

DIMENSIONS AND ESTIMATE OF QUANTITIES

~ NOTES ~

INLET SIZE NO.	X	Y	PIPE		CONCRETE		REINF.	
			MAX. DIA.	① H	CU. YDS.	② Q	STEEL LBS.	
1			12"	2'-2"	0.99			
2	2'-0"	2'-0"	15"	2'-5"	1.06		28	
3			18"	2'-9"	1.13			
4			21"	3'-0"	1.35		32	
5	2'-6"	2'-6"	24"	3'-3"	1.44	0.3	37	
6			2'-0"	1.60	37			
7			2'-6"	1.68				
8	3'-0"	2'-0"	27"	3'-6"	1.86	0.4	42	
9					2'-6"		2.04	48
10	3'-6"	2'-0"	30"	3'-10"	1.93	0.3	41	
11					2'-6"		2.13	47
12					3'-0"		2.34	0.4
13	3'-6"	3'-6"	33"	4'-1"	2.54	0.3	60	
14					2'-0"		2.02	41
15					2'-6"		2.24	47
16	4'-0"	3'-0"	36"	4'-4"	2.45	0.4	54	
17					3'-0"		2.66	60
18					3'-6"		2.30	45
19	4'-6"	3'-0"	42"	4'-11"	2.53	0.4	52	
20					3'-0"		2.76	59
21					3'-6"		2.99	66
22	5'-0"	4'-0"	48"	5'-5"	3.22	0.5	73	
23					2'-0"		2.70	50
24					2'-6"		2.95	57
25	5'-6"	3'-0"	54"	6'-0"	3.21	0.4	65	
26					3'-0"		3.47	73
27					3'-6"		3.73	80
28	6'-0"	4'-0"	60"	6'-6"	3.98	0.5	88	
29					2'-0"		3.12	54
30					2'-6"		3.41	62
31	5'-0"	3'-0"	48"	5'-5"	3.69	0.4	71	
32					3'-0"		3.97	79
33					3'-6"		4.26	88
34	5'-6"	4'-0"	54"	6'-0"	4.54	0.5	96	
35					4'-0"		4.83	104
36					4'-6"		3.58	58
37	6'-0"	2'-0"	60"	6'-6"	3.89	0.4	67	
38					2'-6"		4.20	76
39					3'-0"		4.51	86
40	6'-6"	3'-6"	66"	7'-1"	4.82	0.5	95	
41					4'-0"		5.13	104
42					4'-6"		5.44	113
43	7'-0"	5'-0"	72"	7'-7"	5.75	0.6	122	
44					5'-6"		4.06	63
45					2'-0"		4.39	72
46	7'-6"	2'-6"	84"	8'-6"	4.73	0.5	82	
47					3'-0"		5.07	92
48					3'-6"			

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

- 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.

REFERENCE CHART

DIA. OF PIPE	JUNCTION BOX		CONCRETE TO DEDUCT FOR EACH PIPE CU. YDS.
	PIPE ON "X" SIDE OF BOX	PIPE ON "Y" SIDE OF BOX	
0			---
12"	2'-0"	2'-0"	
15"-18"			0.1
21"-24"	2'-6"	2'-6"	
27"	3'-0"	3'-0"	0.2
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

USE WITH CUR. STD. DWG. RDX-001

KENTUCKY DEPARTMENT OF HIGHWAYS	
JUNCTION BOX (DIMENSIONS & QUANTITIES)	
STANDARD DRAWING NO. RDX-002-04	
SUBMITTED <i>William P. Gabel</i>	12-01-15
DIRECTOR OF DESIGN	DATE
APPROVED <i>[Signature]</i>	12-01-15
STATE HIGHWAY ENGINEER	DATE