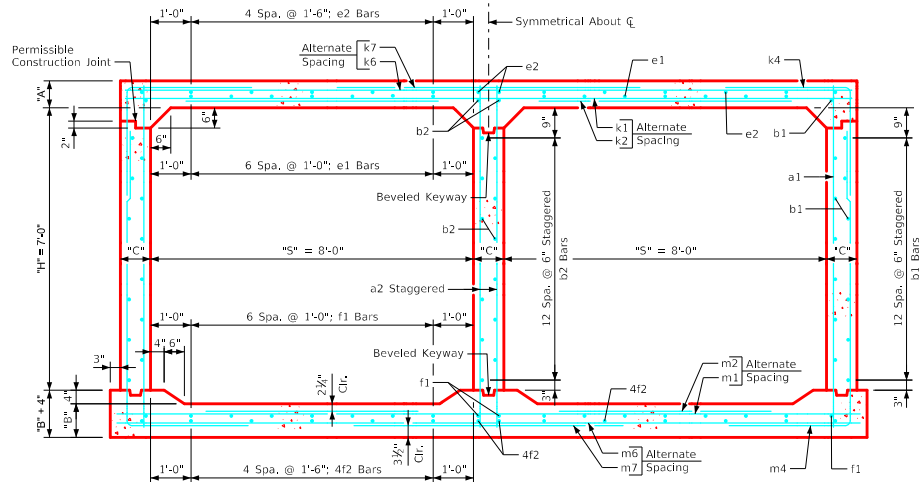
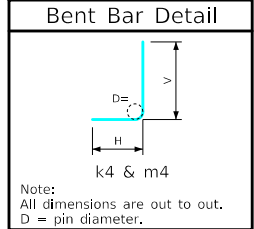


Variable Dimensions and Quantities for Twin 8' x 7' Barrel Sections

Dimensions													Bar List																																										
Fill	S	H	A	B	C	D	E	U	W	X	Z	a1			a2			b1			b2			e1			e2			f1			f2			k1			k2			k4			k6			k7			k9				
												Size	Sp.	L	Size	Sp.	L	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.		
0	8	7	13	10.5	9	9	9	0'-0	5'-2	1'-11	5'-7	4	9	8'-10	6	9	8'-10	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	5	18	17'-11	5	18	8'-11	4	6	8'-2	5'-5	3'-1	4	12	17'-11	4	12	10'-4	4	4.5	17'-11
1	8	7	11	10	9	9	9	0'-0	5'-5	1'-11	5'-7	4	9	8'-8	6	9	8'-8	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	5	18	17'-11	5	18	8'-11	4	6	8'-2	5'-2	3'-0	4	12	17'-11	5	18	10'-10	5	4.5	17'-11
2	8	7	8	10	9	9	9	0'-10	5'-7	1'-11	4'-1	4	9	8'-5	6	9	8'-5	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	4	9	17'-11	4	9	7'-8	4	6	6'-7	3'-10	2'-9	5	18	17'-11	6	18	11'-2	6	4.5	17'-11
3	8	7	8	10	9	9	9	1'-7	3'-11	2'-6	3'-4	4	12	8'-5	6	9	8'-5	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	6	18	17'-11	5	18	6'-4	4	6	6'-0	3'-3	2'-9	4	12	17'-11	4	12	7'-10	4	4.5	17'-11
4	8	7	8	10	9	9	9	1'-6	3'-4	1'-8	3'-1	4	12	8'-5	6	9	8'-5	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	4	12	17'-11	4	12	6'-8	4	6	6'-2	3'-1	3'-1	4	12	17'-11	4	12	6'-8	4	4.5	17'-11
5-7	8	7	8	10	9	9	9	1'-8	3'-2	2'-7	3'-2	4	12	8'-5	6	9	8'-5	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	4	12	17'-11	4	12	6'-6	4	6	5'-10	2'-11	2'-11	4	12	17'-11	5	12	6'-4	5	4.5	17'-11
8-10	8	7	8	10	9	9	9	1'-11	2'-11	2'-4	3'-0	4	9	8'-5	6	9	8'-5	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	6	18	17'-11	5	18	5'-9	4	6	5'-6	2'-9	2'-9	5	12	17'-11	5	12	5'-10	5	4.5	17'-11
11-13	8	7	8.5	11	9	9	9	2'-0	2'-10	2'-1	2'-11	4	9	8'-6	6	9	8'-6	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	5	12	17'-11	4	12	5'-9	4	6	5'-6	2'-9	2'-9	4	9	17'-11	5	9	5'-8	5	4.5	17'-11
14-16	8	7	9.5	12	9	9	9	1'-9	3'-0	1'-7	3'-3	4	9	8'-8	6	9	8'-8	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	5	12	17'-11	4	12	6'-4	4	6	5'-8	2'-10	2'-10	5	12	17'-11	6	12	6'-0	6	4.5	17'-11
17-19	8	7	10.5	13	9	9	9	1'-10	2'-11	1'-8	3'-3	4	9	8'-10	6	9	8'-10	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	5	12	17'-11	4	12	6'-5	4	6	5'-4	2'-5	2'-11	5	12	17'-11	6	12	5'-10	6	4.5	17'-11
20-22	8	7	12	14.5	9	9	9	1'-4	3'-0	1'-6	3'-3	4	9	9'-1	6	9	9'-1	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	6	18	17'-11	5	18	7'-6	4	6	5'-6	2'-6	3'-0	5	12	17'-11	6	12	6'-0	6	4.5	17'-11
23-25	8	7	13	15.5	9	9	9	1'-0	3'-1	1'-2	3'-3	4	9	9'-3	6	9	9'-3	4	6	28	4	6	15	4	12	14	4	18	14	4	12	18	4	18	14	4	9	17'-11	4	9	7'-11	4	6	5'-8	2'-7	3'-1	5	12	17'-11	6	12	6'-2	6	4.5	17'-11

Fill	Bar List																											Quantities			
	m1			m2			m4			m6			m7			m9			Concrete (CY/FT)			Steel (LB/FT)									
Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	H	V	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Slab	Floor	Walls	Total	Steel							
0	5	12	18'-5	4	12	5'-10	4	6	12'-4	5'-0	7'-4	4	18	18'-5	6	18	11'-2	6	4.5	18'-5	0.789	0.667	0.549	2.005	253.45						
1	5	12	18'-5	4	12	5'-10	4	6	12'-3	5'-0	7'-3	5	18	18'-5	6	18	11'-2	6	4.5	18'-5	0.676	0.638	0.549	1.863	253.74						
2	5	12	18'-5	4	12	5'-10	4	6	11'-2	3'-11	7'-3	5	18	18'-5	6	18	8'-2	6	4.5	18'-5	0.507	0.638	0.549	1.694	255.08						
3	5	12	18'-5	4	12	4'-10	4	6	10'-5	3'-2	7'-3	5	18	18'-5	5	18	6'-8	5	4.5	18'-5	0.507	0.638	0.549	1.694	233.79						
4	4	12	18'-5	4	12	6'-5	4	6	10'-3	3'-0	7'-3	5	18	18'-5	5	18	6'-2	5	4.5	18'-5	0.507	0.638	0.549	1.694	219.74						
5-7	5	12	18'-5	4	12	4'-6	4	6	10'-1	2'-10	7'-3	5	18	18'-5	6	18	6'-4	6	4.5	18'-5	0.507	0.638	0.549	1.694	228.82						
8-10	5	12	18'-5	4	12	5'-2	4	6	9'-11	2'-8	7'-3	4	12	18'-5	6	12	6'-0	6	4.5	18'-5	0.507	0.638	0.549	1.694	246.68						
11-13	5	12	18'-5	4	12	5'-10	4	6	9'-11	2'-7	7'-4	4	9	18'-5	5	9	5'-10	5	4.5	18'-5	0.536	0.696	0.549	1.781	248.32						
14-16	4	9	18'-5	4	12	6'-10	4	6	10'-0	2'-7	7'-5	5	18	18'-5	8	18	6'-6	8	4.5	18'-5	0.592	0.753	0.549	1.894	258.84						
17-19	5	12	18'-5	4	12	6'-9	4	6	10'-0	2'-6	7'-6	5	18	18'-5	8	18	6'-6	8	4.5	18'-5	0.648	0.811	0.549	2.008	259.05						
20-22	5	12	18'-5	4	12	7'-5	4	6	10'-3	2'-7	7'-8	5	18	18'-5	8	18	6'-6	8	4.5	18'-5	0.733	0.898	0.549	2.180	264.29						
23-25	4	9	18'-5	4	9	7'-10	4	6	10'-5	2'-8	7'-9	5	18	18'-5	8	18	6'-6	8	4.5	18'-5	0.789	0.956	0.549	2.294	265.97						



- Notes:**
- Dimensions listed on this sheet to be used in conjunction with Sheet TWRCB G3-20.
 - Fill, dimensions "S" and "H" are in feet.
 - Dimensions "A", "B", "C", "D", and "Sp." listed in the bar list are in inches.
 - Dimensions "L", "H", "V" are in feet and inches.

LATEST REVISION DATE	APPROVED BY BRIDGE ENGINEER	<p style="margin: 0;">Standard Design Twin Reinforced Concrete Box Culverts July, 2020</p>
		<p>Culvert Barrel Details</p> <p>8' x 7' Barrel Sections</p>
		TWRCB 8-7-20

ENGLISHLRFDDESIGNEDTWINCULVERTS.DGN - TWRCB 8-7-20 - THIS SHEET ISSUED 07-2020.