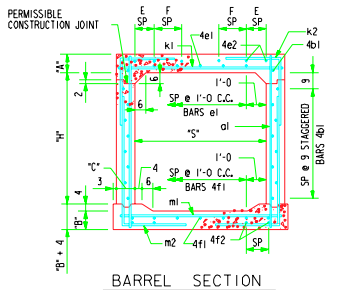
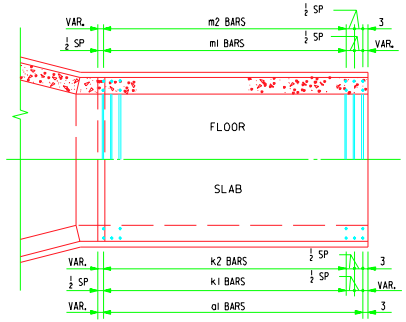
VARIABLE DIMENSIONS AND QUANTITIES FOR BARREL SECTIONS

DIMENSIONS							BAR LIST																														QUANTITIES				STEEL
							a1			b1			e1			e2			f1			f2			k1			m1			k2					m2					CONCRETE YD 3/FT				
FILL	S	H	A	B	C	D	SIZE	SP	L	SIZE	SP	NO.	SIZE	SP	NO.	SIZE	SPACING E	F	NO.	SIZE	SP	NO.	SIZE	SP	NO.	SIZE	SP	NO.	SIZE	SP	L	SIZE	SP	L	h	v	SIZE	SP	L	h	v	SLAB	FLOOR	WALLS	TOTAL	LBS/FT
0	4	4	9.5	10	9	6	4	6	5'-6	4	9	12	4	12	3	4	16	-	4	4	12	5	4	16	4	5	9	5'-2	4	9	5'-8	5	12	6'-4	3'-3	3'-1	5	12	6'-5	2'-2	4'-3	.194	.222	.201	.617	73.82
1	4	4	10	10	9	6	4	6	5'-7	4	9	12	4	12	3	4	12	-	4	4	12	5	4	16	4	5	9	5'-2	4	9	5'-8	5	12	4'-11	1'-10	3'-1	5	12	6'-5	2'-2	4'-3	.202	.222	.201	.625	71.82
2	4	4	8	10	9	9	4	12	5'-5	4	9	12	4	12	3	4	10	-	4	4	12	5	4	10	4	4	9	5'-2	4	9	5'-8	4	6	4'-7	1'-8	2'-11	4	6	5'-7	1'-8	3'-11	.168	.222	.201	.591	63.58
3	4	4	8	10	9	9	4	12	5'-5	4	9	12	4	12	3	4	9	-	4	4	12	5	4	10	4	4	12	5'-2	4	9	5'-8	4	6	4'-6	1'-7	2'-11	4	6	5'-7	1'-8	3'-11	.168	.222	.201	.591	62.29
4 - 8	4	4	8	10	9	9	4	12	5'-5	4	9	12	4	12	3	4	9	-	4	4	12	5	4	9	4	4	12	5'-2	4	12	5'-8	4	6	4'-6	1'-7	2'-11	4	6	5'-6	1'-7	3'-11	.168	.222	.201	.591	60.87
9 - 10	4	4	8	10	9	9	4	12	5'-5	4	9	12	4	12	3	4	9	-	4	4	12	5	4	9	4	4	12	5'-2	4	12	5'-8	4	6	4'-6	1'-7	2'-11	4	6	5'-6	1'-7	3'-11	.168	.222	.201	.591	60.87
11 - 15	4	4	8	10	9	9	4	12	5'-5	4	9	12	4	12	3	4	9	-	4	4	12	5	4	9	4	4	9	5'-2	4	9	5'-8	4	6	4'-6	1'-7	2'-11	4	6	5'-6	1'-7	3'-11	.168	.222	.201	.591	63.16
16 - 20	4	4	8	10	9	9	4	12	5'-5	4	9	12	4	12	3	4	9	-	4	4	12	5	4	9	4	4	9	5'-2	5	12	5'-8	4	6	4'-6	1'-7	2'-11	4	6	5'-6	1'-7	3'-11	.168	.222	.201	.591	64.24
21 - 25	4	4	8	10	9	9	4	12	5'-5	4	9	12	4	12	3	4	9	-	4	4	12	5	4	9	4	5	12	5'-2	5	9	5'-8	4	6	4'-6	1'-7	2'-11	4	6	5'-6	1'-7	3'-11	.168	.222	.201	.591	67.11

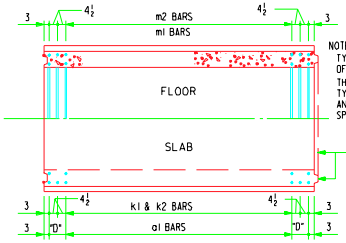


BARREL SECTION



PLAN - 0° SKEW

(KEYWAY NOT SHOWN)



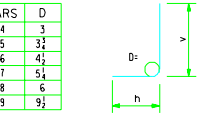
NOTE:
TYPICAL FOR LENGTHS OF 38', 35', 32', 29', AND 26'. THESE LENGTHS ARE SHOWN AS TYPICAL BECAUSE ALL TRANSVERSE AND VERTICAL REINFORCING STEEL SPACING REPEATS IN 3' INTERVALS.

STANDARD SECTION PLAN VIEW

(KEYWAY IS TO BE OMITTED WHEN BELL JOINTS ARE USED)

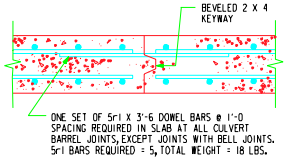
BENT BAR DETAIL

BARS	D
4	3
5	3¾
6	4½
7	5¼
8	6
9	9½



m2 & k2

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



TOP SLAB CONSTRUCTION JOINT DETAIL

NOTES:

1. SEE DRAWING RCB-G1-87 FOR GENERAL INFORMATION, SPECIFICATIONS, AND DESIGN STRESSES.

LATEST REVISION DATE : 8-1-89

APPROVED BY : William A. Haudquist

STANDARD DESIGN

CULVERT BARREL DETAILS

FOR

REINFORCED CONCRETE BOX CULVERTS

HIGHWAY DIVISION

IOWA DEPARTMENT OF TRANSPORTATION

AUGUST , 1989

RCB 4-1-89

REVISED: 8/89 THIS SHEET ADDED TO RCB CULVERT STANDARDS.
RCB41897.SOI

XXXXXXXXXSYSTEMTIME XXXXXXXUSERNAME XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXDGNSPEC