option.

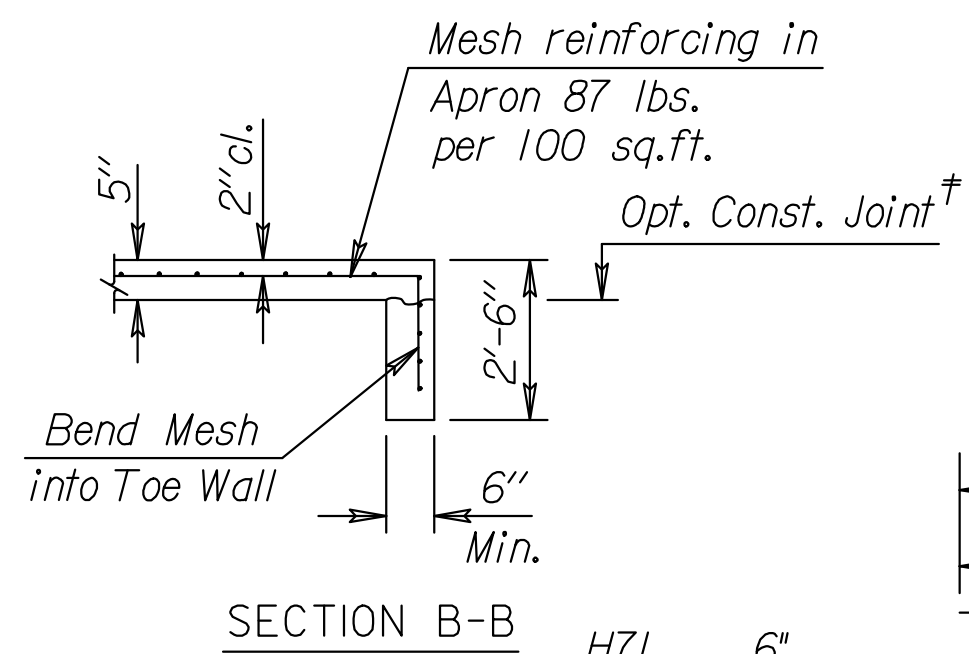


**VIEW D-D**



**SECTION E-E**

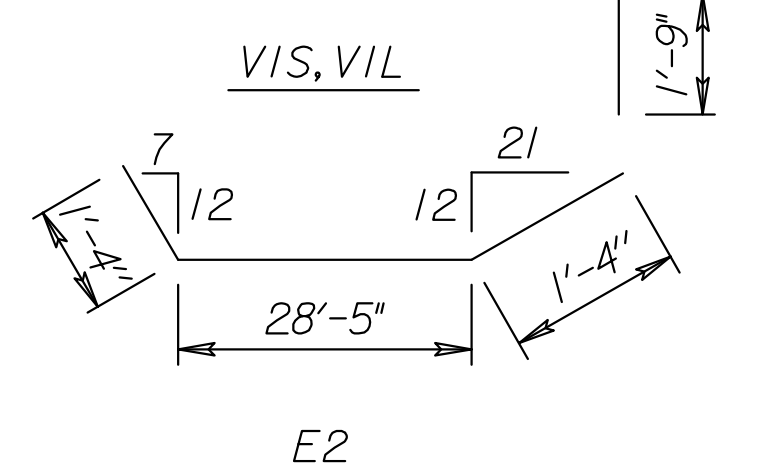
NOTE:  
 EF = Each Face  
 NS = Near Side  
 FS = Far Side  
 CJ = Const. Joint



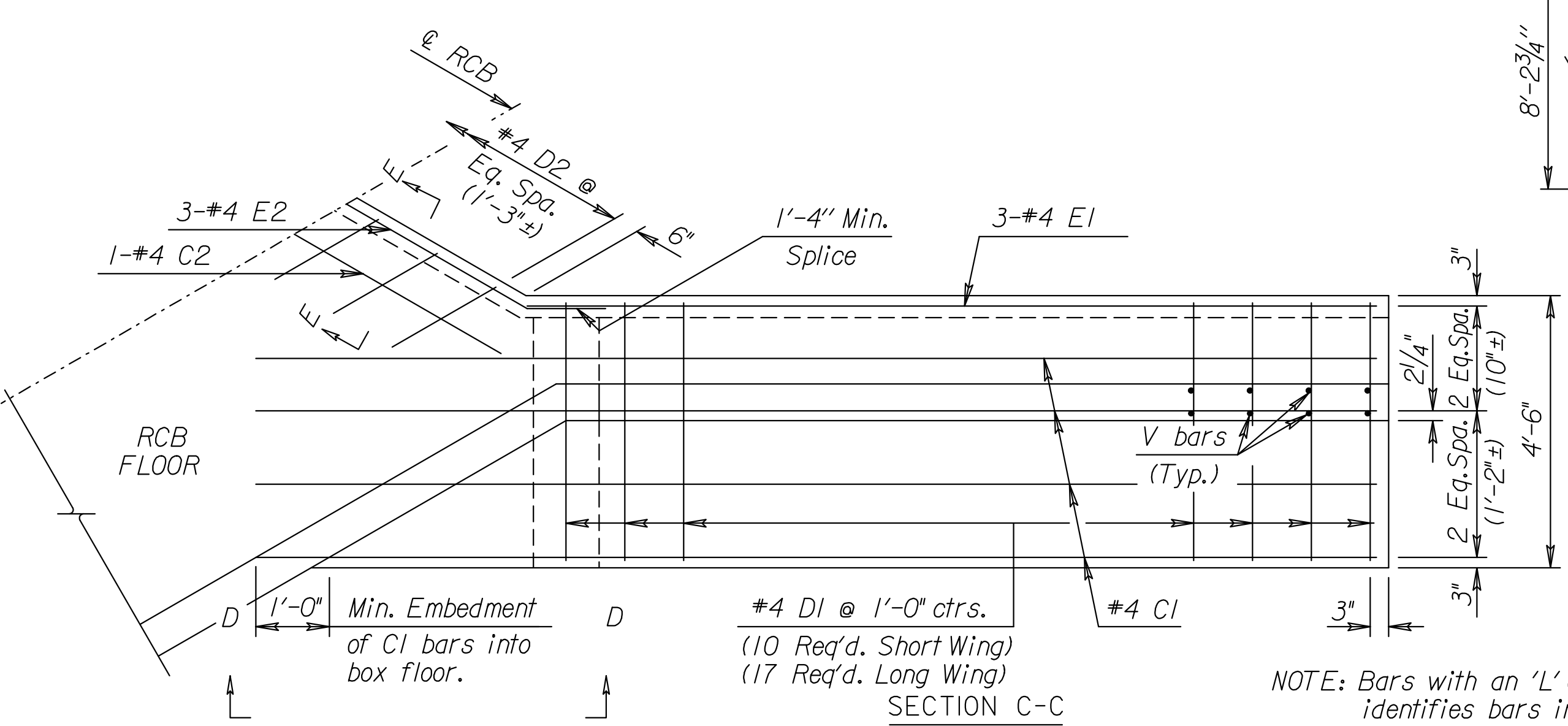
**SECTION B-B**

Bar	Incrmts.
VIS	2 1/2"
VIL	1 1/2"
V5S	4"
V5L	3"

Var. 4'-5" to 6'-5"  
 by equal increments (See Table)  
 V5S, V5L  
 Var. 4'-5" to 6'-5"  
 by equal increments (See Table)  
 VIS, VIL

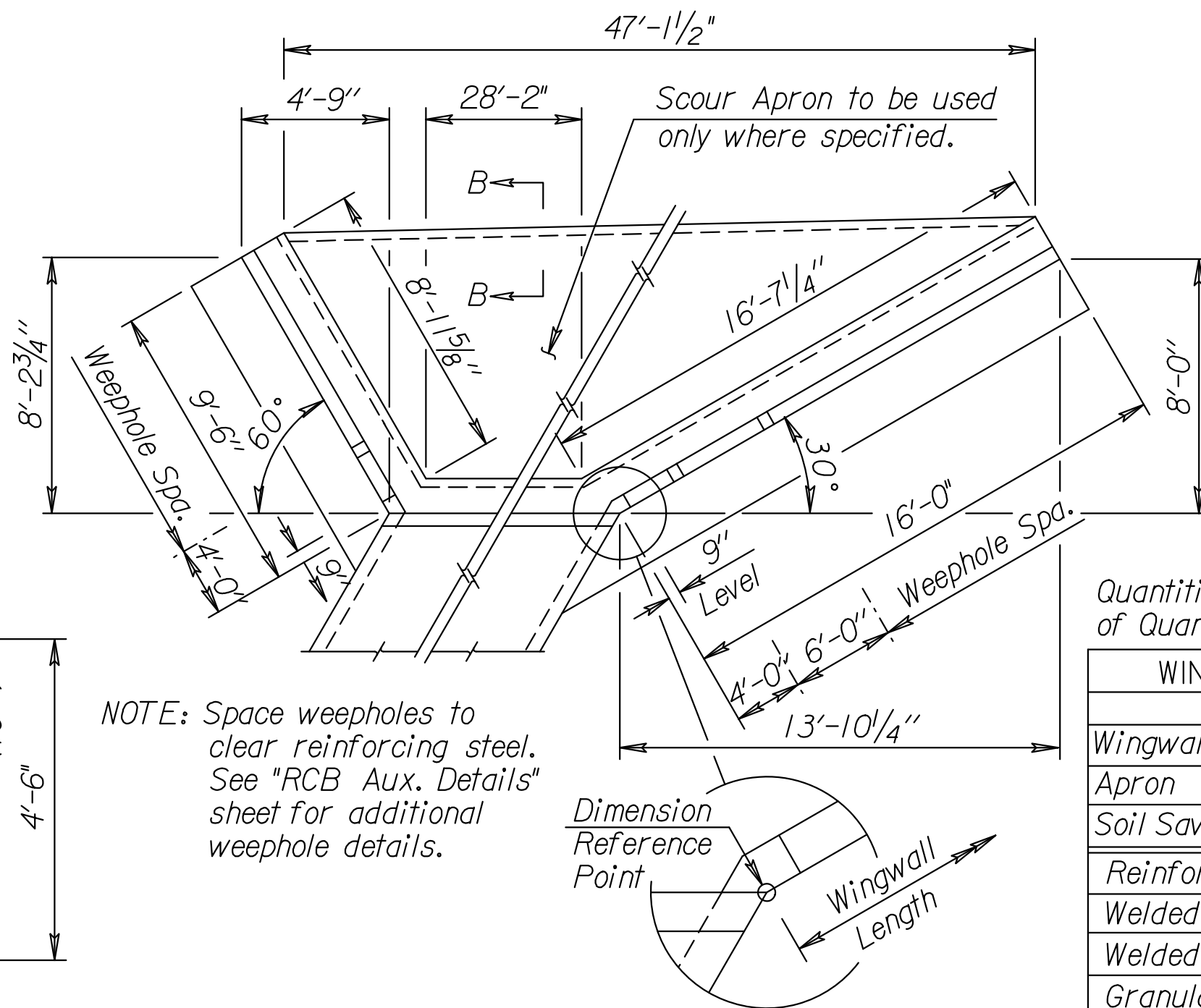


**BENDING DIAGRAM**  
(All dimensions are out to out of bars.)  
 †† Bend in Field



**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 30 SKEWED BOX**  
(3/2:1 Embankment Slope)

Quantities listed below are included in the Summary of Quantities shown on the RCB details.

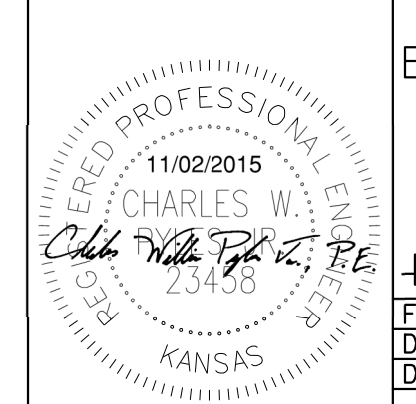
	Foundation Stabilization	Concrete (Gr. 4.0)
Wingwalls	3.16 (C.Y.)	10.70 (C.Y.)
Apron	0.00 (C.Y.)	0.00 (C.Y.)
Soil Saver	0.00 (C.Y.)	0.00 (C.Y.)
Reinforcing Steel (Gr. 60)		996 Lbs.
Welded Wire Fabric (Wings)		100 Lbs.
Welded Wire Fabric (Apron)		0 Lbs.
Granular Backfill (Wingwalls)		24.00 C.Y.
Filter Fabric (subsidiary)		29.00 S.Y.

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

30° Skew	Mark	#4 C1S	#4 C1L	#4 DI	#4 E1S	#4 E1L	#4 C2	#4 D2	#4 E2	#6 VIS	#6 VIL	#4 H1S	#4 H1L	#4 H2S	#4 H2L	#4 H3S	#4 H3L	#4 H5S	#4 H5L	#4 H6L	#4 H6S	#4 H7S	#4 H7L	#4 V5L	#4 V5S	#4 V6
	Number	4	4	27*	3	3	1	23*	3*	9	16	8	8	2	2	2	2	6*	6*	6*	6*	6*	6*	11	7	6
	Length	11'-9"	20'-9"	6'-4"	8'-9"	16'-6"	30'-11"	5'-2"	31'-1"	*	*	8'-4"	14'-10"	6'-4"	11'-5"	8'-6"	15'-0"	2'-1"	1'-10"	2'-0"	2'-0"	1'-9"	1'-8"	*	*	5'-10"

\*See Bending Diagram

Plotted By: mb  
 File: USWichita-Civil\2015\15120\001\Trans\Bridg\DCN\_Proj\rcb\031\_3-6x5Wing\1.dgn  
 Plot Date: 11/2/2015



KANSAS DEPARTMENT OF TRANSPORTATION			
Br. No. N/A-87-N/A(000) Sta. 10+00.00			
WEST FLARED WINGWALLS			
5 ft Rise (30*SKEW) (10*ROT.)			
BR 10.30.05		Sedgwick Co.	
DESIGNED	QUANTITIES	APP'D	BY
DESIGN CK.	DETAIL CK.	QUAN. CK.	CADD CK.