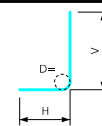


Variable Dimensions and Quantities for 16' x 13' Barrel Sections

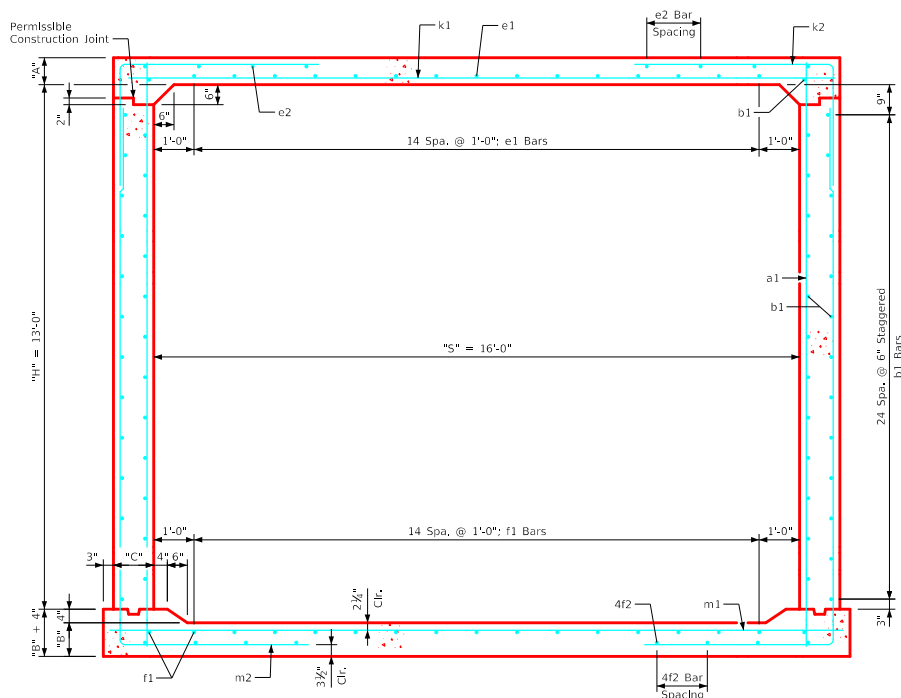
Dimensions										Bar List																		Quantities																					
Fill	S	H	A	B	C	D	a1		b1			e1			e2			f1		f2			k1			k2			k9			m1		m2			m9			Concrete (CY/FT)				Steel (LB/FT)					
0	1	2	3-5	6-8	9-10	11-13	14-16	Size	Sp.	L	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Slab	Floor	Walls	Total					
0	16	13	15	15.5	13	9	5	12	15'-5"	4	6	52	5	12	15	5	18	12	4	12	17	4	17	10	8	9	17'-10"	8	12	15'-4"	10'-6"	4'-10"	-	-	8	9	18'-4"	8	12	20'-7"	6'-10"	13'-9"	8	18'-4"	0.884	0.936	1.014	2.834	457.42
1	16	13	14	15.5	13	9	4	9	15'-4"	4	6	52	5	12	15	4	18	12	4	12	17	4	15	12	8	9	17'-10"	8	12	15'-3"	10'-6"	4'-9"	-	-	8	9	18'-4"	8	12	21'-0"	7'-3"	13'-9"	8	18'-4"	0.828	0.936	1.014	2.778	450.71
2	16	13	9.5	11.5	13	9	4	12	14'-8"	4	6	52	6	12	15	4	16	10	4	12	17	4	15	10	9	9	17'-10"	8	9	10'-8"	6'-4"	4'-4"	8	17'-10"	7	6	18'-4"	8	9	19'-4"	5'-11"	13'-5"	8	18'-4"	0.575	0.706	1.014	2.295	490.42
3-5	16	13	9	12	13	9	4	12	14'-8"	4	6	52	4	12	15	4	15	10	4	12	17	4	14	10	9	9	17'-10"	9	9	11'-0"	5'-11"	5'-1"	9	17'-10"	7	6	18'-4"	8	9	19'-0"	5'-7"	13'-5"	8	18'-4"	0.547	0.735	1.014	2.296	501.05
6-8	16	13	10	12.5	13	9	4	12	14'-9"	4	6	52	4	12	15	4	17	8	4	12	17	4	16	8	8	6	17'-10"	7	6	9'-2"	5'-2"	4'-0"	7	17'-10"	8	6	18'-4"	7	6	18'-7"	5'-1"	13'-6"	7	18'-4"	0.603	0.763	1.014	2.380	515.84
9-10	16	13	11	13.5	13	9	4	12	14'-11"	4	6	52	4	12	15	4	15	8	4	12	17	4	15	8	8	6	17'-10"	7	6	8'-11"	4'-10"	4'-1"	7	17'-10"	8	6	18'-4"	7	6	18'-5"	4'-10"	13'-7"	7	18'-4"	0.659	0.821	1.014	2.494	512.61
11-13	16	13	13	16	13	9	4	9	15'-4"	4	6	52	4	12	15	4	15	8	4	12	17	4	15	8	8	6	17'-10"	8	9	9'-4"	4'-8"	4'-8"	8	17'-10"	9	6	18'-4"	8	9	18'-5"	4'-8"	13'-9"	8	18'-4"	0.772	0.965	1.014	2.751	528.24
14-16	16	13	14.5	17.5	14	6	4	6	15'-7"	4	6	52	4	12	15	4	15	8	4	12	17	4	14	8	9	6	18'-0"	8	9	9'-6"	4'-9"	4'-9"	8	18'-0"	9	6	18'-6"	8	9	18'-7"	4'-8"	13'-11"	8	18'-6"	0.866	1.063	1.091	3.020	573.55

Bent Bar Detail

Bars	D
7	5/8"
8	6"
9	9/2"



Note:
All dimensions are out to out.
D = pin diameter.



16' x 13' 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 Single Reinforced Concrete Box Culverts July, 2020
Culvert Barrel Details		RCB 16-13-20
16' x 13' Barrel Sections		