

DIMENSIONS AND ESTIMATE OF QUANTITIES
(PIPE CHAMBER-GRADE CONDITION)

REFERENCE CHART

INLET SIZE ④			MAX. PIPE DIA.	PIPE LOCATION	Z ①	CONCRETE	
NO. ⑥	X	Y				CU. YD. ①②	Q ③
1	2'-3"	1'-3"	12"	X OR Y	2'-2"	0.8	0.2
2		2'-0"	15"	X	2'-5"	1.0	0.3
3			X OR Y	0.9		0.2	
4		1'-3"	18"	X	2'-9"	1.1	0.3
5		2'-0"		X OR Y		1.0	0.2
6		1'-3"	21"	X	3'-0"	1.2	0.3
7		2'-0"		X OR Y		1.3	
8		2'-6"		Y		1.4	
9		1'-3"	24"	X	3'-3"	1.1	0.3
10		2'-0"		X OR Y		1.3	
11	2'-6"	2'-6"	X	1.5	1.6	0.4	
12	2'-3"	3'-0"	Y	1.7	1.3		0.3
13	2'-6"	1'-3"	27"	X	3'-6"	1.6	
14	3'-0"	2'-0"				1.7	1.9
15	1'-3"	3'-0"	X OR Y	1.9	2.0	0.3	
16	2'-3"	3'-6"	Y	2.1	2.3		0.4
17	2'-6"	1'-3"	30"	X	3'-10"	1.5	
18	3'-0"	2'-0"				1.8	2.0
19	3'-6"	2'-6"	X	2.2	2.5	0.4	
20	3'-0"	3'-0"	X OR Y	2.5	2.1		0.3
21	2'-3"	3'-6"	33"	X	4'-1"	1.6	
22	2'-6"	2'-0"				1.9	2.1
23	3'-0"	3'-0"	X OR Y	2.3	2.6	0.4	
24	2'-3"	1'-3"	36"	X	4'-4"		1.8
25	2'-6"	2'-0"				2.2	2.4
26	3'-0"	3'-6"	X OR Y	2.6	2.7	0.4	
27	2'-3"	4'-0"	Y	2.7	3.0		0.5
28	2'-6"	1'-3"	42"	Y	5'-2"	2.8	
29	3'-0"	2'-0"				2.2	2.4
30	3'-6"	2'-6"	48"	X	5'-5"	3.2	0.5
31	3'-0"	3'-0"				3.9	
32	2'-3"	1'-3"	54"	X	5'-8"	2.5	0.4
33	2'-6"	2'-0"				3.0	
34	3'-0"	3'-6"	X OR Y	3.5	3.9	0.5	
35	3'-6"	2'-6"	4.2	4.5			
36	2'-3"	1'-3"	60"	X	5'-0"	2.5	0.4
37	2'-6"	2'-0"				3.0	
38	3'-0"	3'-0"	X OR Y	3.5	3.9	0.5	
39	3'-6"	4'-0"	4.2	4.5			
40	2'-3"	1'-3"	66"	X	5'-5"	2.5	0.4
41	2'-6"	2'-0"				3.0	
42	3'-0"	3'-6"	X OR Y	3.5	3.9	0.5	
43	3'-6"	4'-0"	4.2	4.5			
44	2'-3"	1'-3"	72"	Y	5'-8"	2.5	0.4
45	2'-6"	2'-0"				3.0	
46	3'-0"	3'-6"	X OR Y	3.5	3.9	0.5	
47	3'-6"	4'-0"	4.2	4.5			

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NO. ⑥	X	Y				CU. YD. ①②	Q ③
47	3'-0"	4'-6"	42"	Y	5'-2"	3.2	0.4
48	3'-6"					3.4	0.5
49	4'-0"					3.7	0.3
50	2'-3"	1'-3"	48"	X	4'-11"	2.2	0.3
51		2'-0"				2.6	0.4
52	2'-6"	3'-0"	54"	X	5'-2"	2.8	0.5
53	3'-0"	3.1				3.4	
54	3'-6"	4'-0"	60"	X	5'-8"	3.7	0.5
55	4'-0"	4.0				3.2	
56	4'-6"	1'-3"	66"	X	5'-5"	2.5	0.4
57	2'-3"	2'-0"				3.0	
58	2'-6"	3'-0"	72"	Y	5'-8"	3.6	0.5
59	3'-0"	3.9				4.2	
60	3'-6"	4'-0"	78"	X	5'-8"	4.2	0.6
61	4'-0"	4.5				2.5	
62	4'-6"	1'-3"	84"	X	5'-5"	3.2	0.5
63	2'-3"	2'-0"				3.5	
64	2'-6"	3'-0"	90"	X	5'-8"	3.9	0.6
65	3'-0"	3'-6"				4.2	
66	3'-6"	4'-0"	96"	X	5'-8"	4.2	0.6
67	4'-0"	4'-6"				4.5	
68	4'-6"	1'-3"	102"	X	5'-8"	2.5	0.4
69	2'-0"	2'-0"				3.0	
70	5'-0"	3'-0"	108"	X	5'-8"	3.5	0.5
		3'-6"				3.9	

DIA. OF PIPE	D.B.I. TYPE 13		CONCRETE TO DEDUCT FOR EACH PIPE CUBIC YARDS
	PIPE ON "X" SIDE OF INLET	PIPE ON "Y" SIDE OF INLET	
0		1'-3"	----
12"	2'-3"	2'-0"	0.1
15"-18"		2'-6"	
21"		3'-0"	
24"	3'-6"	3'-0"	0.2
27"	4'-0"	4'-0"	
30"-33"	4'-6"	4'-6"	0.3
36"	5'-0"	5'-0"	0.4
42"			0.5
48"			0.6

~ NOTES ~

- ① BASED ON "Z" AS EQUAL TO D++1'-0" WHEN "Y" DIMENSION IS LESS THAN 3'-6". BASED ON "Z" AS EQUAL TO D++1'-3" WHEN "Y" DIMENSION IS 3'-6" OR GREATER.
- ② SEE REFERENCE CHART FOR QUANTITIES TO DEDUCT FOR PIPE.
- ③ Q = CU. YD. PER FT. INCREASE OR DECREASE WHEN Z VARIES.
- ④ SEE CUR. STD. DWGS. **RDB-013** AND **RDB-014** FOR DIMENSIONS.
5. SEE CUR. STD. DWGS. **RDB-018** AND **RDB-019** FOR STEEL REINFORCEMENT IN PIPE CHAMBER AND RISER WHEN H = 8'-0" OR GREATER.
- ⑥ INLET IS SHOWN ON PLANS AS "DROP BOX INLET TYPE 13". FOLLOWING THIS IS A NUMBER AND A BOX HEIGHT. USE THIS NUMBER WITH THIS CHART.
7. SEE CUR. STD. DWG. **RDB-017** FOR DIMENSIONS AND ESTIMATE OF QUANTITIES WHEN BOXES ARE LOCATED IN A SAG CONDITION.

USE WITH CUR. STD. DWGS.
RDB-013, RDB-014, RDB-015,
RDB-017, RDB-018, RDB-019,

KENTUCKY	
DEPARTMENT OF HIGHWAYS	
DROP BOX INLET	
TYPE 13	
(PIPE CHAMBER-GRADE COND'TN.)	
STANDARD DRAWING NO. RDB-016-03	
SUBMITTED <i>William P. Gullett</i>	DATE 12-01-15
DIRECTOR, DIVISION OF DESIGN	DATE
APPROVED <i>[Signature]</i>	DATE 12-01-15
STATE HIGHWAY ENGINEER	DATE