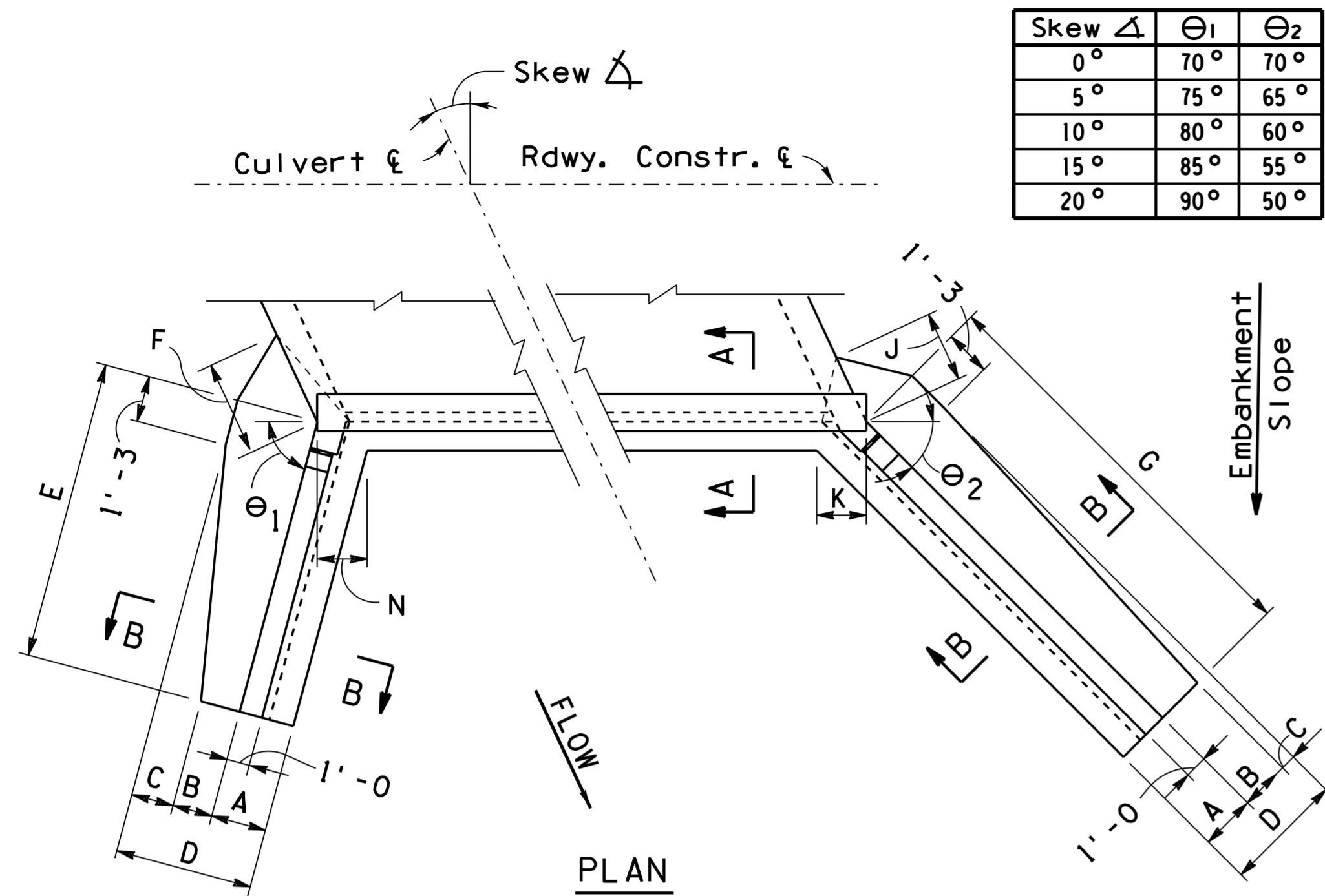


Note to Designer: The information presented in this Standard Detail has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

NO.	DESCRIPTION OF REVISIONS	DATE
1	Original Issue	2-12
2		
3		
4		



Skew $\Delta$	$\theta_1$	$\theta_2$
0°	70°	70°
5°	75°	65°
10°	80°	60°
15°	85°	55°
20°	90°	50°

Skew $\Delta$	0°					5°					10°					15°					20°					
	8'	9'	10'	11'	12'	8'	9'	10'	11'	12'	8'	9'	10'	11'	12'	8'	9'	10'	11'	12'	8'	9'	10'	11'	12'	
2 : 1 Slope	Dimensions																									
	A	2'-0	2'-1	2'-2	2'-3	2'-4	2'-0	2'-1	2'-2	2'-3	2'-4	2'-0	2'-1	2'-2	2'-3	2'-4	2'-0	2'-1	2'-2	2'-3	2'-4	2'-0	2'-1	2'-2	2'-3	2'-4
	B	1'-4	1'-5	1'-6	1'-7	1'-8	1'-4	1'-5	1'-6	1'-7	1'-8	1'-4	1'-5	1'-6	1'-7	1'-8	1'-4	1'-5	1'-6	1'-7	1'-8	1'-4	1'-5	1'-6	1'-7	1'-8
	C	1'-10	2'-2	2'-6	3'-0	3'-8	1'-11	2'-3	2'-7	3'-2	3'-10	1'-11	2'-4	2'-8	3'-3	4'-0	2'-0	2'-5	2'-9	3'-5	4'-1	2'-1	2'-6	2'-10	3'-6	4'-3
	D	5'-2	5'-8	6'-2	6'-10	7'-8	5'-3	5'-9	6'-3	7'-0	7'-10	5'-3	5'-10	6'-4	7'-1	8'-0	5'-4	5'-11	6'-5	7'-3	8'-1	5'-5	6'-0	6'-6	7'-4	8'-3
	E	14'-6	16'-0	17'-6	19'-0	20'-6	14'-0	15'-6	17'-0	18'-6	20'-0	14'-0	15'-6	17'-0	18'-6	20'-0	13'-6	15'-0	16'-6	18'-0	19'-6	13'-6	15'-0	16'-6	18'-0	19'-6
	F	3'-9	4'-3	4'-10	5'-7	6'-6	3'-10	4'-5	4'-11	5'-9	6'-9	3'-10	4'-6	5'-0	5'-11	6'-11	4'-0	4'-7	5'-2	6'-1	7'-1	4'-1	4'-9	5'-3	6'-2	7'-3
	G	14'-6	16'-0	17'-6	19'-0	20'-6	14'-6	16'-6	18'-0	19'-6	21'-0	15'-0	17'-0	18'-6	20'-0	22'-0	15'-6	17'-6	19'-0	21'-0	22'-6	16'-6	18'-6	20'-0	22'-0	23'-6
	J	3'-9	4'-3	4'-10	5'-7	6'-6	3'-10	4'-5	4'-11	5'-9	6'-9	3'-10	4'-6	5'-0	5'-11	6'-11	4'-0	4'-7	5'-2	6'-1	7'-1	4'-1	4'-9	5'-3	6'-2	7'-3
	K	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-11	2'-0 1/4	2'-1 1/2	2'-2 1/2	2'-3 1/4	1'-11 3/4	2'-1 1/8	2'-2 3/4	2'-3 3/4	2'-5
	L	2'-3	2'-7	2'-10	3'-2	3'-5	2'-4	2'-7	2'-10	3'-2	3'-5	2'-2	2'-5	2'-8	2'-11	3'-3	2'-4	2'-7	2'-10	3'-1	3'-4	2'-4	2'-7	2'-10	3'-1	3'-4
	M	2'-3	2'-7	2'-10	3'-2	3'-5	2'-6	2'-7	2'-11	3'-3	3'-7	2'-7	2'-8	3'-1	3'-5	3'-6	2'-9	2'-11	3'-3	3'-6	3'-10	2'-9	3'-0	3'-5	3'-8	4'-1
	N	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-11 1/4	2'-0 1/4	2'-1 1/2	2'-2 1/2	2'-3 1/4	2'-0	2'-1	2'-2	2'-3	2'-4

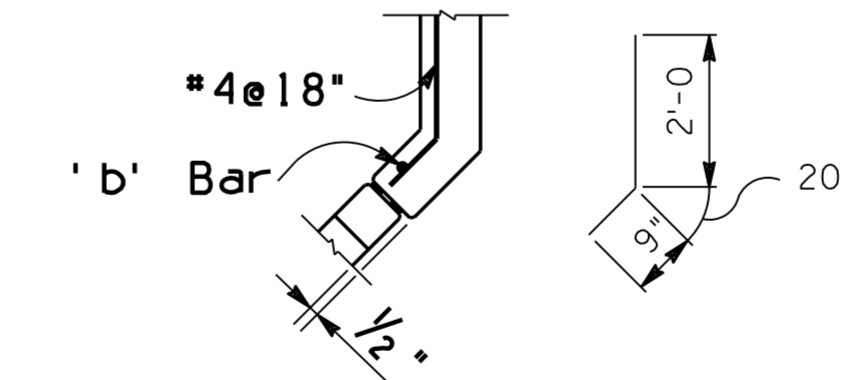
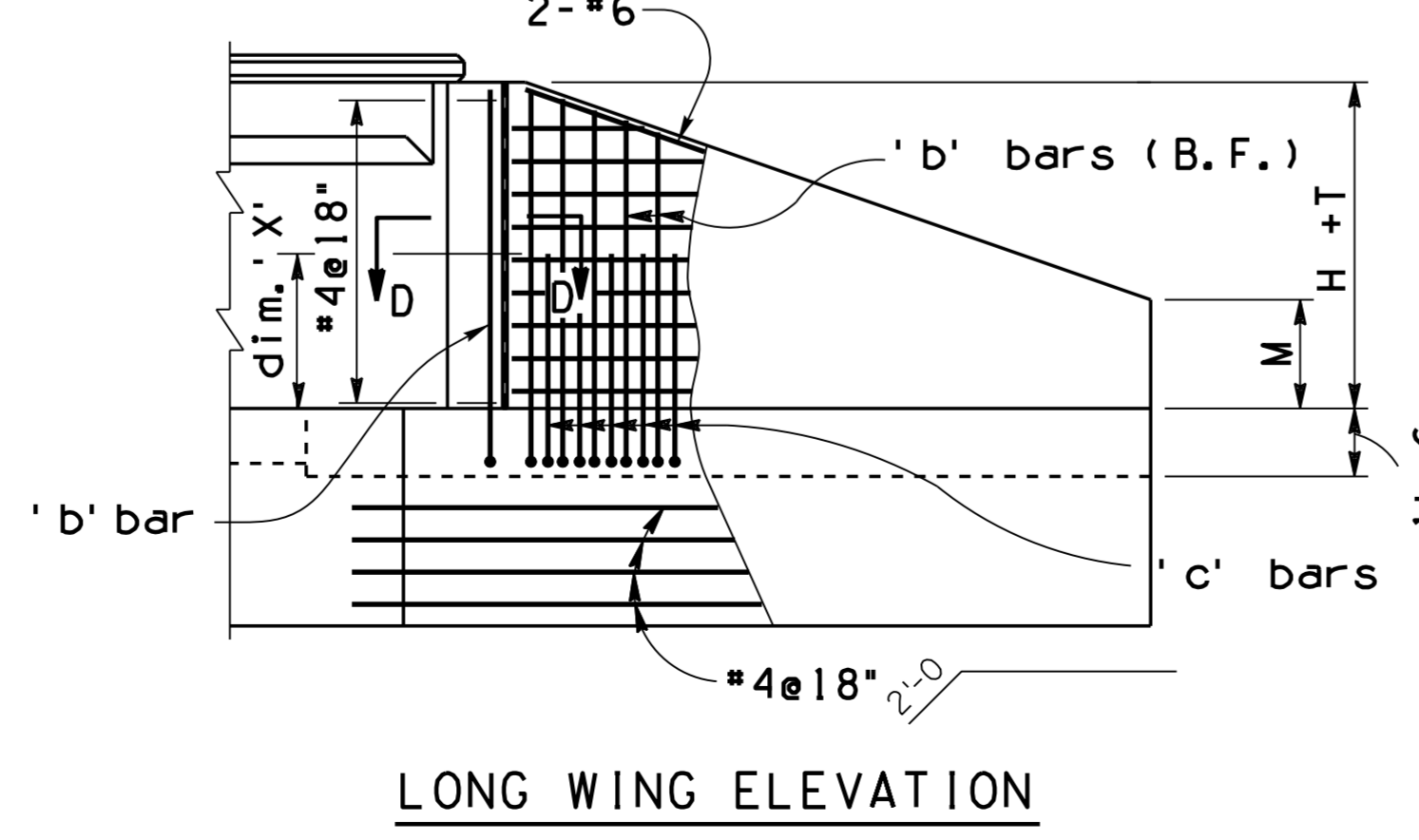
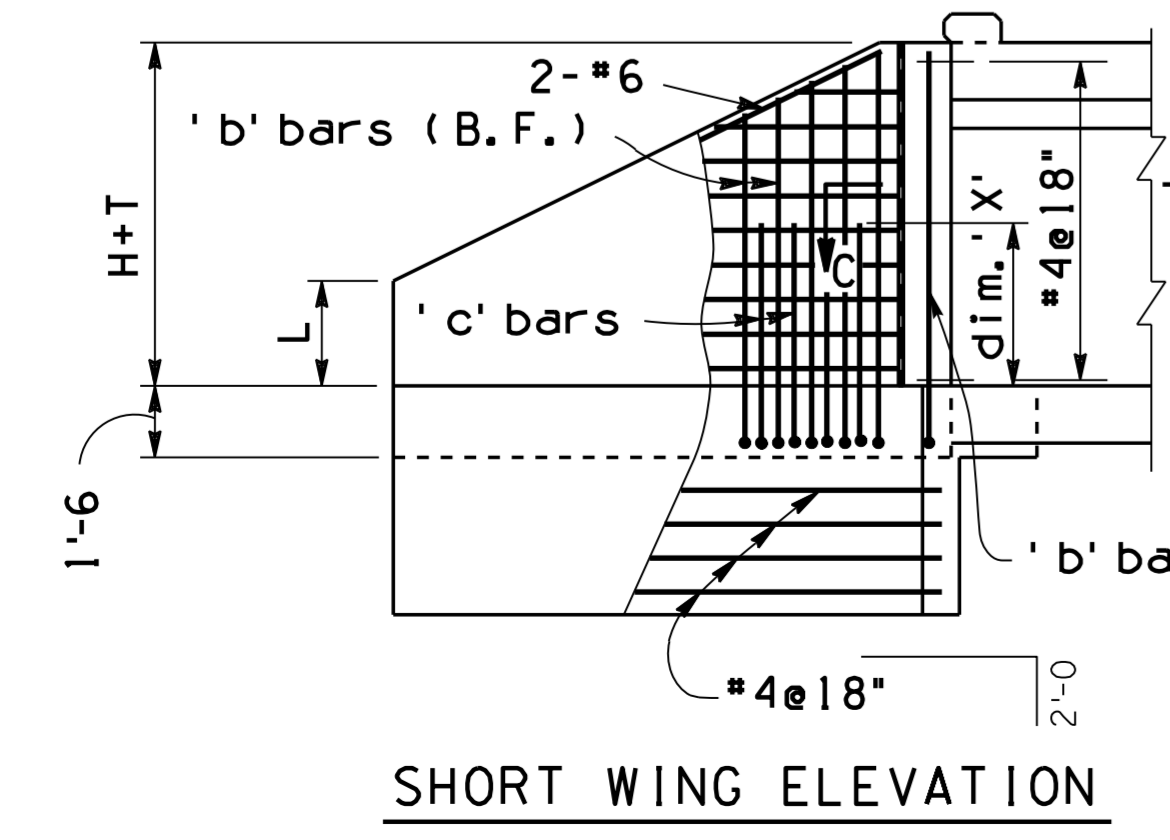
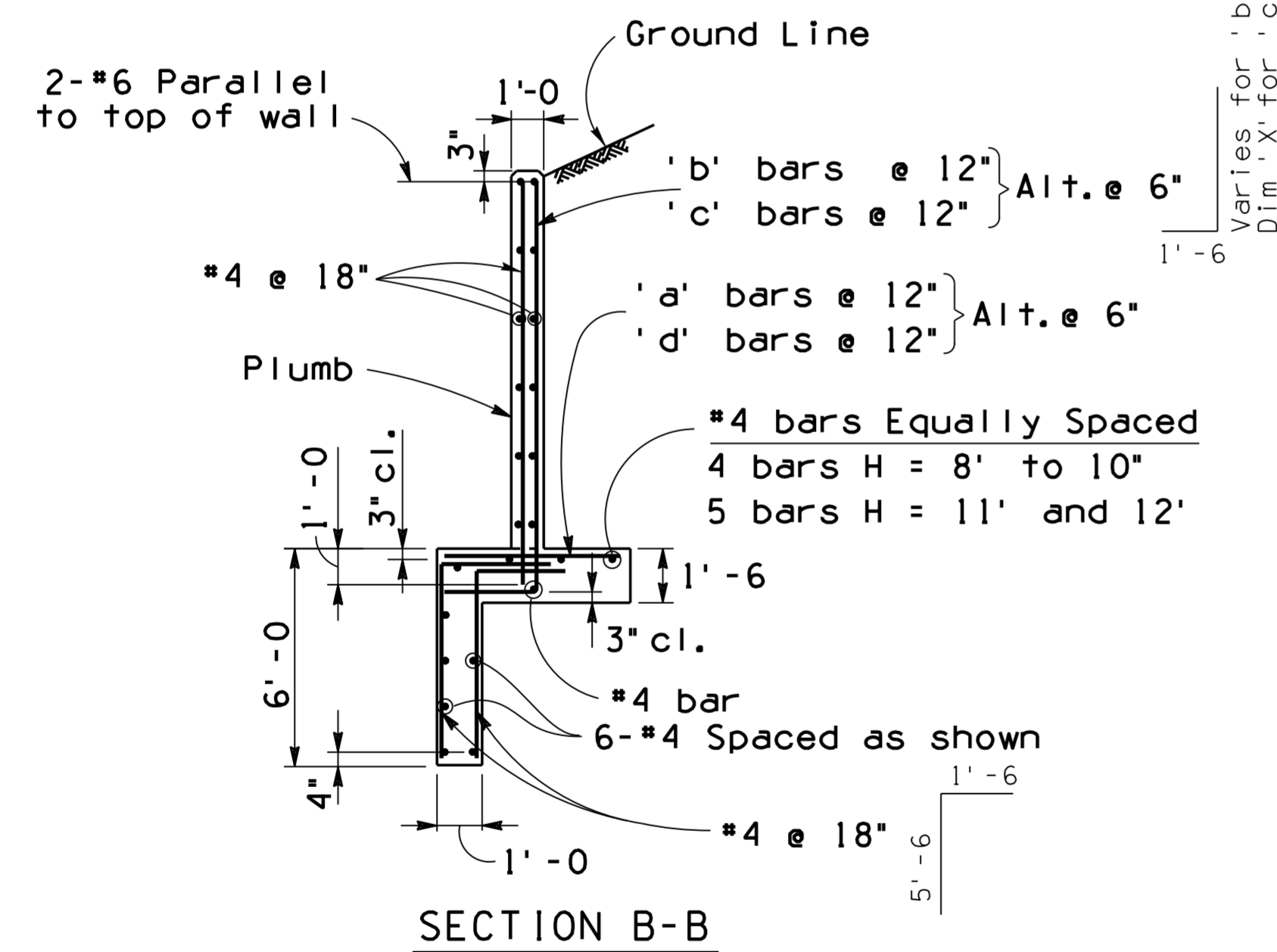
Skew $\Delta$	0°					5°					10°					15°					20°					
	8'	9'	10'	11'	12'	8'	9'	10'	11'	12'	8'	9'	10'	11'	12'	8'	9'	10'	11'	12'	8'	9'	10'	11'	12'	
4 : 1 Slope	Dimensions																									
	A	2'-0	2'-1	2'-2	2'-3	2'-4	2'-0	2'-1	2'-2	2'-3	2'-4	2'-0	2'-1	2'-2	2'-3	2'-4	2'-0	2'-1	2'-2	2'-3	2'-4	2'-0	2'-1	2'-2	2'-3	2'-4
	B	1'-4	1'-5	1'-6	1'-7	1'-8	1'-4	1'-5	1'-6	1'-7	1'-8	1'-4	1'-5	1'-6	1'-7	1'-8	1'-4	1'-5	1'-6	1'-7	1'-8	1'-4	1'-5	1'-6	1'-7	1'-8
	C	1'-8	2'-0	2'-4	2'-10	3'-6	1'-9	2'-1	2'-5	2'-11	3'-6	1'-9	2'-1	2'-5	2'-11	3'-7	1'-9	2'-1	2'-5	3'-0	3'-8	1'-10	2'-2	2'-6	3'-0	3'-8
	D	5'-0	5'-6	6'-0	6'-8	7'-6	5'-1	5'-7	6'-1	6'-9	7'-6	5'-1	5'-7	6'-1	6'-9	7'-7	5'-1	5'-7	6'-1	6'-10	7'-8	5'-2	5'-8	6'-2	6'-10	7'-8
	E	22'-6	25'-0	27'-6	30'-0	32'-6	22'-0	24'-6	27'-0	29'-6	32'-0	22'-0	24'-0	26'-6	29'-0	31'-6	21'-6	24'-0	26'-6	29'-0	31'-0	21'-6	24'-0	26'-6	29'-0	31'-0
	F	3'-6	4'-1	4'-7	5'-4	6'-4	3'-8	4'-2	4'-9	5'-5	6'-4	3'-8	4'-2	4'-9	5'-5	6'-5	3'-8	4'-2	4'-9	5'-7	6'-6	3'-9	4'-3	4'-10	5'-7	6'-6
	G	22'-6	25'-0	27'-6	30'-0	32'-6	23'-0	25'-6	28'-0	30'-6	33'-0	23'-6	26'-0	28'-6	31'-0	34'-0	24'-0	27'-0	29'-6	32'-0	35'-0	25'-0	28'-0	30'-6	33'-6	36'-0
	J	3'-6	4'-1	4'-7	5'-4	6'-4	3'-8	4'-2	4'-9	5'-5	6'-4	3'-8	4'-2	4'-9	5'-5	6'-5	3'-8	4'-2	4'-9	5'-7	6'-6	3'-9	4'-3	4'-10	5'-7	6'-6
	K	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-11	2'-0 1/4	2'-1 1/2	2'-2 1/2	2'-3 1/4	1'-11 3/4	2'-1 1/8	2'-2 3/4	2'-3 3/4	2'-5
	L	3'-9	4'-2	4'-7	5'-0	5'-5	3'-9	4'-2	4'-7	4'-11	5'-4	3'-8	4'-2	4'-6	4'-11	5'-4	3'-9	4'-1	4'-6	4'-10	5'-4	3'-8	4'-1	4'-5	4'-10	5'-4
	M	3'-9	4'-2	4'-7	5'-0	5'-5	3'-10	4'-3	4'-9	5'-2	5'-7	4'-0	4'-5	4'-11	5'-4	5'-8	4'-2	4'-6	5'-0	5'-6	5'-11	4'-3	4'-8	5'-3	5'-8	6'-2
	N	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-10 1/4	1'-11 3/8	2'-0 1/2	2'-1 1/2	2'-2 1/2	1'-11 1/4	2'-0 1/4	2'-1 1/2	2'-2 1/2	2'-3 1/4	2'-0	2'-1	2'-2	2'-3	2'-4

Skew $\Delta$	0°	5°	10°	15°	20°	
6 : 1 Slope	Dimensions					
	A	2'-0	2'-0	2'-0	2'-0	2'-0
	B	1'-4	1'-4	1'-4	1'-4	1'-4
	C	1'-8	1'-8	1'-8	1'-9	1'-9
	D	5'-0	5'-0	5'-0	5'-1	5'-1
	E	28'-0	27'-6	27'-0	27'-0	27'-0
	F	3'-6	3'-6	3'-6	3'-8	3'-8
	G	28'-0	28'-0	29'-0	29'-6	30'-6
	J	3'-6	3'-6	3'-6	3'-8	3'-8
	K	1'-10 1/4	1'-10 1/4	1'-10 1/2	1'-11	1'-11 1/4
	L	4'-8	4'-8	4'-8	4'-7	4'-7
	M	4'-8	4'-10	4'-11	5'-0	5'-2
	N	1'-10 1/4	1'-10 1/4	1'-10 1/4	1'-11 1/4	2'-0

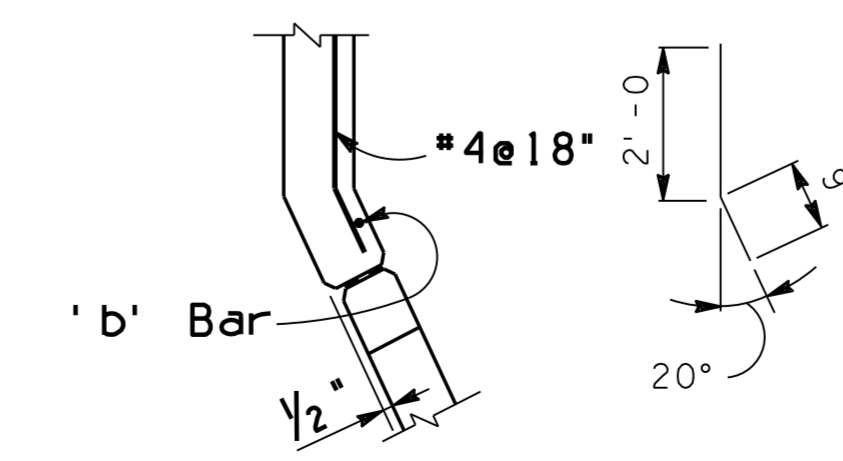
Height H	'a' bars	'b' bars
8'	#5	#5
9'	#5	#5
10'	#6	#5
11'	#5	#5
12'	#6	#6

Height H	'c' Bars										'd' Bars			
	Short Wing Skew $\Delta$					Long Wing Skew $\Delta$					Dim 'X'	Short Wing		Long Wing
	0°	5°	10°	15°	20°	0°	5°	10°	15°	20°		0° to 10°	15° & 20°	
8'	2-#5	2-#5	2-#5	-	-	2-#5	2-#5	2-#5	3-#5	3-#5	2'-0	-	-	-
9'	4-#5	4-#5	4-#5	3-#5	2-#5	4-#5	4-#5	4-#5	5-#5	5-#5	3'-0	-	-	-
10'	6-#6	6-#6	5-#6	5-#6	4-#6	6-#6	7-#6	7-#6	7-#6	8-#6	4'-3	-	-	-
11'	8-#7	8-#7	7-#7	6-#7	6-#7	8-#7	9-#7	9-#7	10-#7	10-#7	6'-9	5-#6	4-#6	5-#6
12'	9-#7	8-#7	7-#7	6-#7	6-#7	9-#7	9-#7	9-#7	10-#7	10-#7	6'-9	8-#6	6-#6	8-#6
4 : 1 Slope	9'	6-#5	6-#5	5-#5	4-#5	6-#5	6-#5	6-#5	7-#5	7-#5	3'-0	-	-	-
	10'	10-#5	10-#5	9-#5	8-#5	10-#5	10-#5	11-#5	12-#5	12-#5	4'-0	-	-	-
	11'	14-#6	14-#6	13-#6	12-#6	12-#6	14-#6	15-#6	16-#6	17-#6	5'-3	9-#6	8-#6	10-#6
12'	14-#7	14-#7	13-#7	12-#7	11-#7	14-#7	14-#7	15-#7	16-#7	17-#7	6'-9	13-#6	12-#6	15-#6

'd' bars alternate with 'a' bars at high end of wall.



SECTION C-C



SECTION D-D

**NOTE:**  
 For General Notes, Dimensions, and additional Details, see SD 6.01 (1 of 5). For Headwall Quantities see SD 6.09 (1 to 3).

DESIGN APPROVED <i>Shafiq U. Hasan</i>	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP STRUCTURE DETAIL
APPROVED FOR DISTRIBUTION <i>Teon A. Nehme</i>	REINFORCED CONCRETE BOX CULVERTS OUTLET WINGS - SKEW 0° to 20° CULVERT HEIGHT 8' to 12'
ROUTE PROJECT NO. FA NO.	DRAWING NO. SD 6.08 (2 of 8)
LOCATION SHEET NO.	OF