

END DETAILS

ESTIMATE OF QUANTITIES - FLUME BASIN

BILL OF REINFORCING STEEL			6' x 3'			6' x 4'			6' x 5'			6' x 6'			6' x 7'			6' x 8'								
BAR	LOCATION	SHAPE	SIZE	NO.	LENGTH	WEIGHT	SIZE	NO.	LENGTH	WEIGHT	SIZE	NO.	LENGTH	WEIGHT	SIZE	NO.	LENGTH	WEIGHT	SIZE	NO.	LENGTH	WEIGHT				
5a1	WALLS - VERT. - F.F.		5	28	1'-8 1/4'-10	95	5	30	2'-5 5/8'-11	130	5	32	3'-2 1/8'-11	168	5	34	4'-0 7/8'-11	211	5	36	4'-9 9/16'-0	258	5	38	5'-6 1/10'-0	307
5b1	WALLS - LONGIT. - F.F. & B.F.		5	8	15'-1	126	5	12	16'-2	202	5	16	17'-3	288	5	16	18'-4	306	5	20	19'-4	403	5	24	20'-5	511
5b2	WALLS - LONGIT. - F.F. & B.F.		5	4	13'-10	58	5	4	15'-1	63	5	4	16'-1	67	5	8	17'-5	145	5	8	18'-5	154	5	8	19'-5	162
c1	WALLS - VERT. - B.F.		5	27	16'-9 1/2'-0	475	5	29	18'-9 1/2'-0	571	5	23	20'-9 1/2'-1	502	5	17	22'-11 1/2'-2	409	5	11	24'-11 1/2'-2	287	5	5	27'-1 1/2'-4	142
c2	WALLS - VERT. - B.F.		--	--	--	--	--	--	--	--	5	8	13'-5 1/2'-2	119	5	16	13'-5 1/2'-2	255	5	24	13'-5 1/2'-2	408	5	32	13'-7 1/2'-4	583
c3	WALLS - VERT. - B.F.		--	--	--	--	--	--	--	--	5	16	5'-16'-0	92	5	32	5'-2 1/2'-0	203	5	48	5'-2 1/2'-1	332	5	64	5'-2 1/2'-1	476
6f1	FLOOR - LONGIT. - TOP		6	14	13'-5	282	6	14	14'-8	308	6	15	15'-8	353	6	15	16'-11	381	6	16	17'-11	431	6	16	18'-11	455
5f2	FLOOR - LONGIT. - BOT.		5	14	13'-5	196	5	14	14'-8	214	5	15	15'-8	245	5	15	16'-11	265	5	16	17'-11	299	5	16	18'-11	316
5g1	CURTAIN BRACKET - VERT.		5	4	5'-3	22	5	4	5'-6	23	5	4	5'-6	23	5	4	5'-9	24	5	4	6'-0	25	5	4	6'-3	26
5h1	BASIN BACKWALL - VERT.		5	8	7'-4	61	5	8	8'-1	67	5	8	8'-7	72	5	8	9'-4	78	5	8	9'-10	82	5	8	10'-4	86
6m1	FLOOR TRANS. - TOP		6	14	7'-8 1/2'-11	227	6	15	7'-8 1/4'-5	249	6	16	7'-8 1/4'-11	271	6	17	7'-8 1/2'-5	295	6	18	7'-8 1/2'-11	319	6	19	7'-10 1/2'-7	348
6p1	CURTAIN - TRANS.		6	2	14'-0	42	6	2	14'-4 1/4'-6	43	6	2	14'-10 1/2'-0	45	6	2	15'-3 1/2'-6	46	6	2	15'-9 1/2'-0	48	6	2	16'-5 1/2'-8	50
6s1	WALL - TOP SLOPE		6	4	15'-4	92	6	4	16'-5	99	6	4	17'-6	105	6	4	18'-7	112	6	4	19'-7	118	6	4	20'-8	124
5t1	CURTAIN - VERT.		5	11	6'-1	70	5	11	6'-4	73	5	12	6'-4	79	5	12	6'-7	82	5	13	6'-10	93	5	13	7'-1	96
TOTAL WEIGHT (LB)						1746				2042				2429				2812				3257				3682
CONCRETE (CY)			FOOTING			7.0	WALLS			8.1	FLOOR			8.7	CURTAIN			9.8	TOTAL			10.7	TOTAL			12.4
			WALLS			1.8	FLOOR			2.6	CURTAIN			3.6	TOTAL			4.7	TOTAL			5.8	TOTAL			7.9
			TOTAL			8.8	TOTAL			10.7	TOTAL			12.3	TOTAL			14.5	TOTAL			16.5	TOTAL			20.3

VARIABLE DIMENSIONS

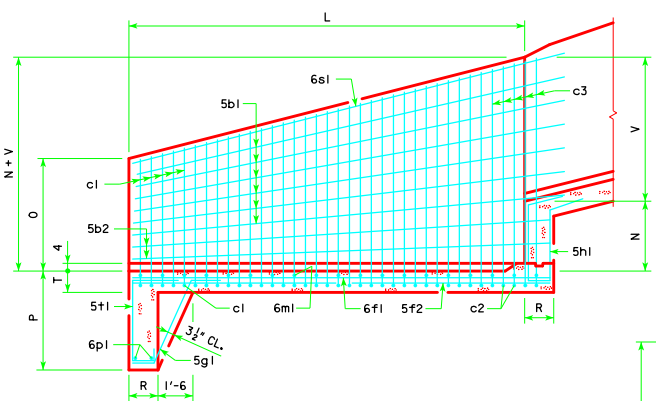
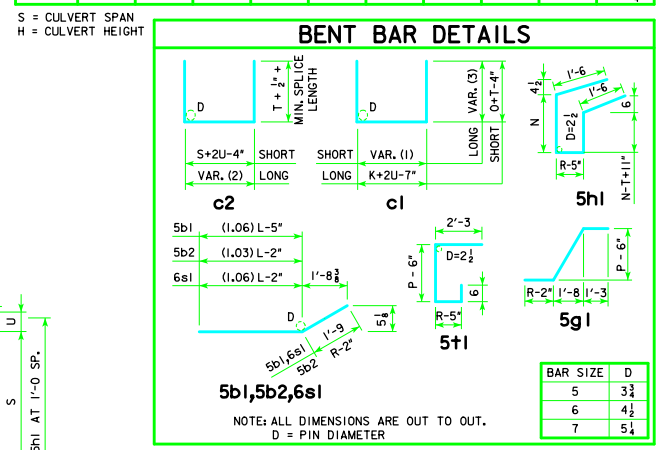
VARIABLE (1)	$K+2U-4''$ (K-S) (No. of c1 - 1) No. of c1 + c2 - 1
VARIABLE (2)	$S+2U-4''$ (K-S) (No. of c2 - 1) No. of c1 + c2 - 1
VARIABLE (3)	$O+T-4''$ (N+V-0) (No. of cl - 1) No. of c1 + c2 - 1

TABLE OF FLUME BASIN DIMENSIONS

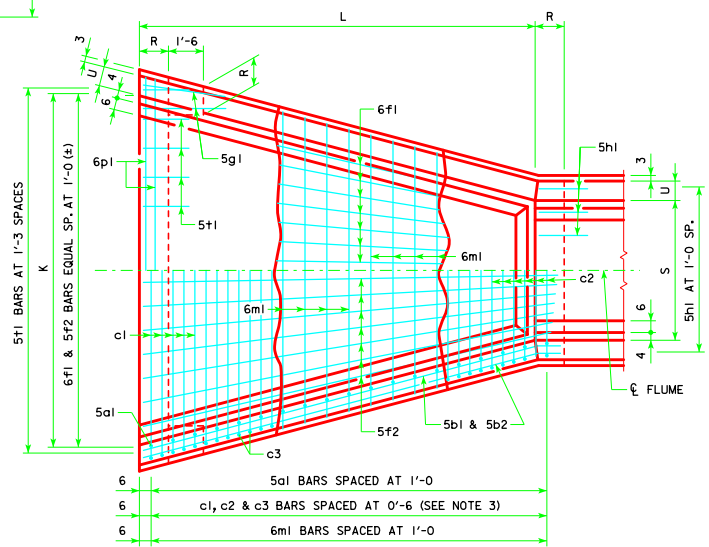
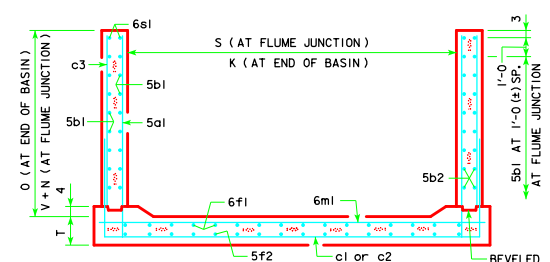
S x H	K	L	M	N	O	P	R	T	U	V
6' x 3'	12'-6	13'-0	2'-3	2'-0	1'-1	3'-6	0'-9	0'-11	0'-9	2'-3 1/2
6' x 4'	13'-0	14'-0	3'-0	2'-3	1'-10	3'-6	1'-0	0'-11	0'-9	3'-1 1/2
6' x 5'	13'-6	15'-0	3'-9	2'-6	2'-7	3'-6	1'-0	0'-11	0'-9	3'-10 1/2
6' x 6'	14'-0	16'-0	4'-6	2'-9	3'-5	3'-6	1'-3	0'-11	0'-9	4'-7 1/2
6' x 7'	14'-6	17'-0	5'-3	3'-0	4'-2	3'-9	1'-3	0'-11	0'-9	5'-5
6' x 8'	15'-0	18'-0	6'-0	3'-3	4'-11	4'-0	1'-3	0'-11	0'-10	6'-2 1/2

FLUME BASIN NOTES:

- SEE STANDARD SHEET RCFB-01-12 FOR GENERAL INFORMATION.
- c2 & c3 BARS ARE LAPPED.
- c1 BARS ARE OMITTED IF BOTH S AND H ARE EQUAL TO OR LARGER THAN 8' AND 9' RESPECTIVELY.



LONGITUDINAL SECTION



PLAN VIEW

Iowa Department of Transportation
Highway Division

STANDARD DESIGN
**REINFORCED CONCRETE
BOX CULVERTS**
APRIL, 2012

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

**FLUME BASIN
DETAILS**
6' SPAN

RCFB-02-12

ENGLISH: IOWA DEPT. OF TRANSPORTATION - RCFB-02-12 - THIS SHEET ISSUED 04-12