

DIMENSIONS AND ESTIMATE OF QUANTITIES

INLET SIZE			PIPE	①	CONCRETE		REINF. STEEL
NO.	X	Y	MAX. DIA.	H	CU. YDS.	② Q	LBS.
1	2'-0"	2'-0"	12"	2'-2"	0.99	0.3	28
2			15"	2'-5"	1.06		
3			18"	2'-9"	1.13		
4	2'-6"	2'-0"	21"	3'-0"	1.35		32
5					1.51		37
6					1.44		32
7		2'-6"	24"	3'-3"	1.60		37
8	3'-0"	2'-0"	27"	3'-6"	1.68	0.4	42
9		2'-6"			1.86		48
10		3'-0"			2.04		41
11	3'-6"	2'-0"	30"	3'-10"	1.93		47
12		2'-6"			2.13		54
13		3'-0"			2.34		60
14		3'-6"			2.54		41
15		2'-0"	33"	4'-1"	2.02	0.4	47
16		2'-6"			2.24		54
17		3'-0"			2.45		60
18	4'-0"	3'-6"	36"	4'-4"	2.66		45
19		2'-0"			2.30		52
20		2'-6"			2.53		59
21		3'-0"			2.76		66
22		3'-6"			2.99		73
23	4'-6"	4'-0"	42"	4'-11"	3.22	0.5	50
24		2'-0"			2.70		57
25		2'-6"			2.95		65
26		3'-0"			3.21		73
27		3'-6"			3.47		80
28	5'-0"	4'-0"	48"	5'-5"	3.73	0.6	88
29		4'-6"			3.98		54
30		2'-0"			3.12		62
31		2'-6"			3.41		71
32		3'-0"			3.69		79
33	5'-6"	3'-6"	54"	6'-0"	3.97	0.5	88
34		4'-0"			4.26		96
35		4'-6"			4.54		104
36		5'-0"			4.83		58
37		2'-0"	54"	6'-0"	3.58	0.4	67
38		2'-6"			3.89		76
39		3'-0"			4.20		86
40		3'-6"			4.51		95
41		4'-0"			4.82	0.6	104
42		4'-6"			5.13		113
43		5'-0"			5.44		122
44		5'-6"			5.75		

INLET SIZE			PIPE	①	CONCRETE		REINF. STEEL
NO.	X	Y	MAX. DIA.	H	CU. YDS.	② Q	LBS.
45	6'-0"	2'-0"	60"	6'-6"	4.06	0.5	63
46		2'-6"			4.39		72
47		3'-0"			4.73		82
48		3'-6"			5.07		92
49	6'-0"	4'-0"	60"	6'-6"	5.40	0.6	102
50		4'-6"			5.74		111
51		5'-0"			6.08		121
52		5'-6"			6.42		131
53	7'-0"	6'-0"	66"	7'-1"	6.75	0.7	140
54		2'-0"			4.81		71
55		2'-6"			5.19		83
56		3'-0"			5.57	0.6	94
57		3'-6"			5.94		105
58		4'-0"			6.32		116
59		4'-6"			6.70		127
60		5'-0"			7.07	0.7	138
61	7'-6"	5'-6"	72"	7'-7"	7.45		149
62		6'-0"			7.83	0.8	160
63		7'-0"			8.58		182
64		2'-0"			5.37	0.5	76
65		2'-6"			5.77		88
66		3'-0"			6.17	0.6	99
67		3'-6"			6.57		111
68		4'-0"			6.98		123
69	7'-6"	4'-6"	72"	7'-7"	7.38	0.7	134
70		5'-0"			7.78		146
71		5'-6"			8.19	0.8	158
72		6'-0"			8.59		169
73		7'-0"			9.39	0.8	193
74		7'-6"			9.80		204

~ NOTES ~

- ① BASED ON "H" AS EQUAL TO D+t+1'-0".
- ② "Q" = CU. YDS. OF CONCRETE PER FOOT INCREASE OR DECREASE WHEN "H" VARIES FROM D+t+1'-0".
3. NO DEDUCTIONS HAVE BEEN MADE FOR PIPE, SEE REFERENCE CHART FOR QUANTITIES TO DEDUCT.
4. THE DIMENSIONS AND QUANTITIES HAVE BEEN CALCULATED FOR ROUND CONCRETE PIPE. WHEN NON-CIRCULAR PIPE IS USED THE BOX SIZE SHALL BE DETERMINED BY THE CONTROLLING DIMENSIONS OF THE PIPE.
- USE WITH CUR. STD. DWG.
RDX-001

REFERENCE CHART

DIA. OF PIPE	JUNCTION BOX		CONCRETE TO DEDUCT FOR EACH PIPE
	PIPE ON "X" SIDE OF BOX	PIPE ON "Y" SIDE OF BOX	CU. YDS.
0	2'-0"	2'-0"	---
12"			0.1
15"-18"			
21"-24"	2'-6"	2'-6"	0.2
27"	3'-0"	3'-0"	
30"-33"	3'-6"	3'-6"	
36"	4'-0"	4'-0"	0.3
42"	4'-6"	4'-6"	0.4
48"	5'-0"	5'-0"	0.5
54"	5'-6"	5'-6"	0.6
60"	6'-0"	6'-0"	0.7
66"	7'-0"	7'-0"	0.8
72"	7'-6"	7'-6"	1.0

REVISION DATE: 12/01/2015
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SUBMITTED 12-01-2015
DATE

WILLIAM S. LALOR
DIVISION DIRECTOR

12-01-2015
DATE

STATE HIGHWAY ENGINEER

DRAINAGE



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



MISCELLANEOUS

JUNCTION BOX (DIMENSIONS & QUANTITIES)

STANDARD DRAWING NUMBER

RDX-002-04