Pipe Size (sft)	Span (ft.)	Rise (ft.)	Flowable Backfill to Vc (cys/ft. of pipe)	*K Factor for Structure Backfill Determination
29.6	6.58	5.67	1.45	10.26
31.9	6.92	5.75	1.49	10.61
34.3	7.25	5.92	1.56	10.97
36.8	7.75	6.00	1.64	11.49
39.3	8.08	6.08	1.67	11.83
41.9	8.42	6.25	1.75	12.19
44.5	8.83	6.33	1.81	12.62
47.1	9.25	6.42	1.87	13.06
49.9	9.58	6.50	1.91	13.40
52.7	9.92	6.67	1.99	13.76
55.5	10.25	6.75	2.03	14.11
58.4	10.75	6.83	2.12	14.62
61.4	11.08	7.00	2.20	14.99
64.4	11.42	7.08	2.24	15.33
67.5	11.75	7.17	2.28	15.68
70.5	12.25	7.25	2.38	16.19
73.7	12.58	7.42	2.47	16.56
77.0	12.92	7.50	2.51	16.90
83.0	13.08	8.17	2.76	17.18
86.8	13.08	8.33	2.72	17.21
90.3	13.92	8.42	2.96	18.06
94.2	14.00	8.58	2.95	18.17
101.5	13.92	9.42	3.20	18.22
105.7	14.25	9.58	3.30	18.58
109.9	14.67	9.67	3.37	19.01
114.2	14.92	9.83	3.43	19.29
118.6	15.33	10.00	3.56	19.74
123.1	15.58	10.17	3.63	20.01
127.6	16.08	10.33	3.80	20.54
132.3	16.33	10.50	3.87	20.82
136.9	16.75	10.67	4.01	21.26
141.8	17.00	10.83	4.07	21.54
146.7	17.25	11.00	4.14	21.82
151.6	17.75	11.17	4.33	22.35
156.7	18.00	11.33	4.39	22.62
161.7	18.42	11.50	4.55	23.07
167.0	18.67	11.67	4.61	23.35
172.2	19.17	11.75	4.74	23.86
177.6	19.42	11.92	4.81	24.14
182.9	19.83	12.08	4.97	24.58
188.5	20.08	12.25	5.04	24.86
194.4	20.08	12.50	5.05	24.90
199.7	20.83	12.58	5.33	25.67
205.5	21.08	12.75	5.40	25.94
211.2	21.50	12.92	5.57	26.39

Structure Backfill Quantity (cys/ft. of pipe) = [(Tc-Vc)/27][K+(Tc-Vc)/12], Where K=Bc+2W+(Hc+Vc)/6.
Refer to E 715-BKFL Series of Recurring Plan Details for Tc, Vc, Bc, W, and Hc.

METHOD 1 – FLOWABLE BACKFILL QUANTITIES
(Deformed Corrugated (Structural Plate Aluminum Alloy) Pipe)

Figure 17-2Q