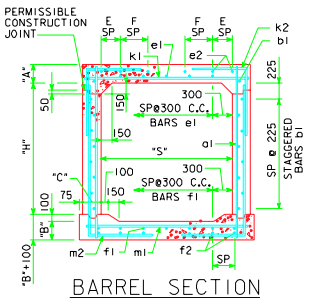
VARIABLE DIMENSIONS AND QUANTITIES FOR BARREL SECTIONS

DIMENSIONS							DIMENSIONS																														QUANTITIES				
							a1			b1			e1			e2				f1			f2			k1			m1			k2				m2				CONCRETE m³/m				STEEL
																SPACING																											
FILL	S	H	A	B	⌀	*D	SIZE	SP	L	SIZE	SP	NO.	SIZE	SP	NO.	SIZE	E	F	NO.	SIZE	SP	NO.	SIZE	SP	NO.	SIZE	SP	L	SIZE	SP	L	SIZE	SP	L	h	v	SIZE	SP	L	h	v	SLAB	FLOOR	WALLS	TOTAL	kg/m
0	900	900	220	255	230	140	15	140	1350	15	225	8	15	300	2	15	230	-	4	15	300	4	15	360	4	15	182	1260	15	210	1410	15	280	1640	950	590	15	280	1810	610	1200	0.379	0.471	0.367	1.217	128.3
300	900	900	230	255	230	140	15	140	1360	15	225	8	15	300	2	15	280	-	4	15	300	4	15	330	4	15	280	1260	15	210	1410	15	280	1230	540	690	15	280	1810	590	1220	0.393	0.471	0.367	1.230	120.0
600	900	900	205	255	230	210	15	280	1330	15	225	8	15	300	2	15	280	-	4	15	300	4	15	280	4	15	210	1260	15	210	1410	15	280	1230	540	690	15	280	1740	540	1200	0.359	0.471	0.367	1.196	106.1
900-2100	900	900	205	255	230	210	15	280	1330	15	225	8	15	300	2	15	280	-	4	15	300	4	15	280	4	15	280	1260	15	280	1410	15	280	1230	540	690	15	280	1740	540	1200	0.359	0.471	0.367	1.196	101.4
2400-3000	900	900	205	255	230	210	15	280	1330	15	225	8	15	300	2	15	280	-	4	15	300	4	15	280	4	15	280	1260	15	280	1410	15	280	1230	540	690	15	280	1740	540	1200	0.359	0.471	0.367	1.196	101.4
3300-3900	900	900	205	255	230	210	15	280	1330	15	225	8	15	300	2	15	280	-	4	15	300	4	15	280	4	15	280	1260	15	280	1410	15	280	1230	540	690	15	280	1740	540	1200	0.359	0.471	0.367	1.196	101.4
4200-4800	900	900	205	255	230	210	15	280	1330	15	225	8	15	300	2	15	280	-	4	15	300	4	15	280	4	15	280	1260	15	280	1410	15	280	1230	540	690	15	280	1740	540	1200	0.359	0.471	0.367	1.196	101.4
5100-6000	900	900	205	255	230	210	15	280	1330	15	225	8	15	300	2	15	280	-	4	15	300	4	15	280	4	15	280	1260	15	210	1410	15	280	1230	540	690	15	280	1740	540	1200	0.359	0.471	0.367	1.196	109.9
6300-7500	900	900	205	255	230	210	15	280	1330	15	225	8	15	300	2	15	280	-	4	15	300	4	15	280	4	15	210	1260	15	210	1410	15	280	1230	540	690	15	280	1740	540	1200	0.359	0.471	0.367	1.196	106.1

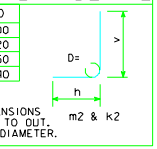
* THESE DIMENSIONS ARE CORRECT FOR 11 480 mm LONG STANDARD SECTIONS ONLY. DIMENSIONS MUST BE RECALCULATED FOR ALL OTHER SECTION LENGTHS.



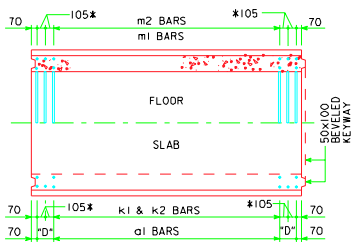
BARREL SECTION

BENT BAR DETAIL

BARS	D
15	100
20	120
25	150
30	240

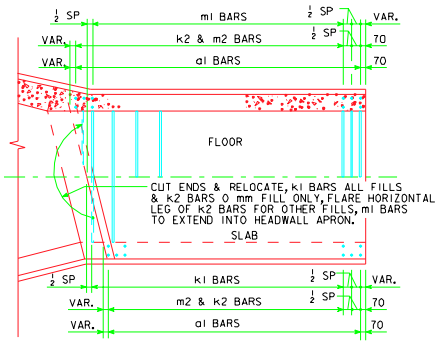


NOTE:
ALL DIMENSIONS ARE OUT TO OUT.
D = PIN DIAMETER.



STANDARD SECTION PLAN VIEW

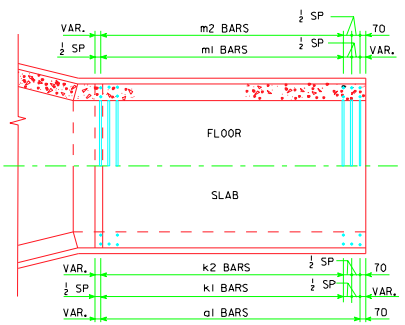
NOTE:
TYPICAL FOR LENGTHS OF 11 480 mm.
(KEYWAY IS TO BE OMITTED WHEN BELL JOINTS ARE USED)



PLAN - SKEW TYPICAL

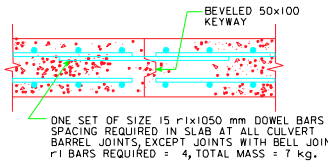
(KEYWAY NOT SHOWN)

NOTE:
ALL LONGITUDINAL BARREL STEEL SHALL EXTEND AT LEAST TO THE BACKFACE OF PARAPET.



PLAN - 0° SKEW

(KEYWAY NOT SHOWN)



TOP SLAB CONSTRUCTION JOINT DETAIL

NOTES:

1. SEE SHEET MRCB-G1-95 FOR GENERAL INFORMATION, SPECIFICATIONS, AND DESIGN STRESSES.

LATEST REVISION DATE :

APPROVED BY :

STANDARD DESIGN

CULVERT BARREL DETAILS

FOR

REINFORCED CONCRETE BOX CULVERTS

PROJECT DEVELOPMENT DIVISION
IOWA DEPARTMENT OF TRANSPORTATION

JULY, 1995

MRCB-900-1-95

RCB09M1.SDI

XXXXXXXXXXSYSTEMTIME XXXXXXXXUSERNAME XXXXXXXXXX