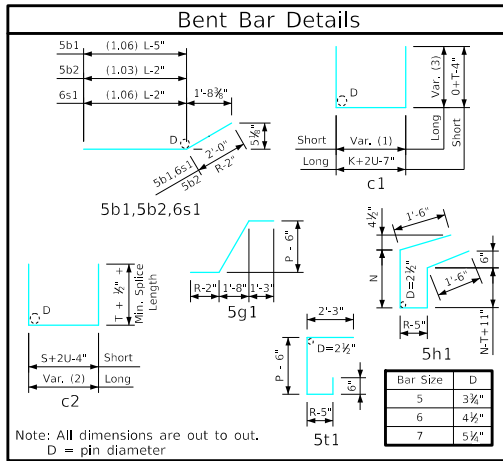


Estimate of Quantities - Flume Basin

Bill of Reinforcing Steel		12' x 4'				12' x 5'				12' x 6'				12' x 7'				12' x 8'				12' x 9'				12' x 10'				12' x 11'				12' x 12'				
Bar	Location	Shape	Size	No.	Length	Weight	Size	No.	Length	Weight	Size	No.	Length	Weight	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.	U	5	30	2'-8" x 6'-2"	138	5	32	3'-5" x 7'-2"	177	5	34	4'-3" x 8'-2"	220	5	36	5'-0" x 9'-3"	268	5	38	5'-9" x 10'-3"	317	5	40	6'-6" x 11'-3"	370	5	42	7'-4" x 12'-3"	429	5	44	8'-1" x 13'-4"	491	5	46	8'-10" x 14'-4"	556
5b1	Walls - Longit. - F.F. & B.F.	U	5	12	16'-5"	205	5	16	17'-6"	292	5	20	18'-7"	388	5	20	19'-7"	409	5	24	20'-8"	517	5	28	21'-9"	635	5	32	22'-9"	759	5	32	23'-10"	795	5	36	24'-11"	936
5b2	Walls - Longit. - F.F. & B.F.	U	5	4	15'-1"	63	5	4	16'-1"	67	5	4	17'-5"	73	5	8	19'-5"	154	5	8	20'-6"	162	5	8	20'-6"	171	5	8	21'-6"	179	5	12	22'-7"	283	5	12	23'-7"	295
c1	Walls - Vert. - B.F.	U	5	27	25'-3" x 25'-6"	715	5	21	27'-3" x 27'-7"	601	5	15	29'-5" x 29'-8"	462	5	9	31'-5" x 31'-8"	296	5	3	33'-7" x 33'-10"	105	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
c2	Walls - Vert. - B.F.	U	5	2	19'-7" x 19'-10"	41	5	10	19'-7" x 21'-10"	216	5	18	19'-7" x 23'-10"	408	5	26	19'-7" x 25'-10"	616	5	34	19'-9" x 28'-0"	847	5	39	19'-9" x 29'-3"	997	6	41	20'-7" x 30'-7"	1575	7	43	21'-7" x 32'-1"	2358	7	45	21'-9" x 32'-9"	2506
c3	Walls - Vert. - B.F.	U	5	4	4'-10" x 5'-0"	21	5	20	4'-10" x 6'-0"	113	5	36	4'-11" x 7'-0"	224	5	52	4'-11" x 8'-1"	353	5	68	4'-11" x 9'-1"	496	5	78	5'-4" x 10'-1"	627	6	82	6'-2" x 11'-1"	1062	7	86	6'-11" x 12'-2"	1677	7	90	7'-8" x 13'-2"	1916
6f1	Floor - Longit. - Top	U	6	20	14'-8"	441	6	21	15'-8"	494	6	21	16'-11"	534	6	22	17'-11"	592	6	22	18'-11"	625	6	23	19'-11"	686	6	23	20'-11"	723	6	24	21'-11"	790	6	24	22'-11"	826
5f2	Floor - Longit. - Bott.	U	5	20	14'-8"	306	5	21	15'-8"	343	5	21	16'-11"	371	5	22	17'-11"	411	5	22	18'-11"	434	5	23	19'-11"	478	5	23	20'-11"	502	5	24	21'-11"	549	5	24	22'-11"	574
5g1	Curtain Bracket - Vert.	U	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	5	4	6'-5"	27	5	4	6'-8"	28	5	4	6'-11"	29	5	4	7'-2"	30
5h1	Basin Backwall - Vert.	U	5	14	7'-10"	114	5	14	8'-4"	122	5	14	9'-1"	133	5	14	9'-7"	140	5	14	10'-1"	147	5	14	10'-7"	155	5	14	11'-1"	162	5	14	11'-7"	169	5	15	12'-1"	189
6m1	Floor Trans. - Top	U	6	15	13'-8" x 20'-5"	384	6	16	13'-8" x 20'-11"	416	6	17	13'-8" x 21'-5"	448	6	18	13'-8" x 21'-11"	481	6	19	13'-10" x 22'-7"	520	6	20	13'-10" x 23'-1"	554	6	21	13'-10" x 23'-7"	590	6	22	14'-0" x 24'-3"	632	6	23	14'-2" x 24'-11"	675
6p1	Curtain - Trans.	U	6	2	20'-4" x 20'-6"	61	6	2	20'-10" x 21'-0"	63	6	2	21'-3" x 21'-6"	64	6	2	21'-9" x 22'-0"	66	6	2	22'-5" x 22'-8"	68	6	2	22'-11" x 23'-2"	69	6	2	23'-5" x 23'-8"	71	6	2	24'-1" x 24'-4"	73	6	2	24'-9" x 25'-0"	75
6s1	Wall - Top Slope	U	6	4	16'-8"	100	6	4	17'-9"	107	6	4	18'-10"	113	6	4	19'-10"	119	6	4	20'-11"	126	6	4	22'-0"	132	6	4	23'-0"	138	6	4	24'-1"	145	6	4	25'-2"	151
5t1	Curtain - Vert.	U	5	16	6'-4"	106	5	17	6'-4"	112	5	17	6'-7"	117	5	17	6'-10"	121	5	18	7'-1"	133	5	18	7'-4"	138	5	19	7'-7"	150	5	19	7'-10"	155	5	20	8'-1"	169
Total Weight (LB)						2718				3146				3579				4051				4523				5041				6368				8146			8898	
Concrete (CY)																																						
Footings						14.0				15.0				16.7				18.1				19.6				21.1				22.3				24.2			26.0	
Walls						2.6				3.6				4.7				5.7				7.9				9.4				11.0				14.1			17.6	
Total						16.6				18.6				21.4				23.8				27.5				30.5				33.3				38.3			43.6	



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-O) (No. of c1 - 1) No. of c1 + c2 - 1

Table of Flume Basin Dimensions

S x H	K	L	M	N	O	P	R	T	U	V
12' x 4'	19'-0"	14'-0"	3'-0"	2'-3"	1'-10"	3'-6"	1'-0"	1'-2"	9"	3'-1 1/2"
12' x 5'	19'-6"	15'-0"	3'-9"	2'-6"	2'-7"	3'-6"	1'-0"	1'-2"	9"	3'-10 3/4"
12' x 6'	20'-0"	16'-0"	4'-6"	2'-9"	3'-5"	3'-6"	1'-3"	1'-2"	9"	4'-7 3/8"
12' x 7'	20'-6"	17'-0"	5'-3"	3'-0"	4'-2"	3'-9"	1'-3"	1'-2"	9"	5'-5"
12' x 8'	21'-0"	18'-0"	6'-0"	3'-3"	4'-11"	4'-0"	1'-3"	1'-2"	10"	6'-2 1/2"
12' x 9'	21'-6"	19'-0"	6'-9"	3'-6"	5'-8"	4'-3"	1'-3"	1'-2"	10"	6'-11 1/2"
12' x 10'	22'-0"	20'-0"	7'-6"	3'-9"	6'-6"	4'-6"	1'-3"	1'-2"	10"	7'-8 1/2"
12' x 11'	22'-6"	21'-0"	8'-3"	4'-0"	7'-3"	4'-9"	1'-3"	1'-2"	11"	8'-6"
12' x 12'	23'-0"	22'-0"	9'-0"	4'-3"	8'-0"	5'-0"	1'-3"	1'-2"	11'-0"	9'-3 3/8"

S = Culvert Span
H = Culvert Height

Note:
See Sheet RCFB 07-20 for flume basin details and notes.

LATEST REVISION DATE	 Standard Design Single Reinforced Concrete Box Culverts December, 2020	Flume Basin Details 12'-0" Span	RCFB 06-20
		APPROVED BY BRIDGE ENGINEER 	

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