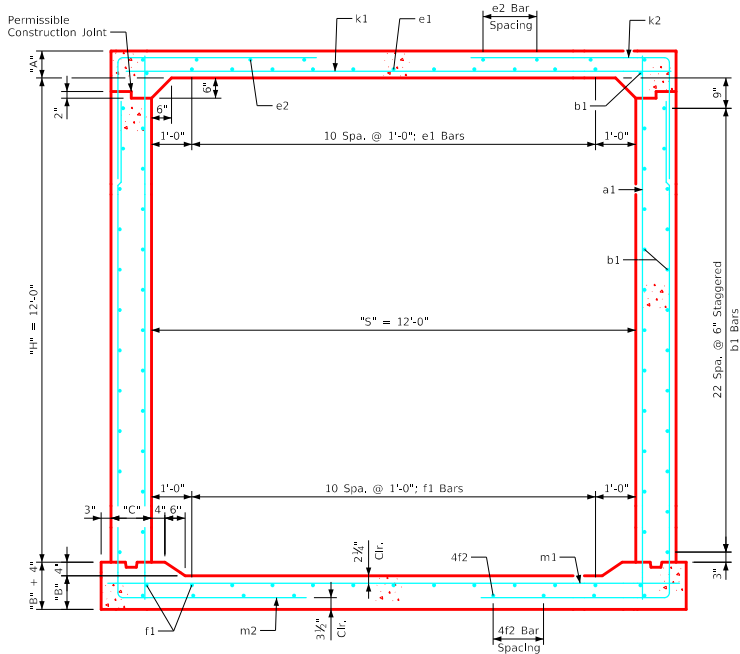
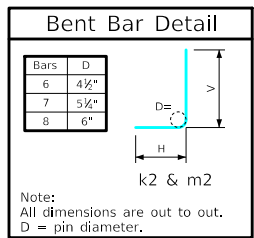


### Variable Dimensions and Quantities for 12' x 12' Barrel Sections

Dimensions								Bar List																											Quantities															
Fill	S	H	A	B	C	D		a1			b1			e1			e2			f1			f2			k1			k2			k9			m1			m2			m9			Concrete (CY/FT)				Steel (LB/FT)		
0	1	2	3	4-7	8-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	Size	Sp.	L	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Slab	Floor	Walls	Total		
0	12	12	13.5	14	12	9		5	12	14'-2	4	6	48	5	12	11	4	16	10	4	12	13	4	16	10	8	12	13'-8	6	9	12'-1	8'-1	4'-0	-	-	7	9	14'-2	6	9	20'-8	8'-1	12'-7	-	-	0.623	0.668	0.862	2.153	312.34
1	12	12	12.5	13.5	12	6		4	6	14'-1	4	6	48	5	12	11	4	16	10	4	12	13	4	16	10	7	9	13'-8	6	9	11'-1	8'-1	3'-10	-	-	7	9	14'-2	6	9	20'-8	8'-1	12'-7	-	-	0.580	0.645	0.862	2.087	318.53
2	12	12	8.5	10.5	12	9		4	9	13'-6	4	6	48	5	12	11	4	16	10	4	12	13	4	17	8	8	9	13'-8	7	9	11'-4	7'-5	3'-11	-	-	7	6	14'-2	7	9	17'-2	5'-3	12'-4	7	14'-2	0.407	0.511	0.862	1.780	363.89
3	12	12	8	10.5	12	9		4	9	13'-5	4	6	48	4	12	11	4	17	8	4	12	13	4	16	8	8	9	13'-8	6	6	8'-9	5'-3	3'-6	6	13'-8	6	6	14'-2	6	6	17'-2	4'-10	12'-4	6	14'-2	0.386	0.511	0.862	1.759	336.29
4-7	12	12	8.5	10.5	12	9		4	9	13'-6	4	6	48	4	12	11	4	16	8	4	12	13	4	15	8	6	6	13'-8	6	6	8'-5	4'-11	3'-6	6	13'-8	7	6	14'-2	6	6	17'-0	4'-8	12'-4	6	14'-2	0.407	0.511	0.862	1.780	339.68
8-10	12	12	9	11.5	12	9		4	9	13'-7	4	6	48	4	12	11	4	14	8	4	12	13	4	14	8	7	6	13'-8	6	6	7'-11	4'-4	3'-7	6	13'-8	7	6	14'-2	6	6	16'-9	4'-4	12'-5	6	14'-2	0.429	0.556	0.862	1.847	350.26
11-15	12	12	10.5	12.5	12	9		4	9	13'-10	4	6	48	4	12	11	4	13	8	4	12	13	4	13	8	7	6	13'-8	6	6	7'-10	4'-2	3'-8	6	13'-8	8	6	14'-2	6	6	16'-8	4'-2	12'-6	6	14'-2	0.494	0.601	0.862	1.957	367.68
16-20	12	12	12.5	15	13	9		4	9	14'-2	4	6	48	4	12	11	4	18	6	4	12	13	4	12	8	9	9	13'-10	6	6	7'-10	3'-11	3'-11	6	13'-10	8	6	14'-4	6	6	16'-8	4'-0	12'-8	6	14'-4	0.589	0.722	0.934	2.245	376.87
21-25	12	12	14.5	17.5	14.5	9		6	9	14'-7	4	6	48	4	12	11	4	13	8	4	12	13	4	12	8	8	6	14'-1	7	9	8'-10	4'-5	4'-5	7	14'-1	8	6	14'-7	7	9	17'-1	4'-2	12'-11	7	14'-7	0.692	0.852	1.041	2.585	423.00
26-30	12	12	16.5	19	16	9		8	12	14'-10	4	6	48	4	12	11	4	13	8	4	12	13	4	12	8	8	6	14'-4	7	9	9'-2	4'-7	4'-7	7	14'-4	8	6	14'-10	7	9	17'-4	4'-4	13'-0	7	14'-10	0.797	0.939	1.148	2.884	451.63
31-35	12	12	18	21	17.5	9		4	9	15'-2	4	6	48	4	12	11	4	12	8	4	12	13	4	13	8	8	6	14'-7	8	9	9'-6	4'-5	5'-1	8	14'-7	9	6	15'-1	8	9	17'-9	4'-7	13'-2	8	15'-1	0.883	1.052	1.255	3.190	475.42
36-40	12	12	19.5	22.5	18.5	9		7	12	15'-5	4	6	48	4	12	11	4	12	8	5	12	13	4	13	8	9	6	14'-9	6	6	9'-2	4'-7	4'-7	6	14'-9	9	6	15'-3	6	6	18'-1	4'-9	13'-4	6	15'-3	0.965	1.137	1.327	3.429	502.71
41-45	12	12	21	24	19.5	9		8	12	15'-8	4	6	48	4	12	11	4	13	8	5	12	13	4	13	8	9	6	14'-11	6	6	9'-6	4'-9	4'-9	6	14'-11	9	6	15'-5	6	6	18'-4	4'-11	13'-5	6	15'-5	1.048	1.223	1.398	3.669	529.76
46-50	12	12	22.5	25.5	20.5	9		4	12	15'-11	4	6	48	5	12	11	4	14	8	5	12	13	4	13	8	9	6	15'-1	7	6	10'-2	5'-1	5'-1	7	15'-1	9	6	15'-7	7	6	18'-7	5'-0	13'-7	7	15'-7	1.133	1.311	1.470	3.914	541.76
51-55	12	12	24	27	21.5	9		8	12	16'-2	5	6	48	5	12	11	4	13	8	5	12	13	4	14	8	9	6	15'-3	6	6	10'-2	5'-1	5'-1	6	15'-3	9	6	15'-9	6	6	18'-11	5'-3	13'-8	6	15'-9	1.219	1.401	1.541	4.161	566.68



12' x 12' Barrel Section

- Notes:**
- Dimensions listed on this sheet to be used in conjunction with Sheet RCB G3-20.
  - The k2 and m2 bars horizontal legs may lap in low fill situations.
  - 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	Standard Design <b>Single Reinforced Concrete Box Culverts</b> July, 2020
Culvert Barrel Details		RCB 12-12-20
12' x 12' Barrel Sections		

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