

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	2	Maximum Rainfall (mm/hr)	0.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	9.900
Ratio-R	0.400	Preferred Cover Depth (m)	1.500
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
1	0.058	5.00	127.094	1200	444485.781	303189.608	1.667
2	0.073	5.00	126.571	1200	444479.395	303210.152	1.725
3	0.133	5.00	125.862	1200	444471.061	303238.171	1.462
4	0.011	5.00	125.667	1500	444468.767	303245.883	1.367
5			125.620	1500	444483.379	303249.457	1.370
6			125.650	1500	444525.141	303232.212	1.550
29	0.083	5.00	126.282	1200	444541.643	303203.190	1.714
7	0.032	5.00	125.725	1500	444546.879	303222.872	1.725
8	0.108	5.00	125.300	1500	444603.384	303207.131	1.730
30	0.085	5.00	125.494	1200	444631.274	303178.732	1.694
9	0.027	5.00	124.896	1500	444634.455	303202.730	1.424
10	0.059	5.00	124.609	1500	444637.537	303216.972	1.183
11	0.065	5.00	124.800	1500	444656.504	303212.856	1.435
14	0.185	5.00	129.005	1200	444425.510	303143.934	1.725
15	0.030	5.00	129.124	1200	444460.760	303140.872	2.040
16	0.102	5.00	128.943	1200	444467.587	303142.714	1.901
17	0.109	5.00	127.732	1200	444497.955	303165.221	1.961
18	0.016	5.00	127.325	1500	444514.760	303171.825	1.902
19	0.036	5.00	127.124	1500	444532.838	303170.093	1.800
31	0.082	5.00	128.330	1200	444533.630	303118.685	1.603
32	0.104	5.00	127.696	1200	444540.028	303138.871	2.335
20	0.112	5.00	126.960	1500	444548.594	303165.897	1.916
21	0.116	5.00	126.486	1500	444594.569	303153.726	1.800
22	0.074	5.00	126.320	1500	444611.276	303151.478	1.803
33		5.00	127.175	1200	444623.184	303114.054	1.641
34			126.550	1200	444626.544	303139.659	1.594
23	0.024	5.00	126.137	1500	444629.731	303151.977	1.912
24	0.042	5.00	125.822	1500	444667.738	303153.224	1.992
25	0.222	5.00	125.470	1500	444685.200	303149.460	1.770
35	0.082	5.00	129.230	1200	444486.946	303073.647	1.677
36	0.051	5.00	129.038	1200	444500.876	303075.127	1.725
37	0.085	5.00	128.661	1200	444522.806	303074.452	1.879
38	0.275	5.00	127.872	1200	444585.696	303071.197	1.725
39	0.061	5.00	127.679	1200	444604.609	303073.736	1.800
40	0.008	5.00	127.589	1200	444612.845	303080.832	1.800
41	0.092	5.00	127.461	1200	444619.154	303087.998	1.969
42	0.014	5.00	126.999	1200	444642.770	303080.688	1.800
43	0.013	5.00	126.675	1500	444660.579	303073.653	1.811
44	0.080	5.00	126.520	1500	444671.451	303071.131	1.800
48	0.012	5.00	129.007	1200	444482.776	303054.115	1.650
49	0.017	5.00	128.817	1200	444481.857	303035.147	1.773

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
50	0.065	5.00	128.713	1200	444483.897	303025.677	1.771
51	0.009	5.00	128.612	1200	444490.127	303018.649	1.866
52	0.011	5.00	128.503	1200	444499.726	303015.460	1.800
53	0.059	5.00	128.135	1200	444536.426	303013.682	1.818
54	0.025	5.00	127.866	1200	444563.169	303016.054	1.813
55	0.097	5.00	127.600	1200	444600.463	303014.284	1.986
60	0.071	5.00	127.250	1200	444611.895	303051.790	1.577
56	0.041	5.00	127.480	1200	444609.468	303018.844	2.079
57	0.052	5.00	126.865	1500	444622.809	303010.871	1.984
58	0.048	5.00	126.827	1500	444669.160	303011.875	2.051
59			126.488	1500	444677.679	303042.183	1.988
45			126.112	1500	444688.472	303061.997	1.712
46			125.500	1500	444697.607	303068.968	1.400
47			125.500	1500	444708.811	303116.704	1.500
26	0.041	5.00	125.200	1500	444717.046	303132.090	1.950
27			124.550	1500	444722.039	303147.899	1.400
28			124.550	1500	444712.403	303178.518	1.500
12			124.550	1500	444688.754	303229.478	1.598
13			123.740	1500	444690.490	303237.624	0.800
47a			125.500	1500	444704.749	303125.200	1.600

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	1	2	21.514	0.600	125.427	124.846	0.581	37.0	225	5.17	0.0
1.001	2	3	29.232	0.600	124.846	124.400	0.446	65.5	225	5.47	0.0
1.002	3	4	8.046	0.600	124.400	124.300	0.100	80.5	225	5.56	0.0
1.003	4	5	15.043	0.600	124.300	124.250	0.050	300.9	375	5.80	0.0
1.004	5	6	45.182	0.600	124.250	124.100	0.150	301.2	375	6.53	0.0
1.005	6	7	23.660	0.600	124.100	124.000	0.100	236.6	375	6.86	0.0
3.000	29	7	20.367	0.600	124.568	124.000	0.568	35.9	225	5.15	0.0
1.006	7	8	58.657	0.600	124.000	123.645	0.355	165.2	375	7.56	0.0
1.007	8	9	31.381	0.600	123.570	123.472	0.098	320.2	450	8.02	0.0
4.000	30	9	24.208	0.600	123.800	123.697	0.103	235.0	225	5.48	0.0
1.008	9	10	14.572	0.600	123.472	123.426	0.046	316.8	450	8.23	0.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	2.156	85.7	0.0	1.442	1.500	0.058	0.0	0	0.000
1.001	1.618	64.3	0.0	1.500	1.237	0.131	0.0	0	0.000
1.002	1.459	58.0	0.0	1.237	1.142	0.264	0.0	0	0.000
1.003	1.039	114.8	0.0	0.992	0.995	0.275	0.0	0	0.000
1.004	1.038	114.7	0.0	0.995	1.175	0.275	0.0	0	0.000
1.005	1.173	129.6	0.0	1.175	1.350	0.275	0.0	0	0.000
3.000	2.191	87.1	0.0	1.489	1.500	0.083	0.0	0	0.000
1.006	1.407	155.3	0.0	1.350	1.280	0.390	0.0	0	0.000
1.007	1.130	179.8	0.0	1.280	0.974	0.498	0.0	0	0.000
4.000	0.848	33.7	0.0	1.469	0.974	0.085	0.0	0	0.000
1.008	1.137	180.8	0.0	0.974	0.733	0.610	0.0	0	0.000

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.009	10	11	19.408	0.600	123.426	123.365	0.061	318.2	450	8.52	0.0
1.010	11	12	36.282	0.600	123.365	123.165	0.200	181.4	450	8.92	0.0
2.000	14	15	35.383	0.600	127.280	127.084	0.196	180.5	300	5.51	0.0
2.001	15	16	7.071	0.600	127.084	127.042	0.042	168.4	300	5.60	0.0
2.002	16	17	37.799	0.600	127.042	125.771	1.271	29.7	300	5.82	0.0
2.003	17	18	18.056	0.600	125.771	125.498	0.273	66.1	300	5.98	0.0
2.004	18	19	18.161	0.600	125.423	125.324	0.099	183.4	375	6.20	0.0
2.005	19	20	16.305	0.600	125.324	125.044	0.280	58.2	375	6.32	0.0
5.000	31	32	21.176	0.600	126.727	125.361	1.366	15.5	225	5.11	0.0
5.001	32	20	28.351	0.600	125.361	125.194	0.167	169.8	225	5.58	0.0
2.006	20	21	47.559	0.600	125.044	124.686	0.358	132.8	375	6.82	0.0
2.007	21	22	16.858	0.600	124.686	124.517	0.169	99.7	375	6.98	0.0
2.008	22	23	18.462	0.600	124.517	124.225	0.292	63.2	375	7.11	0.0
6.000	33	34	25.825	0.600	125.534	124.956	0.578	44.7	225	5.22	0.0
6.001	34	23	12.724	0.600	124.956	124.375	0.581	21.9	225	5.29	0.0
2.009	23	24	38.027	0.600	124.225	123.905	0.320	118.8	375	7.49	0.0
2.010	24	25	17.863	0.600	123.830	123.700	0.130	137.4	450	7.67	0.0
2.011	25	26	36.275	0.600	123.700	123.400	0.300	120.9	450	7.99	0.0
7.000	35	36	14.008	0.600	127.553	127.313	0.240	58.4	225	5.14	0.0
7.001	36	37	21.940	0.600	127.313	126.857	0.456	48.1	225	5.33	0.0
7.002	37	38	62.974	0.600	126.782	126.147	0.635	99.2	300	5.99	0.0
7.003	38	39	19.083	0.600	126.147	125.879	0.268	71.2	300	6.17	0.0
7.004	39	40	10.871	0.600	125.879	125.789	0.090	120.8	300	6.29	0.0
7.005	40	41	9.548	0.600	125.789	125.492	0.297	32.1	300	6.35	0.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.009	1.134	180.4	0.0	0.733	0.985	0.669	0.0	0	0.000
1.010	1.506	239.5	0.0	0.985	0.935	0.734	0.0	0	0.000
2.000	1.167	82.5	0.0	1.425	1.740	0.185	0.0	0	0.000
2.001	1.209	85.4	0.0	1.740	1.601	0.215	0.0	0	0.000
2.002	2.893	204.5	0.0	1.601	1.661	0.317	0.0	0	0.000
2.003	1.936	136.8	0.0	1.661	1.527	0.426	0.0	0	0.000
2.004	1.334	147.4	0.0	1.527	1.425	0.442	0.0	0	0.000
2.005	2.378	262.6	0.0	1.425	1.541	0.478	0.0	0	0.000
5.000	3.340	132.8	0.0	1.378	2.110	0.082	0.0	0	0.000
5.001	1.000	39.8	0.0	2.110	1.541	0.186	0.0	0	0.000
2.006	1.570	173.4	0.0	1.541	1.425	0.776	0.0	0	0.000
2.007	1.814	200.3	0.0	1.425	1.428	0.892	0.0	0	0.000
2.008	2.282	252.0	0.0	1.428	1.537	0.966	0.0	0	0.000
6.000	1.962	78.0	0.0	1.416	1.369	0.000	0.0	0	0.000
6.001	2.808	111.6	0.0	1.369	1.537	0.000	0.0	0	0.000
2.009	1.661	183.4	0.0	1.537	1.542	0.990	0.0	0	0.000
2.010	1.732	275.5	0.0	1.542	1.320	1.032	0.0	0	0.000
2.011	1.847	293.8	0.0	1.320	1.350	1.254	0.0	0	0.000
7.000	1.715	68.2	0.0	1.452	1.500	0.082	0.0	0	0.000
7.001	1.890	75.2	0.0	1.500	1.579	0.133	0.0	0	0.000
7.002	1.579	111.6	0.0	1.579	1.425	0.218	0.0	0	0.000
7.003	1.865	131.8	0.0	1.425	1.500	0.493	0.0	0	0.000
7.004	1.429	101.0	0.0	1.500	1.500	0.554	0.0	0	0.000
7.005	2.782	196.7	0.0	1.500	1.669	0.562	0.0	0	0.000

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
7.006	41	42	24.721	0.600	125.492	125.199	0.293	84.4	300	6.59	0.0
7.007	42	43	19.148	0.600	125.199	124.939	0.260	73.6	300	6.76	0.0
7.008	43	44	11.161	0.600	124.864	124.720	0.144	77.5	375	6.85	0.0
7.009	44	45	19.317	0.600	124.720	124.475	0.245	78.8	375	7.01	0.0
8.000	48	49	18.990	0.600	127.357	127.044	0.313	60.7	225	5.19	0.0
8.001	49	50	9.687	0.600	127.044	126.942	0.102	95.0	225	5.31	0.0
8.002	50	51	9.392	0.600	126.942	126.821	0.121	77.6	225	5.41	0.0
8.003	51	52	10.115	0.600	126.746	126.703	0.043	235.2	300	5.58	0.0
8.004	52	53	36.743	0.600	126.703	126.317	0.386	95.2	300	5.96	0.0
8.005	53	54	26.848	0.600	126.317	126.053	0.264	101.7	300	6.25	0.0
8.006	54	55	37.336	0.600	126.053	125.614	0.439	85.0	300	6.61	0.0
8.007	55	56	10.094	0.600	125.614	125.401	0.213	47.4	300	6.68	0.0
9.000	60	56	33.035	0.600	125.673	125.476	0.197	167.7	225	5.55	0.0
8.008	56	57	15.542	0.600	125.401	125.031	0.370	42.0	300	6.79	0.0
8.009	57	58	46.362	0.600	124.881	124.776	0.105	441.5	450	7.60	0.0
8.010	58	59	31.483	0.600	124.776	124.500	0.276	114.1	450	7.87	0.0
8.011	59	45	22.563	0.600	124.500	124.400	0.100	225.6	450	8.15	0.0
7.010	45	46	11.491	0.600	124.400	124.250	0.150	76.6	450	8.23	0.0
7.011	46	47	49.033	0.600	124.100	124.000	0.100	490.3	600	8.98	0.0
7.012	47	47a	9.417	0.600	124.000	123.900	0.100	94.2	600	9.04	0.0
7.012b	47a	26	14.096	0.600	123.900	123.325	0.575	24.5	600	9.09	0.0
2.012	26	27	16.579	0.600	123.250	123.150	0.100	165.8	600	9.24	0.0
2.013	27	28	32.099	0.600	123.150	123.050	0.100	321.0	675	9.60	0.0
2.014	28	12	56.180	0.600	123.050	122.952	0.098	573.3	675	10.46	0.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
7.006	1.712	121.0	0.0	1.669	1.500	0.654	0.0	0	0.000
7.007	1.834	129.6	0.0	1.500	1.436	0.668	0.0	0	0.000
7.008	2.059	227.5	0.0	1.436	1.425	0.681	0.0	0	0.000
7.009	2.042	225.5	0.0	1.425	1.262	0.761	0.0	0	0.000
8.000	1.682	66.9	0.0	1.425	1.548	0.012	0.0	0	0.000
8.001	1.342	53.3	0.0	1.548	1.546	0.029	0.0	0	0.000
8.002	1.485	59.1	0.0	1.546	1.566	0.094	0.0	0	0.000
8.003	1.021	72.1	0.0	1.566	1.500	0.103	0.0	0	0.000
8.004	1.611	113.9	0.0	1.500	1.518	0.114	0.0	0	0.000
8.005	1.559	110.2	0.0	1.518	1.513	0.173	0.0	0	0.000
8.006	1.706	120.6	0.0	1.513	1.686	0.198	0.0	0	0.000
8.007	2.289	161.8	0.0	1.686	1.779	0.295	0.0	0	0.000
9.000	1.007	40.0	0.0	1.352	1.779	0.071	0.0	0	0.000
8.008	2.432	171.9	0.0	1.779	1.534	0.407	0.0	0	0.000
8.009	0.961	152.8	0.0	1.534	1.601	0.459	0.0	0	0.000
8.010	1.902	302.6	0.0	1.601	1.538	0.507	0.0	0	0.000
8.011	1.349	214.6	0.0	1.538	1.262	0.507	0.0	0	0.000
7.010	2.324	369.7	0.0	1.262	0.800	1.268	0.0	0	0.000
7.011	1.093	309.0	0.0	0.800	0.900	1.268	0.0	0	0.000
7.012	2.510	709.6	0.0	0.900	1.000	1.268	0.0	0	0.000
7.012b	4.931	1394.2	0.0	1.000	1.275	1.268	0.0	0	0.000
2.012	1.888	533.9	0.0	1.350	0.800	2.563	0.0	0	0.000
2.013	1.457	521.4	0.0	0.725	0.825	2.563	0.0	0	0.000
2.014	1.087	389.0	0.0	0.825	0.923	2.563	0.0	0	0.000

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.011	12	13	8.329	0.600	122.952	122.940	0.012	694.1	600	10.62	0.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.011	0.916	259.1	0.0	0.998	0.200	3.297	0.0	0	0.000

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	21.514	37.0	225	Circular_Default Sewer Type	127.094	125.427	1.442	126.571	124.846	1.500
1.001	29.232	65.5	225	Circular_Default Sewer Type	126.571	124.846	1.500	125.862	124.400	1.237
1.002	8.046	80.5	225	Circular_Default Sewer Type	125.862	124.400	1.237	125.667	124.300	1.142
1.003	15.043	300.9	375	Circular_Default Sewer Type	125.667	124.300	0.992	125.620	124.250	0.995
1.004	45.182	301.2	375	Circular_Default Sewer Type	125.620	124.250	0.995	125.650	124.100	1.175
1.005	23.660	236.6	375	Circular_Default Sewer Type	125.650	124.100	1.175	125.725	124.000	1.350
3.000	20.367	35.9	225	Circular_Default Sewer Type	126.282	124.568	1.489	125.725	124.000	1.500
1.006	58.657	165.2	375	Circular_Default Sewer Type	125.725	124.000	1.350	125.300	123.645	1.280
1.007	31.381	320.2	450	Circular_Default Sewer Type	125.300	123.570	1.280	124.896	123.472	0.974
4.000	24.208	235.0	225	Circular_Default Sewer Type	125.494	123.800	1.469	124.896	123.697	0.974
1.008	14.572	316.8	450	Circular_Default Sewer Type	124.896	123.472	0.974	124.609	123.426	0.733
1.009	19.408	318.2	450	Circular_Default Sewer Type	124.609	123.426	0.733	124.800	123.365	0.985
1.010	36.282	181.4	450	Circular_Default Sewer Type	124.800	123.365	0.985	124.550	123.165	0.935
2.000	35.383	180.5	300	Circular_Default Sewer Type	129.005	127.280	1.425	129.124	127.084	1.740
2.001	7.071	168.4	300	Circular_Default Sewer Type	129.124	127.084	1.740	128.943	127.042	1.601
2.002	37.799	29.7	300	Circular_Default Sewer Type	128.943	127.042	1.601	127.732	125.771	1.661
2.003	18.056	66.1	300	Circular_Default Sewer Type	127.732	125.771	1.661	127.325	125.498	1.527
2.004	18.161	183.4	375	Circular_Default Sewer Type	127.325	125.423	1.527	127.124	125.324	1.425
2.005	16.305	58.2	375	Circular_Default Sewer Type	127.124	125.324	1.425	126.960	125.044	1.541

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1200	Manhole	Adoptable	2	1200	Manhole	Adoptable
1.001	2	1200	Manhole	Adoptable	3	1200	Manhole	Adoptable
1.002	3	1200	Manhole	Adoptable	4	1500	Manhole	Adoptable
1.003	4	1500	Manhole	Adoptable	5	1500	Manhole	Adoptable
1.004	5	1500	Manhole	Adoptable	6	1500	Manhole	Adoptable
1.005	6	1500	Manhole	Adoptable	7	1500	Manhole	Adoptable
3.000	29	1200	Manhole	Adoptable	7	1500	Manhole	Adoptable
1.006	7	1500	Manhole	Adoptable	8	1500	Manhole	Adoptable
1.007	8	1500	Manhole	Adoptable	9	1500	Manhole	Adoptable
4.000	30	1200	Manhole	Adoptable	9	1500	Manhole	Adoptable
1.008	9	1500	Manhole	Adoptable	10	1500	Manhole	Adoptable
1.009	10	1500	Manhole	Adoptable	11	1500	Manhole	Adoptable
1.010	11	1500	Manhole	Adoptable	12	1500	Manhole	Adoptable
2.000	14	1200	Manhole	Adoptable	15	1200	Manhole	Adoptable
2.001	15	1200	Manhole	Adoptable	16	1200	Manhole	Adoptable
2.002	16	1200	Manhole	Adoptable	17	1200	Manhole	Adoptable
2.003	17	1200	Manhole	Adoptable	18	1500	Manhole	Adoptable
2.004	18	1500	Manhole	Adoptable	19	1500	Manhole	Adoptable
2.005	19	1500	Manhole	Adoptable	20	1500	Manhole	Adoptable

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
5.000	21.176	15.5	225	Circular_Default Sewer Type	128.330	126.727	1.378	127.696	125.361	2.110
5.001	28.351	169.8	225	Circular_Default Sewer Type	127.696	125.361	2.110	126.960	125.194	1.541
2.006	47.559	132.8	375	Circular_Default Sewer Type	126.960	125.044	1.541	126.486	124.686	1.425
2.007	16.858	99.7	375	Circular_Default Sewer Type	126.486	124.686	1.425	126.320	124.517	1.428
2.008	18.462	63.2	375	Circular_Default Sewer Type	126.320	124.517	1.428	126.137	124.225	1.537
6.000	25.825	44.7	225	Circular_Default Sewer Type	127.175	125.534	1.416	126.550	124.956	1.369
6.001	12.724	21.9	225	Circular_Default Sewer Type	126.550	124.956	1.369	126.137	124.375	1.537
2.009	38.027	118.8	375	Circular_Default Sewer Type	126.137	124.225	1.537	125.822	123.905	1.542
2.010	17.863	137.4	450	Circular_Default Sewer Type	125.822	123.830	1.542	125.470	123.700	1.320
2.011	36.275	120.9	450	Circular_Default Sewer Type	125.470	123.700	1.320	125.200	123.400	1.350
7.000	14.008	58.4	225	Circular_Default Sewer Type	129.230	127.553	1.452	129.038	127.313	1.500
7.001	21.940	48.1	225	Circular_Default Sewer Type	129.038	127.313	1.500	128.661	126.857	1.579
7.002	62.974	99.2	300	Circular_Default Sewer Type	128.661	126.782	1.579	127.872	126.147	1.425
7.003	19.083	71.2	300	Circular_Default Sewer Type	127.872	126.147	1.425	127.679	125.879	1.500
7.004	10.871	120.8	300	Circular_Default Sewer Type	127.679	125.879	1.500	127.589	125.789	1.500
7.005	9.548	32.1	300	Circular_Default Sewer Type	127.589	125.789	1.500	127.461	125.492	1.669
7.006	24.721	84.4	300	Circular_Default Sewer Type	127.461	125.492	1.669	126.999	125.199	1.500
7.007	19.148	73.6	300	Circular_Default Sewer Type	126.999	125.199	1.500	126.675	124.939	1.436
7.008	11.161	77.5	375	Circular_Default Sewer Type	126.675	124.864	1.436	126.520	124.720	1.425
7.009	19.317	78.8	375	Circular_Default Sewer Type	126.520	124.720	1.425	126.112	124.475	1.262
8.000	18.990	60.7	225	Circular_Default Sewer Type	129.007	127.357	1.425	128.817	127.044	1.548
8.001	9.687	95.0	225	Circular_Default Sewer Type	128.817	127.044	1.548	128.713	126.942	1.546
8.002	9.392	77.6	225	Circular_Default Sewer Type	128.713	126.942	1.546	128.612	126.821	1.566
8.003	10.115	235.2	300	Circular_Default Sewer Type	128.612	126.746	1.566	128.503	126.703	1.500
8.004	36.743	95.2	300	Circular_Default Sewer Type	128.503	126.703	1.500	128.135	126.317	1.518

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
5.000	31	1200	Manhole	Adoptable	32	1200	Manhole	Adoptable
5.001	32	1200	Manhole	Adoptable	20	1500	Manhole	Adoptable
2.006	20	1500	Manhole	Adoptable	21	1500	Manhole	Adoptable
2.007	21	1500	Manhole	Adoptable	22	1500	Manhole	Adoptable
2.008	22	1500	Manhole	Adoptable	23	1500	Manhole	Adoptable
6.000	33	1200	Manhole	Adoptable	34	1200	Manhole	Adoptable
6.001	34	1200	Manhole	Adoptable	23	1500	Manhole	Adoptable
2.009	23	1500	Manhole	Adoptable	24	1500	Manhole	Adoptable
2.010	24	1500	Manhole	Adoptable	25	1500	Manhole	Adoptable
2.011	25	1500	Manhole	Adoptable	26	1500	Manhole	Adoptable
7.000	35	1200	Manhole	Adoptable	36	1200	Manhole	Adoptable
7.001	36	1200	Manhole	Adoptable	37	1200	Manhole	Adoptable
7.002	37	1200	Manhole	Adoptable	38	1200	Manhole	Adoptable
7.003	38	1200	Manhole	Adoptable	39	1200	Manhole	Adoptable
7.004	39	1200	Manhole	Adoptable	40	1200	Manhole	Adoptable
7.005	40	1200	Manhole	Adoptable	41	1200	Manhole	Adoptable
7.006	41	1200	Manhole	Adoptable	42	1200	Manhole	Adoptable
7.007	42	1200	Manhole	Adoptable	43	1500	Manhole	Adoptable
7.008	43	1500	Manhole	Adoptable	44	1500	Manhole	Adoptable
7.009	44	1500	Manhole	Adoptable	45	1500	Manhole	Adoptable
8.000	48	1200	Manhole	Adoptable	49	1200	Manhole	Adoptable
8.001	49	1200	Manhole	Adoptable	50	1200	Manhole	Adoptable
8.002	50	1200	Manhole	Adoptable	51	1200	Manhole	Adoptable
8.003	51	1200	Manhole	Adoptable	52	1200	Manhole	Adoptable
8.004	52	1200	Manhole	Adoptable	53	1200	Manhole	Adoptable

Pipeline Schedule

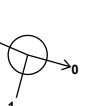
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
8.005	26.848	101.7	300	Circular_Default Sewer Type	128.135	126.317	1.518	127.866	126.053	1.513
8.006	37.336	85.0	300	Circular_Default Sewer Type	127.866	126.053	1.513	127.600	125.614	1.686
8.007	10.094	47.4	300	Circular_Default Sewer Type	127.600	125.614	1.686	127.480	125.401	1.779
9.000	33.035	167.7	225	Circular_Default Sewer Type	127.250	125.673	1.352	127.480	125.476	1.779
8.008	15.542	42.0	300	Circular_Default Sewer Type	127.480	125.401	1.779	126.865	125.031	1.534
8.009	46.362	441.5	450	Circular_Default Sewer Type	126.865	124.881	1.534	126.827	124.776	1.601
8.010	31.483	114.1	450	Circular_Default Sewer Type	126.827	124.776	1.601	126.488	124.500	1.538
8.011	22.563	225.6	450	Circular_Default Sewer Type	126.488	124.500	1.538	126.112	124.400	1.262
7.010	11.491	76.6	450	Circular_Default Sewer Type	126.112	124.400	1.262	125.500	124.250	0.800
7.011	49.033	490.3	600	Circular_Default Sewer Type	125.500	124.100	0.800	125.500	124.000	0.900
7.012	9.417	94.2	600	Circular_Default Sewer Type	125.500	124.000	0.900	125.500	123.900	1.000
7.012b	14.096	24.5	600	Circular_Default Sewer Type	125.500	123.900	1.000	125.200	123.325	1.275
2.012	16.579	165.8	600	Circular_Default Sewer Type	125.200	123.250	1.350	124.550	123.150	0.800
2.013	32.099	321.0	675	Circular_Default Sewer Type	124.550	123.150	0.725	124.550	123.050	0.825
2.014	56.180	573.3	675	Circular_Default Sewer Type	124.550	123.050	0.825	124.550	122.952	0.923
1.011	8.329	694.1	600	Circular_Default Sewer Type	124.550	122.952	0.998	123.740	122.940	0.200

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
8.005	53	1200	Manhole	Adoptable	54	1200	Manhole	Adoptable
8.006	54	1200	Manhole	Adoptable	55	1200	Manhole	Adoptable
8.007	55	1200	Manhole	Adoptable	56	1200	Manhole	Adoptable
9.000	60	1200	Manhole	Adoptable	56	1200	Manhole	Adoptable
8.008	56	1200	Manhole	Adoptable	57	1500	Manhole	Adoptable
8.009	57	1500	Manhole	Adoptable	58	1500	Manhole	Adoptable
8.010	58	1500	Manhole	Adoptable	59	1500	Manhole	Adoptable
8.011	59	1500	Manhole	Adoptable	45	1500	Manhole	Adoptable
7.010	45	1500	Manhole	Adoptable	46	1500	Manhole	Adoptable
7.011	46	1500	Manhole	Adoptable	47	1500	Manhole	Adoptable
7.012	47	1500	Manhole	Adoptable	47a	1500	Manhole	Adoptable
7.012b	47a	1500	Manhole	Adoptable	26	1500	Manhole	Adoptable
2.012	26	1500	Manhole	Adoptable	27	1500	Manhole	Adoptable
2.013	27	1500	Manhole	Adoptable	28	1500	Manhole	Adoptable
2.014	28	1500	Manhole	Adoptable	12	1500	Manhole	Adoptable
1.011	12	1500	Manhole	Adoptable	13	1500	Manhole	Adoptable

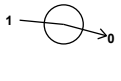
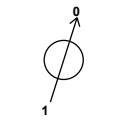
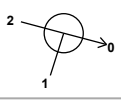
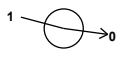
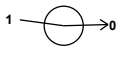
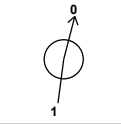
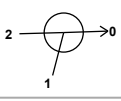
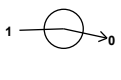
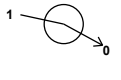
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
1	444485.781	303189.608	127.094	1.667	1200		0	1.000	125.427	225
2	444479.395	303210.152	126.571	1.725	1200		1	1.000	124.846	225
3	444471.061	303238.171	125.862	1.462	1200		0	1.001	124.846	225
						1	1.001	124.400	225	
							0	1.002	124.400	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
4	444468.767	303245.883	125.667	1.367	1500		1	1.002	124.300	225
5	444483.379	303249.457	125.620	1.370	1500		0	1.003	124.300	375
							1	1.003	124.250	375
6	444525.141	303232.212	125.650	1.550	1500		0	1.004	124.250	375
							1	1.004	124.100	375
29	444541.643	303203.190	126.282	1.714	1200		0	1.005	124.100	375
							0	3.000	124.568	225
7	444546.879	303222.872	125.725	1.725	1500		1	3.000	124.000	225
							2	1.005	124.000	375
8	444603.384	303207.131	125.300	1.730	1500		0	1.006	124.000	375
							1	1.006	123.645	375
30	444631.274	303178.732	125.494	1.694	1200		0	1.007	123.570	450
							0	4.000	123.800	225
9	444634.455	303202.730	124.896	1.424	1500		1	4.000	123.697	225
							2	1.007	123.472	450
10	444637.537	303216.972	124.609	1.183	1500		0	1.008	123.472	450
							1	1.008	123.426	450
11	444656.504	303212.856	124.800	1.435	1500		0	1.009	123.426	450
							1	1.009	123.365	450
14	444425.510	303143.934	129.005	1.725	1200		0	1.010	123.365	450
							0	2.000	127.280	300
15	444460.760	303140.872	129.124	2.040	1200		1	2.000	127.084	300
							0	2.001	127.084	300
16	444467.587	303142.714	128.943	1.901	1200		1	2.001	127.042	300
							0	2.002	127.042	300

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
17	444497.955	303165.221	127.732	1.961	1200		1	2.002	125.771	300
							0	2.003	125.771	300
18	444514.760	303171.825	127.325	1.902	1500		1	2.003	125.498	300
							0	2.004	125.423	375
19	444532.838	303170.093	127.124	1.800	1500		1	2.004	125.324	375
							0	2.005	125.324	375
31	444533.630	303118.685	128.330	1.603	1200					
							0	5.000	126.727	225
32	444540.028	303138.871	127.696	2.335	1200		1	5.000	125.361	225
							0	5.001	125.361	225
20	444548.594	303165.897	126.960	1.916	1500		1	5.001	125.194	225
							2	2.005	125.044	375
							0	2.006	125.044	375
21	444594.569	303153.726	126.486	1.800	1500		1	2.006	124.686	375
							0	2.007	124.686	375
22	444611.276	303151.478	126.320	1.803	1500		1	2.007	124.517	375
							0	2.008	124.517	375
33	444623.184	303114.054	127.175	1.641	1200					
							0	6.000	125.534	225
34	444626.544	303139.659	126.550	1.594	1200		1	6.000	124.956	225
							0	6.001	124.956	225
23	444629.731	303151.977	126.137	1.912	1500		1	6.001	124.375	225
							2	2.008	124.225	375
							0	2.009	124.225	375
24	444667.738	303153.224	125.822	1.992	1500		1	2.009	123.905	375
							0	2.010	123.830	450
25	444685.200	303149.460	125.470	1.770	1500		1	2.010	123.700	450
							0	2.011	123.700	450

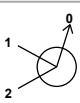
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
35	444486.946	303073.647	129.230	1.677	1200		0	7.000	127.553	225
36	444500.876	303075.127	129.038	1.725	1200		1	7.000	127.313	225
						0	7.001	127.313	225	
37	444522.806	303074.452	128.661	1.879	1200		1	7.001	126.857	225
						0	7.002	126.782	300	
38	444585.696	303071.197	127.872	1.725	1200		1	7.002	126.147	300
						0	7.003	126.147	300	
39	444604.609	303073.736	127.679	1.800	1200		1	7.003	125.879	300
						0	7.004	125.879	300	
40	444612.845	303080.832	127.589	1.800	1200		1	7.004	125.789	300
						0	7.005	125.789	300	
41	444619.154	303087.998	127.461	1.969	1200		1	7.005	125.492	300
						0	7.006	125.492	300	
42	444642.770	303080.688	126.999	1.800	1200		1	7.006	125.199	300
						0	7.007	125.199	300	
43	444660.579	303073.653	126.675	1.811	1500		1	7.007	124.939	300
						0	7.008	124.864	375	
44	444671.451	303071.131	126.520	1.800	1500		1	7.008	124.720	375
						0	7.009	124.720	375	
48	444482.776	303054.115	129.007	1.650	1200		0	8.000	127.357	225
49	444481.857	303035.147	128.817	1.773	1200		1	8.000	127.044	225
						0	8.001	127.044	225	
50	444483.897	303025.677	128.713	1.771	1200		1	8.001	126.942	225
						0	8.002	126.942	225	

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections		Link	IL (m)	Dia (mm)
51	444490.127	303018.649	128.612	1.866	1200		1	8.002	126.821	225
							0	8.003	126.746	300
52	444499.726	303015.460	128.503	1.800	1200		1	8.003	126.703	300
							0	8.004	126.703	300
53	444536.426	303013.682	128.135	1.818	1200		1	8.004	126.317	300
							0	8.005	126.317	300
54	444563.169	303016.054	127.866	1.813	1200		1	8.005	126.053	300
							0	8.006	126.053	300
55	444600.463	303014.284	127.600	1.986	1200		1	8.006	125.614	300
							0	8.007	125.614	300
60	444611.895	303051.790	127.250	1.577	1200					
							0	9.000	125.673	225
56	444609.468	303018.844	127.480	2.079	1200		1	9.000	125.476	225
							2	8.007	125.401	300
							0	8.008	125.401	300
57	444622.809	303010.871	126.865	1.984	1500		1	8.008	125.031	300
							0	8.009	124.881	450
58	444669.160	303011.875	126.827	2.051	1500		1	8.009	124.776	450
							0	8.010	124.776	450
59	444677.679	303042.183	126.488	1.988	1500		1	8.010	124.500	450
							0	8.011	124.500	450
45	444688.472	303061.997	126.112	1.712	1500		1	7.009	124.475	375
							2	8.011	124.400	450
							0	7.010	124.400	450
46	444697.607	303068.968	125.500	1.400	1500		1	7.010	124.250	450
							0	7.011	124.100	600
47	444708.811	303116.704	125.500	1.500	1500		1	7.011	124.000	600
							0	7.012	124.000	600

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
26	444717.046	303132.090	125.200	1.950	1500		1	2.011	123.400	450
							2	7.012b	123.325	600
							0	2.012	123.250	600
27	444722.039	303147.899	124.550	1.400	1500		1	2.012	123.150	600
							0	2.013	123.150	675
28	444712.403	303178.518	124.550	1.500	1500		1	2.013	123.050	675
							0	2.014	123.050	675
12	444688.754	303229.478	124.550	1.598	1500		1	1.010	123.165	450
							2	2.014	122.952	675
							0	1.011	122.952	600
13	444690.490	303237.624	123.740	0.800	1500		1	1.011	122.940	600
47a	444704.749	303125.200	125.500	1.600	1500		1	7.012	123.900	600
							0	7.012b	123.900	600

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
Rainfall Events	Singular	Skip Steady State	✓
FSR Region	England and Wales	Drain Down Time (mins)	240
M5-60 (mm)	20.000	Additional Storage (m³/ha)	20.0
Ratio-R	0.400	Starting Level (m)	
Summer CV	0.750	Check Discharge Rate(s)	✓
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0
30	0	0	0
100	40	0	0

Pre-development Discharge Rate

Site Makeup	Greenfield	Growth Factor 1 year	0.85
Greenfield Method	IH124	Growth Factor 30 year	1.95
Positively Drained Area (ha)		Growth Factor 100 year	2.48
SAAR (mm)		Betterment (%)	0
Soil Index	1	QBar	
SPR	0.10	Q 1 year (l/s)	
Region	1	Q 30 year (l/s)	

Pre-development Discharge Rate

Q 100 year (l/s)

Node 12 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	122.952	Product Number	CTL-SHE-0212-2330-1000-2330
Design Depth (m)	1.000	Min Outlet Diameter (m)	0.225
Design Flow (l/s)	23.3	Min Node Diameter (mm)	1500

Node 47a Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	123.900	Product Number	CTL-SHE-0106-5000-1000-5000
Design Depth (m)	1.000	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	5.0	Min Node Diameter (mm)	1200

Node 47a Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	124.000
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	1039.7	0.0	1.500	1684.9	0.0	1.501	0.0	0.0

Node 12 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	123.050
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	1131.0	0.0	1.500	1748.0	0.0

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.36%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	125.480	0.053	10.6	0.0968	0.0000	OK
15 minute winter	2	10	124.939	0.093	23.8	0.1844	0.0000	OK
15 minute winter	3	11	124.590	0.190	47.6	0.5596	0.0000	OK
15 minute winter	4	11	124.486	0.186	48.4	0.3589	0.0000	OK
15 minute winter	5	11	124.426	0.176	48.7	0.3112	0.0000	OK
15 minute winter	6	12	124.269	0.169	48.6	0.2992	0.0000	OK
15 minute winter	29	10	124.631	0.063	15.1	0.1319	0.0000	OK
15 minute winter	7	12	124.174	0.174	66.8	0.3727	0.0000	OK
15 minute winter	8	12	123.806	0.236	81.1	0.7124	0.0000	OK
15 minute winter	30	10	123.909	0.109	15.5	0.2333	0.0000	OK
15 minute winter	9	12	123.747	0.275	98.5	0.5897	0.0000	OK
15 minute winter	10	12	123.691	0.265	107.0	0.7329	0.0000	OK
15 minute winter	11	12	123.597	0.232	116.1	0.6206	0.0000	OK
15 minute winter	14	10	127.417	0.137	33.7	0.4494	0.0000	OK
15 minute winter	15	10	127.230	0.146	38.6	0.2087	0.0000	OK
15 minute winter	16	11	127.148	0.106	56.4	0.2345	0.0000	OK
15 minute winter	17	11	125.946	0.175	75.7	0.3929	0.0000	OK
15 minute winter	18	11	125.627	0.204	78.4	0.3954	0.0000	OK
15 minute winter	19	11	125.489	0.165	84.9	0.3576	0.0000	OK
15 minute winter	31	10	126.778	0.051	14.9	0.1090	0.0000	OK
15 minute winter	32	11	125.525	0.164	33.8	0.3311	0.0000	OK
15 minute winter	20	11	125.313	0.269	137.2	0.7891	0.0000	OK
15 minute winter	21	11	124.975	0.289	157.4	0.8840	0.0000	OK
15 minute winter	22	11	124.782	0.265	168.2	0.6868	0.0000	OK
15 minute summer	33	1	125.534	0.000	0.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	10.5	0.940	0.122	0.2437	
15 minute winter	2	1.001	3	23.4	0.894	0.364	0.7468	
15 minute winter	3	1.002	4	46.5	1.316	0.802	0.2851	
15 minute winter	4	1.003	5	48.7	0.928	0.424	0.7926	
15 minute winter	5	1.004	6	48.6	0.987	0.424	2.2272	
15 minute winter	6	1.005	7	48.3	0.981	0.372	1.1642	
15 minute winter	29	3.000	7	15.0	1.068	0.172	0.4169	
15 minute winter	7	1.006	8	65.7	1.345	0.423	2.8651	
15 minute winter	8	1.007	9	81.3	0.876	0.452	2.9130	
15 minute winter	30	4.000	9	15.0	0.831	0.445	0.4394	
15 minute winter	9	1.008	10	98.6	0.993	0.545	1.4463	
15 minute winter	10	1.009	11	106.8	1.190	0.592	1.7425	
15 minute winter	11	1.010	12	114.7	1.469	0.479	2.8510	
15 minute winter	14	2.000	15	33.1	1.009	0.401	1.1593	
15 minute winter	15	2.001	16	38.2	1.356	0.447	0.1997	
15 minute winter	16	2.002	17	56.1	1.737	0.274	1.2296	
15 minute winter	17	2.003	18	75.7	1.888	0.553	0.7238	
15 minute winter	18	2.004	19	78.7	1.457	0.534	0.9811	
15 minute winter	19	2.005	20	85.1	1.290	0.324	1.0696	
15 minute winter	31	5.000	32	14.8	0.825	0.111	0.3963	
15 minute winter	32	5.001	20	32.9	1.105	0.826	0.8430	
15 minute winter	20	2.006	21	137.5	1.563	0.793	4.1799	
15 minute winter	21	2.007	22	155.5	1.780	0.776	1.4720	
15 minute winter	22	2.008	23	166.6	1.860	0.661	1.6621	
15 minute summer	33	6.000	34	0.0	0.000	0.000	0.0000	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.36%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	34	1	124.956	0.000	0.0	0.0000	0.0000	OK
15 minute winter	23	12	124.536	0.311	170.7	0.6266	0.0000	OK
15 minute winter	24	12	124.140	0.310	177.0	0.6791	0.0000	OK
15 minute winter	25	12	124.004	0.304	209.0	1.3013	0.0000	OK
15 minute winter	35	10	127.626	0.073	14.9	0.1541	0.0000	OK
15 minute winter	36	10	127.404	0.091	24.1	0.1563	0.0000	OK
15 minute winter	37	11	126.902	0.120	39.1	0.2448	0.0000	OK
15 minute winter	38	11	126.351	0.204	88.3	0.8822	0.0000	OK
15 minute winter	39	11	126.134	0.255	97.4	0.4614	0.0000	OK
15 minute winter	40	11	125.976	0.187	99.1	0.2280	0.0000	OK
15 minute winter	41	11	125.760	0.268	114.9	0.5535	0.0000	OK
15 minute winter	42	11	125.453	0.254	116.9	0.3273	0.0000	OK
15 minute winter	43	11	125.096	0.232	118.1	0.4425	0.0000	OK
15 minute winter	44	11	124.950	0.230	131.5	0.6114	0.0000	OK
15 minute winter	48	10	127.385	0.028	2.2	0.0354	0.0000	OK
15 minute winter	49	10	127.091	0.047	5.3	0.0623	0.0000	OK
15 minute winter	50	10	127.031	0.089	17.0	0.1660	0.0000	OK
15 minute winter	51	10	126.851	0.105	18.3	0.1293	0.0000	OK
15 minute winter	52	11	126.788	0.085	20.2	0.1062	0.0000	OK
15 minute winter	53	11	126.429	0.112	30.5	0.1993	0.0000	OK
15 minute winter	54	11	126.164	0.111	34.9	0.1567	0.0000	OK
15 minute winter	55	11	125.745	0.131	51.6	0.2763	0.0000	OK
15 minute winter	60	10	125.761	0.088	12.9	0.1790	0.0000	OK
15 minute winter	56	11	125.550	0.149	71.2	0.2269	0.0000	OK
15 minute winter	57	11	125.110	0.229	80.2	0.5255	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	34	6.001	23	0.0	0.000	0.000	0.1765	
15 minute winter	23	2.009	24	171.0	1.840	0.932	3.5297	
15 minute winter	24	2.010	25	177.4	1.539	0.644	2.0600	
15 minute winter	25	2.011	26	210.2	1.949	0.715	3.9114	
15 minute winter	35	7.000	36	14.8	1.132	0.217	0.1830	
15 minute winter	36	7.001	37	23.7	1.635	0.315	0.3177	
15 minute winter	37	7.002	38	38.5	0.998	0.345	2.4389	
15 minute winter	38	7.003	39	86.9	1.502	0.659	1.0966	
15 minute winter	39	7.004	40	97.7	1.757	0.967	0.5977	
15 minute winter	40	7.005	41	99.1	1.760	0.504	0.5374	
15 minute winter	41	7.006	42	114.5	1.761	0.946	1.6080	
15 minute winter	42	7.007	43	115.9	1.958	0.894	1.1343	
15 minute winter	43	7.008	44	117.8	1.667	0.518	0.7943	
15 minute winter	44	7.009	45	130.6	1.940	0.579	1.3353	
15 minute winter	48	8.000	49	2.2	0.503	0.032	0.0836	
15 minute winter	49	8.001	50	5.2	0.512	0.097	0.0998	
15 minute winter	50	8.002	51	16.7	1.216	0.283	0.1293	
15 minute winter	51	8.003	52	18.2	0.955	0.252	0.1933	
15 minute winter	52	8.004	53	20.2	1.007	0.177	0.7400	
15 minute winter	53	8.005	54	30.6	1.283	0.278	0.6410	
15 minute winter	54	8.006	55	35.0	1.318	0.290	0.9962	
15 minute winter	55	8.007	56	51.7	1.605	0.319	0.3252	
15 minute winter	60	9.000	56	12.5	0.887	0.313	0.4665	
15 minute winter	56	8.008	57	71.3	2.191	0.415	0.5060	
15 minute winter	57	8.009	58	80.2	1.158	0.525	3.2138	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.36%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	58	11	124.952	0.176	88.4	0.3935	0.0000	OK
15 minute winter	59	12	124.738	0.238	87.2	0.4212	0.0000	OK
15 minute winter	45	12	124.697	0.297	217.8	0.5248	0.0000	OK
15 minute winter	46	12	124.450	0.350	218.4	0.6187	0.0000	OK
15 minute winter	47	12	124.264	0.264	218.8	0.4659	0.0000	OK
15 minute winter	26	12	123.579	0.329	220.5	0.7190	0.0000	OK
15 minute winter	27	12	123.487	0.337	220.5	0.5947	0.0000	OK
720 minute winter	28	495	123.387	0.337	24.6	0.5949	0.0000	OK
720 minute winter	12	495	123.387	0.434	35.4	405.1449	0.0000	OK
15 minute summer	13	1	123.200	0.260	0.0	0.0000	0.0000	OK
240 minute winter	47a	240	124.175	0.274	57.5	188.9362	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	58	8.010	59	87.2	1.256	0.288	2.2326	
15 minute winter	59	8.011	45	87.7	0.898	0.409	2.2138	
15 minute winter	45	7.010	46	218.4	2.195	0.591	1.1417	
15 minute winter	46	7.011	47	218.8	1.516	0.708	7.1072	
15 minute winter	47	7.012	47a	217.5	2.647	0.307	0.8072	
15 minute winter	26	2.012	27	220.5	1.376	0.413	2.6578	
15 minute winter	27	2.013	28	219.5	1.262	0.421	5.5855	
720 minute winter	28	2.014	12	24.0	0.249	0.062	11.8138	
720 minute winter	12	Hydro-Brake®	13	19.0				486.5
240 minute winter	47a	Hydro-Brake®	26	5.0				

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.36%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	125.501	0.074	20.1	0.1343	0.0000	OK
15 minute winter	2	11	125.113	0.267	45.2	0.5286	0.0000	SURCHARGED
15 minute winter	3	11	124.897	0.497	84.9	1.4648	0.0000	SURCHARGED
15 minute winter	4	11	124.573	0.273	86.2	0.5266	0.0000	OK
15 minute winter	5	11	124.504	0.254	85.8	0.4490	0.0000	OK
15 minute winter	6	12	124.349	0.249	85.6	0.4402	0.0000	OK
15 minute winter	29	10	124.656	0.088	28.7	0.1849	0.0000	OK
15 minute winter	7	11	124.253	0.253	121.3	0.5418	0.0000	OK
15 minute winter	8	12	124.004	0.434	155.9	1.3103	0.0000	OK
15 minute winter	30	11	123.968	0.168	29.4	0.3595	0.0000	OK
15 minute winter	9	12	123.924	0.452	180.6	0.9698	0.0000	SURCHARGED
15 minute winter	10	12	123.849	0.423	196.4	1.1700	0.0000	OK
15 minute winter	11	12	123.725	0.360	213.9	0.9611	0.0000	OK
15 minute winter	14	10	127.489	0.209	64.0	0.6858	0.0000	OK
15 minute winter	15	11	127.303	0.219	73.2	0.3120	0.0000	OK
15 minute winter	16	12	127.214	0.171	107.4	0.3779	0.0000	OK
15 minute winter	17	12	126.785	1.014	144.3	2.2733	0.0000	SURCHARGED
15 minute winter	18	13	126.517	1.094	125.7	2.1164	0.0000	SURCHARGED
15 minute winter	19	13	126.426	1.102	131.9	2.3880	0.0000	SURCHARGED
15 minute winter	31	10	126.797	0.070	28.4	0.1512	0.0000	OK
15 minute winter	32	12	126.588	1.227	64.2	2.4807	0.0000	SURCHARGED
15 minute winter	20	13	126.326	1.281	200.2	3.7624	0.0000	SURCHARGED
15 minute winter	21	13	125.777	1.091	226.8	3.3349	0.0000	SURCHARGED
15 minute winter	22	13	125.462	0.945	243.3	2.4462	0.0000	SURCHARGED
15 minute summer	33	1	125.534	0.000	0.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	19.9	1.056	0.233	0.5448	
15 minute winter	2	1.001	3	40.9	1.073	0.637	1.1626	
15 minute winter	3	1.002	4	82.6	2.077	1.424	0.3200	
15 minute winter	4	1.003	5	85.8	1.047	0.748	1.2447	
15 minute winter	5	1.004	6	85.6	1.093	0.746	3.5469	
15 minute winter	6	1.005	7	86.4	1.147	0.666	1.8500	
15 minute winter	29	3.000	7	28.5	1.167	0.327	0.5516	
15 minute winter	7	1.006	8	121.2	1.345	0.780	5.4408	
15 minute winter	8	1.007	9	149.9	0.949	0.834	4.9451	
15 minute winter	30	4.000	9	28.6	0.945	0.847	0.8576	
15 minute winter	9	1.008	10	180.5	1.148	0.999	2.2807	
15 minute winter	10	1.009	11	196.3	1.341	1.088	2.8185	
15 minute winter	11	1.010	12	212.7	1.662	0.888	4.6561	
15 minute winter	14	2.000	15	62.8	1.179	0.761	1.8828	
15 minute winter	15	2.001	16	72.1	1.598	0.844	0.3418	
15 minute winter	16	2.002	17	106.6	1.901	0.521	2.1173	
15 minute winter	17	2.003	18	120.5	2.025	0.881	1.2715	
15 minute winter	18	2.004	19	120.2	1.496	0.816	2.0031	
15 minute winter	19	2.005	20	126.7	1.305	0.482	1.7984	
15 minute winter	31	5.000	32	28.2	0.941	0.213	0.5329	
15 minute winter	32	5.001	20	47.3	1.190	1.190	1.1275	
15 minute winter	20	2.006	21	196.7	1.783	1.134	5.2456	
15 minute winter	21	2.007	22	223.3	2.025	1.115	1.8594	
15 minute winter	22	2.008	23	240.8	2.184	0.956	2.0363	
15 minute summer	33	6.000	34	0.0	0.000	0.000	0.0539	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.36%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	34	13	125.080	0.124	7.4	0.1407	0.0000	OK
15 minute winter	23	13	125.076	0.851	247.3	1.7173	0.0000	SURCHARGED
15 minute winter	24	12	124.378	0.548	254.1	1.2003	0.0000	SURCHARGED
15 minute winter	25	12	124.206	0.506	311.1	2.1640	0.0000	SURCHARGED
15 minute winter	35	12	127.672	0.119	28.4	0.2509	0.0000	OK
15 minute winter	36	12	127.667	0.354	45.7	0.6089	0.0000	SURCHARGED
15 minute winter	37	12	127.577	0.795	75.4	1.6194	0.0000	SURCHARGED
15 minute winter	38	12	127.407	1.260	154.6	5.4420	0.0000	SURCHARGED
15 minute winter	39	12	127.077	1.198	142.8	2.1665	0.0000	SURCHARGED
15 minute winter	40	12	126.796	1.007	141.9	1.2290	0.0000	SURCHARGED
15 minute winter	41	12	126.532	1.040	166.1	2.1474	0.0000	SURCHARGED
15 minute winter	42	12	125.818	0.619	169.2	0.7970	0.0000	SURCHARGED
15 minute winter	43	13	125.236	0.372	172.5	0.7112	0.0000	OK
15 minute winter	44	12	125.104	0.384	191.6	1.0194	0.0000	SURCHARGED
15 minute winter	48	10	127.395	0.038	4.2	0.0483	0.0000	OK
15 minute winter	49	10	127.109	0.065	10.0	0.0862	0.0000	OK
15 minute winter	50	10	127.074	0.132	32.3	0.2466	0.0000	OK
15 minute winter	51	10	126.896	0.150	35.0	0.1845	0.0000	OK
15 minute winter	52	10	126.823	0.120	38.5	0.1504	0.0000	OK
15 minute winter	53	11	126.482	0.165	58.3	0.2931	0.0000	OK
15 minute winter	54	11	126.217	0.164	66.6	0.2310	0.0000	OK
15 minute winter	55	11	125.824	0.210	98.5	0.4431	0.0000	OK
15 minute winter	60	10	125.803	0.130	24.6	0.2631	0.0000	OK
15 minute winter	56	11	125.638	0.237	136.0	0.3615	0.0000	OK
15 minute winter	57	11	125.233	0.352	153.2	0.8069	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	34	6.001	23	-7.4	0.246	-0.066	0.3962	
15 minute winter	23	2.009	24	245.8	2.229	1.340	4.1943	
15 minute winter	24	2.010	25	255.4	1.662	0.927	2.8303	
15 minute winter	25	2.011	26	310.6	2.057	1.057	5.5034	
15 minute winter	35	7.000	36	28.1	1.298	0.413	0.4277	
15 minute winter	36	7.001	37	46.1	1.853	0.613	0.8726	
15 minute winter	37	7.002	38	65.0	1.050	0.583	4.4346	
15 minute winter	38	7.003	39	124.5	1.768	0.944	1.3438	
15 minute winter	39	7.004	40	139.7	1.985	1.383	0.7655	
15 minute winter	40	7.005	41	141.2	2.006	0.718	0.6724	
15 minute winter	41	7.006	42	165.4	2.350	1.367	1.7408	
15 minute winter	42	7.007	43	169.0	2.401	1.304	1.3475	
15 minute winter	43	7.008	44	172.2	1.761	0.757	1.2300	
15 minute winter	44	7.009	45	189.4	1.999	0.840	2.1306	
15 minute winter	48	8.000	49	4.1	0.605	0.062	0.1320	
15 minute winter	49	8.001	50	9.9	0.589	0.185	0.1635	
15 minute winter	50	8.002	51	31.9	1.415	0.540	0.2115	
15 minute winter	51	8.003	52	34.7	1.128	0.481	0.3116	
15 minute winter	52	8.004	53	38.6	1.173	0.339	1.2103	
15 minute winter	53	8.005	54	58.5	1.481	0.531	1.0611	
15 minute winter	54	8.006	55	66.9	1.463	0.555	1.7210	
15 minute winter	55	8.007	56	98.8	1.758	0.610	0.5676	
15 minute winter	60	9.000	56	24.4	0.961	0.609	0.8746	
15 minute winter	56	8.008	57	136.3	2.472	0.793	0.8566	
15 minute winter	57	8.009	58	152.8	1.341	1.000	5.2863	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.36%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	58	11	125.036	0.260	168.4	0.5814	0.0000	OK
15 minute winter	59	12	124.952	0.452	167.4	0.7983	0.0000	SURCHARGED
15 minute winter	45	12	124.868	0.468	351.5	0.8263	0.0000	SURCHARGED
15 minute winter	46	12	124.583	0.483	350.4	0.8542	0.0000	OK
360 minute winter	47	360	124.364	0.364	87.7	0.6428	0.0000	OK
15 minute winter	26	12	123.683	0.433	326.4	0.9483	0.0000	OK
15 minute winter	27	12	123.580	0.430	327.1	0.7598	0.0000	OK
600 minute winter	28	450	123.563	0.513	44.9	0.9071	0.0000	OK
600 minute winter	12	450	123.563	0.611	66.9	636.2405	0.0000	SURCHARGED
15 minute summer	13	1	123.200	0.260	5.4	0.0000	0.0000	OK
360 minute winter	47a	360	124.360	0.460	70.5	403.7192	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	58	8.010	59	167.4	1.362	0.553	3.9527	
15 minute winter	59	8.011	45	165.9	1.047	0.773	3.5741	
15 minute winter	45	7.010	46	350.4	2.390	0.948	1.6469	
15 minute winter	46	7.011	47	350.0	1.693	1.133	10.0897	
360 minute winter	47	7.012	47a	70.5	0.760	0.099	1.9338	
15 minute winter	26	2.012	27	327.1	1.507	0.613	3.5986	
15 minute winter	27	2.013	28	327.8	1.420	0.629	7.4114	
600 minute winter	28	2.014	12	43.8	0.340	0.113	17.7285	
600 minute winter	12	Hydro-Brake®	13	23.2				765.3
360 minute winter	47a	Hydro-Brake®	26	5.0				

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.36%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	12	126.534	1.107	36.5	2.0221	0.0000	SURCHARGED
15 minute winter	2	12	126.444	1.598	69.5	3.1597	0.0000	FLOOD RISK
15 minute winter	3	11	125.862	1.462	139.9	4.3129	4.5102	FLOOD
15 minute winter	4	12	125.410	1.110	122.3	2.1408	0.0000	FLOOD RISK
15 minute winter	5	12	125.348	1.098	118.4	1.9403	0.0000	FLOOD RISK
15 minute winter	6	12	125.205	1.105	115.9	1.9523	0.0000	SURCHARGED
15 minute winter	29	12	125.281	0.713	52.2	1.4965	0.0000	SURCHARGED
15 minute winter	7	12	125.119	1.119	161.1	2.3919	0.0000	SURCHARGED
15 minute winter	8	12	124.682	1.112	212.8	3.3542	0.0000	SURCHARGED
15 minute winter	30	12	124.707	0.907	53.4	1.9368	0.0000	SURCHARGED
15 minute winter	9	12	124.496	1.024	270.9	2.1982	0.0000	SURCHARGED
15 minute winter	10	12	124.316	0.890	301.0	2.4620	0.0000	FLOOD RISK
15 minute winter	11	12	124.051	0.686	334.3	1.8349	0.0000	SURCHARGED
15 minute winter	14	11	129.005	1.725	116.2	5.6511	1.8864	FLOOD
15 minute winter	15	11	128.782	1.698	101.4	2.4200	0.0000	SURCHARGED
15 minute winter	16	11	128.674	1.632	159.6	3.5961	0.0000	FLOOD RISK
15 minute winter	17	10	127.732	1.961	223.3	4.3985	13.2234	FLOOD
15 minute summer	18	10	127.305	1.882	156.5	3.6425	0.0000	FLOOD RISK
15 minute winter	19	10	127.124	1.800	178.7	3.9006	3.0202	FLOOD
15 minute winter	31	11	127.935	1.208	51.5	2.6020	0.0000	SURCHARGED
15 minute winter	32	10	127.696	2.335	111.1	4.7214	4.4083	FLOOD
30 minute winter	20	17	126.960	1.916	291.5	5.6254	30.4739	FLOOD
15 minute winter	21	10	126.486	1.800	271.1	5.5008	4.4654	FLOOD
15 minute winter	22	11	126.176	1.659	284.5	4.2926	0.0000	FLOOD RISK
15 minute winter	33	11	125.765	0.231	6.2	0.2618	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	30.0	1.086	0.349	0.8556	
15 minute winter	2	1.001	3	67.2	1.690	1.045	1.1626	
15 minute winter	3	1.002	4	115.8	2.912	1.996	0.3200	
15 minute winter	4	1.003	5	118.4	1.145	1.032	1.6592	
15 minute winter	5	1.004	6	115.9	1.144	1.010	4.9834	
15 minute winter	6	1.005	7	121.9	1.197	0.940	2.6096	
15 minute winter	29	3.000	7	46.8	1.336	0.537	0.8100	
15 minute winter	7	1.006	8	166.3	1.508	1.071	6.4697	
15 minute winter	8	1.007	9	213.4	1.347	1.187	4.9721	
15 minute winter	30	4.000	9	45.9	1.154	1.361	0.9628	
15 minute winter	9	1.008	10	272.0	1.717	1.505	2.3088	
15 minute winter	10	1.009	11	302.4	1.909	1.677	3.0751	
15 minute winter	11	1.010	12	335.8	2.122	1.402	5.5677	
15 minute winter	14	2.000	15	86.7	1.234	1.051	2.4916	
15 minute winter	15	2.001	16	102.6	1.575	1.200	0.4979	
15 minute winter	16	2.002	17	158.9	2.256	0.777	2.6618	
15 minute winter	17	2.003	18	148.7	2.112	1.087	1.2715	
15 minute summer	18	2.004	19	156.4	1.475	1.061	2.0031	
15 minute winter	19	2.005	20	161.9	1.468	0.616	1.7984	
15 minute winter	31	5.000	32	49.6	1.248	0.374	0.8422	
15 minute winter	32	5.001	20	76.4	1.921	1.921	1.1275	
30 minute winter	20	2.006	21	217.5	1.972	1.254	5.2456	
15 minute winter	21	2.007	22	244.7	2.219	1.222	1.8594	
15 minute winter	22	2.008	23	273.1	2.476	1.084	2.0363	
15 minute winter	33	6.000	34	-6.2	-0.261	-0.080	1.0271	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.36%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	34	11	125.735	0.779	36.6	0.8807	0.0000	SURCHARGED
15 minute winter	23	12	125.713	1.488	288.2	3.0025	0.0000	SURCHARGED
15 minute winter	24	11	124.859	1.028	296.0	2.2513	0.0000	SURCHARGED
15 minute winter	25	11	124.622	0.922	424.0	3.9431	0.0000	SURCHARGED
15 minute winter	35	11	129.198	1.645	51.5	3.4699	0.0000	FLOOD RISK
15 minute winter	36	11	129.038	1.725	75.8	2.9705	0.7273	FLOOD
15 minute winter	37	11	128.629	1.847	114.1	3.7612	0.0000	FLOOD RISK
15 minute winter	38	9	127.872	1.725	275.9	7.4503	43.0753	FLOOD
15 minute winter	39	10	127.679	1.800	165.8	3.2562	1.7521	FLOOD
15 minute winter	40	11	127.485	1.696	158.5	2.0690	0.0000	FLOOD RISK
15 minute winter	41	11	127.291	1.799	201.0	3.7154	0.0000	FLOOD RISK
15 minute winter	42	11	126.492	1.293	189.7	1.6641	0.0000	SURCHARGED
15 minute winter	43	11	125.779	0.915	194.6	1.7480	0.0000	SURCHARGED
15 minute winter	44	11	125.602	0.882	240.2	2.3424	0.0000	SURCHARGED
15 minute winter	48	13	127.410	0.052	7.5	0.0670	0.0000	OK
15 minute winter	49	13	127.392	0.348	18.1	0.4608	0.0000	SURCHARGED
15 minute winter	50	12	127.381	0.439	57.4	0.8194	0.0000	SURCHARGED
15 minute winter	51	12	127.297	0.551	62.0	0.6765	0.0000	SURCHARGED
15 minute winter	52	12	127.269	0.566	68.5	0.7094	0.0000	SURCHARGED
15 minute winter	53	12	127.198	0.881	100.6	1.5674	0.0000	SURCHARGED
15 minute winter	54	12	127.048	0.995	103.2	1.3996	0.0000	SURCHARGED
15 minute winter	55	12	126.785	1.170	141.7	2.4673	0.0000	SURCHARGED
15 minute winter	60	12	126.743	1.070	44.6	2.1732	0.0000	SURCHARGED
15 minute winter	56	12	126.551	1.150	187.0	1.7534	0.0000	SURCHARGED
15 minute winter	57	12	125.906	1.024	213.9	2.3470	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	34	6.001	23	-36.6	-0.953	-0.328	0.5060	
15 minute winter	23	2.009	24	281.9	2.556	1.537	4.1943	
15 minute winter	24	2.010	25	299.8	1.892	1.088	2.8303	
15 minute winter	25	2.011	26	424.7	2.681	1.445	5.6961	
15 minute winter	35	7.000	36	45.6	1.342	0.669	0.5571	
15 minute winter	36	7.001	37	67.0	1.859	0.892	0.8726	
15 minute winter	37	7.002	38	113.3	1.609	1.015	4.4346	
15 minute winter	38	7.003	39	129.8	1.843	0.984	1.3438	
15 minute winter	39	7.004	40	153.8	2.185	1.523	0.7655	
15 minute winter	40	7.005	41	149.8	2.127	0.761	0.6724	
15 minute winter	41	7.006	42	180.9	2.570	1.495	1.7408	
15 minute winter	42	7.007	43	186.4	2.647	1.438	1.3484	
15 minute winter	43	7.008	44	190.0	1.764	0.835	1.2310	
15 minute winter	44	7.009	45	234.1	2.123	1.038	2.1306	
15 minute winter	48	8.000	49	7.4	0.664	0.111	0.4443	
15 minute winter	49	8.001	50	19.7	0.612	0.370	0.3853	
15 minute winter	50	8.002	51	56.3	1.560	0.954	0.3735	
15 minute winter	51	8.003	52	61.6	1.312	0.854	0.7123	
15 minute winter	52	8.004	53	67.0	1.252	0.588	2.5874	
15 minute winter	53	8.005	54	91.1	1.530	0.826	1.8906	
15 minute winter	54	8.006	55	100.2	1.423	0.831	2.6292	
15 minute winter	55	8.007	56	132.4	1.880	0.818	0.7108	
15 minute winter	60	9.000	56	36.4	0.966	0.911	1.3138	
15 minute winter	56	8.008	57	187.9	2.669	1.093	1.0945	
15 minute winter	57	8.009	58	214.9	1.356	1.406	7.3458	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.36%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	58	12	125.651	0.875	238.5	1.9561	0.0000	SURCHARGED
15 minute winter	59	12	125.418	0.918	239.6	1.6218	0.0000	SURCHARGED
15 minute winter	45	12	125.232	0.832	469.9	1.4708	0.0000	SURCHARGED
15 minute winter	46	12	124.761	0.661	470.5	1.1679	0.0000	SURCHARGED
960 minute winter	47	945	124.724	0.724	57.6	1.2790	0.0000	SURCHARGED
600 minute winter	26	570	123.986	0.736	78.3	1.6112	0.0000	SURCHARGED
600 minute winter	27	585	123.986	0.836	77.4	1.4772	0.0000	SURCHARGED
600 minute winter	28	570	123.987	0.936	76.4	1.6548	0.0000	SURCHARGED
600 minute winter	12	570	123.986	1.034	114.2	1241.0480	0.0000	SURCHARGED
15 minute summer	13	1	123.200	0.260	22.4	0.0000	0.0000	OK
960 minute winter	47a	945	124.724	0.824	74.3	867.6648	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	58	8.010	59	239.6	1.513	0.792	4.9883	
15 minute winter	59	8.011	45	240.3	1.517	1.120	3.5750	
15 minute winter	45	7.010	46	470.5	2.970	1.273	1.8207	
15 minute winter	46	7.011	47	471.2	1.771	1.525	11.9970	
960 minute winter	47	7.012	47a	74.3	0.728	0.105	2.6526	
600 minute winter	26	2.012	27	77.4	0.880	0.145	4.6699	
600 minute winter	27	2.013	28	76.4	0.625	0.147	11.4586	
600 minute winter	28	2.014	12	75.1	0.432	0.193	20.0550	
600 minute winter	12	Hydro-Brake®	13	23.2				794.4
960 minute winter	47a	Hydro-Brake®	26	5.0				