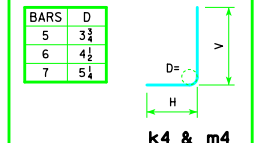


VARIABLE DIMENSIONS AND QUANTITIES FOR TRIPLE 12 x 8 BARREL SECTIONS

DIMENSIONS																		BAR LIST																																																																					
																		a1					a2					b1					b2					e1					e2					f1					f2					k1					k2					k3					k4					k6					k7				
FILL	S	H	A	B	C	D	E	R	T	U	W	X	Z	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L																							
0	12	8	14.5	11.5	9	9	9	0'-3	0'-0	7'-8	2'-8	5'-4	4'-3	4	12	10'-1	6	9	10'-1	4	6	32	4	6	34	4	12	33	5	17	30	4	12	39	4	17	30	5	12	38'-8	5	12	12'-11	5	12	12'-3	5	9	10'-4	7'-0	3'-4	5	18	38'-8	7	18	15'-4																														
1	12	8	13.5	11.5	9	9	9	0'-8	0'-2	7'-8	2'-8	5'-4	4'-3	4	12	10'-0	6	9	10'-0	4	6	32	4	6	34	4	12	33	4	17	30	4	12	39	4	17	30	6	12	38'-8	6	18	12'-9	6	12	9'-4	5'-9	3'-7	5	18	38'-8	7	18	15'-4																																	
2	12	8	10.5	10	9	9	9	2'-4	1'-4	6'-1	3'-4	4'-5	4'-2	4	9	9'-7	6	9	9'-7	4	6	32	4	6	34	4	12	33	4	17	30	4	12	39	4	17	30	6	12	38'-8	5	12	10'-11	4	12	8'-1	6	9	7'-7	4'-2	3'-5	4	9	38'-8	5	9	13'-7																														
3-6	12	8	10.5	10.5	9	9	9	2'-0	1'-4	5'-8	3'-0	4'-4	4'-0	5	12	9'-8	6	9	9'-8	4	6	32	4	6	34	4	12	33	4	17	30	4	12	39	4	17	30	7	18	38'-8	7	18	11'-5	5	18	8'-9	6	9	7'-2	3'-9	3'-5	5	12	38'-8	6	12	13'-9																														
7-8	12	8	10.5	11.5	9	9	9	4'-0	2'-10	4'-0	2'-11	4'-4	3'-11	4	9	9'-9	6	9	9'-9	4	6	32	4	6	34	4	12	33	4	17	30	4	12	39	4	17	30	5	9	38'-8	4	9	8'-7	4	9	4'-9	6	9	6'-8	3'-4	3'-4	5	9	38'-8	5	9	8'-6																														
9-10	12	8	11	13	9	9	9	4'-1	2'-9	4'-0	2'-8	4'-6	3'-10	4	12	9'-11	6	9	9'-11	4	6	32	4	6	34	4	12	33	4	17	30	4	12	39	4	17	30	6	12	38'-8	5	12	8'-9	4	12	4'-7	5	6	6'-2	3'-1	3'-1	5	12	38'-8	7	12	8'-5																														
11-12	12	8	12	14	9	9	9	4'-1	2'-8	3'-11	2'-6	4'-2	3'-9	4	12	10'-11	6	9	10'-1	4	6	32	4	6	34	4	12	33	4	17	30	4	12	39	4	17	30	6	12	38'-8	5	12	9'-3	4	12	4'-7	5	6	6'-4	3'-2	3'-2	5	12	38'-8	7	12	8'-4																														
13-15	12	8	14	16	9	9	9	4'-2	2'-2	3'-11	2'-2	4'-5	3'-10	4	12	10'-5	6	9	10'-5	4	6	32	4	6	34	4	12	33	4	17	30	4	12	39	4	17	30	6	12	38'-8	5	12	10'-2	4	12	4'-5	5	6	6'-4	3'-0	3'-4	5	12	38'-8	7	12	8'-4																														
16-17	12	8	15	17	9	9	9	3'-10	1'-7	3'-11	2'-0	4'-3	3'-11	4	12	10'-7	6	9	10'-7	4	6	32	4	6	34	4	12	33	4	17	30	4	12	39	4	17	30	7	18	38'-8	7	18	11'-4	4	18	5'-1	5	6	6'-5	3'-0	3'-5	5	12	38'-8	7	12	8'-5																														
18-19	12	8	16	18	9	9	9	3'-9	1'-6	3'-11	1'-7	4'-1	3'-11	4	12	10'-9	6	9	10'-9	4	6	32	4	6	34	4	12	33	4	17	30	4	12	39	4	17	30	7	18	38'-8	7	18	11'-5	4	18	5'-3	5	6	6'-6	3'-0	3'-6	5	12	38'-8	7	12	8'-6																														
20-21	12	8	17	19	9.5	9	6	3'-9	1'-5	4'-0	1'-7	4'-3	4'-0	4	12	10'-11	5	6	10'-11	4	6	32	4	6	34	4	12	33	4	17	30	4	12	39	4	17	30	5	9	38'-10	5	9	11'-7	4	9	5'-4	6	9	7'-0	3'-1	3'-11	5	9	38'-10	6	9	8'-8																														
22-23	12	8	18	20	10	6	9	3'-7	1'-0	4'-1	1'-2	4'-0	4'-1	4	6	11'-1	7	9	11'-1	4	6	32	4	6	34	4	12	33	4	17	30	4	12	39	4	17	30	5	9	39'-0	5	9	12'-1	4	9	5'-8	6	12	7'-2	3'-2	4'-0	5	9	39'-0	6	9	8'-10																														
24-25	12	8	19	21.5	10	6	9	3'-7	1'-0	4'-1	1'-0	4'-1	4'-3	4	6	11'-3	7	9	11'-3	4	6	32	4	6	34	4	12	33	4	17	30	5	12	39	4	17	30	6	12	39'-0	6	12	12'-1	4	12	5'-8	6	12	7'-4	3'-3	4'-1	5	9	39'-0	6	9	8'-11																														

BAR LIST																		QUANTITIES																													
																		CONCRETE (CY/FT)										STEEL																			
FILL	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SLAB	FLOOR	WALLS	TOTAL	(LB/FT)
0	7	4.5	38'-8	5	12	39'-2	5	12	8'-11	4	12	2'-1	6	9	14'-1	5'-8	8'-5	4	9	39'-2	5	9	8'-7	5	4.5	39'-2	1.827	1.483	0.840	4.150	565.00																
1	7	4.5	38'-8	5	12	39'-2	5	12	8'-11	4	12	2'-1	7	12	14'-1	5'-8	8'-5	4	12	39'-2	6	12	8'-8	6	4.5	39'-2	1.706	1.483	0.840	4.029	550.58																
2	5	4.5	38'-8	6	12	39'-2	5	12	7'-4	4	12	3'-11	6	9	12'-5	4'-2	8'-3	5	12	39'-2	7	12	8'-6	7	4.5	39'-2	1.345	1.301	0.840	3.486	594.92																
3-6	6	4.5	38'-8	5	9	39'-2	5	9	8'-1	4	9	4'-1	6	9	12'-0	3'-8	8'-4	5	9	39'-2	6	9	8'-2	6	4.5	39'-2	1.345	1.362	0.840	3.547	622.68																
7-8	5	4.5	38'-8	6	12	39'-2	5	12	8'-6	4	12	4'-1	6	9	11'-8	3'-3	8'-5	5	12	39'-2	7	12	8'-1	7	4.5	39'-2	1.345	1.483	0.840	3.668	580.34																
9-10	7	4.5	38'-8	6	12	39'-2	5	12	9'-2	4	12	3'-9	5	6	11'-7	3'-1	8'-6	5	12	39'-2	7	12	8'-1	7	4.5	39'-2	1.405	1.666	0.840	3.911	586.18																
11-12	7	4.5	38'-8	5	9	39'-2	5	9	9'-7	4	9	4'-5	5	6	11'-7	3'-0	8'-7	5	12	39'-2	7	12	8'-0	7	4.5	39'-2	1.526	1.788	0.840	4.154	590.11																
13-15	7	4.5	38'-8	5	9	39'-2	5	9	10'-8	4	9	3'-11	5	6	11'-10	3'-1	8'-9	5	12	39'-2	7	12	8'-3	7	4.5	39'-2	1.766	2.032	0.840	4.638	598.39																
16-17	7	4.5	38'-8	5	9	39'-2	5	9	11'-0	4	9	4'-3	5	6	11'-11	3'-1	8'-10	5	12	39'-2	7	12	8'-5	7	4.5	39'-2	1.887	2.154	0.840	4.881	607.95																
18-19	7	4.5	38'-8	5	9	39'-2	5	9	11'-5	4	9	4'-7	5	6	12'-0	3'-1	8'-11	5	12	39'-2	7	12	8'-5	7	4.5	39'-2	2.007	2.276	0.840	5.123	611.87																
20-21	6	4.5	38'-10	6	12	39'-4	6	12	11'-6	4	12	4'-4	6	9	12'-2	3'-2	9'-0	5	9	39'-4	6	9	8'-8	6	4.5	39'-4	2.139	2.410	0.887	5.436	645.89																
22-23	6	4.5	39'-0	6	12	39'-6	6	12	11'-11	4	12	4'-10	6	12	12'-4	3'-3	9'-1	5	9	39'-6	6	9	8'-10	6	4.5	39'-6	2.272	2.544	0.934	5.750	664.08																
24-25	6	4.5	39'-0	6	12	39'-6	6	12	12'-1	4	12	4'-8	6	12	12'-7	3'-4	9'-3	5	9	39'-6	6	9	9'-2	6	4.5	39'-6	2.393	2.729	0.934	6.056	691.03																

BENT BAR DETAIL



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

NOTES:

1. DIMENSIONS LISTED ON THIS SHEET TO BE USED IN CONJUNCTION WITH SHEET TRRCB G2-12.
2. DIMENSIONS "A", "B", "C", "D", "E", 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 TRIPLE REINFORCED CONCRETE BOX CULVERTS APRIL, 2012 CULVERT BARREL DETAILS 12 x 8 BARREL SECTIONS	TRRCB 12-8-12 SHEET 2 OF 2
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ENGLISH BEDSIGN(RED)TRIPLE CULVERTS.DGN - TRRCB 12-8&2-12 - THIS SHEET ISSUED 04-12.