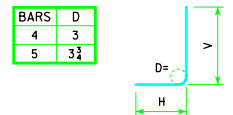


VARIABLE DIMENSIONS AND QUANTITIES FOR 4 x 4 BARREL SECTIONS

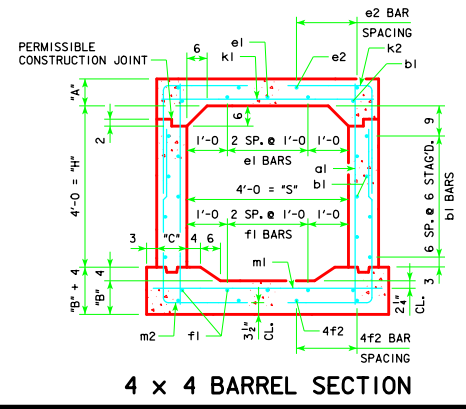
DIMENSIONS										BAR LIST																		QUANTITIES																					
FILL	S	H	A	B	C	D	a1		b1		e1		e2		f1		f2		k1			k2			k9		m1		m2			CONCRETE (CY/FT)				STEEL (LB/FT)													
							SIZE	SP.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SLAB	FLOOR	WALLS	TOTAL				
0	4	4	10	10	9	9	4	9	5'-7	4	6	16	5	12	3	4	15	4	4	12	5	4	15	4	6	9	5'-2	5	12	6'-6	3'-6	3'-0	--	--	5	12	5'-8	5	12	7'-5	3'-2	4'-3	--	--	0.202	0.222	0.202	0.626	80.84
1	4	4	8	10	9	9	4	9	5'-5	4	6	16	4	12	3	4	15	4	4	12	5	4	15	4	6	9	5'-2	5	12	6'-4	3'-6	2'-10	--	--	5	12	5'-8	5	12	7'-0	2'-9	4'-3	--	--	0.168	0.222	0.202	0.592	76.00
2	4	4	8	10	9	9	4	9	5'-5	4	6	16	4	12	3	4	15	4	4	12	5	4	15	4	6	9	5'-2	5	12	6'-4	3'-6	2'-10	--	--	5	12	5'-8	5	12	7'-0	2'-9	4'-3	--	--	0.168	0.222	0.202	0.592	74.32
3-5	4	4	8	10	9	9	4	9	5'-5	4	6	16	4	12	3	4	15	4	4	12	5	4	11	6	4	9	5'-2	5	12	5'-8	2'-10	2'-10	--	--	4	9	5'-8	5	12	6'-8	2'-5	4'-3	5	5'-8	0.168	0.222	0.202	0.592	70.42
6-8	4	4	8	10	9	9	4	9	5'-5	4	6	16	4	12	3	4	18	4	4	12	5	4	18	4	4	9	5'-2	5	12	4'-11	2'-1	2'-10	--	--	4	9	5'-8	5	12	6'-4	2'-1	4'-3	5	5'-8	0.168	0.222	0.202	0.592	66.97
9-10	4	4	8	10	9	9	4	9	5'-5	4	6	16	4	12	3	4	15	4	4	12	5	4	15	4	4	9	5'-2	5	12	4'-8	1'-10	2'-10	5	5'-2	4	9	5'-8	5	12	6'-1	1'-10	4'-3	5	5'-8	0.168	0.222	0.202	0.592	64.74
11-15	4	4	8	10	9	9	4	9	5'-5	4	6	16	4	12	3	4	15	4	4	12	5	4	15	4	4	9	5'-2	5	12	4'-8	1'-10	2'-10	5	5'-2	4	6	5'-8	5	12	6'-1	1'-10	4'-3	5	5'-8	0.168	0.222	0.202	0.592	69.18
16-20	4	4	8	10	9	9	4	9	5'-5	4	6	16	4	12	3	4	15	4	4	12	5	4	15	4	4	6	5'-2	5	12	4'-8	1'-10	2'-10	5	5'-2	4	6	5'-8	5	12	6'-1	1'-10	4'-3	5	5'-8	0.168	0.222	0.202	0.592	70.37
21-25	4	4	8	10	9	9	4	9	5'-5	4	6	16	4	12	3	4	14	4	4	12	5	4	15	4	5	9	5'-2	5	12	4'-7	1'-9	2'-10	5	5'-2	6	9	5'-8	5	12	6'-1	1'-10	4'-3	5	5'-8	0.168	0.222	0.202	0.592	74.92
26-30	4	4	8	10	9	9	4	9	5'-5	4	6	16	4	12	3	4	14	4	4	12	5	4	15	4	6	9	5'-2	5	12	4'-7	1'-9	2'-10	5	5'-2	6	9	5'-8	5	12	6'-1	1'-10	4'-3	5	5'-8	0.168	0.222	0.202	0.592	78.21
31-35	4	4	8	10	9	9	4	9	5'-5	4	6	16	4	12	3	4	14	4	4	12	5	4	15	4	6	9	5'-2	5	12	4'-7	1'-9	2'-10	5	5'-2	6	9	5'-8	5	12	6'-1	1'-10	4'-3	5	5'-8	0.168	0.222	0.202	0.592	78.21
36-40	4	4	8	10	9	9	4	9	5'-5	4	6	16	4	12	3	4	14	4	4	12	5	4	14	4	6	9	5'-2	5	12	4'-7	1'-9	2'-10	5	5'-2	5	6	5'-8	5	12	6'-0	1'-9	4'-3	5	5'-8	0.168	0.222	0.202	0.592	78.13
41-45	4	4	8	10	9	9	4	12	5'-5	4	6	16	4	12	3	4	14	4	4	12	5	4	13	4	5	6	5'-2	4	6	4'-7	1'-9	2'-10	4	5'-2	5	6	5'-8	4	6	5'-11	1'-8	4'-3	4	5'-8	0.168	0.222	0.202	0.592	80.34
46-50	4	4	8	10.5	9	9	4	12	5'-5	4	6	16	4	12	3	4	14	4	4	12	5	4	14	4	7	9	5'-2	4	6	4'-7	1'-9	2'-10	4	5'-2	7	9	5'-8	4	6	5'-1	1'-9	4'-4	4	5'-8	0.168	0.231	0.202	0.601	88.79
51-55	4	4	8	10.5	9	9	4	9	5'-5	4	6	16	4	12	3	4	14	4	4	12	5	4	14	4	6	6	5'-2	4	6	4'-7	1'-9	2'-10	4	5'-2	6	6	5'-8	4	6	5'-1	1'-9	4'-4	4	5'-8	0.168	0.231	0.202	0.601	93.16

BENT BAR DETAIL



k2 & m2

NOTE:
ALL DIMENSIONS ARE OUT TO OUT.
D = PIN DIAMETER.



- NOTES:**
- DIMENSIONS LISTED ON THIS SHEET TO BE USED IN CONJUNCTION WITH SHEET RCB G2-12.
 - THE K2 AND M2 BARS HORIZONTAL LEGS MAY LAP IN LOW FILL SITUATIONS.
 - DIMENSIONS "A", "B", "C", "D", AND "SP." LISTED IN THE BAR LIST ARE IN INCHES.

LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	Iowa Department of Transportation Highway Division STANDARD DESIGN SINGLE REINFORCED CONCRETE BOX CULVERTS APRIL, 2012 CULVERT BARREL DETAILS 4 x 4 BARREL SECTIONS	RCB 4-4-12
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ENGLISH BEDSIGNING\EGULVERTS.DGN - RCB_4-4-12 - THIS SHEET ISSUED 04-12