

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	1	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	19.200	Minimum Backdrop Height (m)	0.200
Ratio-R	0.300	Preferred Cover Depth (m)	0.750
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	x

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
1	0.014	5.00	72.716	1350	498576.938	885485.257	3.216
2	0.008	5.00	72.304	1350	498566.979	885497.883	3.075
11	0.005	5.00	72.000	450	498549.287	885474.797	0.975
12	0.005	5.00	72.000	450	498535.949	885482.177	1.232
13	0.005	5.00	72.000	450	498535.593	885495.871	1.463
15	0.005	5.00	72.000	450	498558.890	885494.626	0.975
14	0.005	5.00	72.000	450	498541.373	885505.208	1.648
3	0.008	5.00	71.473	1350	498544.353	885509.655	2.673
4	0.008	5.00	70.895	450	498529.334	885513.828	2.357
5	0.008	5.00	69.751	1350	498515.377	885504.342	2.251
16	0.005	5.00	71.000	450	498546.769	885467.262	0.975
17	0.005	5.00	71.000	450	498540.713	885477.266	1.172
18	0.005	5.00	71.000	450	498526.014	885481.417	1.429
20	0.005	5.00	71.000	450	498525.810	885459.641	0.975
21	0.005	5.00	70.000	450	498522.475	885451.883	0.975
22	0.005	5.00	70.000	450	498521.999	885462.975	1.162
24	0.005	5.00	70.000	450	498499.270	885451.883	0.975
25	0.005	5.00	70.000	450	498501.379	885473.251	1.336
23	0.005	5.00	70.000	450	498510.907	885474.408	1.498
19	0.005	5.00	70.000	450	498516.487	885476.790	1.607
6	0.008	5.00	69.000	1500	498511.821	885485.135	1.747
7	0.000		69.000	1800	498498.572	885473.665	2.500
40	0.005	5.00	68.300	450	498461.988	885470.784	0.975
41	0.005	5.00	68.300	450	498480.464	885476.194	1.299
42	0.005	5.00	68.300	450	498489.753	885462.924	1.572
43	0.005	5.00	68.300	450	498489.038	885453.737	1.727
8	0.000		68.000	1800	498490.782	885451.239	2.000
26	0.005	5.00	68.900	450	498507.679	885532.891	0.975
27	0.005	5.00	68.900	450	498486.438	885540.862	1.357
28	0.005	5.00	68.900	450	498479.536	885523.257	1.675
29	0.000		67.500	450	498459.256	885531.763	1.500
32	0.005	5.00	68.300	450	498491.453	885515.898	0.975
33	0.005	5.00	68.300	450	498470.017	885522.994	1.351
35	0.005	5.00	68.300	450	498480.572	885497.795	0.975
34	0.005	5.00	68.300	450	498462.372	885503.374	1.705
30	0.000	5.00	67.500	450	498450.410	885506.571	1.633
36	0.005	5.00	68.300	450	498480.423	885495.820	1.125
37	0.005	5.00	68.300	450	498458.647	885500.243	1.499
39	0.005	5.00	68.300	450	498469.059	885476.153	0.975
38	0.005	5.00	68.300	450	498454.496	885477.514	1.888
31	0.000		67.500	450	498443.455	885477.894	1.931

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
9	0.001	5.00	67.500	450	498439.743	885454.725	2.300
10			66.700	1800	498433.020	885453.231	1.541

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	16.081	0.600	69.500	69.229	0.271	59.3	450	5.10	45.1
1.001	2	3	25.505	0.600	69.229	68.800	0.429	59.5	450	5.26	44.6
2.000	11	12	15.244	0.600	71.025	70.768	0.257	59.3	225	5.15	44.9
2.001	12	13	13.699	0.600	70.768	70.537	0.231	59.3	225	5.28	44.5
2.002	13	14	10.981	0.600	70.537	70.352	0.185	59.4	225	5.39	44.1
3.000	15	14	20.465	0.600	71.025	70.681	0.344	59.5	225	5.20	44.8
2.003	14	3	5.353	0.600	70.352	70.262	0.090	59.5	225	5.44	44.0
1.002	3	4	15.588	0.600	68.800	68.538	0.262	59.5	450	5.54	43.6
1.003	4	5	16.875	0.600	68.538	68.254	0.284	59.4	450	5.65	43.3
1.004	5	6	19.533	0.600	67.500	67.253	0.247	79.1	450	5.79	42.8
4.000	16	17	11.694	0.600	70.025	69.828	0.197	59.4	225	5.11	45.1
4.001	17	18	15.274	0.600	69.828	69.571	0.257	59.4	225	5.26	44.6
4.002	18	19	10.591	0.600	69.571	69.393	0.178	59.5	225	5.37	44.2
5.000	20	19	19.519	0.600	70.025	69.697	0.328	59.5	225	5.19	44.8
6.000	21	22	11.102	0.600	69.025	68.838	0.187	59.4	225	5.11	45.1
6.001	22	23	15.929	0.600	68.838	68.502	0.336	47.4	225	5.25	44.6
7.000	24	25	21.472	0.600	69.025	68.664	0.361	59.5	225	5.21	44.7
7.001	25	23	9.598	0.600	68.664	68.502	0.162	59.2	225	5.30	44.4
6.002	23	19	6.067	0.600	68.502	68.393	0.109	55.7	225	5.36	44.2
4.003	19	6	9.561	0.600	68.393	68.232	0.161	59.4	225	5.46	43.9

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	2.643	420.3	1.7	2.766	2.625	0.014	0.0	21	0.660
1.001	2.640	419.9	2.6	2.625	2.223	0.022	0.0	25	0.750
2.000	1.701	67.6	0.6	0.750	1.007	0.005	0.0	15	0.535
2.001	1.701	67.6	1.2	1.007	1.238	0.010	0.0	21	0.650
2.002	1.700	67.6	1.8	1.238	1.423	0.015	0.0	25	0.737
3.000	1.698	67.5	0.6	0.750	1.094	0.005	0.0	15	0.534
2.003	1.699	67.5	3.0	1.423	0.986	0.025	0.0	32	0.860
1.002	2.639	419.7	6.4	2.223	1.907	0.054	0.0	38	0.986
1.003	2.641	420.0	7.2	1.907	1.047	0.062	0.0	40	1.015
1.004	2.287	363.8	8.0	1.801	1.297	0.069	0.0	45	0.950
4.000	1.700	67.6	0.6	0.750	0.947	0.005	0.0	15	0.535
4.001	1.699	67.6	1.2	0.947	1.204	0.010	0.0	21	0.650
4.002	1.698	67.5	1.8	1.204	0.382	0.015	0.0	25	0.736
5.000	1.698	67.5	0.6	0.750	0.078	0.005	0.0	15	0.534
6.000	1.700	67.6	0.6	0.750	0.937	0.005	0.0	15	0.534
6.001	1.904	75.7	1.2	0.937	1.273	0.010	0.0	20	0.708
7.000	1.699	67.5	0.6	0.750	1.111	0.005	0.0	15	0.534
7.001	1.702	67.7	1.2	1.111	1.273	0.010	0.0	21	0.651
6.002	1.756	69.8	3.0	1.273	1.382	0.025	0.0	31	0.874
4.003	1.700	67.6	5.9	1.382	0.543	0.050	0.0	45	1.061

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)
1.005	6	7	17.524	0.600	67.253	67.075	0.178	98.5	450	5.93	42.4
1.006	7	8	23.740	0.600	66.500	66.452	0.048	494.6	525	6.33	41.3
13.000	40	41	19.252	0.600	67.325	67.001	0.324	59.4	225	5.19	44.8
13.001	41	42	16.198	0.600	67.001	66.728	0.273	59.3	225	5.35	44.3
13.002	42	43	9.215	0.600	66.728	66.573	0.155	59.5	225	5.44	44.0
13.003	43	8	3.047	0.600	66.573	66.521	0.052	58.6	225	5.47	43.9
1.007	8	9	51.158	0.600	66.000	65.493	0.507	100.9	525	6.71	40.2
8.000	26	27	22.687	0.600	67.925	67.543	0.382	59.4	225	5.22	44.7
8.001	27	28	18.910	0.600	67.543	67.225	0.318	59.5	225	5.41	44.1
8.002	28	29	21.992	0.600	67.225	66.125	1.100	20.0	225	5.53	43.7
8.003	29	30	26.700	0.600	66.000	65.867	0.133	200.0	225	6.02	42.2
9.000	32	33	22.580	0.600	67.325	66.949	0.376	60.0	225	5.22	44.7
9.001	33	34	21.057	0.600	66.949	66.595	0.354	59.5	225	5.43	44.0
10.000	35	34	19.036	0.600	67.325	66.858	0.467	40.8	225	5.15	44.9
9.002	34	30	12.382	0.600	66.595	66.522	0.073	169.6	225	5.64	43.3
8.004	30	31	29.508	0.600	65.867	65.719	0.148	200.0	225	6.55	40.6
11.000	36	37	22.221	0.600	67.175	66.801	0.374	59.4	375	5.16	44.9
11.001	37	38	23.105	0.600	66.801	66.412	0.389	59.4	375	5.32	44.4
12.000	39	38	14.626	0.600	67.325	67.079	0.246	59.5	225	5.14	45.0
11.002	38	31	11.048	0.600	66.412	66.150	0.262	42.2	375	5.39	44.1
8.005	31	9	23.464	0.600	65.569	65.452	0.117	200.0	375	6.86	39.8
1.008	9	10	6.887	0.600	65.200	65.159	0.041	168.0	525	6.92	39.7

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)
1.005	2.049	325.8	14.5	1.297	1.475	0.127	0.0	64	1.050
1.006	1.000	216.5	14.1	1.975	1.023	0.127	0.0	90	0.573
13.000	1.700	67.6	0.6	0.750	1.074	0.005	0.0	15	0.534
13.001	1.701	67.6	1.2	1.074	1.347	0.010	0.0	21	0.650
13.002	1.699	67.6	1.8	1.347	1.502	0.015	0.0	25	0.736
13.003	1.712	68.1	2.4	1.502	1.254	0.020	0.0	29	0.806
1.007	2.229	482.6	16.0	1.475	1.482	0.147	0.0	64	1.050
8.000	1.700	67.6	0.6	0.750	1.132	0.005	0.0	15	0.534
8.001	1.699	67.5	1.2	1.132	1.450	0.010	0.0	21	0.650
8.002	2.939	116.8	1.8	1.450	1.150	0.015	0.0	19	1.065
8.003	0.921	36.6	1.7	1.275	1.408	0.015	0.0	33	0.472
9.000	1.691	67.2	0.6	0.750	1.126	0.005	0.0	15	0.532
9.001	1.699	67.5	1.2	1.126	1.480	0.010	0.0	21	0.649
10.000	2.055	81.7	0.6	0.750	1.217	0.005	0.0	14	0.597
9.002	1.001	39.8	2.3	1.480	0.753	0.020	0.0	37	0.554
8.004	0.921	36.6	3.9	1.408	1.556	0.035	0.0	49	0.598
11.000	2.354	260.0	0.6	0.750	1.124	0.005	0.0	14	0.494
11.001	2.354	260.0	1.2	1.124	1.513	0.010	0.0	18	0.599
12.000	1.699	67.6	0.6	0.750	0.996	0.005	0.0	15	0.534
11.002	2.797	308.9	2.4	1.513	0.975	0.020	0.0	23	0.843
8.005	1.277	141.1	5.9	1.556	1.673	0.055	0.0	52	0.639
1.008	1.725	373.4	21.8	1.775	1.016	0.202	0.0	85	0.959

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	16.081	59.3	450	Circular_Default Sewer Type	72.716	69.500	2.766	72.304	69.229	2.625
1.001	25.505	59.5	450	Circular_Default Sewer Type	72.304	69.229	2.625	71.473	68.800	2.223
2.000	15.244	59.3	225	Circular_Default Sewer Type	72.000	71.025	0.750	72.000	70.768	1.007
2.001	13.699	59.3	225	Circular_Default Sewer Type	72.000	70.768	1.007	72.000	70.537	1.238
2.002	10.981	59.4	225	Circular_Default Sewer Type	72.000	70.537	1.238	72.000	70.352	1.423
3.000	20.465	59.5	225	Circular_Default Sewer Type	72.000	71.025	0.750	72.000	70.681	1.094
2.003	5.353	59.5	225	Circular_Default Sewer Type	72.000	70.352	1.423	71.473	70.262	0.986
1.002	15.588	59.5	450	Circular_Default Sewer Type	71.473	68.800	2.223	70.895	68.538	1.907
1.003	16.875	59.4	450	Circular_Default Sewer Type	70.895	68.538	1.907	69.751	68.254	1.047
1.004	19.533	79.1	450	Circular_Default Sewer Type	69.751	67.500	1.801	69.000	67.253	1.297
4.000	11.694	59.4	225	Circular_Default Sewer Type	71.000	70.025	0.750	71.000	69.828	0.947
4.001	15.274	59.4	225	Circular_Default Sewer Type	71.000	69.828	0.947	71.000	69.571	1.204
4.002	10.591	59.5	225	Circular_Default Sewer Type	71.000	69.571	1.204	70.000	69.393	0.382
5.000	19.519	59.5	225	Circular_Default Sewer Type	71.000	70.025	0.750	70.000	69.697	0.078
6.000	11.102	59.4	225	Circular_Default Sewer Type	70.000	69.025	0.750	70.000	68.838	0.937
6.001	15.929	47.4	225	Circular_Default Sewer Type	70.000	68.838	0.937	70.000	68.502	1.273
7.000	21.472	59.5	225	Circular_Default Sewer Type	70.000	69.025	0.750	70.000	68.664	1.111
7.001	9.598	59.2	225	Circular_Default Sewer Type	70.000	68.664	1.111	70.000	68.502	1.273
6.002	6.067	55.7	225	Circular_Default Sewer Type	70.000	68.502	1.273	70.000	68.393	1.382
4.003	9.561	59.4	225	Circular_Default Sewer Type	70.000	68.393	1.382	69.000	68.232	0.543
1.005	17.524	98.5	450	Circular_Default Sewer Type	69.000	67.253	1.297	69.000	67.075	1.475
1.006	23.740	494.6	525	Circular_Default Sewer Type	69.000	66.500	1.975	68.000	66.452	1.023
13.000	19.252	59.4	225	Circular_Default Sewer Type	68.300	67.325	0.750	68.300	67.001	1.074
13.001	16.198	59.3	225	Circular_Default Sewer Type	68.300	67.001	1.074	68.300	66.728	1.347
13.002	9.215	59.5	225	Circular_Default Sewer Type	68.300	66.728	1.347	68.300	66.573	1.502

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1350	Manhole	Adoptable	2	1350	Manhole	Adoptable
1.001	2	1350	Manhole	Adoptable	3	1350	Manhole	Adoptable
2.000	11	450	Manhole	Adoptable	12	450	Manhole	Adoptable
2.001	12	450	Manhole	Adoptable	13	450	Manhole	Adoptable
2.002	13	450	Manhole	Adoptable	14	450	Manhole	Adoptable
3.000	15	450	Manhole	Adoptable	14	450	Manhole	Adoptable
2.003	14	450	Manhole	Adoptable	3	1350	Manhole	Adoptable
1.002	3	1350	Manhole	Adoptable	4	450	Manhole	Adoptable
1.003	4	450	Manhole	Adoptable	5	1350	Manhole	Adoptable
1.004	5	1350	Manhole	Adoptable	6	1500	Manhole	Adoptable
4.000	16	450	Manhole	Adoptable	17	450	Manhole	Adoptable
4.001	17	450	Manhole	Adoptable	18	450	Manhole	Adoptable
4.002	18	450	Manhole	Adoptable	19	450	Manhole	Adoptable
5.000	20	450	Manhole	Adoptable	19	450	Manhole	Adoptable
6.000	21	450	Manhole	Adoptable	22	450	Manhole	Adoptable
6.001	22	450	Manhole	Adoptable	23	450	Manhole	Adoptable
7.000	24	450	Manhole	Adoptable	25	450	Manhole	Adoptable
7.001	25	450	Manhole	Adoptable	23	450	Manhole	Adoptable
6.002	23	450	Manhole	Adoptable	19	450	Manhole	Adoptable
4.003	19	450	Manhole	Adoptable	6	1500	Manhole	Adoptable
1.005	6	1500	Manhole	Adoptable	7	1800	Manhole	Adoptable
1.006	7	1800	Manhole	Adoptable	8	1800	Manhole	Adoptable
13.000	40	450	Manhole	Adoptable	41	450	Manhole	Adoptable
13.001	41	450	Manhole	Adoptable	42	450	Manhole	Adoptable
13.002	42	450	Manhole	Adoptable	43	450	Manhole	Adoptable

Pipeline Schedule

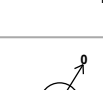
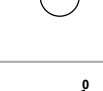
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
13.003	3.047	58.6	225	Circular_Default Sewer Type	68.300	66.573	1.502	68.000	66.521	1.254
1.007	51.158	100.9	525	Circular_Default Sewer Type	68.000	66.000	1.475	67.500	65.493	1.482
8.000	22.687	59.4	225	Circular_Default Sewer Type	68.900	67.925	0.750	68.900	67.543	1.132
8.001	18.910	59.5	225	Circular_Default Sewer Type	68.900	67.543	1.132	68.900	67.225	1.450
8.002	21.992	20.0	225	Circular_Default Sewer Type	68.900	67.225	1.450	67.500	66.125	1.150
8.003	26.700	200.0	225	Circular_Default Sewer Type	67.500	66.000	1.275	67.500	65.867	1.408
9.000	22.580	60.0	225	Circular_Default Sewer Type	68.300	67.325	0.750	68.300	66.949	1.126
9.001	21.057	59.5	225	Circular_Default Sewer Type	68.300	66.949	1.126	68.300	66.595	1.480
10.000	19.036	40.8	225	Circular_Default Sewer Type	68.300	67.325	0.750	68.300	66.858	1.217
9.002	12.382	169.6	225	Circular_Default Sewer Type	68.300	66.595	1.480	67.500	66.522	0.753
8.004	29.508	200.0	225	Circular_Default Sewer Type	67.500	65.867	1.408	67.500	65.719	1.556
11.000	22.221	59.4	375	Circular_Default Sewer Type	68.300	67.175	0.750	68.300	66.801	1.124
11.001	23.105	59.4	375	Circular_Default Sewer Type	68.300	66.801	1.124	68.300	66.412	1.513
12.000	14.626	59.5	225	Circular_Default Sewer Type	68.300	67.325	0.750	68.300	67.079	0.996
11.002	11.048	42.2	375	Circular_Default Sewer Type	68.300	66.412	1.513	67.500	66.150	0.975
8.005	23.464	200.0	375	Circular_Default Sewer Type	67.500	65.569	1.556	67.500	65.452	1.673
1.008	6.887	168.0	525	Circular_Default Sewer Type	67.500	65.200	1.775	66.700	65.159	1.016

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
13.003	43	450	Manhole	Adoptable	8	1800	Manhole	Adoptable
1.007	8	1800	Manhole	Adoptable	9	450	Manhole	Adoptable
8.000	26	450	Manhole	Adoptable	27	450	Manhole	Adoptable
8.001	27	450	Manhole	Adoptable	28	450	Manhole	Adoptable
8.002	28	450	Manhole	Adoptable	29	450	Manhole	Adoptable
8.003	29	450	Manhole	Adoptable	30	450	Manhole	Adoptable
9.000	32	450	Manhole	Adoptable	33	450	Manhole	Adoptable
9.001	33	450	Manhole	Adoptable	34	450	Manhole	Adoptable
10.000	35	450	Manhole	Adoptable	34	450	Manhole	Adoptable
9.002	34	450	Manhole	Adoptable	30	450	Manhole	Adoptable
8.004	30	450	Manhole	Adoptable	31	450	Manhole	Adoptable
11.000	36	450	Manhole	Adoptable	37	450	Manhole	Adoptable
11.001	37	450	Manhole	Adoptable	38	450	Manhole	Adoptable
12.000	39	450	Manhole	Adoptable	38	450	Manhole	Adoptable
11.002	38	450	Manhole	Adoptable	31	450	Manhole	Adoptable
8.005	31	450	Manhole	Adoptable	9	450	Manhole	Adoptable
1.008	9	450	Manhole	Adoptable	10	1800	Manhole	Adoptable

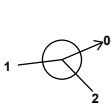
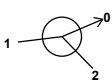
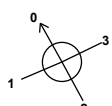
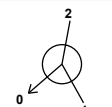
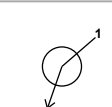
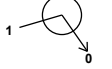
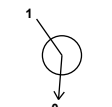
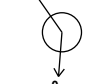
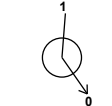
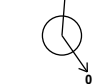
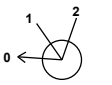
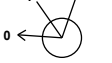
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
1	498576.938	885485.257	72.716	3.216	1350					
						0	1.000	69.500	450	
2	498566.979	885497.883	72.304	3.075	1350		1	1.000	69.229	450
						0	1.001	69.229	450	

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
11	498549.287	885474.797	72.000	0.975	450		0	2.000	71.025	225
12	498535.949	885482.177	72.000	1.232	450		1	2.000	70.768	225
							0	2.001	70.768	225
13	498535.593	885495.871	72.000	1.463	450		1	2.001	70.537	225
							0	2.002	70.537	225
15	498558.890	885494.626	72.000	0.975	450		0	3.000	71.025	225
14	498541.373	885505.208	72.000	1.648	450		1	3.000	70.681	225
							2	2.002	70.352	225
							0	2.003	70.352	225
3	498544.353	885509.655	71.473	2.673	1350		1	2.003	70.262	225
							2	1.001	68.800	450
							0	1.002	68.800	450
4	498529.334	885513.828	70.895	2.357	450		1	1.002	68.538	450
							0	1.003	68.538	450
5	498515.377	885504.342	69.751	2.251	1350		1	1.003	68.254	450
							0	1.004	67.500	450
16	498546.769	885467.262	71.000	0.975	450		0	4.000	70.025	225
17	498540.713	885477.266	71.000	1.172	450		1	4.000	69.828	225
							0	4.001	69.828	225
18	498526.014	885481.417	71.000	1.429	450		1	4.001	69.571	225
							0	4.002	69.571	225
20	498525.810	885459.641	71.000	0.975	450		0	5.000	70.025	225
21	498522.475	885451.883	70.000	0.975	450		0	6.000	69.025	225

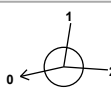
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
22	498521.999	885462.975	70.000	1.162	450	 1	6.000	68.838	225
24	498499.270	885451.883	70.000	0.975	450	 0	6.001	68.838	225
25	498501.379	885473.251	70.000	1.336	450	 1	7.000	69.025	225
23	498510.907	885474.408	70.000	1.498	450	 1	7.001	68.664	225
19	498516.487	885476.790	70.000	1.607	450	 2	6.001	68.502	225
6	498511.821	885485.135	69.000	1.747	1500	 0	6.002	68.502	225
7	498498.572	885473.665	69.000	2.500	1800	 1	5.000	69.697	225
40	498461.988	885470.784	68.300	0.975	450	 3	4.002	69.393	225
41	498480.464	885476.194	68.300	1.299	450	 0	4.003	68.393	225
42	498489.753	885462.924	68.300	1.572	450	 1	4.003	68.232	225
43	498489.038	885453.737	68.300	1.727	450	 0	1.004	67.253	450
8	498490.782	885451.239	68.000	2.000	1800	 1	1.005	67.253	450
26	498507.679	885532.891	68.900	0.975	450	 1	1.005	67.075	450
						 0	1.006	66.500	525
						 0	13.000	67.325	225
						 1	13.000	67.001	225
						 0	13.001	67.001	225
						 1	13.001	66.728	225
						 0	13.002	66.728	225
						 1	13.002	66.573	225
						 0	13.003	66.573	225
						 1	13.003	66.521	225
						 0	1.006	66.452	525
						 0	1.007	66.000	525
						 0	8.000	67.925	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
27	498486.438	885540.862	68.900	1.357	450	 1	8.000	67.543	225
28	498479.536	885523.257	68.900	1.675	450	 1	8.001	67.543	225
						 0	8.001	67.225	225
						 0	8.002	67.225	225
29	498459.256	885531.763	67.500	1.500	450	 1	8.002	66.125	225
						 0	8.003	66.000	225
32	498491.453	885515.898	68.300	0.975	450	 0	9.000	67.325	225
33	498470.017	885522.994	68.300	1.351	450	 1	9.000	66.949	225
						 0	9.001	66.949	225
35	498480.572	885497.795	68.300	0.975	450	 0	10.000	67.325	225
						 0	10.000	66.858	225
34	498462.372	885503.374	68.300	1.705	450	 2	10.000	66.858	225
						 2	9.001	66.595	225
						 0	9.002	66.595	225
30	498450.410	885506.571	67.500	1.633	450	 2	10.000	66.858	225
						 1	9.002	66.522	225
						 2	8.003	65.867	225
36	498480.423	885495.820	68.300	1.125	450	 0	8.004	65.867	225
						 0	11.000	67.175	375
37	498458.647	885500.243	68.300	1.499	450	 1	11.000	66.801	375
						 0	11.001	66.801	375
39	498469.059	885476.153	68.300	0.975	450	 0	12.000	67.325	225
						 0	12.000	67.079	225
38	498454.496	885477.514	68.300	1.888	450	 2	11.001	66.412	375
						 1	11.002	66.412	375
						 0	11.002	66.150	375
31	498443.455	885477.894	67.500	1.931	450	 2	8.004	65.719	225
						 1	8.005	65.569	375
						 0	8.005	65.569	375

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
9	498439.743	885454.725	67.500	2.300	450		1	8.005	65.452	375
							2	1.007	65.493	525
							0	1.008	65.200	525
10	498433.020	885453.231	66.700	1.541	1800		1	1.008	65.159	525

Simulation Settings

Rainfall Methodology	FSR	Drain Down Time (mins)	60
FSR Region	England and Wales	Additional Storage (m³/ha)	75.0
M5-60 (mm)	19.100	Check Discharge Rate(s)	✓
Ratio-R	0.300	1 year (l/s)	
Summer CV	0.750	30 year (l/s)	
Winter CV	0.840	100 year (l/s)	
Analysis Speed	Normal	Check Discharge Volume	✓
Skip Steady State	✓	100 year 360 minute (m³)	

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 %)
100	40	0	0

Pre-development Discharge Rate

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

Pre-development Discharge Volume

Site Makeup	Greenfield	Return Period (years)	100
Greenfield Method	FSR/FEH	Climate Change (%)	0
Positively Drained Area (ha)		Storm Duration (mins)	360
Soil Index	1	Betterment (%)	0
SPR	0.10	PR	
CWI		Runoff Volume (m³)	

Node 10 Online Hydro-Brake® Control

Flap Valve	x	Objective	(CU) Linear Discharge
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	65.159	Product Number	CTL-SCU-0061-4800-1540-4800
Design Depth (m)	1.540	Min Outlet Diameter (m)	0.075
Design Flow (l/s)	4.8	Min Node Diameter (mm)	1200

Node 14 Online Orifice Control

Flap Valve	x	Design Depth (m)	0.750	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	1.0		
Invert Level (m)	70.352	Diameter (m)	0.023		

Node 13 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.400	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	0.5		
Invert Level (m)	70.537	Diameter (m)	0.014		

Node 18 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.400	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	0.5		
Invert Level (m)	69.571	Diameter (m)	0.014		

Node 25 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.300	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	0.5		
Invert Level (m)	68.664	Diameter (m)	0.014		

Node 29 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.500	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	0.5		
Invert Level (m)	66.000	Diameter (m)	0.014		

Node 30 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.600	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	0.5		
Invert Level (m)	65.867	Diameter (m)	0.013		

Node 31 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.780	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	0.5		
Invert Level (m)	65.569	Diameter (m)	0.013		

Node 42 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.570	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	0.5		
Invert Level (m)	66.728	Diameter (m)	0.013		

Node 14 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	70.352
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

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)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	30.0	0.0	0.100	30.0	0.0	0.700	30.0	0.0	0.800	0.0	0.0

Node 13 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	70.537
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

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	45.0	0.0	0.700	45.0	0.0	0.800	0.0	0.0

Node 18 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	69.571
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

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	45.0	0.0	0.700	45.0	0.0	0.800	0.0	0.0

Node 25 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	68.664
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

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	45.0	0.0	0.700	45.0	0.0	0.800	0.0	0.0

Node 29 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	66.000
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

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	45.0	0.0	0.700	45.0	0.0	0.800	0.0	0.0

Node 30 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	65.867
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	30.0	0.0	0.700	30.0	0.0	0.800	0.0	0.0

Node 31 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	65.569
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	30.0	0.0	0.700	30.0	0.0	0.800	0.0	0.0

Node 42 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	66.728
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

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	30.0	0.0	0.700	30.0	0.0	0.800	0.0	0.0

Approval Settings

Node Size	✓	Minimum Full Bore Velocity (m/s)	1.000
Node Losses	✓	Maximum Full Bore Velocity (m/s)	3.000
Link Size	✓	Proportional Velocity	✓
Minimum Diameter (mm)	150	Return Period (years)	1
Link Length	✓	Minimum Proportional Velocity (m/s)	0.300
Maximum Length (m)	100.000	Maximum Proportional Velocity (m/s)	6.000
Coordinates	✓	Surcharged Depth	✓
Accuracy (m)	1.000	Return Period (years)	1
Crossings	✓	Maximum Surcharged Depth (m)	0.100
Cover Depth	x	Flooding	✓
Backdrops	✓	Return Period (years)	30
Minimum Backdrop Height (m)	0.200	Time to Half Empty	x
Maximum Backdrop Height (m)	0.500	Discharge Rates	x
Full Bore Velocity	✓	Discharge Volume	x

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
100 year +40% CC 15 minute summer	419.718	118.766	100 year +40% CC 360 minute summer	60.957	15.686
100 year +40% CC 15 minute winter	294.539	118.766	100 year +40% CC 360 minute winter	39.624	15.686
100 year +40% CC 30 minute summer	289.645	81.959	100 year +40% CC 480 minute summer	48.124	12.718
100 year +40% CC 30 minute winter	203.260	81.959	100 year +40% CC 480 minute winter	31.973	12.718
100 year +40% CC 60 minute summer	204.614	54.074	100 year +40% CC 600 minute summer	39.472	10.796
100 year +40% CC 60 minute winter	135.941	54.074	100 year +40% CC 600 minute winter	26.970	10.796
100 year +40% CC 120 minute summer	130.070	34.374	100 year +40% CC 720 minute summer	35.214	9.438
100 year +40% CC 120 minute winter	86.415	34.374	100 year +40% CC 720 minute winter	23.666	9.438
100 year +40% CC 180 minute summer	100.646	25.900	100 year +40% CC 960 minute summer	28.953	7.624
100 year +40% CC 180 minute winter	65.422	25.900	100 year +40% CC 960 minute winter	19.179	7.624
100 year +40% CC 240 minute summer	79.556	21.024	100 year +40% CC 1440 minute summer	21.006	5.630
100 year +40% CC 240 minute winter	52.855	21.024	100 year +40% CC 1440 minute winter	14.117	5.630

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 98.56%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	69.542	0.041	7.6	0.0729	0.0000	OK
15 minute winter	2	10	69.280	0.051	11.6	0.0817	0.0000	OK
15 minute winter	11	10	71.055	0.030	2.7	0.0165	0.0000	OK
15 minute summer	12	10	70.813	0.045	5.2	0.0210	0.0000	OK
600 minute winter	13	465	70.749	0.212	0.9	9.6438	0.0000	OK
15 minute winter	15	10	71.056	0.031	2.7	0.0167	0.0000	OK
480 minute winter	14	336	70.517	0.165	0.9	5.0190	0.0000	OK
15 minute winter	3	10	68.860	0.060	15.7	0.0979	0.0000	OK
15 minute winter	4	11	68.606	0.068	19.5	0.0271	0.0000	OK
15 minute winter	5	11	67.577	0.077	23.3	0.1292	0.0000	OK
15 minute winter	16	10	70.055	0.030	2.7	0.0166	0.0000	OK
15 minute summer	17	10	69.873	0.045	5.2	0.0217	0.0000	OK
600 minute winter	18	465	69.783	0.212	0.9	9.6182	0.0000	OK
15 minute winter	20	10	70.056	0.031	2.7	0.0167	0.0000	OK
15 minute winter	21	10	69.055	0.030	2.7	0.0166	0.0000	OK
15 minute winter	22	10	68.878	0.040	5.4	0.0194	0.0000	OK
15 minute summer	24	9	69.057	0.032	2.6	0.0176	0.0000	OK
600 minute winter	25	465	68.798	0.134	0.6	6.0761	0.0000	OK
15 minute winter	23	10	68.557	0.055	8.0	0.0224	0.0000	OK
15 minute winter	19	10	68.465	0.072	13.3	0.0283	0.0000	OK
15 minute winter	6	11	67.367	0.114	40.4	0.2374	0.0000	OK
60 minute winter	7	44	66.706	0.206	23.8	0.5253	0.0000	OK
15 minute winter	40	10	67.355	0.030	2.7	0.0165	0.0000	OK
15 minute summer	41	10	67.044	0.043	5.2	0.0191	0.0000	OK
600 minute winter	42	465	67.033	0.305	0.9	9.2739	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	7.5	0.887	0.018	0.1366	
15 minute winter	2	1.001	3	11.4	1.032	0.027	0.2820	
15 minute winter	11	2.000	12	2.7	0.615	0.039	0.0677	
15 minute summer	12	2.001	13	5.2	1.258	0.077	0.0796	
600 minute winter	13	Orifice	14	0.2				
15 minute winter	15	3.000	14	2.6	0.819	0.039	0.0654	
480 minute winter	14	Orifice	3	0.4				
15 minute winter	3	1.002	4	15.4	1.130	0.037	0.2130	
15 minute winter	4	1.003	5	19.5	1.338	0.046	0.2460	
15 minute winter	5	1.004	6	23.5	0.962	0.065	0.4814	
15 minute winter	16	4.000	17	2.7	0.617	0.039	0.0519	
15 minute summer	17	4.001	18	5.2	1.260	0.078	0.0885	
600 minute winter	18	Orifice	19	0.2				
15 minute winter	20	5.000	19	2.6	0.819	0.039	0.0625	
15 minute winter	21	6.000	22	2.7	0.672	0.039	0.0443	
15 minute winter	22	6.001	23	5.3	0.870	0.070	0.0974	
15 minute summer	24	7.000	25	2.6	1.052	0.039	0.0716	
600 minute winter	25	Orifice	23	0.1				
15 minute winter	23	6.002	19	7.9	0.863	0.113	0.0558	
15 minute winter	19	4.003	6	13.1	1.265	0.194	0.0995	
15 minute winter	6	1.005	7	40.8	1.366	0.125	0.5235	
60 minute winter	7	1.006	8	23.7	0.731	0.110	2.1381	
15 minute winter	40	13.000	41	2.7	0.638	0.039	0.0808	
15 minute summer	41	13.001	42	5.3	1.086	0.078	0.1504	
600 minute winter	42	Orifice	43	0.2				

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 98.56%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	43	47	66.704	0.131	1.6	0.0494	0.0000	OK
60 minute winter	8	47	66.704	0.704	25.3	1.7921	0.0000	SURCHARGED
15 minute winter	26	10	67.955	0.030	2.7	0.0165	0.0000	OK
15 minute winter	27	10	67.587	0.044	5.3	0.0190	0.0000	OK
15 minute winter	28	11	67.265	0.040	7.9	0.0153	0.0000	OK
1440 minute winter	29	1110	66.302	0.302	0.7	13.6402	0.0000	SURCHARGED
15 minute winter	32	10	67.355	0.030	2.7	0.0166	0.0000	OK
15 minute winter	33	10	66.991	0.042	5.3	0.0184	0.0000	OK
15 minute winter	35	10	67.353	0.028	2.7	0.0153	0.0000	OK
15 minute winter	34	11	66.677	0.082	10.5	0.0312	0.0000	OK
600 minute winter	30	570	66.328	0.461	1.2	13.8992	0.0000	SURCHARGED
15 minute winter	36	10	67.202	0.027	2.7	0.0132	0.0000	OK
15 minute winter	37	10	66.838	0.037	5.3	0.0150	0.0000	OK
15 minute winter	39	10	67.356	0.031	2.7	0.0168	0.0000	OK
15 minute winter	38	10	66.461	0.049	10.5	0.0175	0.0000	OK
600 minute winter	31	570	66.221	0.652	1.5	19.6778	0.0000	SURCHARGED
60 minute winter	9	49	66.701	1.501	23.5	0.2821	0.0000	SURCHARGED
120 minute winter	10	78	66.700	1.541	13.8	3.9218	3.4307	FLOOD

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	43	13.003	8	1.6	0.689	0.024	0.0894	
60 minute winter	8	1.007	9	23.2	0.821	0.048	11.0518	
15 minute winter	26	8.000	27	2.6	0.623	0.039	0.0973	
15 minute winter	27	8.001	28	5.2	1.029	0.077	0.0958	
15 minute winter	28	8.002	29	7.8	1.660	0.067	0.1032	
1440 minute winter	29	Orifice	30	0.1				
15 minute winter	32	9.000	33	2.6	0.641	0.039	0.0940	
15 minute winter	33	9.001	34	5.2	0.588	0.077	0.1920	
15 minute winter	35	10.000	34	2.6	0.936	0.032	0.0535	
15 minute winter	34	9.002	30	10.4	0.823	0.262	0.1570	
600 minute winter	30	Orifice	31	0.2				
15 minute winter	36	11.000	37	2.7	0.600	0.010	0.0992	
15 minute winter	37	11.001	38	5.2	0.756	0.020	0.1603	
15 minute winter	39	12.000	38	2.6	0.818	0.039	0.0472	
15 minute winter	38	11.002	31	10.4	1.278	0.034	0.0898	
600 minute winter	31	Orifice	9	0.3				
60 minute winter	9	1.008	10	15.7	0.485	0.042	1.4878	
120 minute winter	10	Hydro-Brake®		4.8				38.5

Results for 100 year +40% CC 15 minute summer. 75 minute analysis at 1 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	10	69.541	0.041	7.2	0.0713	0.0000	OK
15 minute summer	2	10	69.279	0.050	11.0	0.0800	0.0000	OK
15 minute summer	11	10	71.055	0.030	2.6	0.0163	0.0000	OK
15 minute summer	12	10	70.813	0.045	5.2	0.0210	0.0000	OK
15 minute summer	13	21	70.608	0.071	7.8	3.2220	0.0000	OK
15 minute summer	15	10	71.055	0.030	2.6	0.0165	0.0000	OK
15 minute summer	14	20	70.422	0.070	5.2	2.1379	0.0000	OK
15 minute summer	3	10	68.858	0.058	15.0	0.0958	0.0000	OK
15 minute summer	4	11	68.605	0.067	18.6	0.0265	0.0000	OK
15 minute summer	5	11	67.575	0.075	22.4	0.1263	0.0000	OK
15 minute summer	16	10	70.055	0.030	2.6	0.0163	0.0000	OK
15 minute summer	17	10	69.873	0.045	5.2	0.0217	0.0000	OK
15 minute summer	18	21	69.642	0.071	7.8	3.2155	0.0000	OK
15 minute summer	20	10	70.055	0.030	2.6	0.0165	0.0000	OK
15 minute summer	21	10	69.055	0.030	2.6	0.0163	0.0000	OK
15 minute summer	22	10	68.878	0.040	5.2	0.0191	0.0000	OK
15 minute summer	24	9	69.057	0.032	2.6	0.0176	0.0000	OK
15 minute summer	25	20	68.711	0.047	5.2	2.1319	0.0000	OK
15 minute summer	23	10	68.556	0.054	7.8	0.0220	0.0000	OK
15 minute summer	19	10	68.464	0.071	12.9	0.0279	0.0000	OK
15 minute summer	6	11	67.364	0.111	39.1	0.2328	0.0000	OK
15 minute summer	7	11	66.653	0.153	39.3	0.3895	0.0000	OK
15 minute summer	40	10	67.355	0.030	2.6	0.0163	0.0000	OK
15 minute summer	41	10	67.044	0.043	5.2	0.0191	0.0000	OK
15 minute summer	42	21	66.832	0.104	7.9	3.1480	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	7.2	0.871	0.017	0.1320	
15 minute summer	2	1.001	3	10.9	1.018	0.026	0.2732	
15 minute summer	11	2.000	12	2.6	0.608	0.038	0.0672	
15 minute summer	12	2.001	13	5.2	1.258	0.077	0.0796	
15 minute summer	13	Orifice	14	0.1				
15 minute summer	15	3.000	14	2.6	0.814	0.038	0.0642	
15 minute summer	14	Orifice	3	0.3				
15 minute summer	3	1.002	4	14.8	1.118	0.035	0.2070	
15 minute summer	4	1.003	5	18.7	1.321	0.044	0.2388	
15 minute summer	5	1.004	6	22.5	0.949	0.062	0.4675	
15 minute summer	16	4.000	17	2.6	0.609	0.038	0.0515	
15 minute summer	17	4.001	18	5.2	1.260	0.078	0.0885	
15 minute summer	18	Orifice	19	0.1				
15 minute summer	20	5.000	19	2.6	0.813	0.038	0.0613	
15 minute summer	21	6.000	22	2.6	0.665	0.038	0.0434	
15 minute summer	22	6.001	23	5.1	0.863	0.068	0.0953	
15 minute summer	24	7.000	25	2.6	1.052	0.039	0.0716	
15 minute summer	25	Orifice	23	0.1				
15 minute summer	23	6.002	19	7.7	0.859	0.111	0.0547	
15 minute summer	19	4.003	6	12.9	1.258	0.190	0.0978	
15 minute summer	6	1.005	7	39.3	1.352	0.121	0.5095	
15 minute summer	7	1.006	8	38.9	0.841	0.180	1.1062	
15 minute summer	40	13.000	41	2.6	0.628	0.038	0.0804	
15 minute summer	41	13.001	42	5.3	1.086	0.078	0.1504	
15 minute summer	42	Orifice	43	0.1				

Results for 100 year +40% CC 15 minute summer. 75 minute analysis at 1 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	43	10	66.606	0.033	2.7	0.0123	0.0000	OK
15 minute summer	8	20	66.249	0.249	41.5	0.6339	0.0000	OK
15 minute summer	26	10	67.955	0.030	2.6	0.0163	0.0000	OK
15 minute summer	27	10	67.586	0.043	5.2	0.0187	0.0000	OK
15 minute summer	28	11	67.265	0.040	7.7	0.0152	0.0000	OK
15 minute summer	29	23	66.073	0.073	7.6	3.2747	0.0000	OK
15 minute summer	32	10	67.355	0.030	2.6	0.0163	0.0000	OK
15 minute summer	33	10	66.991	0.042	5.2	0.0182	0.0000	OK
15 minute summer	35	10	67.353	0.028	2.6	0.0151	0.0000	OK
15 minute summer	34	11	66.677	0.082	10.2	0.0309	0.0000	OK
15 minute summer	30	28	66.015	0.148	10.3	4.4509	0.0000	OK
15 minute summer	36	10	67.201	0.026	2.6	0.0130	0.0000	OK
15 minute summer	37	10	66.837	0.036	5.2	0.0148	0.0000	OK
15 minute summer	39	10	67.356	0.031	2.6	0.0166	0.0000	OK
15 minute summer	38	11	66.460	0.048	10.2	0.0173	0.0000	OK
15 minute summer	31	75	65.756	0.187	10.4	5.6464	0.0000	OK
15 minute summer	9	18	66.251	1.051	41.6	0.1975	0.0000	SURCHARGED
15 minute summer	10	18	66.252	1.093	13.2	2.7812	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	43	13.003	8	2.7	0.788	0.039	0.0103	
15 minute summer	8	1.007	9	41.2	1.157	0.085	8.1072	
15 minute summer	26	8.000	27	2.6	0.617	0.038	0.0955	
15 minute summer	27	8.001	28	5.1	1.023	0.075	0.0942	
15 minute summer	28	8.002	29	7.6	1.650	0.065	0.1019	
15 minute summer	29	Orifice	30	0.1				
15 minute summer	32	9.000	33	2.6	0.635	0.038	0.0923	
15 minute summer	33	9.001	34	5.1	0.584	0.075	0.1895	
15 minute summer	35	10.000	34	2.6	0.929	0.031	0.0525	
15 minute summer	34	9.002	30	10.2	0.818	0.257	0.1546	
15 minute summer	30	Orifice	31	0.1				
15 minute summer	36	11.000	37	2.6	0.593	0.010	0.0974	
15 minute summer	37	11.001	38	5.1	0.751	0.020	0.1578	
15 minute summer	39	12.000	38	2.6	0.812	0.038	0.0462	
15 minute summer	38	11.002	31	10.2	1.270	0.033	0.0886	
15 minute summer	31	Orifice	9	0.1				
15 minute summer	9	1.008	10	13.2	0.503	0.035	1.4878	
15 minute summer	10	Hydro-Brake®		4.1				14.5

Results for 100 year +40% CC 15 minute winter. 75 minute analysis at 1 minute timestep. Mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	69.542	0.041	7.6	0.0729	0.0000	OK
15 minute winter	2	10	69.280	0.051	11.6	0.0817	0.0000	OK
15 minute winter	11	10	71.055	0.030	2.7	0.0165	0.0000	OK
15 minute winter	12	10	70.813	0.045	5.4	0.0210	0.0000	OK
15 minute winter	13	21	70.615	0.078	8.1	3.5496	0.0000	OK
15 minute winter	15	10	71.056	0.031	2.7	0.0167	0.0000	OK
15 minute winter	14	20	70.430	0.078	5.4	2.3580	0.0000	OK
15 minute winter	3	10	68.860	0.060	15.7	0.0979	0.0000	OK
15 minute winter	4	11	68.606	0.068	19.5	0.0271	0.0000	OK
15 minute winter	5	11	67.577	0.077	23.3	0.1292	0.0000	OK
15 minute winter	16	10	70.055	0.030	2.7	0.0166	0.0000	OK
15 minute winter	17	10	69.873	0.045	5.4	0.0217	0.0000	OK
15 minute winter	18	21	69.649	0.078	8.1	3.5420	0.0000	OK
15 minute winter	20	10	70.056	0.031	2.7	0.0167	0.0000	OK
15 minute winter	21	10	69.055	0.030	2.7	0.0166	0.0000	OK
15 minute winter	22	10	68.878	0.040	5.4	0.0194	0.0000	OK
15 minute winter	24	10	69.057	0.032	2.7	0.0176	0.0000	OK
15 minute winter	25	20	68.716	0.052	5.4	2.3477	0.0000	OK
15 minute winter	23	10	68.557	0.055	8.0	0.0224	0.0000	OK
15 minute winter	19	10	68.465	0.072	13.3	0.0283	0.0000	OK
15 minute winter	6	11	67.367	0.114	40.4	0.2374	0.0000	OK
15 minute winter	7	11	66.656	0.156	40.8	0.3968	0.0000	OK
15 minute winter	40	10	67.355	0.030	2.7	0.0165	0.0000	OK
15 minute winter	41	10	67.044	0.043	5.3	0.0191	0.0000	OK
15 minute winter	42	21	66.842	0.114	8.0	3.4671	0.0000	OK

Link Event	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	7.5	0.887	0.018	0.1366	
15 minute winter	2	1.001	3	11.4	1.032	0.027	0.2820	
15 minute winter	11	2.000	12	2.7	0.615	0.039	0.0677	
15 minute winter	12	2.001	13	5.4	1.236	0.079	0.0909	
15 minute winter	13	Orifice	14	0.1				
15 minute winter	15	3.000	14	2.6	0.819	0.039	0.0654	
15 minute winter	14	Orifice	3	0.3				
15 minute winter	3	1.002	4	15.4	1.130	0.037	0.2130	
15 minute winter	4	1.003	5	19.5	1.338	0.046	0.2460	
15 minute winter	5	1.004	6	23.5	0.962	0.065	0.4814	
15 minute winter	16	4.000	17	2.7	0.617	0.039	0.0519	
15 minute winter	17	4.001	18	5.4	1.239	0.079	0.1011	
15 minute winter	18	Orifice	19	0.1				
15 minute winter	20	5.000	19	2.6	0.819	0.039	0.0625	
15 minute winter	21	6.000	22	2.7	0.672	0.039	0.0443	
15 minute winter	22	6.001	23	5.3	0.870	0.070	0.0974	
15 minute winter	24	7.000	25	2.7	1.034	0.040	0.0816	
15 minute winter	25	Orifice	23	0.1				
15 minute winter	23	6.002	19	7.9	0.863	0.113	0.0558	
15 minute winter	19	4.003	6	13.1	1.265	0.194	0.0995	
15 minute winter	6	1.005	7	40.8	1.366	0.125	0.5235	
15 minute winter	7	1.006	8	40.4	0.848	0.186	1.1357	
15 minute winter	40	13.000	41	2.7	0.638	0.039	0.0808	
15 minute winter	41	13.001	42	5.3	1.086	0.079	0.1697	
15 minute winter	42	Orifice	43	0.1				

Results for 100 year +40% CC 15 minute winter. 75 minute analysis at 1 minute timestep. Mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	43	10	66.606	0.033	2.8	0.0126	0.0000	OK
15 minute winter	8	18	66.320	0.320	43.0	0.8149	0.0000	OK
15 minute winter	26	10	67.955	0.030	2.7	0.0165	0.0000	OK
15 minute winter	27	10	67.587	0.044	5.3	0.0190	0.0000	OK
15 minute winter	28	11	67.265	0.040	7.9	0.0153	0.0000	OK
15 minute winter	29	23	66.080	0.080	7.8	3.6162	0.0000	OK
15 minute winter	32	10	67.355	0.030	2.7	0.0166	0.0000	OK
15 minute winter	33	10	66.991	0.042	5.3	0.0184	0.0000	OK
15 minute winter	35	10	67.353	0.028	2.7	0.0153	0.0000	OK
15 minute winter	34	11	66.677	0.082	10.5	0.0312	0.0000	OK
15 minute winter	30	26	66.029	0.162	10.5	4.8975	0.0000	OK
15 minute winter	36	10	67.202	0.027	2.7	0.0132	0.0000	OK
15 minute winter	37	10	66.838	0.037	5.3	0.0150	0.0000	OK
15 minute winter	39	10	67.356	0.031	2.7	0.0168	0.0000	OK
15 minute winter	38	10	66.461	0.049	10.5	0.0175	0.0000	OK
15 minute winter	31	75	65.776	0.207	10.6	6.2490	0.0000	OK
15 minute winter	9	20	66.337	1.137	43.0	0.2137	0.0000	SURCHARGED
15 minute winter	10	20	66.334	1.175	15.6	2.9899	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	43	13.003	8	2.7	0.794	0.040	0.0105	
15 minute winter	8	1.007	9	42.6	1.158	0.088	9.0541	
15 minute winter	26	8.000	27	2.6	0.623	0.039	0.0973	
15 minute winter	27	8.001	28	5.2	1.029	0.077	0.0958	
15 minute winter	28	8.002	29	7.8	1.660	0.067	0.1032	
15 minute winter	29	Orifice	30	0.1				
15 minute winter	32	9.000	33	2.6	0.641	0.039	0.0940	
15 minute winter	33	9.001	34	5.2	0.588	0.077	0.1920	
15 minute winter	35	10.000	34	2.6	0.936	0.032	0.0535	
15 minute winter	34	9.002	30	10.4	0.823	0.262	0.1570	
15 minute winter	30	Orifice	31	0.1				
15 minute winter	36	11.000	37	2.7	0.600	0.010	0.0992	
15 minute winter	37	11.001	38	5.2	0.756	0.020	0.1603	
15 minute winter	39	12.000	38	2.6	0.818	0.039	0.0472	
15 minute winter	38	11.002	31	10.4	1.278	0.034	0.0898	
15 minute winter	31	Orifice	9	0.1				
15 minute winter	9	1.008	10	15.6	0.526	0.042	1.4878	
15 minute winter	10	Hydro-Brake®		4.2				15.1

Results for 100 year +40% CC 30 minute summer. 90 minute analysis at 1 minute timestep. Mass balance: 99.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	18	69.540	0.040	6.8	0.0696	0.0000	OK
30 minute summer	2	18	69.277	0.048	10.4	0.0781	0.0000	OK
30 minute summer	11	18	71.054	0.029	2.4	0.0157	0.0000	OK
30 minute summer	12	17	70.809	0.041	4.8	0.0191	0.0000	OK
30 minute summer	13	36	70.633	0.096	7.2	4.3697	0.0000	OK
30 minute summer	15	18	71.054	0.029	2.4	0.0160	0.0000	OK
30 minute summer	14	34	70.446	0.094	4.9	2.8629	0.0000	OK
30 minute summer	3	18	68.857	0.057	14.2	0.0938	0.0000	OK
30 minute summer	4	18	68.603	0.065	17.8	0.0259	0.0000	OK
30 minute summer	5	18	67.573	0.073	21.3	0.1229	0.0000	OK
30 minute summer	16	18	70.054	0.029	2.4	0.0157	0.0000	OK
30 minute summer	17	17	69.869	0.041	4.8	0.0197	0.0000	OK
30 minute summer	18	36	69.667	0.096	7.2	4.3593	0.0000	OK
30 minute summer	20	18	70.054	0.029	2.4	0.0160	0.0000	OK
30 minute summer	21	18	69.054	0.029	2.4	0.0157	0.0000	OK
30 minute summer	22	18	68.876	0.038	4.8	0.0185	0.0000	OK
30 minute summer	24	17	69.054	0.029	2.4	0.0160	0.0000	OK
30 minute summer	25	35	68.727	0.063	4.8	2.8815	0.0000	OK
30 minute summer	23	18	68.554	0.052	7.3	0.0212	0.0000	OK
30 minute summer	19	18	68.462	0.069	12.1	0.0270	0.0000	OK
30 minute summer	6	18	67.361	0.108	37.0	0.2249	0.0000	OK
30 minute summer	7	19	66.648	0.148	36.6	0.3768	0.0000	OK
30 minute summer	40	18	67.354	0.029	2.4	0.0157	0.0000	OK
30 minute summer	41	18	67.041	0.040	4.8	0.0181	0.0000	OK
30 minute summer	42	36	66.868	0.140	7.2	4.2615	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	6.8	0.859	0.016	0.1275	
30 minute summer	2	1.001	3	10.4	1.003	0.025	0.2645	
30 minute summer	11	2.000	12	2.4	0.619	0.035	0.0603	
30 minute summer	12	2.001	13	4.8	1.001	0.072	0.1155	
30 minute summer	13	Orifice	14	0.1				
30 minute summer	15	3.000	14	2.4	0.799	0.035	0.0614	
30 minute summer	14	Orifice	3	0.3				
30 minute summer	3	1.002	4	14.2	1.106	0.034	0.2003	
30 minute summer	4	1.003	5	17.7	1.299	0.042	0.2300	
30 minute summer	5	1.004	6	21.2	0.938	0.058	0.4467	
30 minute summer	16	4.000	17	2.4	0.620	0.035	0.0462	
30 minute summer	17	4.001	18	4.8	1.004	0.071	0.1284	
30 minute summer	18	Orifice	19	0.1				
30 minute summer	20	5.000	19	2.4	0.799	0.035	0.0586	
30 minute summer	21	6.000	22	2.4	0.649	0.035	0.0413	
30 minute summer	22	6.001	23	4.8	0.849	0.063	0.0906	
30 minute summer	24	7.000	25	2.4	0.850	0.036	0.1031	
30 minute summer	25	Orifice	23	0.1				
30 minute summer	23	6.002	19	7.3	0.848	0.104	0.0522	
30 minute summer	19	4.003	6	12.1	1.238	0.179	0.0937	
30 minute summer	6	1.005	7	36.6	1.327	0.112	0.4848	
30 minute summer	7	1.006	8	36.9	0.828	0.170	1.0594	
30 minute summer	40	13.000	41	2.4	0.621	0.036	0.0751	
30 minute summer	41	13.001	42	4.8	0.823	0.071	0.2156	
30 minute summer	42	Orifice	43	0.1				

Results for 100 year +40% CC 30 minute summer. 90 minute analysis at 1 minute timestep. Mass balance: 99.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	43	18	66.605	0.032	2.5	0.0119	0.0000	OK
30 minute summer	8	33	66.440	0.440	39.2	1.1202	0.0000	OK
30 minute summer	26	18	67.954	0.029	2.4	0.0157	0.0000	OK
30 minute summer	27	18	67.585	0.042	4.8	0.0181	0.0000	OK
30 minute summer	28	18	67.263	0.038	7.2	0.0147	0.0000	OK
30 minute summer	29	38	66.099	0.099	7.2	4.4910	0.0000	OK
30 minute summer	32	18	67.354	0.029	2.4	0.0158	0.0000	OK
30 minute summer	33	18	66.989	0.040	4.8	0.0177	0.0000	OK
30 minute summer	35	18	67.352	0.027	2.4	0.0146	0.0000	OK
30 minute summer	34	18	66.674	0.079	9.6	0.0298	0.0000	OK
30 minute summer	30	39	66.068	0.201	9.6	6.0611	0.0000	OK
30 minute summer	36	18	67.201	0.026	2.4	0.0126	0.0000	OK
30 minute summer	37	18	66.836	0.035	4.8	0.0144	0.0000	OK
30 minute summer	39	18	67.355	0.029	2.4	0.0160	0.0000	OK
30 minute summer	38	18	66.459	0.047	9.6	0.0168	0.0000	OK
30 minute summer	31	90	65.828	0.259	9.8	7.8030	0.0000	OK
30 minute summer	9	33	66.446	1.246	39.5	0.2343	0.0000	SURCHARGED
30 minute summer	10	34	66.440	1.281	12.6	3.2604	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	43	13.003	8	2.5	0.775	0.037	0.0098	
30 minute summer	8	1.007	9	39.1	0.974	0.081	10.4712	
30 minute summer	26	8.000	27	2.4	0.604	0.035	0.0910	
30 minute summer	27	8.001	28	4.8	1.006	0.071	0.0902	
30 minute summer	28	8.002	29	7.2	1.619	0.061	0.0974	
30 minute summer	29	Orifice	30	0.1				
30 minute summer	32	9.000	33	2.4	0.620	0.036	0.0882	
30 minute summer	33	9.001	34	4.8	0.571	0.071	0.1807	
30 minute summer	35	10.000	34	2.4	0.911	0.029	0.0501	
30 minute summer	34	9.002	30	9.5	0.801	0.239	0.1470	
30 minute summer	30	Orifice	31	0.2				
30 minute summer	36	11.000	37	2.4	0.577	0.009	0.0930	
30 minute summer	37	11.001	38	4.8	0.739	0.018	0.1511	
30 minute summer	39	12.000	38	2.4	0.797	0.036	0.0440	
30 minute summer	38	11.002	31	9.6	1.246	0.031	0.0848	
30 minute summer	31	Orifice	9	0.1				
30 minute summer	9	1.008	10	12.6	0.490	0.034	1.4878	
30 minute summer	10	Hydro-Brake®		4.4				18.6

Results for 100 year +40% CC 30 minute winter. 90 minute analysis at 1 minute timestep. Mass balance: 98.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	18	69.538	0.038	6.2	0.0666	0.0000	OK
30 minute winter	2	18	69.275	0.046	9.5	0.0747	0.0000	OK
30 minute winter	11	18	71.053	0.028	2.2	0.0151	0.0000	OK
30 minute winter	12	18	70.807	0.039	4.4	0.0179	0.0000	OK
30 minute winter	13	35	70.644	0.107	6.6	4.8642	0.0000	OK
30 minute winter	15	18	71.053	0.028	2.2	0.0153	0.0000	OK
30 minute winter	14	33	70.457	0.105	4.5	3.1963	0.0000	OK
30 minute winter	3	18	68.855	0.055	13.0	0.0898	0.0000	OK
30 minute winter	4	18	68.600	0.062	16.3	0.0248	0.0000	OK
30 minute winter	5	18	67.570	0.070	19.5	0.1174	0.0000	OK
30 minute winter	16	18	70.053	0.028	2.2	0.0151	0.0000	OK
30 minute winter	17	18	69.867	0.039	4.4	0.0186	0.0000	OK
30 minute winter	18	35	69.678	0.107	6.6	4.8523	0.0000	OK
30 minute winter	20	18	70.053	0.028	2.2	0.0153	0.0000	OK
30 minute winter	21	18	69.053	0.028	2.2	0.0151	0.0000	OK
30 minute winter	22	18	68.875	0.037	4.4	0.0177	0.0000	OK
30 minute winter	24	18	69.053	0.028	2.2	0.0151	0.0000	OK
30 minute winter	25	34	68.735	0.071	4.4	3.2064	0.0000	OK
30 minute winter	23	18	68.551	0.049	6.7	0.0202	0.0000	OK
30 minute winter	19	18	68.459	0.066	11.2	0.0258	0.0000	OK
30 minute winter	6	18	67.356	0.103	33.9	0.2150	0.0000	OK
30 minute winter	7	19	66.642	0.142	33.7	0.3612	0.0000	OK
30 minute winter	40	18	67.353	0.028	2.2	0.0151	0.0000	OK
30 minute winter	41	18	67.040	0.039	4.4	0.0174	0.0000	OK
30 minute winter	42	35	66.884	0.156	6.6	4.7438	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	1	1.000	2	6.2	0.836	0.015	0.1197	
30 minute winter	2	1.001	3	9.5	0.979	0.023	0.2484	
30 minute winter	11	2.000	12	2.2	0.604	0.033	0.0559	
30 minute winter	12	2.001	13	4.4	0.956	0.065	0.1333	
30 minute winter	13	Orifice	14	0.1				
30 minute winter	15	3.000	14	2.2	0.778	0.033	0.0578	
30 minute winter	14	Orifice	3	0.3				
30 minute winter	3	1.002	4	13.0	1.081	0.031	0.1881	
30 minute winter	4	1.003	5	16.2	1.268	0.039	0.2162	
30 minute winter	5	1.004	6	19.5	0.919	0.054	0.4187	
30 minute winter	16	4.000	17	2.2	0.604	0.033	0.0429	
30 minute winter	17	4.001	18	4.4	0.958	0.065	0.1481	
30 minute winter	18	Orifice	19	0.1				
30 minute winter	20	5.000	19	2.2	0.778	0.033	0.0551	
30 minute winter	21	6.000	22	2.2	0.633	0.033	0.0388	
30 minute winter	22	6.001	23	4.4	0.831	0.058	0.0848	
30 minute winter	24	7.000	25	2.2	0.805	0.033	0.1198	
30 minute winter	25	Orifice	23	0.1				
30 minute winter	23	6.002	19	6.7	0.832	0.095	0.0488	
30 minute winter	19	4.003	6	11.1	1.211	0.165	0.0881	
30 minute winter	6	1.005	7	33.7	1.299	0.103	0.4561	
30 minute winter	7	1.006	8	33.9	0.807	0.156	1.2481	
30 minute winter	40	13.000	41	2.2	0.604	0.033	0.0707	
30 minute winter	41	13.001	42	4.4	0.860	0.065	0.2442	
30 minute winter	42	Orifice	43	0.1				

Results for 100 year +40% CC 30 minute winter. 90 minute analysis at 1 minute timestep. Mass balance: 98.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	43	32	66.630	0.057	2.3	0.0215	0.0000	OK
30 minute winter	8	32	66.629	0.629	36.1	1.6000	0.0000	SURCHARGED
30 minute winter	26	18	67.953	0.028	2.2	0.0151	0.0000	OK
30 minute winter	27	18	67.583	0.040	4.4	0.0174	0.0000	OK
30 minute winter	28	18	67.262	0.037	6.6	0.0141	0.0000	OK
30 minute winter	29	38	66.111	0.111	6.6	5.0152	0.0000	OK
30 minute winter	32	18	67.353	0.028	2.2	0.0151	0.0000	OK
30 minute winter	33	18	66.988	0.039	4.4	0.0169	0.0000	OK
30 minute winter	35	18	67.351	0.026	2.2	0.0140	0.0000	OK
30 minute winter	34	18	66.670	0.075	8.8	0.0284	0.0000	OK
30 minute winter	30	38	66.090	0.223	8.8	6.7306	0.0000	OK
30 minute winter	36	18	67.200	0.025	2.2	0.0121	0.0000	OK
30 minute winter	37	18	66.835	0.034	4.4	0.0138	0.0000	OK
30 minute winter	39	18	67.353	0.028	2.2	0.0154	0.0000	OK
30 minute winter	38	18	66.457	0.045	8.8	0.0161	0.0000	OK
30 minute winter	31	90	65.856	0.287	9.1	8.6576	0.0000	OK
30 minute winter	9	32	66.630	1.430	36.4	0.2688	0.0000	SURCHARGED
30 minute winter	10	32	66.629	1.470	13.5	3.7404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	43	13.003	8	2.3	0.758	0.034	0.0406	
30 minute winter	8	1.007	9	36.0	0.957	0.075	11.0518	
30 minute winter	26	8.000	27	2.2	0.589	0.033	0.0856	
30 minute winter	27	8.001	28	4.4	0.981	0.065	0.0848	
30 minute winter	28	8.002	29	6.6	1.580	0.056	0.0916	
30 minute winter	29	Orifice	30	0.1				
30 minute winter	32	9.000	33	2.2	0.603	0.033	0.0830	
30 minute winter	33	9.001	34	4.4	0.558	0.065	0.1698	
30 minute winter	35	10.000	34	2.2	0.888	0.027	0.0471	
30 minute winter	34	9.002	30	8.8	0.784	0.220	0.1382	
30 minute winter	30	Orifice	31	0.2				
30 minute winter	36	11.000	37	2.2	0.560	0.008	0.0875	
30 minute winter	37	11.001	38	4.4	0.719	0.017	0.1420	
30 minute winter	39	12.000	38	2.2	0.776	0.033	0.0415	
30 minute winter	38	11.002	31	8.8	1.216	0.028	0.0798	
30 minute winter	31	Orifice	9	0.1				
30 minute winter	9	1.008	10	13.5	0.504	0.036	1.4878	
30 minute winter	10	Hydro-Brake®		4.7				19.6

Results for 100 year +40% CC 60 minute summer. 120 minute analysis at 1 minute timestep. Mass balance: 99.09%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	33	69.536	0.036	5.4	0.0624	0.0000	OK
60 minute summer	2	33	69.272	0.043	8.3	0.0701	0.0000	OK
60 minute summer	11	33	71.051	0.026	1.9	0.0141	0.0000	OK
60 minute summer	12	33	70.804	0.036	3.8	0.0167	0.0000	OK
60 minute summer	13	64	70.661	0.124	5.7	5.6173	0.0000	OK
60 minute summer	15	33	71.051	0.026	1.9	0.0143	0.0000	OK
60 minute summer	14	63	70.470	0.118	3.9	3.5819	0.0000	OK
60 minute summer	3	33	68.851	0.051	11.4	0.0842	0.0000	OK
60 minute summer	4	33	68.596	0.058	14.3	0.0232	0.0000	OK
60 minute summer	5	33	67.566	0.066	17.2	0.1103	0.0000	OK
60 minute summer	16	33	70.051	0.026	1.9	0.0141	0.0000	OK
60 minute summer	17	33	69.864	0.036	3.8	0.0173	0.0000	OK
60 minute summer	18	64	69.694	0.123	5.7	5.6029	0.0000	OK
60 minute summer	20	33	70.051	0.026	1.9	0.0143	0.0000	OK
60 minute summer	21	33	69.051	0.026	1.9	0.0141	0.0000	OK
60 minute summer	22	33	68.872	0.034	3.8	0.0165	0.0000	OK
60 minute summer	24	33	69.051	0.026	1.9	0.0141	0.0000	OK
60 minute summer	25	64	68.745	0.081	3.8	3.6849	0.0000	OK
60 minute summer	23	33	68.548	0.046	5.8	0.0187	0.0000	OK
60 minute summer	19	33	68.454	0.061	9.7	0.0239	0.0000	OK
60 minute summer	6	33	67.349	0.096	29.7	0.2002	0.0000	OK
60 minute summer	7	52	66.637	0.137	29.5	0.3496	0.0000	OK
60 minute summer	40	33	67.351	0.026	1.9	0.0141	0.0000	OK
60 minute summer	41	33	67.037	0.036	3.8	0.0162	0.0000	OK
60 minute summer	42	64	66.908	0.180	5.7	5.4691	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	1	1.000	2	5.4	0.804	0.013	0.1090	
60 minute summer	2	1.001	3	8.3	0.939	0.020	0.2259	
60 minute summer	11	2.000	12	1.9	0.578	0.028	0.0505	
60 minute summer	12	2.001	13	3.8	0.793	0.056	0.1575	
60 minute summer	13	Orifice	14	0.1				
60 minute summer	15	3.000	14	1.9	0.745	0.028	0.0521	
60 minute summer	14	Orifice	3	0.4				
60 minute summer	3	1.002	4	11.4	1.042	0.027	0.1710	
60 minute summer	4	1.003	5	14.3	1.222	0.034	0.1971	
60 minute summer	5	1.004	6	17.1	0.890	0.047	0.3798	
60 minute summer	16	4.000	17	1.9	0.578	0.028	0.0387	
60 minute summer	17	4.001	18	3.8	0.798	0.056	0.1750	
60 minute summer	18	Orifice	19	0.1				
60 minute summer	20	5.000	19	1.9	0.745	0.028	0.0497	
60 minute summer	21	6.000	22	1.9	0.606	0.028	0.0350	
60 minute summer	22	6.001	23	3.8	0.802	0.050	0.0759	
60 minute summer	24	7.000	25	1.9	0.664	0.028	0.1427	
60 minute summer	25	Orifice	23	0.1				
60 minute summer	23	6.002	19	5.8	0.806	0.083	0.0437	
60 minute summer	19	4.003	6	9.7	1.166	0.143	0.0793	
60 minute summer	6	1.005	7	29.5	1.252	0.090	0.4132	
60 minute summer	7	1.006	8	29.6	0.777	0.137	1.3327	
60 minute summer	40	13.000	41	1.9	0.578	0.028	0.0637	
60 minute summer	41	13.001	42	3.8	0.758	0.056	0.2809	
60 minute summer	42	Orifice	43	0.1				

Results for 100 year +40% CC 60 minute summer. 120 minute analysis at 1 minute timestep. Mass balance: 99.09%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	43	53	66.637	0.064	2.0	0.0239	0.0000	OK
60 minute summer	8	53	66.637	0.637	31.5	1.6202	0.0000	SURCHARGED
60 minute summer	26	33	67.951	0.026	1.9	0.0141	0.0000	OK
60 minute summer	27	33	67.580	0.037	3.8	0.0162	0.0000	OK
60 minute summer	28	33	67.259	0.034	5.7	0.0131	0.0000	OK
60 minute summer	29	70	66.131	0.131	5.7	5.9013	0.0000	OK
60 minute summer	32	33	67.351	0.026	1.9	0.0141	0.0000	OK
60 minute summer	33	33	66.985	0.036	3.8	0.0158	0.0000	OK
60 minute summer	35	33	67.349	0.024	1.9	0.0130	0.0000	OK
60 minute summer	34	33	66.664	0.069	7.6	0.0263	0.0000	OK
60 minute summer	30	67	66.126	0.259	7.6	7.8231	0.0000	SURCHARGED
60 minute summer	36	33	67.198	0.023	1.9	0.0113	0.0000	OK
60 minute summer	37	33	66.832	0.031	3.8	0.0129	0.0000	OK
60 minute summer	39	33	67.351	0.026	1.9	0.0143	0.0000	OK
60 minute summer	38	33	66.454	0.042	7.6	0.0150	0.0000	OK
60 minute summer	31	120	65.911	0.342	7.9	10.3279	0.0000	OK
60 minute summer	9	53	66.637	1.437	30.3	0.2702	0.0000	SURCHARGED
60 minute summer	10	53	66.637	1.478	10.9	3.7602	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	43	13.003	8	2.0	0.729	0.029	0.0453	
60 minute summer	8	1.007	9	30.0	0.811	0.062	11.0518	
60 minute summer	26	8.000	27	1.9	0.564	0.028	0.0771	
60 minute summer	27	8.001	28	3.8	0.942	0.056	0.0763	
60 minute summer	28	8.002	29	5.7	1.515	0.049	0.0824	
60 minute summer	29	Orifice	30	0.1				
60 minute summer	32	9.000	33	1.9	0.577	0.028	0.0749	
60 minute summer	33	9.001	34	3.8	0.538	0.056	0.1522	
60 minute summer	35	10.000	34	1.9	0.850	0.023	0.0425	
60 minute summer	34	9.002	30	7.5	0.754	0.190	0.1239	
60 minute summer	30	Orifice	31	0.2				
60 minute summer	36	11.000	37	1.9	0.538	0.007	0.0791	
60 minute summer	37	11.001	38	3.8	0.688	0.015	0.1279	
60 minute summer	39	12.000	38	1.9	0.743	0.028	0.0374	
60 minute summer	38	11.002	31	7.6	1.167	0.025	0.0718	
60 minute summer	31	Orifice	9	0.1				
60 minute summer	9	1.008	10	10.9	0.487	0.029	1.4878	
60 minute summer	10	Hydro-Brake®		4.7				25.5

Results for 100 year +40% CC 60 minute winter. 120 minute analysis at 1 minute timestep. Mass balance: 98.56%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	33	69.532	0.032	4.3	0.0563	0.0000	OK
60 minute winter	2	33	69.268	0.039	6.6	0.0630	0.0000	OK
60 minute winter	11	33	71.048	0.023	1.5	0.0126	0.0000	OK
60 minute winter	12	34	70.800	0.032	3.0	0.0149	0.0000	OK
60 minute winter	13	63	70.676	0.139	4.5	6.3013	0.0000	OK
60 minute winter	15	34	71.048	0.023	1.5	0.0127	0.0000	OK
60 minute winter	14	62	70.485	0.133	3.1	4.0362	0.0000	OK
60 minute winter	3	33	68.846	0.046	9.2	0.0755	0.0000	OK
60 minute winter	4	34	68.590	0.052	11.5	0.0208	0.0000	OK
60 minute winter	5	34	67.559	0.059	13.8	0.0994	0.0000	OK
60 minute winter	16	33	70.048	0.023	1.5	0.0126	0.0000	OK
60 minute winter	17	33	69.860	0.032	3.0	0.0154	0.0000	OK
60 minute winter	18	63	69.709	0.138	4.5	6.2844	0.0000	OK
60 minute winter	20	34	70.048	0.023	1.5	0.0127	0.0000	OK
60 minute winter	21	33	69.048	0.023	1.5	0.0126	0.0000	OK
60 minute winter	22	33	68.869	0.031	3.0	0.0147	0.0000	OK
60 minute winter	24	34	69.048	0.023	1.5	0.0126	0.0000	OK
60 minute winter	25	63	68.755	0.091	3.0	4.1319	0.0000	OK
60 minute winter	23	35	68.542	0.040	4.6	0.0165	0.0000	OK
60 minute winter	19	35	68.447	0.054	7.7	0.0211	0.0000	OK
60 minute winter	6	34	67.339	0.086	23.8	0.1787	0.0000	OK
60 minute winter	7	44	66.706	0.206	23.8	0.5253	0.0000	OK
60 minute winter	40	34	67.348	0.023	1.5	0.0126	0.0000	OK
60 minute winter	41	34	67.033	0.032	3.0	0.0144	0.0000	OK
60 minute winter	42	63	66.930	0.202	4.5	6.1413	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	1	1.000	2	4.3	0.744	0.010	0.0929	
60 minute winter	2	1.001	3	6.6	0.876	0.016	0.1924	
60 minute winter	11	2.000	12	1.5	0.539	0.022	0.0428	
60 minute winter	12	2.001	13	3.0	0.842	0.044	0.1805	
60 minute winter	13	Orifice	14	0.1				
60 minute winter	15	3.000	14	1.5	0.695	0.022	0.0442	
60 minute winter	14	Orifice	3	0.4				
60 minute winter	3	1.002	4	9.2	0.984	0.022	0.1457	
60 minute winter	4	1.003	5	11.5	1.147	0.027	0.1686	
60 minute winter	5	1.004	6	13.8	0.838	0.038	0.3239	
60 minute winter	16	4.000	17	1.5	0.539	0.022	0.0328	
60 minute winter	17	4.001	18	3.0	0.843	0.044	0.2006	
60 minute winter	18	Orifice	19	0.1				
60 minute winter	20	5.000	19	1.5	0.694	0.022	0.0422	
60 minute winter	21	6.000	22	1.5	0.564	0.022	0.0297	
60 minute winter	22	6.001	23	3.0	0.755	0.040	0.0638	
60 minute winter	24	7.000	25	1.5	0.697	0.022	0.1658	
60 minute winter	25	Orifice	23	0.1				
60 minute winter	23	6.002	19	4.6	0.763	0.066	0.0367	
60 minute winter	19	4.003	6	7.7	1.097	0.114	0.0671	
60 minute winter	6	1.005	7	23.8	1.179	0.073	0.3532	
60 minute winter	7	1.006	8	23.7	0.731	0.110	2.1381	
60 minute winter	40	13.000	41	1.5	0.539	0.022	0.0540	
60 minute winter	41	13.001	42	3.0	0.777	0.044	0.3100	
60 minute winter	42	Orifice	43	0.2				

Results for 100 year +40% CC 60 minute winter. 120 minute analysis at 1 minute timestep. Mass balance: 98.56%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	43	47	66.704	0.131	1.6	0.0494	0.0000	OK
60 minute winter	8	47	66.704	0.704	25.3	1.7921	0.0000	SURCHARGED
60 minute winter	26	34	67.948	0.023	1.5	0.0126	0.0000	OK
60 minute winter	27	32	67.576	0.033	3.0	0.0144	0.0000	OK
60 minute winter	28	34	67.256	0.031	4.5	0.0117	0.0000	OK
60 minute winter	29	86	66.149	0.149	4.5	6.7157	0.0000	OK
60 minute winter	32	34	67.348	0.023	1.5	0.0126	0.0000	OK
60 minute winter	33	34	66.981	0.032	3.0	0.0141	0.0000	OK
60 minute winter	35	34	67.346	0.021	1.5	0.0116	0.0000	OK
60 minute winter	34	34	66.656	0.061	6.0	0.0232	0.0000	OK
60 minute winter	30	65	66.156	0.289	6.1	8.7066	0.0000	SURCHARGED
60 minute winter	36	34	67.195	0.020	1.5	0.0101	0.0000	OK
60 minute winter	37	34	66.829	0.028	3.0	0.0116	0.0000	OK
60 minute winter	39	34	67.349	0.024	1.5	0.0128	0.0000	OK
60 minute winter	38	34	66.449	0.037	6.0	0.0133	0.0000	OK
60 minute winter	31	120	65.947	0.378	6.4	11.3925	0.0000	SURCHARGED
60 minute winter	9	49	66.701	1.501	23.5	0.2821	0.0000	SURCHARGED
60 minute winter	10	44	66.700	1.541	15.7	3.9218	2.0935	FLOOD

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	43	13.003	8	1.6	0.689	0.024	0.0894	
60 minute winter	8	1.007	9	23.2	0.821	0.048	11.0518	
60 minute winter	26	8.000	27	1.5	0.527	0.022	0.0652	
60 minute winter	27	8.001	28	3.0	0.880	0.044	0.0645	
60 minute winter	28	8.002	29	4.5	1.415	0.039	0.0700	
60 minute winter	29	Orifice	30	0.1				
60 minute winter	32	9.000	33	1.5	0.538	0.022	0.0635	
60 minute winter	33	9.001	34	3.0	0.505	0.044	0.1285	
60 minute winter	35	10.000	34	1.5	0.793	0.018	0.0360	
60 minute winter	34	9.002	30	6.0	0.709	0.151	0.1048	
60 minute winter	30	Orifice	31	0.2				
60 minute winter	36	11.000	37	1.5	0.504	0.006	0.0673	
60 minute winter	37	11.001	38	3.0	0.647	0.012	0.1083	
60 minute winter	39	12.000	38	1.5	0.693	0.022	0.0317	
60 minute winter	38	11.002	31	6.0	1.091	0.019	0.0608	
60 minute winter	31	Orifice	9	0.1				
60 minute winter	9	1.008	10	15.7	0.485	0.042	1.4878	
60 minute winter	10	Hydro-Brake®		4.8				26.4

Results for 100 year +40% CC 120 minute summer. 180 minute analysis at 2 minute timestep. Mass balance: 99.63%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	64	69.530	0.030	3.6	0.0520	0.0000	OK
120 minute summer	2	64	69.265	0.036	5.5	0.0578	0.0000	OK
120 minute summer	11	64	71.047	0.022	1.3	0.0118	0.0000	OK
120 minute summer	12	64	70.798	0.030	2.6	0.0139	0.0000	OK
120 minute summer	13	124	70.684	0.147	3.9	6.6951	0.0000	OK
120 minute summer	15	64	71.047	0.022	1.3	0.0119	0.0000	OK
120 minute summer	14	104	70.486	0.134	2.7	4.0748	0.0000	OK
120 minute summer	3	64	68.842	0.042	7.7	0.0692	0.0000	OK
120 minute summer	4	64	68.586	0.048	9.6	0.0191	0.0000	OK
120 minute summer	5	64	67.554	0.054	11.5	0.0911	0.0000	OK
120 minute summer	16	64	70.047	0.022	1.3	0.0118	0.0000	OK
120 minute summer	17	64	69.858	0.030	2.6	0.0144	0.0000	OK
120 minute summer	18	124	69.718	0.147	3.9	6.6770	0.0000	OK
120 minute summer	20	64	70.047	0.022	1.3	0.0119	0.0000	OK
120 minute summer	21	64	69.047	0.022	1.3	0.0118	0.0000	OK
120 minute summer	22	64	68.867	0.028	2.6	0.0137	0.0000	OK
120 minute summer	24	64	69.047	0.022	1.3	0.0118	0.0000	OK
120 minute summer	25	124	68.760	0.096	2.6	4.3532	0.0000	OK
120 minute summer	23	64	68.539	0.037	4.0	0.0153	0.0000	OK
120 minute summer	19	64	68.443	0.050	6.7	0.0196	0.0000	OK
120 minute summer	6	64	67.331	0.078	20.1	0.1639	0.0000	OK
120 minute summer	7	88	66.691	0.191	20.0	0.4856	0.0000	OK
120 minute summer	40	64	67.347	0.022	1.3	0.0118	0.0000	OK
120 minute summer	41	64	67.031	0.030	2.6	0.0135	0.0000	OK
120 minute summer	42	124	66.942	0.214	3.9	6.5090	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	1	1.000	2	3.6	0.705	0.009	0.0821	
120 minute summer	2	1.001	3	5.5	0.832	0.013	0.1695	
120 minute summer	11	2.000	12	1.3	0.517	0.019	0.0387	
120 minute summer	12	2.001	13	2.6	0.667	0.038	0.1921	
120 minute summer	13	Orifice	14	0.2				
120 minute summer	15	3.000	14	1.3	0.666	0.019	0.0400	
120 minute summer	14	Orifice	3	0.4				
120 minute summer	3	1.002	4	7.7	0.936	0.018	0.1280	
120 minute summer	4	1.003	5	9.6	1.089	0.023	0.1484	
120 minute summer	5	1.004	6	11.5	0.792	0.032	0.2856	
120 minute summer	16	4.000	17	1.3	0.517	0.019	0.0297	
120 minute summer	17	4.001	18	2.6	0.669	0.038	0.2135	
120 minute summer	18	Orifice	19	0.2				
120 minute summer	20	5.000	19	1.3	0.666	0.019	0.0381	
120 minute summer	21	6.000	22	1.3	0.542	0.019	0.0269	
120 minute summer	22	6.001	23	2.6	0.725	0.034	0.0574	
120 minute summer	24	7.000	25	1.3	0.550	0.019	0.1763	
120 minute summer	25	Orifice	23	0.1				
120 minute summer	23	6.002	19	4.0	0.738	0.057	0.0330	
120 minute summer	19	4.003	6	6.7	1.057	0.099	0.0606	
120 minute summer	6	1.005	7	20.0	1.124	0.062	0.3125	
120 minute summer	7	1.006	8	19.9	0.693	0.092	1.9752	
120 minute summer	40	13.000	41	1.3	0.517	0.019	0.0489	
120 minute summer	41	13.001	42	2.6	0.636	0.038	0.3203	
120 minute summer	42	Orifice	43	0.2				

Results for 100 year +40% CC 120 minute summer. 180 minute analysis at 2 minute timestep. Mass balance: 99.63%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	43	88	66.691	0.118	1.4	0.0443	0.0000	OK
120 minute summer	8	88	66.691	0.691	21.4	1.7583	0.0000	SURCHARGED
120 minute summer	26	64	67.947	0.022	1.3	0.0118	0.0000	OK
120 minute summer	27	64	67.574	0.031	2.6	0.0134	0.0000	OK
120 minute summer	28	64	67.253	0.028	3.9	0.0109	0.0000	OK
120 minute summer	29	156	66.165	0.165	3.9	7.4638	0.0000	OK
120 minute summer	32	64	67.347	0.022	1.3	0.0118	0.0000	OK
120 minute summer	33	64	66.979	0.030	2.6	0.0131	0.0000	OK
120 minute summer	35	64	67.345	0.020	1.3	0.0109	0.0000	OK
120 minute summer	34	64	66.652	0.057	5.2	0.0215	0.0000	OK
120 minute summer	30	126	66.175	0.308	5.3	9.2833	0.0000	SURCHARGED
120 minute summer	36	64	67.194	0.019	1.3	0.0094	0.0000	OK
120 minute summer	37	64	66.827	0.026	2.6	0.0108	0.0000	OK
120 minute summer	39	64	67.347	0.022	1.3	0.0119	0.0000	OK
120 minute summer	38	64	66.447	0.035	5.2	0.0124	0.0000	OK
120 minute summer	31	180	65.997	0.428	5.6	12.9128	0.0000	SURCHARGED
120 minute summer	9	88	66.691	1.491	20.0	0.2804	0.0000	SURCHARGED
120 minute summer	10	88	66.691	1.532	7.9	3.8981	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	43	13.003	8	1.4	0.663	0.021	0.0811	
120 minute summer	8	1.007	9	19.8	0.716	0.041	11.0518	
120 minute summer	26	8.000	27	1.3	0.505	0.019	0.0590	
120 minute summer	27	8.001	28	2.6	0.845	0.038	0.0583	
120 minute summer	28	8.002	29	3.9	1.355	0.033	0.0633	
120 minute summer	29	Orifice	30	0.1				
120 minute summer	32	9.000	33	1.3	0.516	0.019	0.0574	
120 minute summer	33	9.001	34	2.6	0.485	0.038	0.1157	
120 minute summer	35	10.000	34	1.3	0.762	0.016	0.0325	
120 minute summer	34	9.002	30	5.2	0.681	0.131	0.0945	
120 minute summer	30	Orifice	31	0.2				
120 minute summer	36	11.000	37	1.3	0.479	0.005	0.0609	
120 minute summer	37	11.001	38	2.6	0.617	0.010	0.0978	
120 minute summer	39	12.000	38	1.3	0.664	0.019	0.0286	
120 minute summer	38	11.002	31	5.2	1.048	0.017	0.0548	
120 minute summer	31	Orifice	9	0.1				
120 minute summer	9	1.008	10	7.9	0.444	0.021	1.4878	
120 minute summer	10	Hydro-Brake®		4.8				37.1

Results for 100 year +40% CC 120 minute winter. 180 minute analysis at 2 minute timestep. Mass balance: 99.26%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	64	69.526	0.026	2.8	0.0461	0.0000	OK
120 minute winter	2	64	69.261	0.032	4.3	0.0517	0.0000	OK
120 minute winter	11	64	71.044	0.019	1.0	0.0104	0.0000	OK
120 minute winter	12	64	70.795	0.027	2.0	0.0123	0.0000	OK
120 minute winter	13	122	70.707	0.170	3.0	7.7065	0.0000	OK
120 minute winter	15	64	71.044	0.019	1.0	0.0105	0.0000	OK
120 minute winter	14	116	70.507	0.155	2.1	4.7001	0.0000	OK
120 minute winter	3	64	68.838	0.038	6.1	0.0620	0.0000	OK
120 minute winter	4	64	68.581	0.043	7.6	0.0170	0.0000	OK
120 minute winter	5	64	67.549	0.049	9.1	0.0817	0.0000	OK
120 minute winter	16	64	70.044	0.019	1.0	0.0104	0.0000	OK
120 minute winter	17	64	69.855	0.027	2.0	0.0127	0.0000	OK
120 minute winter	18	122	69.740	0.169	3.0	7.6849	0.0000	OK
120 minute winter	20	64	70.044	0.019	1.0	0.0105	0.0000	OK
120 minute winter	21	64	69.044	0.019	1.0	0.0104	0.0000	OK
120 minute winter	22	64	68.863	0.025	2.0	0.0121	0.0000	OK
120 minute winter	24	64	69.044	0.019	1.0	0.0104	0.0000	OK
120 minute winter	25	122	68.774	0.110	2.0	5.0092	0.0000	OK
120 minute winter	23	66	68.535	0.033	3.1	0.0133	0.0000	OK
120 minute winter	19	66	68.437	0.044	5.2	0.0173	0.0000	OK
120 minute winter	6	66	67.322	0.069	15.8	0.1452	0.0000	OK
120 minute winter	7	78	66.705	0.205	15.8	0.5219	0.0000	OK
120 minute winter	40	64	67.344	0.019	1.0	0.0104	0.0000	OK
120 minute winter	41	64	67.028	0.027	2.0	0.0119	0.0000	OK
120 minute winter	42	122	66.975	0.247	3.0	7.5184	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	1	1.000	2	2.8	0.657	0.007	0.0692	
120 minute winter	2	1.001	3	4.3	0.764	0.010	0.1435	
120 minute winter	11	2.000	12	1.0	0.477	0.015	0.0322	
120 minute winter	12	2.001	13	2.0	0.736	0.030	0.2238	
120 minute winter	13	Orifice	14	0.2				
120 minute winter	15	3.000	14	1.0	0.616	0.015	0.0332	
120 minute winter	14	Orifice	3	0.4				
120 minute winter	3	1.002	4	6.1	0.881	0.015	0.1085	
120 minute winter	4	1.003	5	7.6	1.019	0.018	0.1259	
120 minute winter	5	1.004	6	9.1	0.746	0.025	0.2406	
120 minute winter	16	4.000	17	1.0	0.476	0.015	0.0247	
120 minute winter	17	4.001	18	2.0	0.736	0.030	0.2487	
120 minute winter	18	Orifice	19	0.2				
120 minute winter	20	5.000	19	1.0	0.616	0.015	0.0317	
120 minute winter	21	6.000	22	1.0	0.498	0.015	0.0224	
120 minute winter	22	6.001	23	2.0	0.675	0.026	0.0475	
120 minute winter	24	7.000	25	1.0	0.607	0.015	0.2112	
120 minute winter	25	Orifice	23	0.1				
120 minute winter	23	6.002	19	3.1	0.693	0.044	0.0273	
120 minute winter	19	4.003	6	5.2	0.986	0.077	0.0506	
120 minute winter	6	1.005	7	15.8	1.054	0.049	0.2631	
120 minute winter	7	1.006	8	15.8	0.653	0.073	2.1390	
120 minute winter	40	13.000	41	1.0	0.477	0.015	0.0407	
120 minute winter	41	13.001	42	2.0	0.671	0.030	0.3311	
120 minute winter	42	Orifice	43	0.2				

Results for 100 year +40% CC 120 minute winter. 180 minute analysis at 2 minute timestep. Mass balance: 99.26%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	43	78	66.704	0.131	1.1	0.0491	0.0000	OK
120 minute winter	8	78	66.704	0.704	16.9	1.7905	0.0000	SURCHARGED
120 minute winter	26	64	67.944	0.019	1.0	0.0104	0.0000	OK
120 minute winter	27	64	67.570	0.027	2.0	0.0118	0.0000	OK
120 minute winter	28	64	67.250	0.025	3.0	0.0096	0.0000	OK
120 minute winter	29	180	66.193	0.193	3.0	8.7086	0.0000	OK
120 minute winter	32	64	67.344	0.019	1.0	0.0104	0.0000	OK
120 minute winter	33	64	66.976	0.027	2.0	0.0116	0.0000	OK
120 minute winter	35	64	67.343	0.018	1.0	0.0096	0.0000	OK
120 minute winter	34	66	66.645	0.050	4.0	0.0188	0.0000	OK
120 minute winter	30	122	66.220	0.353	4.1	10.6510	0.0000	SURCHARGED
120 minute winter	36	64	67.192	0.017	1.0	0.0084	0.0000	OK
120 minute winter	37	64	66.824	0.023	2.0	0.0096	0.0000	OK
120 minute winter	39	64	67.344	0.019	1.0	0.0105	0.0000	OK
120 minute winter	38	64	66.443	0.031	4.0	0.0109	0.0000	OK
120 minute winter	31	180	66.050	0.481	4.4	14.5164	0.0000	SURCHARGED
120 minute winter	9	86	66.700	1.500	14.9	0.2820	0.0000	SURCHARGED
120 minute winter	10	78	66.700	1.541	13.8	3.9218	3.4307	FLOOD

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	43	13.003	8	1.1	0.622	0.017	0.0890	
120 minute winter	8	1.007	9	14.7	0.703	0.030	11.0518	
120 minute winter	26	8.000	27	1.0	0.467	0.015	0.0490	
120 minute winter	27	8.001	28	2.0	0.781	0.030	0.0484	
120 minute winter	28	8.002	29	3.0	1.253	0.026	0.1107	
120 minute winter	29	Orifice	30	0.1				
120 minute winter	32	9.000	33	1.0	0.476	0.015	0.0479	
120 minute winter	33	9.001	34	2.0	0.452	0.030	0.0957	
120 minute winter	35	10.000	34	1.0	0.701	0.012	0.0272	
120 minute winter	34	9.002	30	4.0	0.634	0.101	0.0781	
120 minute winter	30	Orifice	31	0.2				
120 minute winter	36	11.000	37	1.0	0.439	0.004	0.0507	
120 minute winter	37	11.001	38	2.0	0.572	0.008	0.0812	
120 minute winter	39	12.000	38	1.0	0.615	0.015	0.0238	
120 minute winter	38	11.002	31	4.0	0.969	0.013	0.0456	
120 minute winter	31	Orifice	9	0.1				
120 minute winter	9	1.008	10	13.8	0.435	0.037	1.4878	
120 minute winter	10	Hydro-Brake®		4.8				38.5

Results for 100 year +40% CC 180 minute summer. 240 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	96	69.526	0.026	2.7	0.0453	0.0000	OK
180 minute summer	2	96	69.261	0.032	4.2	0.0512	0.0000	OK
180 minute summer	11	96	71.044	0.019	1.0	0.0104	0.0000	OK
180 minute summer	12	96	70.795	0.027	2.0	0.0123	0.0000	OK
180 minute summer	13	184	70.695	0.158	3.0	7.1582	0.0000	OK
180 minute summer	15	96	71.044	0.019	1.0	0.0105	0.0000	OK
180 minute summer	14	140	70.491	0.139	2.1	4.2337	0.0000	OK
180 minute summer	3	96	68.837	0.037	6.0	0.0615	0.0000	OK
180 minute summer	4	96	68.581	0.043	7.5	0.0169	0.0000	OK
180 minute summer	5	96	67.548	0.048	9.0	0.0813	0.0000	OK
180 minute summer	16	96	70.044	0.019	1.0	0.0104	0.0000	OK
180 minute summer	17	96	69.855	0.027	2.0	0.0127	0.0000	OK
180 minute summer	18	184	69.728	0.157	3.0	7.1387	0.0000	OK
180 minute summer	20	96	70.044	0.019	1.0	0.0105	0.0000	OK
180 minute summer	21	96	69.044	0.019	1.0	0.0104	0.0000	OK
180 minute summer	22	96	68.863	0.025	2.0	0.0121	0.0000	OK
180 minute summer	24	96	69.044	0.019	1.0	0.0104	0.0000	OK
180 minute summer	25	180	68.766	0.102	2.0	4.6284	0.0000	OK
180 minute summer	23	96	68.535	0.033	3.1	0.0133	0.0000	OK
180 minute summer	19	96	68.437	0.044	5.2	0.0172	0.0000	OK
180 minute summer	6	96	67.322	0.069	15.7	0.1447	0.0000	OK
180 minute summer	7	124	66.655	0.155	15.7	0.3947	0.0000	OK
180 minute summer	40	96	67.344	0.019	1.0	0.0104	0.0000	OK
180 minute summer	41	96	67.028	0.027	2.0	0.0119	0.0000	OK
180 minute summer	42	184	66.957	0.229	3.0	6.9510	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	1	1.000	2	2.7	0.646	0.006	0.0678	
180 minute summer	2	1.001	3	4.2	0.757	0.010	0.1415	
180 minute summer	11	2.000	12	1.0	0.477	0.015	0.0322	
180 minute summer	12	2.001	13	2.0	0.657	0.030	0.2068	
180 minute summer	13	Orifice	14	0.2				
180 minute summer	15	3.000	14	1.0	0.616	0.015	0.0332	
180 minute summer	14	Orifice	3	0.4				
180 minute summer	3	1.002	4	6.0	0.876	0.014	0.1074	
180 minute summer	4	1.003	5	7.5	1.016	0.018	0.1247	
180 minute summer	5	1.004	6	9.0	0.742	0.025	0.2393	
180 minute summer	16	4.000	17	1.0	0.476	0.015	0.0247	
180 minute summer	17	4.001	18	2.0	0.657	0.030	0.2299	
180 minute summer	18	Orifice	19	0.2				
180 minute summer	20	5.000	19	1.0	0.616	0.015	0.0317	
180 minute summer	21	6.000	22	1.0	0.498	0.015	0.0224	
180 minute summer	22	6.001	23	2.0	0.675	0.026	0.0475	
180 minute summer	24	7.000	25	1.0	0.540	0.015	0.1908	
180 minute summer	25	Orifice	23	0.1				
180 minute summer	23	6.002	19	3.1	0.693	0.044	0.0273	
180 minute summer	19	4.003	6	5.2	0.986	0.077	0.0505	
180 minute summer	6	1.005	7	15.7	1.052	0.048	0.2618	
180 minute summer	7	1.006	8	15.7	0.652	0.073	1.5474	
180 minute summer	40	13.000	41	1.0	0.476	0.015	0.0407	
180 minute summer	41	13.001	42	2.0	0.619	0.030	0.3264	
180 minute summer	42	Orifice	43	0.2				

Results for 100 year +40% CC 180 minute summer. 240 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	43	124	66.655	0.082	1.1	0.0309	0.0000	OK
180 minute summer	8	124	66.655	0.655	16.8	1.6677	0.0000	SURCHARGED
180 minute summer	26	96	67.944	0.019	1.0	0.0104	0.0000	OK
180 minute summer	27	96	67.570	0.027	2.0	0.0118	0.0000	OK
180 minute summer	28	96	67.250	0.025	3.0	0.0096	0.0000	OK
180 minute summer	29	232	66.183	0.183	3.0	8.2565	0.0000	OK
180 minute summer	32	96	67.344	0.019	1.0	0.0104	0.0000	OK
180 minute summer	33	96	66.976	0.027	2.0	0.0116	0.0000	OK
180 minute summer	35	96	67.343	0.018	1.0	0.0096	0.0000	OK
180 minute summer	34	96	66.645	0.050	4.0	0.0188	0.0000	OK
180 minute summer	30	184	66.198	0.331	4.1	9.9695	0.0000	SURCHARGED
180 minute summer	36	96	67.192	0.017	1.0	0.0084	0.0000	OK
180 minute summer	37	96	66.824	0.023	2.0	0.0096	0.0000	OK
180 minute summer	39	96	67.344	0.019	1.0	0.0105	0.0000	OK
180 minute summer	38	96	66.443	0.031	4.0	0.0109	0.0000	OK
180 minute summer	31	236	66.034	0.465	4.4	14.0334	0.0000	SURCHARGED
180 minute summer	9	124	66.656	1.456	15.3	0.2737	0.0000	SURCHARGED
180 minute summer	10	124	66.655	1.496	6.5	3.8072	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	43	13.003	8	1.1	0.622	0.017	0.0576	
180 minute summer	8	1.007	9	15.1	0.679	0.031	11.0518	
180 minute summer	26	8.000	27	1.0	0.467	0.015	0.0490	
180 minute summer	27	8.001	28	2.0	0.781	0.030	0.0484	
180 minute summer	28	8.002	29	3.0	1.253	0.026	0.0886	
180 minute summer	29	Orifice	30	0.1				
180 minute summer	32	9.000	33	1.0	0.476	0.015	0.0478	
180 minute summer	33	9.001	34	2.0	0.452	0.030	0.0957	
180 minute summer	35	10.000	34	1.0	0.701	0.012	0.0272	
180 minute summer	34	9.002	30	4.0	0.634	0.101	0.0781	
180 minute summer	30	Orifice	31	0.2				
180 minute summer	36	11.000	37	1.0	0.439	0.004	0.0507	
180 minute summer	37	11.001	38	2.0	0.572	0.008	0.0812	
180 minute summer	39	12.000	38	1.0	0.615	0.015	0.0238	
180 minute summer	38	11.002	31	4.0	0.969	0.013	0.0456	
180 minute summer	31	Orifice	9	0.1				
180 minute summer	9	1.008	10	6.5	0.361	0.017	1.4878	
180 minute summer	10	Hydro-Brake®		4.7				47.1

Results for 100 year +40% CC 180 minute winter. 240 minute analysis at 4 minute timestep. Mass balance: 99.77%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	96	69.523	0.023	2.1	0.0403	0.0000	OK
180 minute winter	2	96	69.257	0.028	3.2	0.0451	0.0000	OK
180 minute winter	11	96	71.042	0.017	0.8	0.0094	0.0000	OK
180 minute winter	12	96	70.792	0.024	1.6	0.0111	0.0000	OK
180 minute winter	13	184	70.722	0.185	2.4	8.3799	0.0000	OK
180 minute winter	15	96	71.042	0.017	0.8	0.0095	0.0000	OK
180 minute winter	14	148	70.516	0.164	1.7	4.9691	0.0000	OK
180 minute winter	3	96	68.833	0.033	4.6	0.0544	0.0000	OK
180 minute winter	4	96	68.575	0.037	5.7	0.0149	0.0000	OK
180 minute winter	5	96	67.542	0.042	6.8	0.0712	0.0000	OK
180 minute winter	16	96	70.042	0.017	0.8	0.0094	0.0000	OK
180 minute winter	17	96	69.852	0.024	1.6	0.0115	0.0000	OK
180 minute winter	18	184	69.755	0.184	2.4	8.3564	0.0000	OK
180 minute winter	20	96	70.042	0.017	0.8	0.0095	0.0000	OK
180 minute winter	21	96	69.042	0.017	0.8	0.0094	0.0000	OK
180 minute winter	22	96	68.861	0.023	1.6	0.0109	0.0000	OK
180 minute winter	24	96	69.042	0.017	0.8	0.0094	0.0000	OK
180 minute winter	25	180	68.783	0.119	1.6	5.4099	0.0000	OK
180 minute winter	23	96	68.531	0.029	2.5	0.0120	0.0000	OK
180 minute winter	19	96	68.433	0.040	4.2	0.0155	0.0000	OK
180 minute winter	6	96	67.314	0.061	12.2	0.1272	0.0000	OK
180 minute winter	7	116	66.705	0.205	12.1	0.5229	0.0000	OK
180 minute winter	40	96	67.342	0.017	0.8	0.0094	0.0000	OK
180 minute winter	41	96	67.025	0.024	1.6	0.0107	0.0000	OK
180 minute winter	42	184	66.997	0.269	2.4	8.1688	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	1	1.000	2	2.1	0.598	0.005	0.0565	
180 minute winter	2	1.001	3	3.2	0.699	0.008	0.1176	
180 minute winter	11	2.000	12	0.8	0.446	0.012	0.0276	
180 minute winter	12	2.001	13	1.6	0.657	0.024	0.2422	
180 minute winter	13	Orifice	14	0.2				
180 minute winter	15	3.000	14	0.8	0.574	0.012	0.0285	
180 minute winter	14	Orifice	3	0.4				
180 minute winter	3	1.002	4	4.6	0.812	0.011	0.0889	
180 minute winter	4	1.003	5	5.7	0.937	0.014	0.1031	
180 minute winter	5	1.004	6	6.8	0.688	0.019	0.1980	
180 minute winter	16	4.000	17	0.8	0.446	0.012	0.0212	
180 minute winter	17	4.001	18	1.6	0.657	0.024	0.2693	
180 minute winter	18	Orifice	19	0.2				
180 minute winter	20	5.000	19	0.8	0.574	0.012	0.0272	
180 minute winter	21	6.000	22	0.8	0.468	0.012	0.0192	
180 minute winter	22	6.001	23	1.6	0.633	0.021	0.0405	
180 minute winter	24	7.000	25	0.8	0.540	0.012	0.2323	
180 minute winter	25	Orifice	23	0.1				
180 minute winter	23	6.002	19	2.5	0.655	0.036	0.0233	
180 minute winter	19	4.003	6	4.2	0.930	0.063	0.0435	
180 minute winter	6	1.005	7	12.1	0.978	0.037	0.2179	
180 minute winter	7	1.006	8	12.1	0.603	0.056	2.1348	
180 minute winter	40	13.000	41	0.8	0.446	0.012	0.0349	
180 minute winter	41	13.001	42	1.6	0.619	0.024	0.3337	
180 minute winter	42	Orifice	43	0.2				

Results for 100 year +40% CC 180 minute winter. 240 minute analysis at 4 minute timestep. Mass balance: 99.77%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	43	116	66.702	0.129	0.9	0.0487	0.0000	OK
180 minute winter	8	116	66.702	0.702	13.1	1.7878	0.0000	SURCHARGED
180 minute winter	26	96	67.942	0.017	0.8	0.0094	0.0000	OK
180 minute winter	27	96	67.567	0.024	1.6	0.0106	0.0000	OK
180 minute winter	28	96	67.248	0.023	2.4	0.0086	0.0000	OK
180 minute winter	29	240	66.218	0.218	2.4	9.8500	0.0000	OK
180 minute winter	32	96	67.342	0.017	0.8	0.0094	0.0000	OK
180 minute winter	33	96	66.973	0.024	1.6	0.0105	0.0000	OK
180 minute winter	35	96	67.341	0.016	0.8	0.0087	0.0000	OK
180 minute winter	34	96	66.639	0.044	3.2	0.0168	0.0000	OK
180 minute winter	30	184	66.252	0.385	3.3	11.6236	0.0000	SURCHARGED
180 minute winter	36	96	67.190	0.015	0.8	0.0076	0.0000	OK
180 minute winter	37	96	66.822	0.021	1.6	0.0086	0.0000	OK
180 minute winter	39	96	67.342	0.017	0.8	0.0095	0.0000	OK
180 minute winter	38	96	66.440	0.027	3.2	0.0098	0.0000	OK
180 minute winter	31	236	66.107	0.538	3.6	16.2133	0.0000	SURCHARGED
180 minute winter	9	124	66.700	1.500	11.0	0.2820	0.0000	SURCHARGED
180 minute winter	10	116	66.700	1.541	9.0	3.9218	2.6131	FLOOD

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	43	13.003	8	0.9	0.589	0.014	0.0883	
180 minute winter	8	1.007	9	10.9	0.727	0.023	11.0518	
180 minute winter	26	8.000	27	0.8	0.437	0.012	0.0420	
180 minute winter	27	8.001	28	1.6	0.731	0.024	0.0414	
180 minute winter	28	8.002	29	2.4	1.172	0.021	0.1705	
180 minute winter	29	Orifice	30	0.1				
180 minute winter	32	9.000	33	0.8	0.445	0.012	0.0410	
180 minute winter	33	9.001	34	1.6	0.424	0.024	0.0815	
180 minute winter	35	10.000	34	0.8	0.655	0.010	0.0233	
180 minute winter	34	9.002	30	3.2	0.595	0.080	0.0666	
180 minute winter	30	Orifice	31	0.2				
180 minute winter	36	11.000	37	0.8	0.412	0.003	0.0434	
180 minute winter	37	11.001	38	1.6	0.539	0.006	0.0695	
180 minute winter	39	12.000	38	0.8	0.573	0.012	0.0204	
180 minute winter	38	11.002	31	3.2	0.905	0.010	0.0391	
180 minute winter	31	Orifice	9	0.1				
180 minute winter	9	1.008	10	9.0	0.277	0.024	1.4878	
180 minute winter	10	Hydro-Brake®		4.8				49.3

Results for 100 year +40% CC 240 minute summer. 300 minute analysis at 4 minute timestep. Mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	124	69.524	0.024	2.3	0.0419	0.0000	OK
240 minute summer	2	124	69.258	0.029	3.5	0.0470	0.0000	OK
240 minute summer	11	124	71.042	0.017	0.8	0.0094	0.0000	OK
240 minute summer	12	124	70.792	0.024	1.6	0.0111	0.0000	OK
240 minute summer	13	244	70.709	0.172	2.4	7.8318	0.0000	OK
240 minute summer	15	124	71.042	0.017	0.8	0.0095	0.0000	OK
240 minute summer	14	172	70.499	0.147	1.7	4.4684	0.0000	OK
240 minute summer	3	124	68.834	0.034	5.0	0.0563	0.0000	OK
240 minute summer	4	124	68.577	0.039	6.2	0.0154	0.0000	OK
240 minute summer	5	128	67.544	0.044	7.4	0.0738	0.0000	OK
240 minute summer	16	124	70.042	0.017	0.8	0.0094	0.0000	OK
240 minute summer	17	124	69.852	0.024	1.6	0.0115	0.0000	OK
240 minute summer	18	244	69.743	0.172	2.4	7.8105	0.0000	OK
240 minute summer	20	124	70.042	0.017	0.8	0.0095	0.0000	OK
240 minute summer	21	124	69.042	0.017	0.8	0.0094	0.0000	OK
240 minute summer	22	124	68.861	0.023	1.6	0.0109	0.0000	OK
240 minute summer	24	124	69.042	0.017	0.8	0.0094	0.0000	OK
240 minute summer	25	240	68.775	0.111	1.6	5.0254	0.0000	OK
240 minute summer	23	128	68.531	0.029	2.5	0.0120	0.0000	OK
240 minute summer	19	128	68.433	0.040	4.2	0.0155	0.0000	OK
240 minute summer	6	128	67.315	0.062	12.8	0.1305	0.0000	OK
240 minute summer	7	156	66.633	0.133	12.8	0.3375	0.0000	OK
240 minute summer	40	124	67.342	0.017	0.8	0.0094	0.0000	OK
240 minute summer	41	124	67.025	0.024	1.6	0.0107	0.0000	OK
240 minute summer	42	244	66.978	0.250	2.4	7.6026	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	1	1.000	2	2.3	0.615	0.005	0.0600	
240 minute summer	2	1.001	3	3.5	0.717	0.008	0.1242	
240 minute summer	11	2.000	12	0.8	0.446	0.012	0.0276	
240 minute summer	12	2.001	13	1.6	0.657	0.024	0.2271	
240 minute summer	13	Orifice	14	0.2				
240 minute summer	15	3.000	14	0.8	0.574	0.012	0.0285	
240 minute summer	14	Orifice	3	0.4				
240 minute summer	3	1.002	4	5.0	0.829	0.012	0.0936	
240 minute summer	4	1.003	5	6.2	0.959	0.015	0.1085	
240 minute summer	5	1.004	6	7.4	0.703	0.020	0.2069	
240 minute summer	16	4.000	17	0.8	0.446	0.012	0.0212	
240 minute summer	17	4.001	18	1.6	0.657	0.024	0.2525	
240 minute summer	18	Orifice	19	0.2				
240 minute summer	20	5.000	19	0.8	0.574	0.012	0.0272	
240 minute summer	21	6.000	22	0.8	0.468	0.012	0.0192	
240 minute summer	22	6.001	23	1.6	0.634	0.021	0.0405	
240 minute summer	24	7.000	25	0.8	0.540	0.012	0.2118	
240 minute summer	25	Orifice	23	0.1				
240 minute summer	23	6.002	19	2.5	0.655	0.036	0.0233	
240 minute summer	19	4.003	6	4.2	0.930	0.063	0.0435	
240 minute summer	6	1.005	7	12.8	0.992	0.039	0.2262	
240 minute summer	7	1.006	8	12.8	0.614	0.059	1.2880	
240 minute summer	40	13.000	41	0.8	0.446	0.012	0.0349	
240 minute summer	41	13.001	42	1.6	0.619	0.024	0.3292	
240 minute summer	42	Orifice	43	0.2				

Results for 100 year +40% CC 240 minute summer. 300 minute analysis at 4 minute timestep. Mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	43	156	66.631	0.058	0.9	0.0218	0.0000	OK
240 minute summer	8	156	66.633	0.633	13.7	1.6101	0.0000	SURCHARGED
240 minute summer	26	124	67.942	0.017	0.8	0.0094	0.0000	OK
240 minute summer	27	124	67.567	0.024	1.6	0.0106	0.0000	OK
240 minute summer	28	124	67.248	0.023	2.4	0.0086	0.0000	OK
240 minute summer	29	300	66.210	0.210	2.4	9.4637	0.0000	OK
240 minute summer	32	124	67.342	0.017	0.8	0.0094	0.0000	OK
240 minute summer	33	124	66.973	0.024	1.6	0.0105	0.0000	OK
240 minute summer	35	124	67.341	0.016	0.8	0.0087	0.0000	OK
240 minute summer	34	128	66.639	0.044	3.2	0.0168	0.0000	OK
240 minute summer	30	244	66.231	0.364	3.3	10.9688	0.0000	SURCHARGED
240 minute summer	36	124	67.190	0.015	0.8	0.0076	0.0000	OK
240 minute summer	37	124	66.822	0.021	1.6	0.0086	0.0000	OK
240 minute summer	39	124	67.342	0.017	0.8	0.0095	0.0000	OK
240 minute summer	38	124	66.440	0.027	3.2	0.0098	0.0000	OK
240 minute summer	31	276	66.086	0.517	3.6	15.5916	0.0000	SURCHARGED
240 minute summer	9	156	66.631	1.431	12.6	0.2691	0.0000	SURCHARGED
240 minute summer	10	156	66.632	1.473	7.1	3.7499	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	43	13.003	8	0.9	0.590	0.014	0.0422	
240 minute summer	8	1.007	9	12.5	0.673	0.026	11.0518	
240 minute summer	26	8.000	27	0.8	0.437	0.012	0.0420	
240 minute summer	27	8.001	28	1.6	0.731	0.024	0.0414	
240 minute summer	28	8.002	29	2.4	1.172	0.021	0.1498	
240 minute summer	29	Orifice	30	0.1				
240 minute summer	32	9.000	33	0.8	0.445	0.012	0.0410	
240 minute summer	33	9.001	34	1.6	0.424	0.024	0.0815	
240 minute summer	35	10.000	34	0.8	0.655	0.010	0.0233	
240 minute summer	34	9.002	30	3.2	0.595	0.080	0.0666	
240 minute summer	30	Orifice	31	0.2				
240 minute summer	36	11.000	37	0.8	0.412	0.003	0.0434	
240 minute summer	37	11.001	38	1.6	0.539	0.006	0.0695	
240 minute summer	39	12.000	38	0.8	0.573	0.012	0.0204	
240 minute summer	38	11.002	31	3.2	0.905	0.010	0.0391	
240 minute summer	31	Orifice	9	0.2				
240 minute summer	9	1.008	10	7.1	0.356	0.019	1.4878	
240 minute summer	10	Hydro-Brake®		4.7				56.6

Results for 100 year +40% CC 240 minute winter. 300 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	124	69.521	0.021	1.7	0.0367	0.0000	OK
240 minute winter	2	128	69.254	0.025	2.6	0.0408	0.0000	OK
240 minute winter	11	116	71.040	0.015	0.6	0.0083	0.0000	OK
240 minute winter	12	120	70.789	0.021	1.2	0.0097	0.0000	OK
240 minute winter	13	240	70.727	0.190	1.8	8.6379	0.0000	OK
240 minute winter	15	120	71.040	0.015	0.6	0.0083	0.0000	OK
240 minute winter	14	188	70.516	0.164	1.3	4.9713	0.0000	OK
240 minute winter	3	128	68.830	0.030	3.8	0.0500	0.0000	OK
240 minute winter	4	128	68.572	0.034	4.7	0.0136	0.0000	OK
240 minute winter	5	128	67.539	0.039	5.6	0.0652	0.0000	OK
240 minute winter	16	116	70.040	0.015	0.6	0.0083	0.0000	OK
240 minute winter	17	120	69.849	0.021	1.2	0.0100	0.0000	OK
240 minute winter	18	240	69.761	0.190	1.8	8.6139	0.0000	OK
240 minute winter	20	120	70.040	0.015	0.6	0.0083	0.0000	OK
240 minute winter	21	116	69.040	0.015	0.6	0.0083	0.0000	OK
240 minute winter	22	116	68.858	0.020	1.2	0.0095	0.0000	OK
240 minute winter	24	120	69.040	0.015	0.6	0.0083	0.0000	OK
240 minute winter	25	236	68.786	0.122	1.2	5.5499	0.0000	OK
240 minute winter	23	136	68.528	0.026	1.9	0.0105	0.0000	OK
240 minute winter	19	136	68.428	0.035	3.3	0.0136	0.0000	OK
240 minute winter	6	128	67.308	0.055	9.8	0.1141	0.0000	OK
240 minute winter	7	164	66.700	0.200	9.8	0.5101	0.0000	OK
240 minute winter	40	120	67.340	0.015	0.6	0.0083	0.0000	OK
240 minute winter	41	120	67.022	0.021	1.2	0.0093	0.0000	OK
240 minute winter	42	240	67.005	0.277	1.8	8.4104	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	1	1.000	2	1.7	0.560	0.004	0.0488	
240 minute winter	2	1.001	3	2.6	0.649	0.006	0.1027	
240 minute winter	11	2.000	12	0.6	0.407	0.009	0.0226	
240 minute winter	12	2.001	13	1.2	0.657	0.018	0.2487	
240 minute winter	13	Orifice	14	0.2				
240 minute winter	15	3.000	14	0.6	0.526	0.009	0.0233	
240 minute winter	14	Orifice	3	0.4				
240 minute winter	3	1.002	4	3.8	0.768	0.009	0.0779	
240 minute winter	4	1.003	5	4.7	0.884	0.011	0.0904	
240 minute winter	5	1.004	6	5.6	0.651	0.015	0.1706	
240 minute winter	16	4.000	17	0.6	0.407	0.009	0.0173	
240 minute winter	17	4.001	18	1.2	0.657	0.018	0.2767	
240 minute winter	18	Orifice	19	0.2				
240 minute winter	20	5.000	19	0.6	0.526	0.009	0.0223	
240 minute winter	21	6.000	22	0.6	0.425	0.009	0.0157	
240 minute winter	22	6.001	23	1.2	0.580	0.016	0.0332	
240 minute winter	24	7.000	25	0.6	0.540	0.009	0.2397	
240 minute winter	25	Orifice	23	0.1				
240 minute winter	23	6.002	19	1.9	0.608	0.027	0.0192	
240 minute winter	19	4.003	6	3.3	0.864	0.048	0.0360	
240 minute winter	6	1.005	7	9.8	0.917	0.030	0.1867	
240 minute winter	7	1.006	8	9.8	0.570	0.045	2.0901	
240 minute winter	40	13.000	41	0.6	0.407	0.009	0.0285	
240 minute winter	41	13.001	42	1.2	0.619	0.018	0.3333	
240 minute winter	42	Orifice	43	0.2				

Results for 100 year +40% CC 240 minute winter. 300 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	43	164	66.700	0.127	0.7	0.0478	0.0000	OK
240 minute winter	8	164	66.700	0.700	10.5	1.7819	0.0000	SURCHARGED
240 minute winter	26	120	67.940	0.015	0.6	0.0083	0.0000	OK
240 minute winter	27	116	67.564	0.021	1.2	0.0093	0.0000	OK
240 minute winter	28	116	67.245	0.020	1.8	0.0075	0.0000	OK
240 minute winter	29	300	66.230	0.230	1.8	10.4078	0.0000	SURCHARGED
240 minute winter	32	120	67.340	0.015	0.6	0.0083	0.0000	OK
240 minute winter	33	120	66.970	0.021	1.2	0.0091	0.0000	OK
240 minute winter	35	120	67.339	0.014	0.6	0.0076	0.0000	OK
240 minute winter	34	120	66.633	0.038	2.4	0.0145	0.0000	OK
240 minute winter	30	240	66.267	0.400	2.5	12.0675	0.0000	SURCHARGED
240 minute winter	36	120	67.189	0.014	0.6	0.0067	0.0000	OK
240 minute winter	37	120	66.819	0.018	1.2	0.0076	0.0000	OK
240 minute winter	39	120	67.340	0.015	0.6	0.0083	0.0000	OK
240 minute winter	38	120	66.436	0.024	2.4	0.0086	0.0000	OK
240 minute winter	31	284	66.139	0.570	2.8	17.1905	0.0000	SURCHARGED
240 minute winter	9	164	66.701	1.501	9.4	0.2821	0.0000	SURCHARGED
240 minute winter	10	160	66.700	1.541	7.0	3.9218	0.7795	FLOOD

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	43	13.003	8	0.7	0.552	0.011	0.0869	
240 minute winter	8	1.007	9	9.3	0.682	0.019	11.0518	
240 minute winter	26	8.000	27	0.6	0.400	0.009	0.0343	
240 minute winter	27	8.001	28	1.2	0.673	0.018	0.0337	
240 minute winter	28	8.002	29	1.8	1.078	0.015	0.2008	
240 minute winter	29	Orifice	30	0.1				
240 minute winter	32	9.000	33	0.6	0.406	0.009	0.0335	
240 minute winter	33	9.001	34	1.2	0.392	0.018	0.0663	
240 minute winter	35	10.000	34	0.6	0.599	0.007	0.0191	
240 minute winter	34	9.002	30	2.4	0.548	0.060	0.0542	
240 minute winter	30	Orifice	31	0.2				
240 minute winter	36	11.000	37	0.6	0.383	0.002	0.0355	
240 minute winter	37	11.001	38	1.2	0.489	0.005	0.0567	
240 minute winter	39	12.000	38	0.6	0.525	0.009	0.0167	
240 minute winter	38	11.002	31	2.4	0.831	0.008	0.0319	
240 minute winter	31	Orifice	9	0.2				
240 minute winter	9	1.008	10	7.0	0.406	0.019	1.4878	
240 minute winter	10	Hydro-Brake®		4.8				60.5

Results for 100 year +40% CC 360 minute summer. 424 minute analysis at 8 minute timestep. Mass balance: 99.79%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	184	69.521	0.021	1.8	0.0375	0.0000	OK
360 minute summer	2	184	69.255	0.026	2.8	0.0420	0.0000	OK
360 minute summer	11	184	71.040	0.015	0.6	0.0082	0.0000	OK
360 minute summer	12	184	70.789	0.021	1.2	0.0096	0.0000	OK
360 minute summer	13	368	70.721	0.184	1.8	8.3363	0.0000	OK
360 minute summer	15	184	71.040	0.015	0.6	0.0083	0.0000	OK
360 minute summer	14	240	70.502	0.150	1.3	4.5440	0.0000	OK
360 minute summer	3	184	68.831	0.031	4.1	0.0512	0.0000	OK
360 minute summer	4	184	68.573	0.035	5.1	0.0139	0.0000	OK
360 minute summer	5	184	67.540	0.040	6.0	0.0670	0.0000	OK
360 minute summer	16	184	70.040	0.015	0.6	0.0082	0.0000	OK
360 minute summer	17	184	69.849	0.021	1.2	0.0099	0.0000	OK
360 minute summer	18	368	69.754	0.183	1.8	8.3138	0.0000	OK
360 minute summer	20	184	70.040	0.015	0.6	0.0083	0.0000	OK
360 minute summer	21	184	69.040	0.015	0.6	0.0082	0.0000	OK
360 minute summer	22	184	68.858	0.020	1.2	0.0095	0.0000	OK
360 minute summer	24	184	69.040	0.015	0.6	0.0082	0.0000	OK
360 minute summer	25	360	68.781	0.117	1.2	5.3061	0.0000	OK
360 minute summer	23	184	68.527	0.025	1.9	0.0104	0.0000	OK
360 minute summer	19	184	68.427	0.034	3.2	0.0134	0.0000	OK
360 minute summer	6	184	67.308	0.055	10.2	0.1159	0.0000	OK
360 minute summer	7	184	66.578	0.078	10.1	0.1983	0.0000	OK
360 minute summer	40	184	67.340	0.015	0.6	0.0082	0.0000	OK
360 minute summer	41	184	67.022	0.021	1.2	0.0093	0.0000	OK
360 minute summer	42	368	66.994	0.266	1.8	8.0799	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	1	1.000	2	1.8	0.567	0.004	0.0508	
360 minute summer	2	1.001	3	2.8	0.663	0.007	0.1069	
360 minute summer	11	2.000	12	0.6	0.406	0.009	0.0224	
360 minute summer	12	2.001	13	1.2	0.623	0.018	0.2411	
360 minute summer	13	Orifice	14	0.2				
360 minute summer	15	3.000	14	0.6	0.524	0.009	0.0231	
360 minute summer	14	Orifice	3	0.4				
360 minute summer	3	1.002	4	4.1	0.779	0.010	0.0811	
360 minute summer	4	1.003	5	5.0	0.899	0.012	0.0940	
360 minute summer	5	1.004	6	6.0	0.670	0.016	0.1756	
360 minute summer	16	4.000	17	0.6	0.406	0.009	0.0172	
360 minute summer	17	4.001	18	1.2	0.621	0.018	0.2681	
360 minute summer	18	Orifice	19	0.2				
360 minute summer	20	5.000	19	0.6	0.524	0.009	0.0221	
360 minute summer	21	6.000	22	0.6	0.425	0.009	0.0156	
360 minute summer	22	6.001	23	1.2	0.576	0.016	0.0329	
360 minute summer	24	7.000	25	0.6	0.514	0.009	0.2268	
360 minute summer	25	Orifice	23	0.1				
360 minute summer	23	6.002	19	1.9	0.606	0.027	0.0190	
360 minute summer	19	4.003	6	3.2	0.859	0.047	0.0355	
360 minute summer	6	1.005	7	10.1	0.924	0.031	0.1907	
360 minute summer	7	1.006	8	9.9	0.571	0.046	0.4126	
360 minute summer	40	13.000	41	0.6	0.406	0.009	0.0283	
360 minute summer	41	13.001	42	1.2	0.572	0.017	0.3315	
360 minute summer	42	Orifice	43	0.2				

Results for 100 year +40% CC 360 minute summer. 424 minute analysis at 8 minute timestep. Mass balance: 99.79%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	43	184	66.590	0.017	0.7	0.0065	0.0000	OK
360 minute summer	8	224	66.532	0.532	10.6	1.3532	0.0000	SURCHARGED
360 minute summer	26	184	67.940	0.015	0.6	0.0082	0.0000	OK
360 minute summer	27	184	67.564	0.021	1.2	0.0092	0.0000	OK
360 minute summer	28	184	67.245	0.020	1.8	0.0075	0.0000	OK
360 minute summer	29	424	66.232	0.232	1.8	10.4784	0.0000	SURCHARGED
360 minute summer	32	184	67.340	0.015	0.6	0.0082	0.0000	OK
360 minute summer	33	184	66.970	0.021	1.2	0.0091	0.0000	OK
360 minute summer	35	184	67.339	0.014	0.6	0.0075	0.0000	OK
360 minute summer	34	184	66.633	0.038	2.4	0.0144	0.0000	OK
360 minute summer	30	368	66.260	0.393	2.4	11.8621	0.0000	SURCHARGED
360 minute summer	36	184	67.188	0.013	0.6	0.0066	0.0000	OK
360 minute summer	37	184	66.819	0.018	1.2	0.0075	0.0000	OK
360 minute summer	39	184	67.340	0.015	0.6	0.0083	0.0000	OK
360 minute summer	38	184	66.436	0.024	2.4	0.0085	0.0000	OK
360 minute summer	31	376	66.127	0.558	2.7	16.8238	0.0000	SURCHARGED
360 minute summer	9	224	66.533	1.333	9.0	0.2506	0.0000	SURCHARGED
360 minute summer	10	224	66.531	1.372	9.5	3.4913	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	43	13.003	8	0.7	0.548	0.011	0.0041	
360 minute summer	8	1.007	9	8.9	0.670	0.018	11.0518	
360 minute summer	26	8.000	27	0.6	0.399	0.009	0.0340	
360 minute summer	27	8.001	28	1.2	0.671	0.017	0.0334	
360 minute summer	28	8.002	29	1.8	1.072	0.015	0.2047	
360 minute summer	29	Orifice	30	0.1				
360 minute summer	32	9.000	33	0.6	0.405	0.009	0.0333	
360 minute summer	33	9.001	34	1.2	0.391	0.017	0.0654	
360 minute summer	35	10.000	34	0.6	0.597	0.007	0.0189	
360 minute summer	34	9.002	30	2.3	0.544	0.059	0.0533	
360 minute summer	30	Orifice	31	0.2				
360 minute summer	36	11.000	37	0.6	0.382	0.002	0.0352	
360 minute summer	37	11.001	38	1.2	0.487	0.005	0.0560	
360 minute summer	39	12.000	38	0.6	0.524	0.009	0.0166	
360 minute summer	38	11.002	31	2.4	0.826	0.008	0.0315	
360 minute summer	31	Orifice	9	0.2				
360 minute summer	9	1.008	10	9.5	0.383	0.025	1.4878	
360 minute summer	10	Hydro-Brake®		4.5				76.0

Results for 100 year +40% CC 360 minute winter. 424 minute analysis at 8 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	184	69.518	0.018	1.3	0.0325	0.0000	OK
360 minute winter	2	184	69.251	0.022	2.0	0.0362	0.0000	OK
360 minute winter	11	184	71.039	0.014	0.5	0.0075	0.0000	OK
360 minute winter	12	184	70.787	0.019	1.0	0.0088	0.0000	OK
360 minute winter	13	352	70.741	0.204	1.5	9.2619	0.0000	OK
360 minute winter	15	184	71.039	0.014	0.5	0.0075	0.0000	OK
360 minute winter	14	264	70.516	0.164	1.1	4.9822	0.0000	OK
360 minute winter	3	192	68.827	0.027	3.1	0.0449	0.0000	OK
360 minute winter	4	192	68.569	0.031	3.8	0.0122	0.0000	OK
360 minute winter	5	192	67.535	0.035	4.5	0.0583	0.0000	OK
360 minute winter	16	184	70.039	0.014	0.5	0.0075	0.0000	OK
360 minute winter	17	184	69.847	0.019	1.0	0.0091	0.0000	OK
360 minute winter	18	352	69.774	0.203	1.5	9.2369	0.0000	OK
360 minute winter	20	184	70.039	0.014	0.5	0.0076	0.0000	OK
360 minute winter	21	184	69.039	0.014	0.5	0.0075	0.0000	OK
360 minute winter	22	184	68.856	0.018	1.0	0.0087	0.0000	OK
360 minute winter	24	184	69.039	0.014	0.5	0.0075	0.0000	OK
360 minute winter	25	344	68.793	0.129	1.0	5.8746	0.0000	OK
360 minute winter	23	184	68.525	0.023	1.6	0.0096	0.0000	OK
360 minute winter	19	184	68.424	0.031	2.7	0.0123	0.0000	OK
360 minute winter	6	184	67.302	0.049	7.8	0.1023	0.0000	OK
360 minute winter	7	240	66.595	0.095	7.8	0.2421	0.0000	OK
360 minute winter	40	184	67.339	0.014	0.5	0.0075	0.0000	OK
360 minute winter	41	344	67.023	0.022	1.0	0.0097	0.0000	OK
360 minute winter	42	344	67.023	0.295	1.5	8.9545	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	1	1.000	2	1.3	0.521	0.003	0.0405	
360 minute winter	2	1.001	3	2.0	0.591	0.005	0.0867	
360 minute winter	11	2.000	12	0.5	0.385	0.007	0.0197	
360 minute winter	12	2.001	13	1.0	0.634	0.015	0.2629	
360 minute winter	13	Orifice	14	0.2				
360 minute winter	15	3.000	14	0.5	0.494	0.007	0.0203	
360 minute winter	14	Orifice	3	0.4				
360 minute winter	3	1.002	4	3.1	0.721	0.007	0.0663	
360 minute winter	4	1.003	5	3.8	0.825	0.009	0.0768	
360 minute winter	5	1.004	6	4.5	0.617	0.012	0.1448	
360 minute winter	16	4.000	17	0.5	0.385	0.007	0.0152	
360 minute winter	17	4.001	18	1.0	0.639	0.015	0.2926	
360 minute winter	18	Orifice	19	0.2				
360 minute winter	20	5.000	19	0.5	0.494	0.007	0.0194	
360 minute winter	21	6.000	22	0.5	0.403	0.007	0.0137	
360 minute winter	22	6.001	23	1.0	0.543	0.013	0.0291	
360 minute winter	24	7.000	25	0.5	0.528	0.007	0.2568	
360 minute winter	25	Orifice	23	0.1				
360 minute winter	23	6.002	19	1.6	0.575	0.023	0.0168	
360 minute winter	19	4.003	6	2.7	0.817	0.040	0.0314	
360 minute winter	6	1.005	7	7.8	0.859	0.024	0.1589	
360 minute winter	7	1.006	8	7.7	0.534	0.036	0.8719	
360 minute winter	40	13.000	41	0.5	0.385	0.007	0.0249	
360 minute winter	41	13.001	42	1.0	0.606	0.015	0.3377	
360 minute winter	42	Orifice	43	0.2				

Results for 100 year +40% CC 360 minute winter. 424 minute analysis at 8 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	43	240	66.597	0.024	0.6	0.0090	0.0000	OK
360 minute winter	8	240	66.594	0.594	8.4	1.5106	0.0000	SURCHARGED
360 minute winter	26	184	67.939	0.014	0.5	0.0075	0.0000	OK
360 minute winter	27	184	67.562	0.019	1.0	0.0084	0.0000	OK
360 minute winter	28	184	67.243	0.018	1.5	0.0068	0.0000	OK
360 minute winter	29	424	66.266	0.266	1.5	12.0099	0.0000	SURCHARGED
360 minute winter	32	184	67.339	0.014	0.5	0.0075	0.0000	OK
360 minute winter	33	184	66.968	0.019	1.0	0.0083	0.0000	OK
360 minute winter	35	184	67.338	0.013	0.5	0.0069	0.0000	OK
360 minute winter	34	184	66.629	0.034	2.0	0.0131	0.0000	OK
360 minute winter	30	352	66.304	0.437	2.0	13.1711	0.0000	SURCHARGED
360 minute winter	36	184	67.187	0.012	0.5	0.0061	0.0000	OK
360 minute winter	37	184	66.818	0.017	1.0	0.0069	0.0000	OK
360 minute winter	39	184	67.339	0.014	0.5	0.0076	0.0000	OK
360 minute winter	38	184	66.434	0.022	2.0	0.0078	0.0000	OK
360 minute winter	31	360	66.203	0.634	2.3	19.1290	0.0000	SURCHARGED
360 minute winter	9	240	66.593	1.393	7.3	0.2618	0.0000	SURCHARGED
360 minute winter	10	240	66.594	1.435	5.9	3.6513	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	43	13.003	8	0.6	0.526	0.009	0.0203	
360 minute winter	8	1.007	9	7.2	0.666	0.015	11.0518	
360 minute winter	26	8.000	27	0.5	0.378	0.007	0.0298	
360 minute winter	27	8.001	28	1.0	0.633	0.015	0.0293	
360 minute winter	28	8.002	29	1.5	1.009	0.013	0.2877	
360 minute winter	29	Orifice	30	0.1				
360 minute winter	32	9.000	33	0.5	0.384	0.007	0.0292	
360 minute winter	33	9.001	34	1.0	0.371	0.014	0.0571	
360 minute winter	35	10.000	34	0.5	0.564	0.006	0.0166	
360 minute winter	34	9.002	30	1.9	0.515	0.049	0.0465	
360 minute winter	30	Orifice	31	0.2				
360 minute winter	36	11.000	37	0.5	0.360	0.002	0.0308	
360 minute winter	37	11.001	38	1.0	0.462	0.004	0.0490	
360 minute winter	39	12.000	38	0.5	0.494	0.007	0.0146	
360 minute winter	38	11.002	31	2.0	0.780	0.006	0.0538	
360 minute winter	31	Orifice	9	0.3				
360 minute winter	9	1.008	10	5.9	0.318	0.016	1.4878	
360 minute winter	10	Hydro-Brake®		4.6				78.2

Results for 100 year +40% CC 480 minute summer. 544 minute analysis at 8 minute timestep. Mass balance: 99.80%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	248	69.519	0.019	1.4	0.0336	0.0000	OK
480 minute summer	2	248	69.252	0.023	2.2	0.0378	0.0000	OK
480 minute summer	11	248	71.039	0.014	0.5	0.0076	0.0000	OK
480 minute summer	12	248	70.787	0.019	1.0	0.0089	0.0000	OK
480 minute summer	13	432	70.721	0.184	1.5	8.3494	0.0000	OK
480 minute summer	15	248	71.039	0.014	0.5	0.0076	0.0000	OK
480 minute summer	14	312	70.499	0.147	1.1	4.4621	0.0000	OK
480 minute summer	3	248	68.829	0.029	3.3	0.0468	0.0000	OK
480 minute summer	4	248	68.570	0.032	4.1	0.0127	0.0000	OK
480 minute summer	5	248	67.536	0.036	4.9	0.0612	0.0000	OK
480 minute summer	16	248	70.039	0.014	0.5	0.0076	0.0000	OK
480 minute summer	17	248	69.847	0.019	1.0	0.0092	0.0000	OK
480 minute summer	18	432	69.754	0.183	1.5	8.3270	0.0000	OK
480 minute summer	20	248	70.039	0.014	0.5	0.0076	0.0000	OK
480 minute summer	21	248	69.039	0.014	0.5	0.0076	0.0000	OK
480 minute summer	22	248	68.856	0.018	1.0	0.0088	0.0000	OK
480 minute summer	24	248	69.039	0.014	0.5	0.0076	0.0000	OK
480 minute summer	25	424	68.781	0.117	1.0	5.3018	0.0000	OK
480 minute summer	23	248	68.526	0.024	1.6	0.0096	0.0000	OK
480 minute summer	19	248	68.425	0.032	2.7	0.0125	0.0000	OK
480 minute summer	6	248	67.304	0.051	8.5	0.1065	0.0000	OK
480 minute summer	7	248	66.572	0.072	8.5	0.1839	0.0000	OK
480 minute summer	40	248	67.339	0.014	0.5	0.0076	0.0000	OK
480 minute summer	41	248	67.020	0.019	1.0	0.0086	0.0000	OK
480 minute summer	42	432	66.994	0.266	1.5	8.0878	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	1	1.000	2	1.4	0.525	0.003	0.0430	
480 minute summer	2	1.001	3	2.2	0.608	0.005	0.0923	
480 minute summer	11	2.000	12	0.5	0.385	0.007	0.0199	
480 minute summer	12	2.001	13	1.0	0.634	0.015	0.2414	
480 minute summer	13	Orifice	14	0.2				
480 minute summer	15	3.000	14	0.5	0.497	0.007	0.0206	
480 minute summer	14	Orifice	3	0.4				
480 minute summer	3	1.002	4	3.3	0.738	0.008	0.0707	
480 minute summer	4	1.003	5	4.1	0.849	0.010	0.0821	
480 minute summer	5	1.004	6	4.9	0.628	0.014	0.1546	
480 minute summer	16	4.000	17	0.5	0.385	0.007	0.0153	
480 minute summer	17	4.001	18	1.0	0.639	0.015	0.2685	
480 minute summer	18	Orifice	19	0.2				
480 minute summer	20	5.000	19	0.5	0.497	0.007	0.0196	
480 minute summer	21	6.000	22	0.5	0.404	0.007	0.0138	
480 minute summer	22	6.001	23	1.0	0.546	0.013	0.0294	
480 minute summer	24	7.000	25	0.5	0.528	0.007	0.2265	
480 minute summer	25	Orifice	23	0.1				
480 minute summer	23	6.002	19	1.6	0.577	0.023	0.0170	
480 minute summer	19	4.003	6	2.7	0.822	0.041	0.0319	
480 minute summer	6	1.005	7	8.5	0.880	0.026	0.1686	
480 minute summer	7	1.006	8	8.5	0.549	0.039	0.3671	
480 minute summer	40	13.000	41	0.5	0.385	0.007	0.0252	
480 minute summer	41	13.001	42	1.0	0.606	0.015	0.3309	
480 minute summer	42	Orifice	43	0.2				

Results for 100 year +40% CC 480 minute summer. 544 minute analysis at 8 minute timestep. Mass balance: 99.80%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	43	248	66.589	0.016	0.6	0.0061	0.0000	OK
480 minute summer	8	296	66.425	0.425	9.1	1.0805	0.0000	OK
480 minute summer	26	248	67.939	0.014	0.5	0.0076	0.0000	OK
480 minute summer	27	248	67.563	0.020	1.0	0.0085	0.0000	OK
480 minute summer	28	248	67.243	0.018	1.5	0.0069	0.0000	OK
480 minute summer	29	520	66.235	0.235	1.5	10.6283	0.0000	SURCHARGED
480 minute summer	32	248	67.339	0.014	0.5	0.0076	0.0000	OK
480 minute summer	33	248	66.968	0.019	1.0	0.0084	0.0000	OK
480 minute summer	35	248	67.338	0.013	0.5	0.0070	0.0000	OK
480 minute summer	34	248	66.630	0.035	2.0	0.0133	0.0000	OK
480 minute summer	30	432	66.263	0.396	2.0	11.9316	0.0000	SURCHARGED
480 minute summer	36	248	67.187	0.012	0.5	0.0061	0.0000	OK
480 minute summer	37	248	66.818	0.017	1.0	0.0070	0.0000	OK
480 minute summer	39	248	67.339	0.014	0.5	0.0076	0.0000	OK
480 minute summer	38	248	66.434	0.022	2.0	0.0079	0.0000	OK
480 minute summer	31	440	66.134	0.565	2.4	17.0299	0.0000	SURCHARGED
480 minute summer	9	296	66.428	1.228	8.7	0.2308	0.0000	SURCHARGED
480 minute summer	10	288	66.422	1.263	7.6	3.2137	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	43	13.003	8	0.6	0.527	0.009	0.0037	
480 minute summer	8	1.007	9	8.6	0.653	0.018	10.3113	
480 minute summer	26	8.000	27	0.5	0.379	0.007	0.0302	
480 minute summer	27	8.001	28	1.0	0.637	0.015	0.0297	
480 minute summer	28	8.002	29	1.5	1.017	0.013	0.2128	
480 minute summer	29	Orifice	30	0.1				
480 minute summer	32	9.000	33	0.5	0.384	0.007	0.0296	
480 minute summer	33	9.001	34	1.0	0.371	0.015	0.0582	
480 minute summer	35	10.000	34	0.5	0.567	0.006	0.0168	
480 minute summer	34	9.002	30	2.0	0.521	0.050	0.0476	
480 minute summer	30	Orifice	31	0.2				
480 minute summer	36	11.000	37	0.5	0.361	0.002	0.0312	
480 minute summer	37	11.001	38	1.0	0.464	0.004	0.0498	
480 minute summer	39	12.000	38	0.5	0.497	0.007	0.0147	
480 minute summer	38	11.002	31	2.0	0.786	0.006	0.0281	
480 minute summer	31	Orifice	9	0.3				
480 minute summer	9	1.008	10	7.6	0.174	0.020	1.4878	
480 minute summer	10	Hydro-Brake®		4.4				88.0

Results for 100 year +40% CC 480 minute winter. 544 minute analysis at 8 minute timestep. Mass balance: 99.83%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	232	69.516	0.016	1.0	0.0288	0.0000	OK
480 minute winter	2	248	69.249	0.020	1.6	0.0328	0.0000	OK
480 minute winter	11	240	71.038	0.013	0.4	0.0068	0.0000	OK
480 minute winter	12	240	70.785	0.017	0.8	0.0080	0.0000	OK
480 minute winter	13	408	70.747	0.210	1.2	9.5454	0.0000	OK
480 minute winter	15	248	71.038	0.013	0.4	0.0068	0.0000	OK
480 minute winter	14	336	70.517	0.165	0.9	5.0190	0.0000	OK
480 minute winter	3	248	68.825	0.025	2.6	0.0412	0.0000	OK
480 minute winter	4	248	68.566	0.028	3.2	0.0112	0.0000	OK
480 minute winter	5	248	67.532	0.032	3.7	0.0540	0.0000	OK
480 minute winter	16	240	70.038	0.013	0.4	0.0068	0.0000	OK
480 minute winter	17	240	69.845	0.017	0.8	0.0083	0.0000	OK
480 minute winter	18	408	69.781	0.210	1.2	9.5198	0.0000	OK
480 minute winter	20	248	70.038	0.013	0.4	0.0068	0.0000	OK
480 minute winter	21	240	69.038	0.013	0.4	0.0068	0.0000	OK
480 minute winter	22	240	68.854	0.016	0.8	0.0079	0.0000	OK
480 minute winter	24	240	69.038	0.013	0.4	0.0068	0.0000	OK
480 minute winter	25	408	68.797	0.133	0.8	6.0370	0.0000	OK
480 minute winter	23	256	68.523	0.021	1.3	0.0088	0.0000	OK
480 minute winter	19	256	68.422	0.029	2.3	0.0113	0.0000	OK
480 minute winter	6	248	67.298	0.045	6.6	0.0942	0.0000	OK
480 minute winter	7	248	66.564	0.064	6.6	0.1640	0.0000	OK
480 minute winter	40	240	67.338	0.013	0.4	0.0068	0.0000	OK
480 minute winter	41	408	67.031	0.030	0.8	0.0132	0.0000	OK
480 minute winter	42	408	67.031	0.303	1.2	9.1971	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	1	1.000	2	1.0	0.485	0.002	0.0342	
480 minute winter	2	1.001	3	1.6	0.543	0.004	0.0754	
480 minute winter	11	2.000	12	0.4	0.364	0.006	0.0171	
480 minute winter	12	2.001	13	0.8	0.634	0.012	0.2681	
480 minute winter	13	Orifice	14	0.2				
480 minute winter	15	3.000	14	0.4	0.465	0.006	0.0176	
480 minute winter	14	Orifice	3	0.4				
480 minute winter	3	1.002	4	2.6	0.679	0.006	0.0586	
480 minute winter	4	1.003	5	3.1	0.782	0.007	0.0680	
480 minute winter	5	1.004	6	3.7	0.576	0.010	0.1288	
480 minute winter	16	4.000	17	0.4	0.364	0.006	0.0131	
480 minute winter	17	4.001	18	0.8	0.639	0.012	0.2984	
480 minute winter	18	Orifice	19	0.2				
480 minute winter	20	5.000	19	0.4	0.464	0.006	0.0168	
480 minute winter	21	6.000	22	0.4	0.379	0.006	0.0119	
480 minute winter	22	6.001	23	0.8	0.506	0.011	0.0254	
480 minute winter	24	7.000	25	0.4	0.528	0.006	0.2653	
480 minute winter	25	Orifice	23	0.1				
480 minute winter	23	6.002	19	1.3	0.545	0.019	0.0148	
480 minute winter	19	4.003	6	2.3	0.778	0.034	0.0279	
480 minute winter	6	1.005	7	6.6	0.818	0.020	0.1414	
480 minute winter	7	1.006	8	6.6	0.511	0.030	0.3089	
480 minute winter	40	13.000	41	0.4	0.364	0.006	0.0326	
480 minute winter	41	13.001	42	0.8	0.606	0.012	0.3469	
480 minute winter	42	Orifice	43	0.2				

Results for 100 year +40% CC 480 minute winter. 544 minute analysis at 8 minute timestep. Mass balance: 99.83%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	43	256	66.588	0.015	0.6	0.0057	0.0000	OK
480 minute winter	8	312	66.419	0.419	7.2	1.0661	0.0000	OK
480 minute winter	26	240	67.938	0.013	0.4	0.0068	0.0000	OK
480 minute winter	27	256	67.561	0.018	0.8	0.0077	0.0000	OK
480 minute winter	28	240	67.241	0.016	1.2	0.0062	0.0000	OK
480 minute winter	29	544	66.276	0.276	1.3	12.4696	0.0000	SURCHARGED
480 minute winter	32	240	67.338	0.013	0.4	0.0068	0.0000	OK
480 minute winter	33	240	66.966	0.017	0.8	0.0075	0.0000	OK
480 minute winter	35	240	67.337	0.012	0.4	0.0063	0.0000	OK
480 minute winter	34	248	66.626	0.031	1.6	0.0119	0.0000	OK
480 minute winter	30	464	66.320	0.453	1.6	13.6698	0.0000	SURCHARGED
480 minute winter	36	240	67.186	0.011	0.4	0.0055	0.0000	OK
480 minute winter	37	240	66.816	0.015	0.8	0.0063	0.0000	OK
480 minute winter	39	240	67.338	0.013	0.4	0.0068	0.0000	OK
480 minute winter	38	240	66.432	0.020	1.6	0.0071	0.0000	OK
480 minute winter	31	472	66.215	0.646	2.0	19.4727	0.0000	SURCHARGED
480 minute winter	9	312	66.419	1.219	6.5	0.2291	0.0000	SURCHARGED
480 minute winter	10	312	66.418	1.259	10.1	3.2038	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	43	13.003	8	0.6	0.507	0.008	0.0034	
480 minute winter	8	1.007	9	6.4	0.654	0.013	10.2514	
480 minute winter	26	8.000	27	0.4	0.357	0.006	0.0259	
480 minute winter	27	8.001	28	0.8	0.596	0.012	0.0255	
480 minute winter	28	8.002	29	1.2	0.949	0.010	0.3118	
480 minute winter	29	Orifice	30	0.1				
480 minute winter	32	9.000	33	0.4	0.363	0.006	0.0254	
480 minute winter	33	9.001	34	0.8	0.349	0.012	0.0497	
480 minute winter	35	10.000	34	0.4	0.531	0.005	0.0143	
480 minute winter	34	9.002	30	1.6	0.488	0.040	0.0406	
480 minute winter	30	Orifice	31	0.2				
480 minute winter	36	11.000	37	0.4	0.336	0.002	0.0267	
480 minute winter	37	11.001	38	0.8	0.438	0.003	0.0425	
480 minute winter	39	12.000	38	0.4	0.464	0.006	0.0126	
480 minute winter	38	11.002	31	1.6	0.736	0.005	0.0709	
480 minute winter	31	Orifice	9	0.3				
480 minute winter	9	1.008	10	10.1	0.257	0.027	1.4878	
480 minute winter	10	Hydro-Brake®		4.4				96.5

Results for 100 year +40% CC 600 minute summer. 660 minute analysis at 15 minute timestep. Mass balance: 99.76%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	315	69.518	0.018	1.2	0.0313	0.0000	OK
600 minute summer	2	315	69.250	0.021	1.8	0.0345	0.0000	OK
600 minute summer	11	315	71.038	0.013	0.4	0.0068	0.0000	OK
600 minute summer	12	315	70.785	0.017	0.8	0.0080	0.0000	OK
600 minute summer	13	495	70.717	0.180	1.2	8.1808	0.0000	OK
600 minute summer	15	315	71.038	0.013	0.4	0.0068	0.0000	OK
600 minute summer	14	390	70.496	0.144	0.9	4.3845	0.0000	OK
600 minute summer	3	315	68.826	0.026	2.7	0.0426	0.0000	OK
600 minute summer	4	315	68.567	0.029	3.3	0.0115	0.0000	OK
600 minute summer	5	315	67.533	0.033	3.9	0.0551	0.0000	OK
600 minute summer	16	315	70.038	0.013	0.4	0.0068	0.0000	OK
600 minute summer	17	315	69.845	0.017	0.8	0.0083	0.0000	OK
600 minute summer	18	495	69.751	0.180	1.2	8.1588	0.0000	OK
600 minute summer	20	315	70.038	0.013	0.4	0.0068	0.0000	OK
600 minute summer	21	315	69.038	0.013	0.4	0.0068	0.0000	OK
600 minute summer	22	315	68.854	0.016	0.8	0.0079	0.0000	OK
600 minute summer	24	315	69.038	0.013	0.4	0.0068	0.0000	OK
600 minute summer	25	480	68.779	0.115	0.8	5.2097	0.0000	OK
600 minute summer	23	315	68.523	0.021	1.3	0.0087	0.0000	OK
600 minute summer	19	315	68.422	0.029	2.2	0.0113	0.0000	OK
600 minute summer	6	315	67.299	0.046	6.8	0.0954	0.0000	OK
600 minute summer	7	315	66.565	0.065	6.8	0.1658	0.0000	OK
600 minute summer	40	315	67.338	0.013	0.4	0.0068	0.0000	OK
600 minute summer	41	315	67.018	0.017	0.8	0.0077	0.0000	OK
600 minute summer	42	480	66.989	0.261	1.2	7.9275	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	1	1.000	2	1.2	0.515	0.003	0.0378	
600 minute summer	2	1.001	3	1.8	0.573	0.004	0.0804	
600 minute summer	11	2.000	12	0.4	0.364	0.006	0.0171	
600 minute summer	12	2.001	13	0.8	0.606	0.012	0.2370	
600 minute summer	13	Orifice	14	0.2				
600 minute summer	15	3.000	14	0.4	0.465	0.006	0.0176	
600 minute summer	14	Orifice	3	0.4				
600 minute summer	3	1.002	4	2.7	0.697	0.007	0.0612	
600 minute summer	4	1.003	5	3.3	0.796	0.008	0.0707	
600 minute summer	5	1.004	6	3.9	0.590	0.011	0.1318	
600 minute summer	16	4.000	17	0.4	0.364	0.006	0.0131	
600 minute summer	17	4.001	18	0.8	0.606	0.012	0.2636	
600 minute summer	18	Orifice	19	0.2				
600 minute summer	20	5.000	19	0.4	0.464	0.006	0.0168	
600 minute summer	21	6.000	22	0.4	0.379	0.006	0.0119	
600 minute summer	22	6.001	23	0.8	0.506	0.011	0.0253	
600 minute summer	24	7.000	25	0.4	0.502	0.006	0.2217	
600 minute summer	25	Orifice	23	0.1				
600 minute summer	23	6.002	19	1.3	0.544	0.019	0.0147	
600 minute summer	19	4.003	6	2.2	0.776	0.033	0.0276	
600 minute summer	6	1.005	7	6.8	0.824	0.021	0.1439	
600 minute summer	7	1.006	8	6.8	0.515	0.031	0.3142	
600 minute summer	40	13.000	41	0.4	0.364	0.006	0.0216	
600 minute summer	41	13.001	42	0.8	0.554	0.012	0.3292	
600 minute summer	42	Orifice	43	0.2				

Results for 100 year +40% CC 600 minute summer. 660 minute analysis at 15 minute timestep. Mass balance: 99.76%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	43	315	66.588	0.015	0.5	0.0056	0.0000	OK
600 minute summer	8	360	66.293	0.293	7.3	0.7467	0.0000	OK
600 minute summer	26	315	67.938	0.013	0.4	0.0068	0.0000	OK
600 minute summer	27	315	67.561	0.018	0.8	0.0076	0.0000	OK
600 minute summer	28	315	67.241	0.016	1.2	0.0062	0.0000	OK
600 minute summer	29	570	66.229	0.229	1.2	10.3302	0.0000	SURCHARGED
600 minute summer	32	315	67.338	0.013	0.4	0.0068	0.0000	OK
600 minute summer	33	315	66.966	0.017	0.8	0.0075	0.0000	OK
600 minute summer	35	315	67.337	0.012	0.4	0.0063	0.0000	OK
600 minute summer	34	315	66.626	0.031	1.6	0.0119	0.0000	OK
600 minute summer	30	495	66.255	0.388	1.6	11.6952	0.0000	SURCHARGED
600 minute summer	36	315	67.186	0.011	0.4	0.0055	0.0000	OK
600 minute summer	37	315	66.816	0.015	0.8	0.0063	0.0000	OK
600 minute summer	39	315	67.338	0.013	0.4	0.0068	0.0000	OK
600 minute summer	38	315	66.432	0.020	1.6	0.0071	0.0000	OK
600 minute summer	31	510	66.115	0.546	2.0	16.4721	0.0000	SURCHARGED
600 minute summer	9	360	66.293	1.093	7.1	0.2055	0.0000	SURCHARGED
600 minute summer	10	360	66.293	1.134	6.8	2.8854	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	43	13.003	8	0.5	0.502	0.008	0.0033	
600 minute summer	8	1.007	9	7.0	0.616	0.014	8.6989	
600 minute summer	26	8.000	27	0.4	0.357	0.006	0.0259	
600 minute summer	27	8.001	28	0.8	0.594	0.012	0.0255	
600 minute summer	28	8.002	29	1.2	0.949	0.010	0.1965	
600 minute summer	29	Orifice	30	0.1				
600 minute summer	32	9.000	33	0.4	0.363	0.006	0.0254	
600 minute summer	33	9.001	34	0.8	0.349	0.012	0.0497	
600 minute summer	35	10.000	34	0.4	0.531	0.005	0.0143	
600 minute summer	34	9.002	30	1.6	0.488	0.040	0.0406	
600 minute summer	30	Orifice	31	0.2				
600 minute summer	36	11.000	37	0.4	0.336	0.002	0.0267	
600 minute summer	37	11.001	38	0.8	0.438	0.003	0.0425	
600 minute summer	39	12.000	38	0.4	0.464	0.006	0.0126	
600 minute summer	38	11.002	31	1.6	0.736	0.005	0.0240	
600 minute summer	31	Orifice	9	0.3				
600 minute summer	9	1.008	10	6.8	0.191	0.018	1.4878	
600 minute summer	10	Hydro-Brake®		4.2				93.5

Results for 100 year +40% CC 600 minute winter. 660 minute analysis at 15 minute timestep. Mass balance: 99.55%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	315	69.516	0.016	0.9	0.0275	0.0000	OK
600 minute winter	2	315	69.248	0.019	1.4	0.0309	0.0000	OK
600 minute winter	11	285	71.036	0.011	0.3	0.0060	0.0000	OK
600 minute winter	12	285	70.783	0.015	0.6	0.0070	0.0000	OK
600 minute winter	13	465	70.749	0.212	0.9	9.6438	0.0000	OK
600 minute winter	15	285	71.036	0.011	0.3	0.0060	0.0000	OK
600 minute winter	14	420	70.514	0.162	0.8	4.9184	0.0000	OK
600 minute winter	3	315	68.824	0.024	2.3	0.0389	0.0000	OK
600 minute winter	4	315	68.564	0.026	2.8	0.0105	0.0000	OK
600 minute winter	5	315	67.530	0.030	3.3	0.0507	0.0000	OK
600 minute winter	16	285	70.036	0.011	0.3	0.0060	0.0000	OK
600 minute winter	17	285	69.843	0.015	0.6	0.0073	0.0000	OK
600 minute winter	18	465	69.783	0.212	0.9	9.6182	0.0000	OK
600 minute winter	20	285	70.036	0.011	0.3	0.0060	0.0000	OK
600 minute winter	21	285	69.036	0.011	0.3	0.0060	0.0000	OK
600 minute winter	22	285	68.852	0.014	0.6	0.0069	0.0000	OK
600 minute winter	24	285	69.036	0.011	0.3	0.0060	0.0000	OK
600 minute winter	25	465	68.798	0.134	0.6	6.0761	0.0000	OK
600 minute winter	23	345	68.521	0.019	1.0	0.0078	0.0000	OK
600 minute winter	19	345	68.419	0.026	1.8	0.0101	0.0000	OK
600 minute winter	6	315	67.294	0.041	5.5	0.0864	0.0000	OK
600 minute winter	7	315	66.559	0.059	5.5	0.1511	0.0000	OK
600 minute winter	40	285	67.336	0.011	0.3	0.0060	0.0000	OK
600 minute winter	41	465	67.033	0.032	0.6	0.0144	0.0000	OK
600 minute winter	42	465	67.033	0.305	0.9	9.2739	0.0000	SURCHARGED

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	1	1.000	2	0.9	0.464	0.002	0.0314	
600 minute winter	2	1.001	3	1.4	0.521	0.003	0.0689	
600 minute winter	11	2.000	12	0.3	0.328	0.004	0.0140	
600 minute winter	12	2.001	13	0.6	0.606	0.009	0.2698	
600 minute winter	13	Orifice	14	0.2				
600 minute winter	15	3.000	14	0.3	0.427	0.004	0.0144	
600 minute winter	14	Orifice	3	0.4				
600 minute winter	3	1.002	4	2.3	0.657	0.005	0.0535	
600 minute winter	4	1.003	5	2.8	0.751	0.007	0.0619	
600 minute winter	5	1.004	6	3.3	0.558	0.009	0.1144	
600 minute winter	16	4.000	17	0.3	0.328	0.004	0.0107	
600 minute winter	17	4.001	18	0.6	0.606	0.009	0.3003	
600 minute winter	18	Orifice	19	0.2				
600 minute winter	20	5.000	19	0.3	0.427	0.004	0.0137	
600 minute winter	21	6.000	22	0.3	0.343	0.004	0.0097	
600 minute winter	22	6.001	23	0.6	0.458	0.008	0.0212	
600 minute winter	24	7.000	25	0.3	0.502	0.004	0.2674	
600 minute winter	25	Orifice	23	0.1				
600 minute winter	23	6.002	19	1.0	0.503	0.015	0.0125	
600 minute winter	19	4.003	6	1.8	0.726	0.027	0.0236	
600 minute winter	6	1.005	7	5.5	0.778	0.017	0.1243	
600 minute winter	7	1.006	8	5.5	0.479	0.025	0.2737	
600 minute winter	40	13.000	41	0.3	0.328	0.004	0.0364	
600 minute winter	41	13.001	42	0.6	0.554	0.009	0.3501	
600 minute winter	42	Orifice	43	0.2				

Results for 100 year +40% CC 600 minute winter. 660 minute analysis at 15 minute timestep. Mass balance: 99.55%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	43	345	66.587	0.014	0.5	0.0052	0.0000	OK
600 minute winter	8	375	66.277	0.277	6.0	0.7048	0.0000	OK
600 minute winter	26	285	67.936	0.011	0.3	0.0060	0.0000	OK
600 minute winter	27	315	67.558	0.015	0.6	0.0067	0.0000	OK
600 minute winter	28	285	67.239	0.014	0.9	0.0055	0.0000	OK
600 minute winter	29	660	66.285	0.285	1.0	12.8547	0.0000	SURCHARGED
600 minute winter	32	285	67.336	0.011	0.3	0.0060	0.0000	OK
600 minute winter	33	285	66.964	0.015	0.6	0.0066	0.0000	OK
600 minute winter	35	285	67.335	0.010	0.3	0.0055	0.0000	OK
600 minute winter	34	285	66.622	0.027	1.2	0.0103	0.0000	OK
600 minute winter	30	570	66.328	0.461	1.2	13.8992	0.0000	SURCHARGED
600 minute winter	36	285	67.185	0.010	0.3	0.0049	0.0000	OK
600 minute winter	37	285	66.815	0.014	0.6	0.0055	0.0000	OK
600 minute winter	39	285	67.336	0.011	0.3	0.0060	0.0000	OK
600 minute winter	38	285	66.429	0.017	1.2	0.0062	0.0000	OK
600 minute winter	31	570	66.221	0.652	1.5	19.6778	0.0000	SURCHARGED
600 minute winter	9	375	66.277	1.077	5.9	0.2025	0.0000	SURCHARGED
600 minute winter	10	375	66.276	1.117	6.2	2.8432	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	43	13.003	8	0.5	0.481	0.007	0.0030	
600 minute winter	8	1.007	9	5.8	0.623	0.012	8.4795	
600 minute winter	26	8.000	27	0.3	0.323	0.004	0.0212	
600 minute winter	27	8.001	28	0.6	0.548	0.009	0.0209	
600 minute winter	28	8.002	29	0.9	0.870	0.008	0.3313	
600 minute winter	29	Orifice	30	0.1				
600 minute winter	32	9.000	33	0.3	0.327	0.004	0.0208	
600 minute winter	33	9.001	34	0.6	0.320	0.009	0.0406	
600 minute winter	35	10.000	34	0.3	0.489	0.004	0.0117	
600 minute winter	34	9.002	30	1.2	0.448	0.030	0.0332	
600 minute winter	30	Orifice	31	0.2				
600 minute winter	36	11.000	37	0.3	0.308	0.001	0.0218	
600 minute winter	37	11.001	38	0.6	0.404	0.002	0.0346	
600 minute winter	39	12.000	38	0.3	0.427	0.004	0.0103	
600 minute winter	38	11.002	31	1.2	0.679	0.004	0.0821	
600 minute winter	31	Orifice	9	0.3				
600 minute winter	9	1.008	10	6.2	0.158	0.017	1.4878	
600 minute winter	10	Hydro-Brake®		4.1				112.0