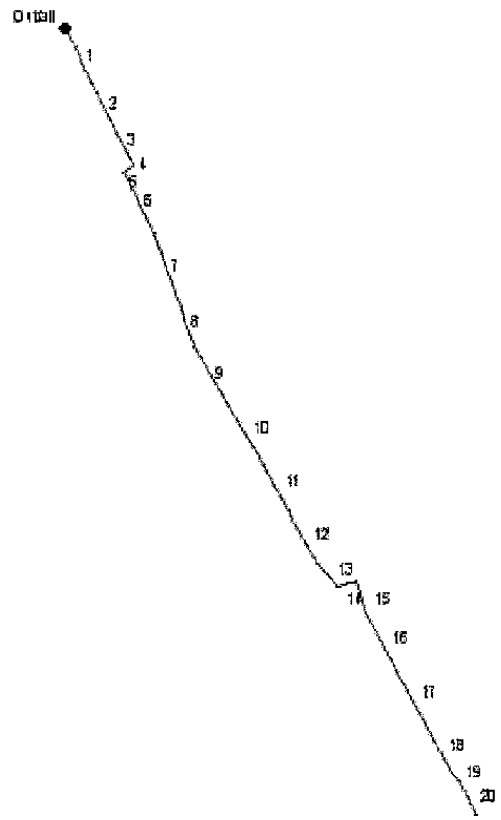
APPENDIX C

Pipe Capacity and HGL Calculations

Hydraflow Plan View



Project file: 48 inch-Tier 2.stm	No. Lines: 20	08-30-2004

Sewer Summary Report

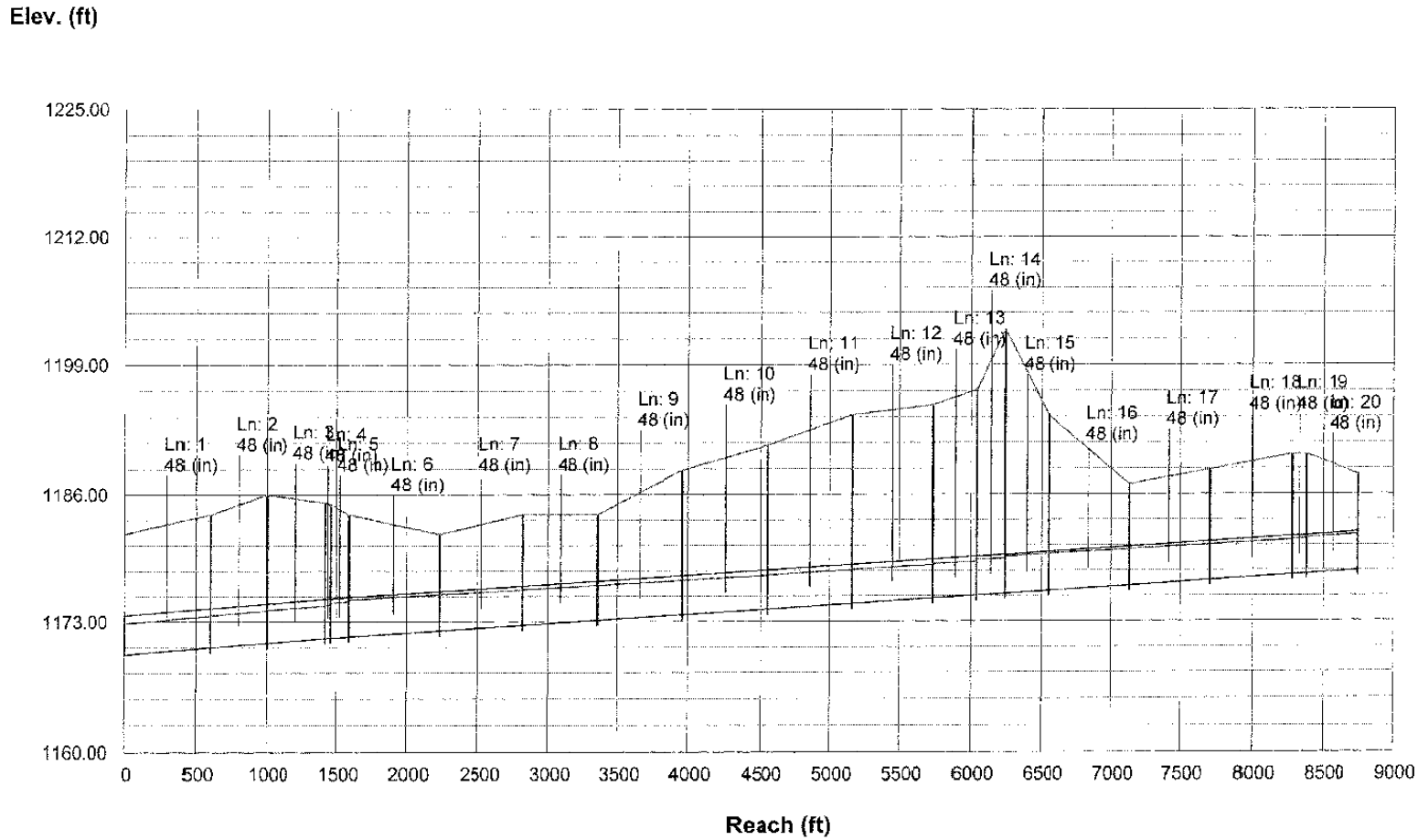
Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	Dns line No.
1	MH40-MH39	50.10	48 c	600.0	1169.64	1170.36	0.120	1172.83	1173.60	0.05	End
2	MH39-MH38	49.60	48 c	400.0	1170.36	1170.84	0.120	1173.65	1174.12	0.05	1
3	MH38-MH37	49.60	48 c	418.0	1170.84	1171.34	0.120	1174.17	1174.65	0.05	2
4	MH37-P1	43.20	48 c	40.0	1171.34	1171.38	0.100	1174.70	1174.73	0.23	3
5	P1-P2	43.20	48 c	130.0	1171.38	1171.50	0.092	1174.96	1175.06	0.21	4
6	P2-P3	43.20	48 c	640.0	1171.50	1172.10	0.094	1175.27	1175.76	0.03	5
7	P3-P4	43.20	48 c	590.0	1172.10	1172.65	0.093	1175.79	1176.25	0.03	6
8	P4-P5	43.20	48 c	540.0	1172.65	1173.15	0.093	1176.28	1176.71	0.03	7
9	P5-P6	43.20	48 c	600.0	1173.15	1173.71	0.093	1176.74	1177.22	0.03	8
10	P6-P7	43.20	48 c	600.0	1173.70	1174.26	0.093	1177.25	1177.73	0.03	9
11	P7-P8	43.20	48 c	600.0	1174.26	1174.82	0.093	1177.76	1178.26	0.03	10
12	P8-P9	43.20	48 c	580.0	1174.82	1175.36	0.093	1178.29	1178.77	0.10	11
13	P9-P10	43.20	48 c	300.0	1175.36	1175.64	0.093	1178.87	1179.11	0.18	12
14	P10-P11	43.20	48 c	200.0	1175.64	1175.83	0.095	1179.30	1179.45	0.20	13
15	P11-P12	43.20	48 c	310.0	1175.83	1176.12	0.094	1179.66	1179.90	0.03	14
16	P12-P13	43.20	48 c	580.0	1176.12	1176.66	0.093	1179.92	1180.37	0.03	15
17	P13-P14	43.20	48 c	580.0	1176.66	1177.20	0.093	1180.40	1180.85	0.03	16
18	P14-P15	43.20	48 c	570.0	1177.20	1177.73	0.093	1180.88	1181.32	0.09	17
19	P15-P16	43.20	48 c	100.0	1177.73	1177.82	0.090	1181.42	1181.49	0.09	18
20	P16-P17	43.20	48 c	370.0	1177.82	1178.16	0.092	1181.58	1181.87	0.20	19

Project File: 48 inch-Tier 2.stm | Number of lines: 20 | Run Date: 08-30-2004

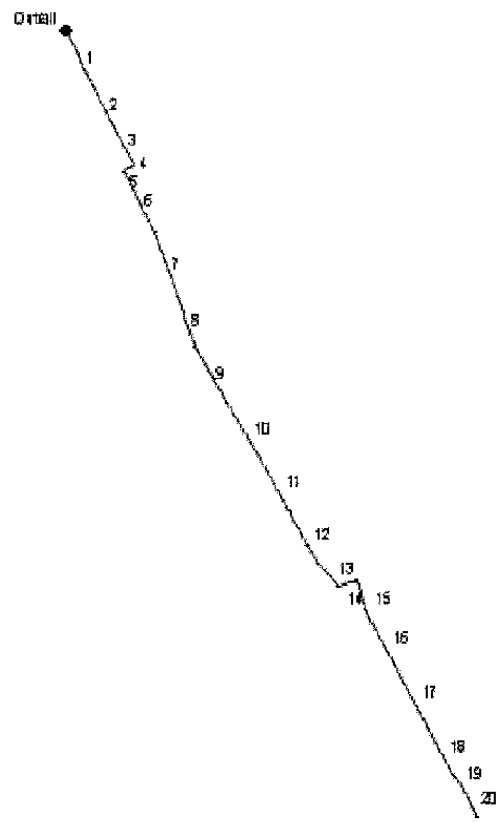
NOTES: c = circular; e = elliptical; b = box; Return period = 100 Yrs.; * Indicates surcharge condition.

Sewer Profile

Proj. file: 48 inch-Tier 2.stm



Hydraflow Plan View



Project file: 48 inch-Total Ridgeline.stm	No. Lines: 20	08-30-2004

Sewer Summary Report

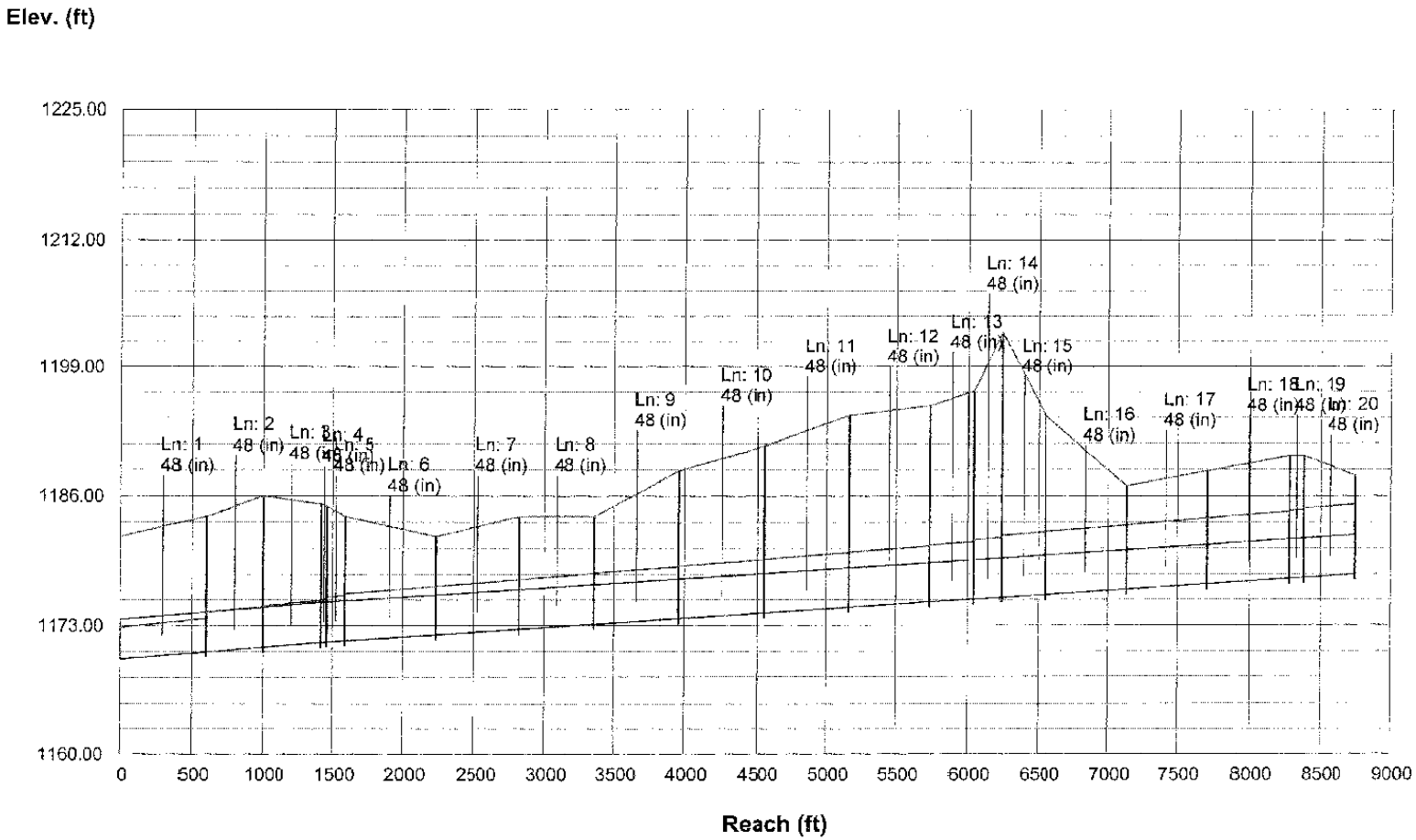
Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	Dns line No.
1	MH40-MH39	54.70	48 c	600.0	1169.64	1170.36	0.120	1172.83	1173.74	0.05	End
2	MH39-MH38	54.20	48 c	400.0	1170.36	1170.84	0.120	1174.36*	1174.93*	0.04	1
3	MH38-MH37	54.20	48 c	418.0	1170.84	1171.34	0.120	1174.97*	1175.57*	0.04	2
4	MH37-P1	47.80	48 c	40.0	1171.34	1171.38	0.100	1175.61*	1175.66*	0.22	3
5	P1-P2	47.80	48 c	130.0	1171.38	1171.50	0.092	1175.88*	1176.03*	0.22	4
6	P2-P3	47.80	48 c	640.0	1171.50	1172.10	0.094	1176.25*	1176.96*	0.03	5
7	P3-P4	47.80	48 c	590.0	1172.10	1172.65	0.093	1176.99*	1177.65*	0.03	6
8	P4-P5	47.80	48 c	540.0	1172.65	1173.15	0.093	1177.68*	1178.28*	0.03	7
9	P5-P6	47.80	48 c	600.0	1173.15	1173.71	0.093	1178.31*	1178.98*	0.03	8
10	P6-P7	47.80	48 c	600.0	1173.70	1174.26	0.093	1179.01*	1179.68*	0.03	9
11	P7-P8	47.80	48 c	600.0	1174.26	1174.82	0.093	1179.71*	1180.37*	0.03	10
12	P8-P9	47.80	48 c	580.0	1174.82	1175.36	0.093	1180.41*	1181.05*	0.10	11
13	P9-P10	47.80	48 c	300.0	1175.36	1175.64	0.093	1181.15*	1181.48*	0.19	12
14	P10-P11	47.80	48 c	200.0	1175.64	1175.83	0.095	1181.67*	1181.90*	0.22	13
15	P11-P12	47.80	48 c	310.0	1175.83	1176.12	0.094	1182.12*	1182.46*	0.03	14
16	P12-P13	47.80	48 c	580.0	1176.12	1176.66	0.093	1182.50*	1183.14*	0.03	15
17	P13-P14	47.80	48 c	580.0	1176.66	1177.20	0.093	1183.17*	1183.82*	0.03	16
18	P14-P15	47.80	48 c	570.0	1177.20	1177.73	0.093	1183.85*	1184.48*	0.10	17
19	P15-P16	47.80	48 c	100.0	1177.73	1177.82	0.090	1184.58*	1184.69*	0.10	18
20	P16-P17	47.80	48 c	370.0	1177.82	1178.16	0.092	1184.80*	1185.20*	0.22	19

Project File: 48 inch-Total Ridgeline.stm | Number of lines: 20 | Run Date: 08-30-2004

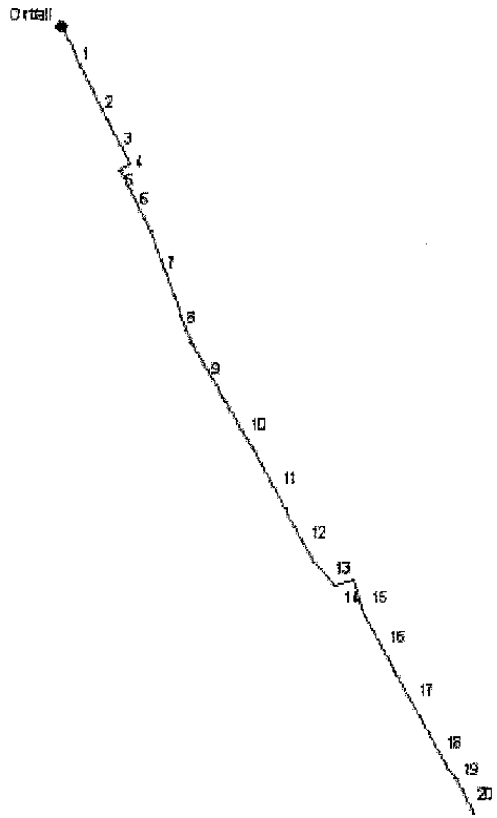
NOTES: c = circular; e = elliptical; b = box; Return period = 100 Yrs.; * Indicates surcharge condition.

Sewer Profile

Proj. file: 48 inch-Total Ridgeline.stm



Hydraflow Plan View



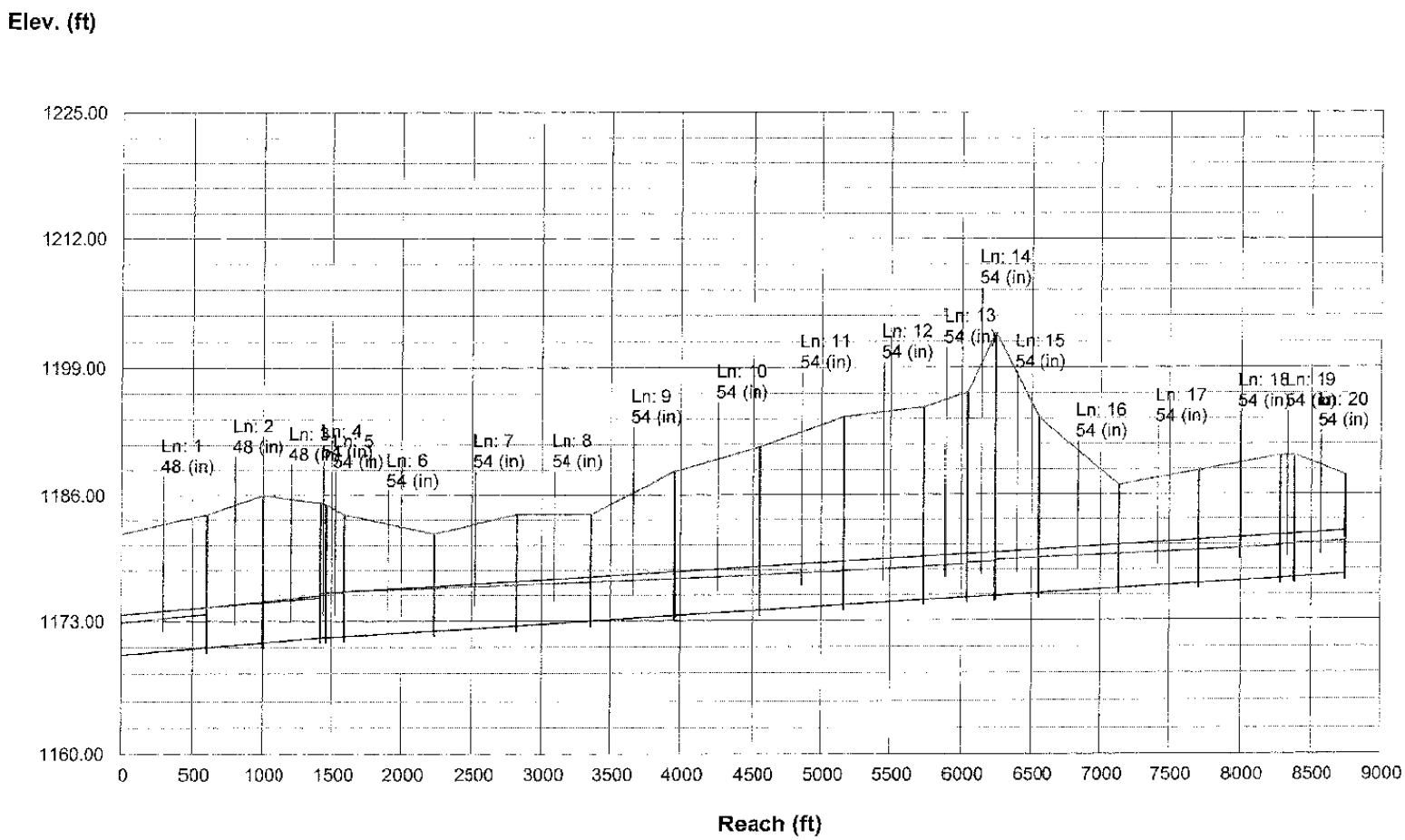
Project file: 54 inch-Total Ridgeline.stm | No. Lines: 20 | 08-30-2004

Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	Dns line No.
1	MH40-MH39	54.70	48 c	600.0	1169.64	1170.36	0.120	1172.83	1173.74	0.05	End
2	MH39-MH38	54.20	48 c	400.0	1170.36	1170.84	0.120	1174.36*	1174.93*	0.04	1
3	MH38-MH37	54.20	48 c	418.0	1170.84	1171.34	0.120	1174.97*	1175.57*	0.04	2
4	MH37-P1	47.80	54 c	40.0	1171.34	1171.37	0.075	1175.61	1175.63	0.15	3
5	P1-P2	47.80	54 c	130.0	1171.37	1171.48	0.085	1175.78	1175.84	0.14	4
6	P2-P3	47.80	54 c	640.0	1171.48	1172.03	0.086	1175.99	1176.34	0.02	5
7	P3-P4	47.80	54 c	590.0	1172.03	1172.54	0.086	1176.36	1176.65	0.02	6
8	P4-P5	47.80	54 c	540.0	1172.54	1173.00	0.085	1176.68	1176.95	0.02	7
9	P5-P6	47.80	54 c	600.0	1173.00	1173.52	0.087	1176.97	1177.29	0.03	8
10	P6-P7	47.80	54 c	600.0	1173.52	1174.04	0.087	1177.32	1177.65	0.03	9
11	P7-P8	47.80	54 c	600.0	1174.04	1174.56	0.087	1177.68	1178.05	0.03	10
12	P8-P9	47.80	54 c	580.0	1174.56	1175.06	0.086	1178.08	1178.45	0.10	11
13	P9-P10	47.80	54 c	300.0	1175.06	1175.32	0.087	1178.55	1178.74	0.18	12
14	P10-P11	47.80	54 c	200.0	1175.32	1175.49	0.085	1178.92	1179.04	0.20	13
15	P11-P12	47.80	54 c	310.0	1175.49	1175.76	0.087	1179.24	1179.41	0.03	14
16	P12-P13	47.80	54 c	580.0	1175.76	1176.26	0.086	1179.44	1179.78	0.03	15
17	P13-P14	47.80	54 c	580.0	1176.26	1176.76	0.086	1179.81	1180.18	0.03	16
18	P14-P15	47.80	54 c	570.0	1176.76	1177.25	0.086	1180.21	1180.60	0.10	17
19	P15-P16	47.80	54 c	100.0	1177.25	1177.34	0.090	1180.70	1180.77	0.09	18
20	P16-P17	47.80	54 c	370.0	1177.34	1177.66	0.087	1180.86	1181.10	0.21	19

Project File: 54 inch-Total Ridgeline.stm Number of lines: 20 Run Date: 08-30-2004

NOTES: c = circular; e = elliptical; b = box; Return period = 100 Yrs.; * Indicates surcharge condition.

Sewer Profile

Proj. file: 54 inch-Total Ridgeline.stm