

Appendix C

Hydraulic Modelling Calculations

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	100	Maximum Rainfall (mm/hr)	100.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.800	Minimum Backdrop Height (m)	0.200
Ratio-R	0.444	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	4.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
S1	0.020	4.00	17.000	1200	532428.410	188522.186	1.325
S2	0.041	4.00	17.000	1200	532418.866	188521.566	1.373
S3	0.067	4.00	17.050	1200	532419.484	188503.768	1.512
S4	0.092	4.00	17.000	1200	532420.364	188482.736	1.567
Swale 1	0.034	4.00	16.750	1200	532451.126	188443.814	1.125
S6	0.048	4.00	16.750	1200	532444.625	188454.239	1.207
S7	0.027	4.00	16.900	1350	532421.525	188458.700	1.662
Swale 2	0.038	4.00	16.750	1200	532409.474	188422.632	1.275
S8	0.024	4.00	16.750	1200	532407.301	188437.266	1.374
S9	0.065	4.00	17.200	1350	532404.661	188455.745	2.048
S10	0.051	4.00	17.200	600	532374.590	188515.601	1.200
S11	0.016	4.00	17.200	600	532377.481	188493.181	1.426
S12	0.014	4.00	17.200	600	532369.090	188491.800	1.511
S13	0.088	4.00	17.100	600	532388.682	188512.540	1.275
S14	0.038	4.00	17.200	600	532393.058	188478.293	1.605
S15	0.019	4.00	17.200	1200	532371.138	188475.287	1.828
S16	0.022	4.00	17.200	1350	532374.220	188451.605	2.277
S19	0.019	4.00	17.450	1350	532358.698	188449.504	2.605
Swale 4	0.156	4.00	17.425	1200	532343.867	188507.606	0.661
S20		4.00	17.425	1350	532350.274	188458.673	2.172
FCMH1			17.425	1350	532347.481	188452.301	2.350
S21	0.164	4.00	17.450	1350	532343.420	188447.267	2.682
S22	0.048	4.00	18.500	600	532315.217	188437.273	2.700
S23	0.078	4.00	18.700	600	532288.167	188416.410	1.282
FCMH2	0.033	4.00	18.600	2100	532284.768	188432.524	3.100
S24			18.220	1350	532284.365	188439.062	3.651
S25	0.232	4.00	18.250	1350	532278.371	188442.122	3.703
S26	0.144	4.00	18.200	1200	532306.328	188452.955	3.400
S27	0.040	4.00	18.100	1200	532298.562	188511.717	3.596
S28			18.580	1200	532277.284	188508.732	4.184
FCMH3			18.350	1800	532269.141	188513.505	4.193
S29	0.055	4.00	18.000	1200	532288.329	188517.022	1.500
S30	0.040	4.00	18.000	1200	532308.705	188519.671	1.705
S31	0.043	4.00	17.900	1200	532334.557	188522.978	1.866
S32	0.068	4.00	16.925	600	532403.615	188555.007	1.125
S33	0.065	4.00	16.925	600	532381.797	188551.933	1.345
S34	0.025	4.00	17.000	600	532357.653	188548.724	1.583
S35	0.021	4.00	17.650	1350	532339.249	188542.783	2.576
S36	0.059	4.00	17.560	1350	532331.449	188553.215	2.551

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
S37	0.162	4.00	17.350	600	532321.187	188625.180	1.950
S38	0.049	4.00	17.450	1350	532325.985	188591.461	2.710
FCMH4	0.026	4.00	17.500	1350	532297.580	188587.781	2.903
S39	0.054	4.00	18.100	1350	532290.305	188544.144	3.600
S40	0.077	4.00	17.700	1350	532285.345	188580.828	3.250
S41	0.033	4.00	17.500	1350	532284.617	188585.928	3.076
S42	0.162	4.00	17.800	1350	532260.088	188582.518	3.875
S43	0.033	4.00	17.500	1350	532253.002	188636.137	3.755
S44	0.051	4.00	17.500	1350	532257.886	188646.981	3.795
S45	0.149	4.00	17.500	1350	532285.373	188599.650	3.500
S46	0.111	4.00	17.200	1350	532278.042	188654.015	3.566
S47	0.089	4.00	16.750	1200	532445.964	188522.318	1.375
S48	0.046	4.00	16.600	1200	532473.566	188523.604	1.363
S49	0.061	4.00	16.600	1350	532477.524	188529.110	1.472
S50	0.067	4.00	16.500	1350	532477.200	188548.837	1.546
S51	0.074	4.00	16.500	1350	532477.489	188569.352	1.649
S52	0.042	4.00	16.500	1500	532477.333	188593.553	1.847
S53	0.043	4.00	16.800	600	532433.951	188538.611	1.500
S54	0.021	4.00	16.800	600	532432.899	188568.578	1.700
S55	0.054	4.00	16.750	600	532450.326	188539.418	1.550
S56	0.042	4.00	16.800	600	532450.597	188569.670	2.000
S57	0.088	4.00	16.750	1500	532450.768	188592.841	2.231
S58	0.047	4.00	17.000	600	532412.287	188535.542	1.200
S59	0.028	4.00	17.000	600	532411.159	188563.537	1.480
S60	0.055	4.00	16.900	1500	532410.413	188591.374	2.583
S61	0.054	4.00	16.700	1500	532408.736	188630.787	2.579
S62	0.067	4.00	16.500	1200	532477.170	188603.991	1.350
S63	0.066	4.00	16.500	1200	532476.337	188622.074	1.441
S64	0.033	4.00	16.500	1200	532475.354	188642.818	1.620
S65	0.039	4.00	16.350	1200	532489.557	188658.296	1.350
S66	0.075	4.00	16.400	1200	532477.537	188660.378	1.608
S67	0.035	4.00	16.550	600	532431.150	188613.586	1.425
S68	0.043	4.00	16.600	600	532449.662	188614.367	1.632
S69	0.049	4.00	16.600	1350	532448.937	188633.068	1.832
S70	0.289	4.00	16.600	1350	532445.245	188646.929	2.003
S71	0.022	4.00	16.500	1350	532445.134	188665.669	2.022
S72	0.091	4.00	16.500	1350	532435.361	188667.490	2.072
S73	0.047	4.00	16.700	1500	532407.129	188665.654	2.754
S74	0.069	4.00	16.600	1500	532377.913	188664.137	2.799
FCMH5			17.300	2100	532312.305	188658.176	3.835
Ex MH 45			16.280		532308.758	188692.468	3.310
Swale 4_Dummy		4.00	18.000		532342.946	188511.861	1.000
Swale 5		4.00	17.250	450	532361.341	188411.265	0.900
S18	0.010	4.00	17.900	600	532354.173	188443.328	1.800
S17	0.018	4.00	17.900	600	532359.179	188418.516	1.620

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	9.564	199.3	300	1 Circular	17.000	15.675	1.025	17.000	15.627	1.073
1.001	17.809	200.1	300	1 Circular	17.000	15.627	1.073	17.050	15.538	1.212
1.002	21.050	200.5	300	1 Circular	17.050	15.538	1.212	17.000	15.433	1.267
1.003	24.064	200.5	300	1 Circular	17.000	15.433	1.267	16.900	15.313	1.287
2.000	12.286	149.8	300	1 Circular	16.750	15.625	0.825	16.750	15.543	0.907
2.001	23.527	102.3	300	1 Circular	16.750	15.543	0.907	16.900	15.313	1.287
1.004	17.121	199.1	375	1 Circular	16.900	15.238	1.287	17.200	15.152	1.673
3.000	14.794	149.4	300	1 Circular	16.750	15.475	0.975	16.750	15.376	1.074
3.001	18.667	125.3	300	1 Circular	16.750	15.376	1.074	17.200	15.227	1.673
1.005	30.721	199.5	375	1 Circular	17.200	15.152	1.673	17.200	14.998	1.827
4.000	22.606	100.0	225	1 Circular	17.200	16.000	0.975	17.200	15.774	1.201
4.001	8.504	100.0	225	1 Circular	17.200	15.774	1.201	17.200	15.689	1.286
4.002	16.640	100.2	225	1 Circular	17.200	15.689	1.286	17.200	15.523	1.452
5.000	34.525	150.1	300	1 Circular	17.100	15.825	0.975	17.200	15.595	1.305
5.001	22.125	149.5	300	1 Circular	17.200	15.595	1.305	17.200	15.447	1.453
4.003	23.882	63.9	375	1 Circular	17.200	15.372	1.453	17.200	14.998	1.827
1.006	15.664	200.8	450	1 Circular	17.200	14.923	1.827	17.450	14.845	2.155
7.000_1	7.566	108.1	225	1 Circular	17.250	16.350	0.675	17.900	16.280	1.395
1.007	15.441	200.5	450	1 Circular	17.450	14.845	2.155	17.450	14.768	2.232
7.001	6.957	39.3	375	1 Circular	17.425	15.253	1.797	17.425	15.076	1.974
7.002	6.468	79.9	225	1 Circular	17.425	15.075	2.125	17.450	14.994	2.231
1.008	59.622	299.6	450	1 Circular	17.450	14.768	2.232	18.220	14.569	3.201
8.000	30.817	102.7	225	1 Circular	18.500	15.800	2.475	18.600	15.500	2.875

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	S1	1200	Manhole	1 Adoptable	S2	1200	Manhole	1 Adoptable
1.001	S2	1200	Manhole	1 Adoptable	S3	1200	Manhole	1 Adoptable
1.002	S3	1200	Manhole	1 Adoptable	S4	1200	Manhole	1 Adoptable
1.003	S4	1200	Manhole	1 Adoptable	S7	1350	Manhole	1 Adoptable
2.000	Swale 1	1200	Manhole	1 Adoptable	S6	1200	Manhole	1 Adoptable
2.001	S6	1200	Manhole	1 Adoptable	S7	1350	Manhole	1 Adoptable
1.004	S7	1350	Manhole	1 Adoptable	S9	1350	Manhole	1 Adoptable
3.000	Swale 2	1200	Manhole	1 Adoptable	S8	1200	Manhole	1 Adoptable
3.001	S8	1200	Manhole	1 Adoptable	S9	1350	Manhole	1 Adoptable
1.005	S9	1350	Manhole	1 Adoptable	S16	1350	Manhole	1 Adoptable
4.000	S10	600	Manhole	1 Adoptable	S11	600	Manhole	1 Adoptable
4.001	S11	600	Manhole	1 Adoptable	S12	600	Manhole	1 Adoptable
4.002	S12	600	Manhole	1 Adoptable	S15	1200	Manhole	1 Adoptable
5.000	S13	600	Manhole	1 Adoptable	S14	600	Manhole	1 Adoptable
5.001	S14	600	Manhole	1 Adoptable	S15	1200	Manhole	1 Adoptable
4.003	S15	1200	Manhole	1 Adoptable	S16	1350	Manhole	1 Adoptable
1.006	S16	1350	Manhole	1 Adoptable	S19	1350	Manhole	1 Adoptable
7.000_1	Swale 5	450	Manhole	1 Adoptable	S17	600	Manhole	1 Adoptable
1.007	S19	1350	Manhole	1 Adoptable	S21	1350	Manhole	1 Adoptable
7.001	S20	1350	Manhole	1 Adoptable	FCMH1	1350	Manhole	1 Adoptable
7.002	FCMH1	1350	Manhole	1 Adoptable	S21	1350	Manhole	1 Adoptable
1.008	S21	1350	Manhole	1 Adoptable	S24	1350	Manhole	1 Adoptable
8.000	S22	600	Manhole	1 Adoptable	FCMH2	2100	Manhole	1 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)
9.001	16.469	8.6	225	1 Circular	18.700	17.418	1.057	18.600	15.500	2.875
8.001	6.550	9.3	300	1 Circular	18.600	15.500	2.800	18.220	14.794	3.126
1.009	6.730	305.9	450	1 Circular	18.220	14.569	3.201	18.250	14.547	3.253
1.010	71.977	184.6	450	1 Circular	18.250	14.547	3.253	18.350	14.157	3.743
10.000	59.273	200.2	300	1 Circular	18.200	14.800	3.100	18.100	14.504	3.296
10.001	21.486	200.8	300	1 Circular	18.100	14.504	3.296	18.580	14.397	3.883
10.002	9.439	106.1	300	1 Circular	18.580	14.396	3.884	18.350	14.307	3.743
1.011	69.604	300.0	450	1 Circular	18.350	14.157	3.743	17.800	13.925	3.425
11.000	20.547	100.2	225	1 Circular	18.000	16.500	1.275	18.000	16.295	1.480
11.001	26.063	99.9	225	1 Circular	18.000	16.295	1.480	17.900	16.034	1.641
11.002	20.353	25.1	225	1 Circular	17.900	16.034	1.641	17.650	15.224	2.201
12.000	22.033	100.2	300	1 Circular	16.925	15.800	0.825	16.925	15.580	1.045
12.001	24.356	150.3	300	1 Circular	16.925	15.580	1.045	17.000	15.418	1.282
12.002	19.339	72.2	300	1 Circular	17.000	15.417	1.283	17.650	15.149	2.201
11.003	13.026	200.4	375	1 Circular	17.650	15.074	2.201	17.560	15.009	2.176
11.004	38.634	199.1	375	1 Circular	17.560	15.009	2.176	17.450	14.815	2.260
13.000	34.059	66.8	300	1 Circular	17.350	15.400	1.650	17.450	14.890	2.260
11.005	28.642	200.3	450	1 Circular	17.450	14.740	2.260	17.500	14.597	2.453
11.006	13.095	75.7	450	1 Circular	17.500	14.597	2.453	17.500	14.424	2.626
14.000	37.831	756.6	450	1 Circular	18.100	14.500	3.150	17.700	14.450	2.800
14.001	5.152	198.2	450	1 Circular	17.700	14.450	2.800	17.500	14.424	2.626
11.007	24.765	49.6	450	1 Circular	17.500	14.424	2.626	17.800	13.925	3.425
1.012	54.085	300.5	450	1 Circular	17.800	13.925	3.425	17.500	13.745	3.305
1.013	11.893	297.3	450	1 Circular	17.500	13.745	3.305	17.500	13.705	3.345
1.014	21.348	300.7	450	1 Circular	17.500	13.705	3.345	17.200	13.634	3.116

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
9.001	S23	600	Manhole	1 Adoptable	FCMH2	2100	Manhole	1 Adoptable
8.001	FCMH2	2100	Manhole	1 Adoptable	S24	1350	Manhole	1 Adoptable
1.009	S24	1350	Manhole	1 Adoptable	S25	1350	Manhole	1 Adoptable
1.010	S25	1350	Manhole	1 Adoptable	FCMH3	1800	Manhole	1 Adoptable
10.000	S26	1200	Manhole	1 Adoptable	S27	1200	Manhole	1 Adoptable
10.001	S27	1200	Manhole	1 Adoptable	S28	1200	Manhole	1 Adoptable
10.002	S28	1200	Manhole	1 Adoptable	FCMH3	1800	Manhole	1 Adoptable
1.011	FCMH3	1800	Manhole	1 Adoptable	S42	1350	Manhole	1 Adoptable
11.000	S29	1200	Manhole	1 Adoptable	S30	1200	Manhole	1 Adoptable
11.001	S30	1200	Manhole	1 Adoptable	S31	1200	Manhole	1 Adoptable
11.002	S31	1200	Manhole	1 Adoptable	S35	1350	Manhole	1 Adoptable
12.000	S32	600	Manhole	1 Adoptable	S33	600	Manhole	1 Adoptable
12.001	S33	600	Manhole	1 Adoptable	S34	600	Manhole	1 Adoptable
12.002	S34	600	Manhole	1 Adoptable	S35	1350	Manhole	1 Adoptable
11.003	S35	1350	Manhole	1 Adoptable	S36	1350	Manhole	1 Adoptable
11.004	S36	1350	Manhole	1 Adoptable	S38	1350	Manhole	1 Adoptable
13.000	S37	600	Manhole	1 Adoptable	S38	1350	Manhole	1 Adoptable
11.005	S38	1350	Manhole	1 Adoptable	FCMH4	1350	Manhole	1 Adoptable
11.006	FCMH4	1350	Manhole	1 Adoptable	S41	1350	Manhole	1 Adoptable
14.000	S39	1350	Manhole	1 Adoptable	S40	1350	Manhole	1 Adoptable
14.001	S40	1350	Manhole	1 Adoptable	S41	1350	Manhole	1 Adoptable
11.007	S41	1350	Manhole	1 Adoptable	S42	1350	Manhole	1 Adoptable
1.012	S42	1350	Manhole	1 Adoptable	S43	1350	Manhole	1 Adoptable
1.013	S43	1350	Manhole	1 Adoptable	S44	1350	Manhole	1 Adoptable
1.014	S44	1350	Manhole	1 Adoptable	S46	1350	Manhole	1 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)
15.000	54.857	149.9	450	1 Circular	17.500	14.000	3.050	17.200	13.634	3.116
1.015	34.515	204.2	450	1 Circular	17.200	13.634	3.116	17.300	13.465	3.385
16.000	27.632	200.2	300	1 Circular	16.750	15.375	1.075	16.600	15.237	1.063
16.001	6.781	199.4	300	1 Circular	16.600	15.237	1.063	16.600	15.203	1.097
16.002	19.730	199.3	375	1 Circular	16.600	15.128	1.097	16.500	15.029	1.096
16.003	20.517	199.2	450	1 Circular	16.500	14.954	1.096	16.500	14.851	1.199
16.004	24.202	196.8	450	1 Circular	16.500	14.851	1.199	16.500	14.728	1.322
16.005	26.575	198.3	525	1 Circular	16.500	14.653	1.322	16.750	14.519	1.706
17.000	29.985	149.9	300	1 Circular	16.800	15.300	1.200	16.800	15.100	1.400
17.001	17.732	59.1	300	1 Circular	16.800	15.100	1.400	16.800	14.800	1.700
18.000	30.253	75.6	300	1 Circular	16.750	15.200	1.250	16.800	14.800	1.700
17.002	23.172	178.2	300	1 Circular	16.800	14.800	1.700	16.750	14.670	1.780
16.006	40.382	199.9	525	1 Circular	16.750	14.519	1.706	16.900	14.317	2.058
19.000	28.018	100.1	225	1 Circular	17.000	15.800	0.975	17.000	15.520	1.255
19.001	27.847	28.5	225	1 Circular	17.000	15.520	1.255	16.900	14.544	2.131
16.007	39.449	200.2	600	1 Circular	16.900	14.318	1.982	16.700	14.121	1.979
16.008	34.904	199.5	600	1 Circular	16.700	14.121	1.979	16.700	13.946	2.154
20.000	18.102	198.9	225	1 Circular	16.500	15.150	1.125	16.500	15.059	1.216
20.001	20.767	199.7	225	1 Circular	16.500	15.059	1.216	16.500	14.955	1.320
20.002	17.695	201.1	300	1 Circular	16.500	14.880	1.320	16.400	14.792	1.308
21.000	12.199	58.6	300	1 Circular	16.350	15.000	1.050	16.400	14.792	1.308
20.003	32.832	200.2	300	1 Circular	16.400	14.792	1.308	16.500	14.628	1.572
22.000	18.528	118.0	300	1 Circular	16.550	15.125	1.125	16.600	14.968	1.332
22.001	18.715	149.7	375	1 Circular	16.600	14.968	1.257	16.600	14.843	1.382
22.002	14.344	149.4	375	1 Circular	16.600	14.768	1.457	16.600	14.672	1.553

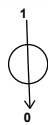
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
15.000	S45	1350	Manhole	1 Adoptable	S46	1350	Manhole	1 Adoptable
1.015	S46	1350	Manhole	1 Adoptable	FCMH5	2100	Manhole	1 Adoptable
16.000	S47	1200	Manhole	1 Adoptable	S48	1200	Manhole	1 Adoptable
16.001	S48	1200	Manhole	1 Adoptable	S49	1350	Manhole	1 Adoptable
16.002	S49	1350	Manhole	1 Adoptable	S50	1350	Manhole	1 Adoptable
16.003	S50	1350	Manhole	1 Adoptable	S51	1350	Manhole	1 Adoptable
16.004	S51	1350	Manhole	1 Adoptable	S52	1500	Manhole	1 Adoptable
16.005	S52	1500	Manhole	1 Adoptable	S57	1500	Manhole	1 Adoptable
17.000	S53	600	Manhole	1 Adoptable	S54	600	Manhole	1 Adoptable
17.001	S54	600	Manhole	1 Adoptable	S56	600	Manhole	1 Adoptable
18.000	S55	600	Manhole	1 Adoptable	S56	600	Manhole	1 Adoptable
17.002	S56	600	Manhole	1 Adoptable	S57	1500	Manhole	1 Adoptable
16.006	S57	1500	Manhole	1 Adoptable	S60	1500	Manhole	1 Adoptable
19.000	S58	600	Manhole	1 Adoptable	S59	600	Manhole	1 Adoptable
19.001	S59	600	Manhole	1 Adoptable	S60	1500	Manhole	1 Adoptable
16.007	S60	1500	Manhole	1 Adoptable	S61	1500	Manhole	1 Adoptable
16.008	S61	1500	Manhole	1 Adoptable	S73	1500	Manhole	1 Adoptable
20.000	S62	1200	Manhole	1 Adoptable	S63	1200	Manhole	1 Adoptable
20.001	S63	1200	Manhole	1 Adoptable	S64	1200	Manhole	1 Adoptable
20.002	S64	1200	Manhole	1 Adoptable	S66	1200	Manhole	1 Adoptable
21.000	S65	1200	Manhole	1 Adoptable	S66	1200	Manhole	1 Adoptable
20.003	S66	1200	Manhole	1 Adoptable	S71	1350	Manhole	1 Adoptable
22.000	S67	600	Manhole	1 Adoptable	S68	600	Manhole	1 Adoptable
22.001	S68	600	Manhole	1 Adoptable	S69	1350	Manhole	1 Adoptable
22.002	S69	1350	Manhole	1 Adoptable	S70	1350	Manhole	1 Adoptable

Pipeline Schedule

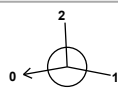
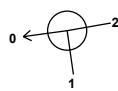
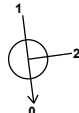
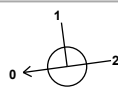
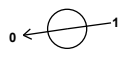
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
22.003	18.740	157.5	450	1 Circular	16.600	14.597	1.553	16.500	14.478	1.572
20.004	9.941	198.8	450	1 Circular	16.500	14.478	1.572	16.500	14.428	1.622
20.005	28.292	85.5	450	1 Circular	16.500	14.428	1.622	16.700	14.097	2.153
16.009	29.255	200.4	600	1 Circular	16.700	13.947	2.153	16.600	13.801	2.199
16.010	65.878	196.1	600	1 Circular	16.600	13.801	2.199	17.300	13.465	3.235
1.016	5.003	10.1	300	1 Circular	17.300	13.465	3.535	16.280	12.970	3.010
7.000	4.354	43.5	100	1 Circular	18.000	17.000	0.900	17.425	16.900	0.425
7.002_1	39.424	131.4	225	1 Circular	17.900	16.100	1.575	18.500	15.800	2.475
7.001_1	25.312	140.6	225	1 Circular	17.900	16.280	1.395	17.900	16.100	1.575

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
22.003	S70	1350	Manhole	1 Adoptable	S71	1350	Manhole	1 Adoptable
20.004	S71	1350	Manhole	1 Adoptable	S72	1350	Manhole	1 Adoptable
20.005	S72	1350	Manhole	1 Adoptable	S73	1500	Manhole	1 Adoptable
16.009	S73	1500	Manhole	1 Adoptable	S74	1500	Manhole	1 Adoptable
16.010	S74	1500	Manhole	1 Adoptable	FCMH5	2100	Manhole	1 Adoptable
1.016	FCMH5	2100	Manhole	1 Adoptable	Ex MH 45		Manhole	1 Adoptable
7.000	Swale 4_Dummy		Junction		Swale 4	1200	Manhole	1 Adoptable
7.002_1	S18	600	Manhole	1 Adoptable	S22	600	Manhole	1 Adoptable
7.001_1	S17	600	Manhole	1 Adoptable	S18	600	Manhole	1 Adoptable

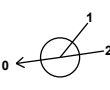
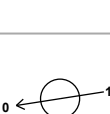
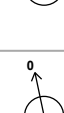
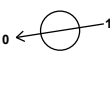
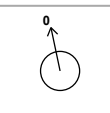
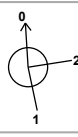
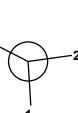
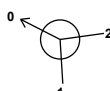
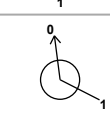
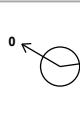
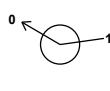
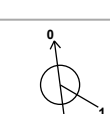
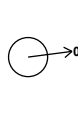
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S1	532428.410	188522.186	17.000	1.325	1200		0	1.000	15.675	300
S2	532418.866	188521.566	17.000	1.373	1200		1	1.000	15.627	300
						0	1.001	15.627	300	
S3	532419.484	188503.768	17.050	1.512	1200		1	1.001	15.538	300
						0	1.002	15.538	300	
S4	532420.364	188482.736	17.000	1.567	1200		1	1.002	15.433	300
						0	1.003	15.433	300	
Swale 1	532451.126	188443.814	16.750	1.125	1200		0	2.000	15.625	300
S6	532444.625	188454.239	16.750	1.207	1200		1	2.000	15.543	300
						0	2.001	15.543	300	

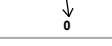
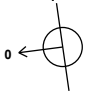
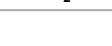
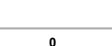
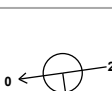
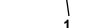
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S7	532421.525	188458.700	16.900	1.662	1350		1	2.001	15.313	300
							2	1.003	15.313	300
							0	1.004	15.238	375
Swale 2	532409.474	188422.632	16.750	1.275	1200		0	3.000	15.475	300
S8	532407.301	188437.266	16.750	1.374	1200		1	3.000	15.376	300
S9	532404.661	188455.745	17.200	2.048	1350		1	3.001	15.227	300
							2	1.004	15.152	375
							0	1.005	15.152	375
S10	532374.590	188515.601	17.200	1.200	600		0	4.000	16.000	225
S11	532377.481	188493.181	17.200	1.426	600		1	4.000	15.774	225
							0	4.001	15.774	225
S12	532369.090	188491.800	17.200	1.511	600		1	4.001	15.689	225
							0	4.002	15.689	225
S13	532388.682	188512.540	17.100	1.275	600		0	5.000	15.825	300
S14	532393.058	188478.293	17.200	1.605	600		1	5.000	15.595	300
							0	5.001	15.595	300
S15	532371.138	188475.287	17.200	1.828	1200		1	4.002	15.523	225
							2	5.001	15.447	300
							0	4.003	15.372	375
S16	532374.220	188451.605	17.200	2.277	1350		1	4.003	14.998	375
							2	1.005	14.998	375
							0	1.006	14.923	450
S19	532358.698	188449.504	17.450	2.605	1350		1	1.006	14.845	450
							0	1.007	14.845	450
Swale 4	532343.867	188507.606	17.425	0.661	1200		1	7.000	16.900	100

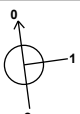
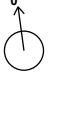
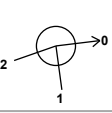
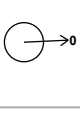
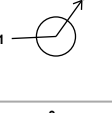
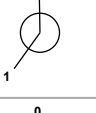
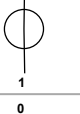
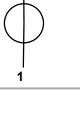
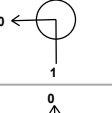
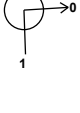
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S20	532350.274	188458.673	17.425	2.172	1350		0	7.001	15.253	375
FCMH1	532347.481	188452.301	17.425	2.350	1350		1	7.001	15.076	375
							0	7.002	15.075	225
S21	532343.420	188447.267	17.450	2.682	1350		1	7.002	14.994	225
							2	1.007	14.768	450
							0	1.008	14.768	450
S22	532315.217	188437.273	18.500	2.700	600		1	7.002_1	15.800	225
							0	8.000	15.800	225
S23	532288.167	188416.410	18.700	1.282	600		0	9.001	17.418	225
FCMH2	532284.768	188432.524	18.600	3.100	2100		1	9.001	15.500	225
							2	8.000	15.500	225
							0	8.001	15.500	300
S24	532284.365	188439.062	18.220	3.651	1350		1	8.001	14.794	300
							2	1.008	14.569	450
							0	1.009	14.569	450
S25	532278.371	188442.122	18.250	3.703	1350		1	1.009	14.547	450
							0	1.010	14.547	450
S26	532306.328	188452.955	18.200	3.400	1200		0	10.000	14.800	300
S27	532298.562	188511.717	18.100	3.596	1200		1	10.000	14.504	300
							0	10.001	14.504	300
S28	532277.284	188508.732	18.580	4.184	1200		1	10.001	14.397	300
							0	10.002	14.396	300
FCMH3	532269.141	188513.505	18.350	4.193	1800		1	10.002	14.307	300
							2	1.010	14.157	450
							0	1.011	14.157	450
S29	532288.329	188517.022	18.000	1.500	1200		0	11.000	16.500	225

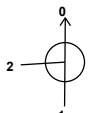
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S30	532308.705	188519.671	18.000	1.705	1200		1	11.000	16.295	225
							0	11.001	16.295	225
S31	532334.557	188522.978	17.900	1.866	1200		1	11.001	16.034	225
							0	11.002	16.034	225
S32	532403.615	188555.007	16.925	1.125	600		0	12.000	15.800	300
S33	532381.797	188551.933	16.925	1.345	600		1	12.000	15.580	300
							0	12.001	15.580	300
S34	532357.653	188548.724	17.000	1.583	600		1	12.001	15.418	300
							0	12.002	15.417	300
S35	532339.249	188542.783	17.650	2.576	1350		1	12.002	15.149	300
							2	11.002	15.224	225
							0	11.003	15.074	375
S36	532331.449	188553.215	17.560	2.551	1350		1	11.003	15.009	375
							0	11.004	15.009	375
S37	532321.187	188625.180	17.350	1.950	600		0	13.000	15.400	300
S38	532325.985	188591.461	17.450	2.710	1350		1	13.000	14.890	300
							2	11.004	14.815	375
							0	11.005	14.740	450
FCMH4	532297.580	188587.781	17.500	2.903	1350		1	11.005	14.597	450
							0	11.006	14.597	450
S39	532290.305	188544.144	18.100	3.600	1350		0	14.000	14.500	450
S40	532285.345	188580.828	17.700	3.250	1350		1	14.000	14.450	450
							0	14.001	14.450	450
S41	532284.617	188585.928	17.500	3.076	1350		1	14.001	14.424	450
							2	11.006	14.424	450
							0	11.007	14.424	450

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S42	532260.088	188582.518	17.800	3.875	1350		1 11.007 2 1.011	13.925 13.925	450 450
S43	532253.002	188636.137	17.500	3.755	1350		1 1.012 0 1.013	13.745 13.745	450 450
S44	532257.886	188646.981	17.500	3.795	1350		1 1.013 0 1.014	13.705 13.705	450 450
S45	532285.373	188599.650	17.500	3.500	1350		0 15.000	14.000	450
S46	532278.042	188654.015	17.200	3.566	1350		1 15.000 2 1.014 0 1.015	13.634 13.634 13.634	450 450 450
S47	532445.964	188522.318	16.750	1.375	1200		0 16.000	15.375	300
S48	532473.566	188523.604	16.600	1.363	1200		1 16.000 0 16.001	15.237 15.237	300 300
S49	532477.524	188529.110	16.600	1.472	1350		1 16.001 0 16.002	15.203 15.128	300 375
S50	532477.200	188548.837	16.500	1.546	1350		1 16.002 0 16.003	15.029 14.954	375 450
S51	532477.489	188569.352	16.500	1.649	1350		1 16.003 0 16.004	14.851 14.851	450 450
S52	532477.333	188593.553	16.500	1.847	1500		1 16.004 0 16.005	14.728 14.653	450 525
S53	532433.951	188538.611	16.800	1.500	600		0 17.000	15.300	300
S54	532432.899	188568.578	16.800	1.700	600		1 17.000 0 17.001	15.100 15.100	300 300

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S55	532450.326	188539.418	16.750	1.550	600					
						0	18.000	15.200	300	
S56	532450.597	188569.670	16.800	2.000	600		1	18.000	14.800	300
						2	17.001	14.800	300	
						0	17.002	14.800	300	
S57	532450.768	188592.841	16.750	2.231	1500		1	17.002	14.670	300
						2	16.005	14.519	525	
						0	16.006	14.519	525	
S58	532412.287	188535.542	17.000	1.200	600					
						0	19.000	15.800	225	
S59	532411.159	188563.537	17.000	1.480	600		1	19.000	15.520	225
						0	19.001	15.520	225	
S60	532410.413	188591.374	16.900	2.583	1500		1	19.001	14.544	225
						2	16.006	14.317	525	
						0	16.007	14.318	600	
S61	532408.736	188630.787	16.700	2.579	1500		1	16.007	14.121	600
						0	16.008	14.121	600	
S62	532477.170	188603.991	16.500	1.350	1200					
						0	20.000	15.150	225	
S63	532476.337	188622.074	16.500	1.441	1200		1	20.000	15.059	225
						0	20.001	15.059	225	
S64	532475.354	188642.818	16.500	1.620	1200		1	20.001	14.955	225
						0	20.002	14.880	300	
S65	532489.557	188658.296	16.350	1.350	1200					
						0	21.000	15.000	300	
S66	532477.537	188660.378	16.400	1.608	1200		1	21.000	14.792	300
						2	20.002	14.792	300	
						0	20.003	14.792	300	
S67	532431.150	188613.586	16.550	1.425	600					
						0	22.000	15.125	300	

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S68	532449.662	188614.367	16.600	1.632	600		1	22.000	14.968	300
							0	22.001	14.968	375
S69	532448.937	188633.068	16.600	1.832	1350		1	22.001	14.843	375
							0	22.002	14.768	375
S70	532445.245	188646.929	16.600	2.003	1350		1	22.002	14.672	375
							0	22.003	14.597	450
S71	532445.134	188665.669	16.500	2.022	1350		1	22.003	14.478	450
							2	20.003	14.628	300
							0	20.004	14.478	450
S72	532435.361	188667.490	16.500	2.072	1350		1	20.004	14.428	450
							0	20.005	14.428	450
S73	532407.129	188665.654	16.700	2.754	1500		1	20.005	14.097	450
							2	16.008	13.946	600
							0	16.009	13.947	600
S74	532377.913	188664.137	16.600	2.799	1500		1	16.009	13.801	600
							0	16.010	13.801	600
FCMH5	532312.305	188658.176	17.300	3.835	2100		1	16.010	13.465	600
							2	1.015	13.465	450
							0	1.016	13.465	300
Ex MH 45	532308.758	188692.468	16.280	3.310			1	1.016	12.970	300
Swale 4_Dummy	532342.946	188511.861	18.000	1.000						
							0	7.000	17.000	100
Swale 5	532361.341	188411.265	17.250	0.900	450					
							0	7.000_1	16.350	225
S18	532354.173	188443.328	17.900	1.800	600		1	7.001_1	16.100	225
							0	7.002_1	16.100	225
S17	532359.179	188418.516	17.900	1.620	600		1	7.000_1	16.280	225
							0	7.001_1	16.280	225

Simulation Settings

Rainfall Methodology	FEH-99	E (1km)	0.331	Skip Steady State	x
C (1km)	-0.027	F (1km)	2.482	Drain Down Time (mins)	240
D1 (1km)	0.338	Summer CV	0.925	Additional Storage (m³/ha)	20.0
D2 (1km)	0.298	Winter CV	0.925	Check Discharge Rate(s)	x
D3 (1km)	0.246	Analysis Speed	Detailed	Check Discharge Volume	x

Storm Durations

60	180	360	600	960	2160	4320	7200	10080
120	240	480	720	1440	2880	5760	8640	

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

Node FCMH1 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	15.075	Product Number	CTL-SHE-0068-3000-2300-3000
Design Depth (m)	2.300	Min Outlet Diameter (m)	0.100
Design Flow (l/s)	3.0	Min Node Diameter (mm)	1200

Node FCMH2 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	15.500	Product Number	CTL-SHE-0261-4200-1950-4200
Design Depth (m)	1.950	Min Outlet Diameter (m)	0.300
Design Flow (l/s)	42.0	Min Node Diameter (mm)	2100

Node FCMH3 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	14.157	Product Number	CTL-SHE-0153-1400-2100-1400
Design Depth (m)	2.100	Min Outlet Diameter (m)	0.225
Design Flow (l/s)	14.0	Min Node Diameter (mm)	1500

Node FCMH4 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	14.597	Product Number	CTL-SHE-0057-2000-2000-2000
Design Depth (m)	2.000	Min Outlet Diameter (m)	0.075
Design Flow (l/s)	2.0	Min Node Diameter (mm)	1200

Node FCMH5 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	13.465	Product Number	CTL-SHE-0212-2920-2550-2920
Design Depth (m)	2.550	Min Outlet Diameter (m)	0.225
Design Flow (l/s)	29.2	Min Node Diameter (mm)	2100

Node S1 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.750	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	
Safety Factor	2.0	Width (m)	2.400	Inf Depth (m)	
Porosity	1.00	Length (m)	16.000		

Node S3 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.650	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	5	Depth (m)	
Safety Factor	2.0	Width (m)	2.400	Inf Depth (m)	
Porosity	1.00	Length (m)	22.000		

Node S4 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.700	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	4	Depth (m)	
Safety Factor	2.0	Width (m)	2.400	Inf Depth (m)	
Porosity	1.00	Length (m)	22.000		

Node S6 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.500	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	
Safety Factor	2.0	Width (m)	10.000	Inf Depth (m)	
Porosity	1.00	Length (m)	16.000		

Node S7 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.238	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	
Safety Factor	2.0	Width (m)	2.400	Inf Depth (m)	
Porosity	1.00	Length (m)	16.500		

Node S19 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	15.750
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	112.0	0.0	0.700	292.0	0.0	1.000	752.0	0.0

Node FCMH1 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	16.700
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	42.0	0.0	0.720	297.0	0.0

Node FCMH2 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	18.000
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)
0.000	68.0	0.0	0.610	211.0	0.0

Node FCMH3 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	14.800
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	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	450.0	0.0	1.500	450.0	0.0	1.501	0.0	0.0

Node S32 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.500	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	
Safety Factor	2.0	Width (m)	10.000	Inf Depth (m)	
Porosity	1.00	Length (m)	11.000		

Node S33 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.500	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	
Safety Factor	2.0	Width (m)	10.000	Inf Depth (m)	
Porosity	1.00	Length (m)	12.000		

Node FCMH4 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	15.800
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)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	255.0	0.0	0.400	503.0	0.0	0.800	890.0	0.0	1.200	1116.0	0.0

Node S47 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.350	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	
Safety Factor	2.0	Width (m)	2.400	Inf Depth (m)	
Porosity	1.00	Length (m)	31.500		

Node S50 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.300	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	
Safety Factor	2.0	Width (m)	2.400	Inf Depth (m)	
Porosity	1.00	Length (m)	31.500		

Node S51 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.150	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	
Safety Factor	2.0	Width (m)	2.400	Inf Depth (m)	
Porosity	1.00	Length (m)	20.000		

Node S52 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.100	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	
Safety Factor	2.0	Width (m)	2.400	Inf Depth (m)	
Porosity	1.00	Length (m)	20.000		

Node S57 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.200	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	
Safety Factor	2.0	Width (m)	2.400	Inf Depth (m)	
Porosity	1.00	Length (m)	33.000		

Node S60 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.350	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	
Safety Factor	2.0	Width (m)	2.400	Inf Depth (m)	
Porosity	1.00	Length (m)	33.000		

Node S62 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.200	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	9	Depth (m)	
Safety Factor	2.0	Width (m)	2.400	Inf Depth (m)	
Porosity	1.00	Length (m)	10.000		

Node S63 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.200	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	8	Depth (m)	
Safety Factor	2.0	Width (m)	4.800	Inf Depth (m)	
Porosity	1.00	Length (m)	10.000		

Node S64 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.200	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	
Safety Factor	2.0	Width (m)	7.200	Inf Depth (m)	
Porosity	1.00	Length (m)	10.000		

Node S65 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.000	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	
Safety Factor	2.0	Width (m)	9.500	Inf Depth (m)	
Porosity	1.00	Length (m)	10.000		

Node FCMH5 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	14.000
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	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	515.0	0.0	2.250	515.0	0.0	2.251	0.0	0.0

Node S15 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	15.400
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	171.0	0.0	1.000	171.0	0.0	1.001	0.0	0.0

Node FCMH5 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	14.500
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	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	485.0	0.0	1.500	485.0	0.0	1.501	0.0	0.0

Node S20 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	47.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.670	Main Channel Slope (1:X)	500.0
Safety Factor	2.0	Time to half empty (mins)		Main Channel n	0.040

Inlets

Swale 4

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	42.0	0.0	0.720	297.0	0.0

Node S56 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	14.800
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	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	280.0	0.0	1.250	280.0	0.0	1.251	0.0	0.0

Node Swale 5 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	16.350
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	22

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	10.2	0.0	0.900	64.2	0.0

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S1	10	15.726	0.051	5.0	0.0729	0.0000	OK
15 minute summer	S2	10	15.716	0.089	15.3	0.1535	0.0000	OK
15 minute summer	S3	10	15.680	0.142	32.2	0.2863	0.0000	OK
15 minute summer	S4	10	15.629	0.196	55.1	0.4522	0.0000	OK
15 minute summer	Swale 1	10	15.687	0.062	8.6	0.1080	0.0000	OK
15 minute summer	S6	10	15.633	0.090	20.7	0.1736	0.0000	OK
15 minute summer	S7	11	15.451	0.213	81.6	8.2637	0.0000	OK
15 minute summer	Swale 2	10	15.543	0.068	9.6	0.1179	0.0000	OK
15 minute summer	S8	9	15.457	0.081	15.6	0.1195	0.0000	OK
30 minute summer	S9	20	15.431	0.279	83.5	0.5756	0.0000	OK
15 minute summer	S10	10	16.077	0.077	12.9	0.0872	0.0000	OK
15 minute summer	S11	10	15.872	0.098	16.9	0.0498	0.0000	OK
15 minute summer	S12	10	15.793	0.104	20.4	0.0485	0.0000	OK
15 minute summer	S13	10	15.927	0.102	22.2	0.1696	0.0000	OK
15 minute summer	S14	10	15.724	0.129	31.9	0.0973	0.0000	OK
15 minute summer	S15	13	15.459	0.087	56.7	10.2678	0.0000	OK
15 minute summer	S16	12	15.399	0.475	121.7	0.7727	0.0000	SURCHARGED
15 minute summer	S19	12	15.377	0.532	113.3	0.8393	0.0000	SURCHARGED
15 minute summer	Swale 4	11	16.866	0.102	39.3	0.5951	0.0000	OK
30 minute winter	S20	33	16.797	1.544	21.2	2.2097	0.0000	SURCHARGED
30 minute winter	FCMH1	32	16.797	1.722	24.1	8.2352	0.0000	SURCHARGED
15 minute summer	S21	12	15.359	0.591	130.9	1.5678	0.0000	SURCHARGED
15 minute summer	S22	11	15.921	0.121	18.9	0.0775	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	S1	1.000	S2	5.0	0.403	0.064	0.1210	
15 minute summer	S2	1.001	S3	15.3	0.612	0.195	0.4473	
15 minute summer	S3	1.002	S4	31.9	0.780	0.408	0.8590	
15 minute summer	S4	1.003	S7	53.8	1.163	0.688	1.1181	
15 minute summer	Swale 1	2.000	S6	8.6	0.610	0.095	0.1741	
15 minute summer	S6	2.001	S7	21.0	1.138	0.191	0.5562	
15 minute summer	S7	1.004	S9	67.3	0.973	0.476	1.2966	
15 minute summer	Swale 2	3.000	S8	9.6	0.709	0.106	0.2001	
15 minute summer	S8	3.001	S9	15.7	0.867	0.158	0.5708	
30 minute summer	S9	1.005	S16	80.4	1.224	0.569	3.0430	
15 minute summer	S10	4.000	S11	12.9	0.903	0.248	0.3235	
15 minute summer	S11	4.001	S12	16.9	0.981	0.325	0.1466	
15 minute summer	S12	4.002	S15	20.4	1.189	0.392	0.2848	
15 minute summer	S13	5.000	S14	22.3	0.896	0.247	0.8624	
15 minute summer	S14	5.001	S15	31.6	1.141	0.348	0.6127	
15 minute summer	S15	4.003	S16	30.2	1.241	0.121	1.5474	
15 minute summer	S16	1.006	S19	112.3	1.077	0.494	2.4819	
15 minute summer	S19	1.007	S21	114.3	0.853	0.502	2.4465	
15 minute summer	Swale 4	Flow through pond	S20	26.2	0.201	0.023	6.1393	
30 minute winter	S20	7.001	FCMH1	24.1	0.477	0.075	0.7673	
30 minute winter	FCMH1	7.002	S21	3.7	0.719	0.063	0.2393	
15 minute summer	S21	1.008	S24	132.0	0.898	0.710	9.4467	
15 minute summer	S22	8.000	FCMH2	18.4	0.562	0.358	0.9493	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S23	10	17.468	0.050	19.7	0.0754	0.0000	OK
15 minute summer	FCMH2	11	15.891	0.391	44.0	1.4386	0.0000	SURCHARGED
15 minute summer	S24	12	15.246	0.677	169.4	0.9682	0.0000	SURCHARGED
15 minute summer	S25	12	15.197	0.650	196.8	1.7452	0.0000	SURCHARGED
30 minute summer	S26	38	15.085	0.285	30.8	0.5647	0.0000	OK
30 minute summer	S27	38	15.082	0.578	37.9	0.7819	0.0000	SURCHARGED
30 minute winter	S28	36	15.081	0.685	28.2	0.7746	0.0000	SURCHARGED
30 minute winter	FCMH3	36	15.081	0.924	180.3	122.6675	0.0000	SURCHARGED
15 minute summer	S29	10	16.581	0.081	13.9	0.1503	0.0000	OK
15 minute summer	S30	10	16.408	0.113	24.0	0.1814	0.0000	OK
15 minute summer	S31	11	16.142	0.108	35.0	0.1716	0.0000	OK
15 minute summer	S32	11	16.067	0.267	51.5	0.3991	0.0000	OK
15 minute summer	S33	11	16.117	0.537	35.3	0.6706	0.0000	SURCHARGED
15 minute summer	S34	11	16.089	0.672	70.7	0.4028	0.0000	SURCHARGED
15 minute summer	S35	11	16.065	0.991	76.7	1.5797	0.0000	SURCHARGED
15 minute summer	S36	11	16.018	1.009	91.9	1.9119	0.0000	SURCHARGED
15 minute summer	S37	10	15.983	0.583	40.8	1.1336	0.0000	SURCHARGED
30 minute winter	S38	35	15.953	1.213	98.6	2.1752	0.0000	SURCHARGED
30 minute winter	FCMH4	33	15.954	1.357	103.0	48.7630	0.0000	SURCHARGED
15 minute summer	S39	10	14.604	0.104	13.6	0.1803	0.0000	OK
15 minute summer	S40	10	14.569	0.119	32.7	0.2267	0.0000	OK
15 minute summer	S41	10	14.514	0.090	42.2	0.1489	0.0000	OK
30 minute winter	S42	37	14.363	0.438	68.6	0.9939	0.0000	OK
30 minute winter	S43	37	14.362	0.617	64.6	0.9910	0.0000	SURCHARGED
30 minute winter	S44	37	14.361	0.656	62.7	1.1152	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 summer	S23	9.001	FCMH2	19.7	1.434	0.110	0.3818	
15 minute summer	FCMH2	8.001	S24	39.7	2.731	0.108	0.2683	
15 minute summer	S24	1.009	S25	167.7	1.058	0.911	1.0663	
15 minute summer	S25	1.010	FCMH3	193.4	1.221	0.815	11.4043	
30 minute summer	S26	10.000	S27	29.3	0.633	0.375	4.1375	
30 minute summer	S27	10.001	S28	36.0	0.640	0.461	1.5130	
30 minute winter	S28	10.002	FCMH3	27.8	0.783	0.258	0.6647	
30 minute winter	FCMH3	1.011	S42	14.5	0.496	0.078	7.9776	
15 minute summer	S29	11.000	S30	13.9	0.850	0.268	0.3370	
15 minute summer	S30	11.001	S31	24.2	1.342	0.465	0.4784	
15 minute summer	S31	11.002	S35	32.1	2.008	0.308	0.5958	
15 minute summer	S32	12.000	S33	-34.4	0.783	-0.310	1.5062	
15 minute summer	S33	12.001	S34	33.9	1.002	0.375	1.7151	
15 minute summer	S34	12.002	S35	42.4	1.329	0.324	1.3618	
15 minute summer	S35	11.003	S36	79.6	0.919	0.565	1.4367	
15 minute summer	S36	11.004	S38	89.6	0.812	0.633	4.2612	
15 minute summer	S37	13.000	S38	73.7	1.138	0.541	2.3984	
30 minute winter	S38	11.005	FCMH4	98.7	0.623	0.433	4.5381	
30 minute winter	FCMH4	11.006	S41	1.7	0.629	0.004	0.1301	
15 minute summer	S39	14.000	S40	13.3	0.436	0.114	1.1573	
15 minute summer	S40	14.001	S41	32.3	1.156	0.141	0.1446	
15 minute summer	S41	11.007	S42	41.9	0.857	0.091	1.7211	
30 minute winter	S42	1.012	S43	59.3	0.791	0.319	8.5393	
30 minute winter	S43	1.013	S44	54.5	0.700	0.292	1.8844	
30 minute winter	S44	1.014	S46	62.5	0.653	0.337	3.3825	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	S45	37	14.360	0.360	24.6	0.8226	0.0000	OK
30 minute winter	S46	37	14.360	0.726	95.9	1.4912	0.0000	SURCHARGED
15 minute summer	S47	10	15.484	0.109	22.4	0.2634	0.0000	OK
15 minute summer	S48	10	15.390	0.153	34.0	0.2756	0.0000	OK
15 minute summer	S49	10	15.290	0.162	49.3	0.3660	0.0000	OK
15 minute summer	S50	10	15.136	0.182	65.9	0.4191	0.0000	OK
15 minute summer	S51	10	15.050	0.199	84.2	0.4625	0.0000	OK
15 minute summer	S52	10	14.855	0.202	92.5	0.4493	0.0000	OK
15 minute summer	S53	10	15.370	0.070	10.8	0.0600	0.0000	OK
15 minute summer	S54	9	15.180	0.080	16.1	0.0425	0.0000	OK
15 minute summer	S55	9	15.278	0.078	13.6	0.0766	0.0000	OK
30 minute winter	S56	26	14.856	0.056	26.4	14.9671	0.0000	OK
15 minute summer	S57	11	14.741	0.222	114.7	0.5679	0.0000	OK
15 minute summer	S58	10	15.875	0.075	11.8	0.0801	0.0000	OK
15 minute summer	S59	10	15.589	0.069	18.9	0.0454	0.0000	OK
15 minute summer	S60	11	14.559	0.242	144.5	0.5312	0.0000	OK
15 minute summer	S61	11	14.393	0.272	157.0	0.5951	0.0000	OK
15 minute summer	S62	10	15.263	0.113	16.9	0.2396	0.0000	OK
15 minute summer	S63	10	15.236	0.177	33.3	0.3616	0.0000	OK
15 minute summer	S64	10	15.053	0.173	41.0	0.2662	0.0000	OK
30 minute summer	S65	21	15.033	0.033	8.3	2.7135	0.0000	OK
15 minute summer	S66	11	14.999	0.207	61.5	0.4263	0.0000	OK
15 minute summer	S67	10	15.184	0.059	8.8	0.0457	0.0000	OK
15 minute summer	S68	10	15.059	0.091	19.6	0.0738	0.0000	OK
15 minute summer	S69	10	14.890	0.122	32.0	0.2406	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	S45	15.000	S46	20.7	0.478	0.078	8.0775	
30 minute winter	S46	1.015	FCMH5	100.8	0.684	0.447	5.4687	
15 minute summer	S47	16.000	S48	22.4	0.762	0.286	0.8147	
15 minute summer	S48	16.001	S49	33.9	1.012	0.432	0.2273	
15 minute summer	S49	16.002	S50	49.0	1.132	0.347	0.8545	
15 minute summer	S50	16.003	S51	65.5	1.026	0.287	1.3094	
15 minute summer	S51	16.004	S52	81.9	1.299	0.356	1.5423	
15 minute summer	S52	16.005	S57	92.0	1.133	0.268	2.1586	
15 minute summer	S53	17.000	S54	10.8	0.785	0.119	0.4127	
15 minute summer	S54	17.001	S56	16.5	1.928	0.114	0.1644	
15 minute summer	S55	18.000	S56	13.8	1.756	0.108	0.2655	
30 minute winter	S56	17.002	S57	6.1	0.688	0.074	0.2069	
15 minute summer	S57	16.006	S60	115.9	1.259	0.339	3.7188	
15 minute summer	S58	19.000	S59	11.8	1.081	0.227	0.3061	
15 minute summer	S59	19.001	S60	18.9	1.880	0.193	0.2798	
15 minute summer	S60	16.007	S61	145.8	1.302	0.300	4.5404	
15 minute summer	S61	16.008	S73	151.5	0.903	0.311	5.9173	
15 minute summer	S62	20.000	S63	16.7	0.640	0.455	0.4829	
15 minute summer	S63	20.001	S64	32.7	1.054	0.892	0.6425	
15 minute summer	S64	20.002	S66	40.5	0.872	0.519	0.8241	
30 minute summer	S65	21.000	S66	3.7	0.403	0.026	0.3041	
15 minute summer	S66	20.003	S71	59.9	1.210	0.765	1.6237	
15 minute summer	S67	22.000	S68	8.8	0.643	0.086	0.2577	
15 minute summer	S68	22.001	S69	19.6	0.983	0.120	0.3726	
15 minute summer	S69	22.002	S70	32.0	0.972	0.196	0.5545	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S70	10	14.836	0.239	104.7	1.0299	0.0000	OK
15 minute summer	S71	10	14.786	0.308	166.7	0.5072	0.0000	OK
15 minute summer	S72	10	14.685	0.257	187.7	0.5943	0.0000	OK
15 minute summer	S73	11	14.373	0.427	341.2	0.9012	0.0000	OK
30 minute winter	S74	36	14.358	0.557	244.2	1.2598	0.0000	OK
30 minute winter	FCMH5	35	14.358	0.893	315.8	178.5648	0.0000	SURCHARGED
15 minute winter	Ex MH 45	17	13.028	0.058	29.2	0.0000	0.0000	OK
15 minute summer	Swale 4_Dummy	1	17.000	0.000	0.0	0.0000	0.0000	OK
15 minute summer	Swale 5	1	16.350	0.000	0.0	0.0000	0.0000	OK
15 minute summer	S18	10	16.158	0.058	7.0	0.0230	0.0000	OK
15 minute summer	S17	10	16.328	0.048	4.5	0.0244	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	S70	22.003	S71	103.8	1.050	0.404	1.8812	
15 minute summer	S71	20.004	S72	164.8	1.582	0.721	1.0394	
15 minute summer	S72	20.005	S73	185.7	2.080	0.531	2.7416	
15 minute summer	S73	16.009	S74	334.9	1.598	0.690	6.4688	
30 minute winter	S74	16.010	FCMH5	229.1	0.869	0.467	18.2686	
30 minute winter	FCMH5	1.016	Ex MH 45	29.2	2.779	0.083	0.0526	457.0
15 minute summer	Swale 4_Dummy	7.000	Swale 4	0.0	0.000	0.000	0.0000	
15 minute summer	Swale 5	7.000_1	S17	0.0	0.000	0.000	0.0237	
15 minute summer	S18	7.002_1	S22	6.8	0.558	0.150	0.5869	
15 minute summer	S17	7.001_1	S18	4.5	0.630	0.103	0.1826	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S1	32	15.711	0.036	2.5	0.0520	0.0000	OK
60 minute summer	S2	32	15.689	0.062	7.5	0.1065	0.0000	OK
60 minute summer	S3	32	15.628	0.090	15.6	0.1807	0.0000	OK
60 minute summer	S4	33	15.558	0.125	26.7	0.2891	0.0000	OK
60 minute summer	Swale 1	32	15.668	0.043	4.2	0.0752	0.0000	OK
60 minute summer	S6	32	15.605	0.062	10.0	0.1194	0.0000	OK
60 minute summer	S7	34	15.381	0.143	39.7	5.4514	0.0000	OK
60 minute summer	Swale 2	32	15.522	0.047	4.7	0.0805	0.0000	OK
60 minute summer	S8	32	15.432	0.056	7.5	0.0824	0.0000	OK
60 minute summer	S9	34	15.314	0.162	51.0	0.3351	0.0000	OK
60 minute summer	S10	32	16.052	0.052	6.3	0.0594	0.0000	OK
60 minute summer	S11	32	15.838	0.064	8.3	0.0326	0.0000	OK
60 minute summer	S12	33	15.758	0.069	9.9	0.0323	0.0000	OK
60 minute summer	S13	32	15.894	0.069	10.8	0.1150	0.0000	OK
60 minute summer	S14	33	15.681	0.086	15.4	0.0649	0.0000	OK
60 minute summer	S15	36	15.441	0.069	27.4	7.2629	0.0000	OK
60 minute summer	S16	36	15.127	0.204	70.9	0.3307	0.0000	OK
60 minute summer	S19	36	15.095	0.250	72.0	0.3942	0.0000	OK
60 minute summer	Swale 4	34	16.841	0.077	19.1	0.4487	0.0000	OK
120 minute summer	S20	88	16.772	1.519	11.2	2.1743	0.0000	SURCHARGED
120 minute summer	FCMH1	88	16.772	1.697	12.4	6.4217	0.0000	SURCHARGED
60 minute summer	S21	36	15.084	0.316	88.4	0.8374	0.0000	OK
60 minute summer	S22	33	15.864	0.064	9.1	0.0406	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	S1	1.000	S2	2.5	0.331	0.031	0.0727	
60 minute summer	S2	1.001	S3	7.4	0.531	0.094	0.2496	
60 minute summer	S3	1.002	S4	15.5	0.684	0.198	0.4792	
60 minute summer	S4	1.003	S7	26.6	0.986	0.340	0.6487	
60 minute summer	Swale 1	2.000	S6	4.1	0.500	0.046	0.1029	
60 minute summer	S6	2.001	S7	10.0	0.957	0.091	0.2543	
60 minute summer	S7	1.004	S9	37.0	0.882	0.262	0.7216	
60 minute summer	Swale 2	3.000	S8	4.6	0.583	0.051	0.1179	
60 minute summer	S8	3.001	S9	7.6	0.743	0.076	0.2381	
60 minute summer	S9	1.005	S16	50.9	1.158	0.360	1.3495	
60 minute summer	S10	4.000	S11	6.3	0.767	0.120	0.1847	
60 minute summer	S11	4.001	S12	8.2	0.835	0.157	0.0832	
60 minute summer	S12	4.002	S15	9.9	0.988	0.191	0.1665	
60 minute summer	S13	5.000	S14	10.7	0.748	0.118	0.4959	
60 minute summer	S14	5.001	S15	15.3	0.945	0.168	0.3573	
60 minute summer	S15	4.003	S16	19.2	1.195	0.077	0.5656	
60 minute summer	S16	1.006	S19	70.2	1.007	0.308	1.2534	
60 minute summer	S19	1.007	S21	69.5	0.896	0.305	1.6148	
60 minute summer	Swale 4	Flow through pond	S20	15.6	0.172	0.014	4.2460	
120 minute summer	S20	7.001	FCMH1	12.4	0.378	0.039	0.7673	
120 minute summer	FCMH1	7.002	S21	2.6	0.718	0.045	0.0536	
60 minute summer	S21	1.008	S24	83.6	0.698	0.450	8.2631	
60 minute summer	S22	8.000	FCMH2	9.0	0.337	0.176	0.7541	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S23	32	17.453	0.035	9.6	0.0530	0.0000	OK
60 minute summer	FCMH2	33	15.726	0.226	22.4	0.8299	0.0000	OK
120 minute winter	S24	116	15.079	0.510	56.1	0.7303	0.0000	SURCHARGED
120 minute winter	S25	116	15.079	0.532	66.2	1.4282	0.0000	SURCHARGED
120 minute winter	S26	118	15.078	0.278	7.9	0.5497	0.0000	OK
120 minute winter	S27	118	15.078	0.574	9.0	0.7766	0.0000	SURCHARGED
120 minute winter	S28	118	15.078	0.682	8.2	0.7714	0.0000	SURCHARGED
120 minute winter	FCMH3	118	15.078	0.921	72.1	121.4218	0.0000	SURCHARGED
60 minute summer	S29	32	16.554	0.054	6.7	0.1008	0.0000	OK
60 minute summer	S30	32	16.370	0.075	11.5	0.1201	0.0000	OK
60 minute summer	S31	33	16.095	0.061	16.7	0.0963	0.0000	OK
720 minute winter	S32	675	16.047	0.247	1.1	0.3682	0.0000	OK
720 minute winter	S33	675	16.047	0.467	2.1	0.5830	0.0000	SURCHARGED
720 minute winter	S34	675	16.047	0.630	2.9	0.3772	0.0000	SURCHARGED
720 minute winter	S35	675	16.047	0.973	5.0	1.5506	0.0000	SURCHARGED
720 minute winter	S36	675	16.047	1.038	5.9	1.9655	0.0000	SURCHARGED
720 minute winter	S37	675	16.047	0.647	2.7	1.2573	0.0000	SURCHARGED
720 minute winter	S38	675	16.047	1.307	9.3	2.3430	0.0000	SURCHARGED
720 minute winter	FCMH4	675	16.047	1.450	9.7	84.2499	0.0000	SURCHARGED
60 minute summer	S39	33	14.571	0.071	6.6	0.1223	0.0000	OK
60 minute summer	S40	33	14.533	0.083	15.8	0.1577	0.0000	OK
60 minute summer	S41	33	14.489	0.065	21.2	0.1070	0.0000	OK
240 minute winter	S42	228	14.425	0.500	26.8	1.1340	0.0000	SURCHARGED
240 minute winter	S43	228	14.423	0.678	24.2	1.0897	0.0000	SURCHARGED
240 minute winter	S44	228	14.422	0.717	25.2	1.2197	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)
60 minute summer	S23	9.001	FCMH2	9.6	1.092	0.054	0.3593	
60 minute summer	FCMH2	8.001	S24	22.1	2.047	0.060	0.2312	
120 minute winter	S24	1.009	S25	53.8	0.720	0.292	1.0663	
120 minute winter	S25	1.010	FCMH3	64.5	0.477	0.272	11.4043	
120 minute winter	S26	10.000	S27	7.0	0.455	0.089	4.1058	
120 minute winter	S27	10.001	S28	8.2	0.463	0.105	1.5130	
120 minute winter	S28	10.002	FCMH3	8.1	0.564	0.075	0.6647	
120 minute winter	FCMH3	1.011	S42	14.3	0.603	0.077	8.5354	
60 minute summer	S29	11.000	S30	6.6	0.707	0.128	0.1941	
60 minute summer	S30	11.001	S31	11.4	1.139	0.220	0.2626	
60 minute summer	S31	11.002	S35	16.6	1.390	0.159	0.4921	
720 minute winter	S32	12.000	S33	1.0	0.325	0.009	1.4588	
720 minute winter	S33	12.001	S34	2.6	0.438	0.029	1.7151	
720 minute winter	S34	12.002	S35	3.0	0.547	0.023	1.3618	
720 minute winter	S35	11.003	S36	4.9	0.388	0.035	1.4367	
720 minute winter	S36	11.004	S38	5.9	0.410	0.042	4.2612	
720 minute winter	S37	13.000	S38	2.7	0.462	0.019	2.3984	
720 minute winter	S38	11.005	FCMH4	9.3	0.162	0.041	4.5381	
720 minute winter	FCMH4	11.006	S41	1.7	0.634	0.005	0.0486	
60 minute summer	S39	14.000	S40	6.5	0.361	0.055	0.6778	
60 minute summer	S40	14.001	S41	15.7	0.927	0.069	0.0877	
60 minute summer	S41	11.007	S42	21.2	0.576	0.046	1.9211	
240 minute winter	S42	1.012	S43	23.1	0.679	0.124	8.5694	
240 minute winter	S43	1.013	S44	23.6	0.676	0.127	1.8844	
240 minute winter	S44	1.014	S46	25.1	0.655	0.135	3.3825	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	S45	228	14.421	0.421	5.1	0.9622	0.0000	OK
240 minute winter	S46	228	14.421	0.787	32.3	1.6175	0.0000	SURCHARGED
60 minute summer	S47	32	15.449	0.074	10.9	0.1806	0.0000	OK
60 minute summer	S48	33	15.337	0.100	16.4	0.1811	0.0000	OK
60 minute summer	S49	33	15.236	0.108	23.6	0.2437	0.0000	OK
60 minute summer	S50	33	15.073	0.119	31.6	0.2746	0.0000	OK
60 minute summer	S51	33	14.984	0.133	40.5	0.3104	0.0000	OK
60 minute summer	S52	33	14.788	0.135	45.5	0.3003	0.0000	OK
60 minute summer	S53	32	15.349	0.049	5.3	0.0421	0.0000	OK
60 minute summer	S54	32	15.151	0.051	7.8	0.0271	0.0000	OK
60 minute summer	S55	32	15.249	0.049	6.6	0.0485	0.0000	OK
120 minute summer	S56	74	14.852	0.052	13.1	13.9802	0.0000	OK
60 minute summer	S57	33	14.670	0.151	58.5	0.3851	0.0000	OK
60 minute summer	S58	32	15.852	0.052	5.8	0.0553	0.0000	OK
60 minute summer	S59	33	15.567	0.047	9.1	0.0310	0.0000	OK
60 minute summer	S60	34	14.480	0.163	73.3	0.3574	0.0000	OK
240 minute winter	S61	228	14.420	0.299	25.6	0.6534	0.0000	OK
60 minute summer	S62	32	15.221	0.071	8.2	0.1516	0.0000	OK
60 minute summer	S63	33	15.167	0.108	16.2	0.2218	0.0000	OK
60 minute summer	S64	33	14.989	0.109	19.9	0.1670	0.0000	OK
60 minute summer	S65	37	15.028	0.028	4.8	2.2175	0.0000	OK
60 minute summer	S66	33	14.927	0.135	31.0	0.2784	0.0000	OK
60 minute summer	S67	32	15.167	0.042	4.3	0.0322	0.0000	OK
60 minute summer	S68	32	15.031	0.063	9.6	0.0507	0.0000	OK
60 minute summer	S69	33	14.849	0.081	15.4	0.1590	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	S45	15.000	S46	3.7	0.248	0.014	8.5778	
240 minute winter	S46	1.015	FCMH5	31.6	0.364	0.140	5.4687	
60 minute summer	S47	16.000	S48	10.8	0.635	0.138	0.4716	
60 minute summer	S48	16.001	S49	16.3	0.839	0.208	0.1317	
60 minute summer	S49	16.002	S50	23.6	0.937	0.167	0.4977	
60 minute summer	S50	16.003	S51	31.7	0.871	0.139	0.7478	
60 minute summer	S51	16.004	S52	40.5	1.076	0.176	0.9120	
60 minute summer	S52	16.005	S57	45.4	0.957	0.132	1.2624	
60 minute summer	S53	17.000	S54	5.2	0.681	0.058	0.2315	
60 minute summer	S54	17.001	S56	7.8	1.318	0.054	0.1131	
60 minute summer	S55	18.000	S56	6.6	1.168	0.052	0.1851	
120 minute summer	S56	17.002	S57	5.4	0.662	0.065	0.1876	
60 minute summer	S57	16.006	S60	58.1	1.078	0.170	2.1791	
60 minute summer	S58	19.000	S59	5.7	0.894	0.111	0.1804	
60 minute summer	S59	19.001	S60	9.0	1.532	0.093	0.1645	
60 minute summer	S60	16.007	S61	73.4	1.208	0.151	2.3962	
240 minute winter	S61	16.008	S73	25.5	0.621	0.053	6.6135	
60 minute summer	S62	20.000	S63	8.1	0.552	0.222	0.2681	
60 minute summer	S63	20.001	S64	16.0	0.876	0.438	0.3803	
60 minute summer	S64	20.002	S66	20.0	0.749	0.256	0.4750	
60 minute summer	S65	21.000	S66	2.6	0.320	0.018	0.2041	
60 minute summer	S66	20.003	S71	30.6	1.031	0.391	0.9774	
60 minute summer	S67	22.000	S68	4.3	0.524	0.042	0.1530	
60 minute summer	S68	22.001	S69	9.4	0.803	0.058	0.2199	
60 minute summer	S69	22.002	S70	15.3	0.915	0.094	0.2406	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S70	32	14.742	0.145	50.6	0.6277	0.0000	OK
60 minute summer	S71	33	14.680	0.202	83.2	0.3326	0.0000	OK
60 minute summer	S72	33	14.597	0.169	94.1	0.3904	0.0000	OK
240 minute winter	S73	224	14.420	0.474	54.9	0.9990	0.0000	OK
240 minute winter	S74	228	14.420	0.619	54.2	1.3987	0.0000	SURCHARGED
240 minute winter	FCMH5	228	14.420	0.955	83.3	208.9647	0.0000	SURCHARGED
60 minute summer	Ex MH 45	42	13.028	0.058	29.2	0.0000	0.0000	OK
60 minute summer	Swale 4_Dummy	1	17.000	0.000	0.0	0.0000	0.0000	OK
60 minute summer	Swale 5	1	16.350	0.000	0.0	0.0000	0.0000	OK
60 minute summer	S18	33	16.141	0.041	3.3	0.0162	0.0000	OK
60 minute summer	S17	32	16.314	0.034	2.2	0.0170	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	S70	22.003	S71	50.2	0.900	0.195	1.0546	
60 minute summer	S71	20.004	S72	83.3	1.354	0.364	0.6121	
60 minute summer	S72	20.005	S73	94.1	1.820	0.269	1.4633	
240 minute winter	S73	16.009	S74	51.9	0.799	0.107	7.6054	
240 minute winter	S74	16.010	FCMH5	51.8	0.373	0.106	18.5563	
240 minute winter	FCMH5	1.016	Ex MH 45	29.2	2.779	0.083	0.0526	775.2
60 minute summer	Swale 4_Dummy	7.000	Swale 4	0.0	0.000	0.000	0.0000	
60 minute summer	Swale 5	7.000_1	S17	0.0	0.000	0.000	0.0141	
60 minute summer	S18	7.002_1	S22	3.3	0.476	0.073	0.2786	
60 minute summer	S17	7.001_1	S18	2.1	0.504	0.049	0.1093	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S1	35	15.870	0.195	8.6	0.2793	0.0000	OK
60 minute summer	S2	35	15.867	0.240	20.3	0.4140	0.0000	OK
60 minute summer	S3	36	15.858	0.320	42.1	0.6464	0.0000	SURCHARGED
60 minute summer	S4	36	15.842	0.409	67.9	0.9420	0.0000	SURCHARGED
60 minute summer	Swale 1	38	15.792	0.167	11.3	0.2899	0.0000	OK
60 minute summer	S6	37	15.795	0.252	27.3	0.4850	0.0000	OK
60 minute summer	S7	37	15.789	0.551	97.5	21.9072	0.0000	SURCHARGED
60 minute summer	Swale 2	38	15.768	0.293	12.7	0.5057	0.0000	OK
60 minute summer	S8	38	15.768	0.392	22.5	0.5798	0.0000	SURCHARGED
60 minute summer	S9	38	15.766	0.614	93.6	1.2695	0.0000	SURCHARGED
60 minute summer	S10	32	16.090	0.090	17.0	0.1021	0.0000	OK
60 minute summer	S11	32	15.891	0.117	22.2	0.0591	0.0000	OK
60 minute summer	S12	32	15.811	0.122	26.7	0.0571	0.0000	OK
60 minute summer	S13	32	15.943	0.118	29.3	0.1970	0.0000	OK
60 minute summer	S14	33	15.746	0.151	41.8	0.1138	0.0000	OK
240 minute winter	S15	232	15.731	0.359	20.9	57.1656	0.0000	OK
240 minute winter	S16	232	15.731	0.808	51.8	1.3128	0.0000	SURCHARGED
240 minute winter	S19	232	15.731	0.886	49.5	1.3969	0.0000	SURCHARGED
120 minute winter	Swale 4	118	16.952	0.188	21.9	1.1017	0.0000	OK
120 minute winter	S20	118	16.952	1.699	20.1	2.4318	0.0000	SURCHARGED
120 minute winter	FCMH1	118	16.952	1.877	14.2	24.5822	0.0000	SURCHARGED
240 minute winter	S21	232	15.731	0.963	64.3	2.5550	0.0000	SURCHARGED
60 minute summer	S22	36	16.355	0.555	25.0	0.3540	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)
60 minute summer	S1	1.000	S2	6.6	0.414	0.084	0.5201	
60 minute summer	S2	1.001	S3	19.8	0.621	0.253	1.1642	
60 minute summer	S3	1.002	S4	38.2	0.786	0.488	1.4823	
60 minute summer	S4	1.003	S7	63.1	1.140	0.807	1.6946	
60 minute summer	Swale 1	2.000	S6	11.3	0.658	0.125	0.6305	
60 minute summer	S6	2.001	S7	25.6	0.996	0.233	1.5711	
60 minute summer	S7	1.004	S9	64.4	0.889	0.455	1.8884	
60 minute summer	Swale 2	3.000	S8	14.8	0.705	0.163	1.0385	
60 minute summer	S8	3.001	S9	24.2	0.714	0.244	1.3145	
60 minute summer	S9	1.005	S16	93.5	1.181	0.662	3.3884	
60 minute summer	S10	4.000	S11	16.9	0.951	0.325	0.4023	
60 minute summer	S11	4.001	S12	22.0	1.032	0.424	0.1816	
60 minute summer	S12	4.002	S15	26.7	1.271	0.514	0.4014	
60 minute summer	S13	5.000	S14	29.1	0.953	0.322	1.0566	
60 minute summer	S14	5.001	S15	41.5	1.224	0.458	1.0970	
240 minute winter	S15	4.003	S16	18.3	1.080	0.073	2.6142	
240 minute winter	S16	1.006	S19	48.0	0.867	0.211	2.4819	
240 minute winter	S19	1.007	S21	48.9	0.718	0.215	2.4465	
120 minute winter	Swale 4	Flow through pond	S20	20.1	0.159	0.018	20.1100	
120 minute winter	S20	7.001	FCMH1	14.2	0.395	0.044	0.7673	
120 minute winter	FCMH1	7.002	S21	2.6	0.718	0.044	0.2572	
240 minute winter	S21	1.008	S24	63.7	0.636	0.342	9.4467	
60 minute summer	S22	8.000	FCMH2	22.5	0.565	0.439	1.2256	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S23	32	17.476	0.058	26.0	0.0866	0.0000	OK
60 minute summer	FCMH2	35	16.328	0.828	54.9	3.0434	0.0000	SURCHARGED
240 minute winter	S24	236	15.730	1.161	78.6	1.6617	0.0000	SURCHARGED
240 minute winter	S25	236	15.730	1.183	96.9	3.1752	0.0000	SURCHARGED
240 minute winter	S26	236	15.729	0.929	12.0	1.8377	0.0000	SURCHARGED
240 minute winter	S27	236	15.729	1.225	14.9	1.6576	0.0000	SURCHARGED
240 minute winter	S28	236	15.729	1.333	14.6	1.5078	0.0000	SURCHARGED
240 minute winter	FCMH3	236	15.729	1.572	110.1	401.4515	0.0000	SURCHARGED
60 minute summer	S29	34	16.622	0.122	18.3	0.2272	0.0000	OK
60 minute summer	S30	34	16.608	0.313	31.5	0.5007	0.0000	SURCHARGED
60 minute summer	S31	34	16.517	0.483	41.1	0.7690	0.0000	SURCHARGED
60 minute summer	S32	33	16.461	0.661	22.6	0.9856	0.0000	SURCHARGED
60 minute summer	S33	33	16.451	0.871	42.9	1.0875	0.0000	SURCHARGED
720 minute winter	S34	705	16.412	0.995	5.7	0.5960	0.0000	SURCHARGED
720 minute winter	S35	705	16.412	1.338	11.3	2.1327	0.0000	SURCHARGED
720 minute winter	S36	705	16.412	1.403	13.3	2.6572	0.0000	SURCHARGED
720 minute winter	S37	705	16.412	1.012	5.9	1.9672	0.0000	SURCHARGED
720 minute winter	S38	705	16.412	1.672	20.8	2.9978	0.0000	SURCHARGED
720 minute winter	FCMH4	705	16.412	1.815	21.7	282.9926	0.0000	SURCHARGED
600 minute winter	S39	585	15.089	0.589	2.2	1.0200	0.0000	SURCHARGED
600 minute winter	S40	585	15.089	0.639	5.1	1.2177	0.0000	SURCHARGED
600 minute winter	S41	585	15.089	0.665	7.7	1.0950	0.0000	SURCHARGED
600 minute winter	S42	585	15.089	1.164	26.7	2.6404	0.0000	SURCHARGED
600 minute winter	S43	585	15.087	1.342	27.6	2.1572	0.0000	SURCHARGED
600 minute winter	S44	585	15.087	1.382	29.5	2.3490	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)
60 minute summer	S23	9.001	FCMH2	26.0	1.376	0.145	0.3936	
60 minute summer	FCMH2	8.001	S24	41.9	2.048	0.114	0.3031	
240 minute winter	S24	1.009	S25	78.1	0.726	0.425	1.0663	
240 minute winter	S25	1.010	FCMH3	96.2	0.607	0.405	11.4043	
240 minute winter	S26	10.000	S27	11.6	0.445	0.148	4.1740	
240 minute winter	S27	10.001	S28	14.6	0.499	0.186	1.5130	
240 minute winter	S28	10.002	FCMH3	14.3	0.583	0.133	0.6647	
240 minute winter	FCMH3	1.011	S42	14.0	0.619	0.075	11.0283	
60 minute summer	S29	11.000	S30	18.2	0.904	0.351	0.6340	
60 minute summer	S30	11.001	S31	28.3	1.284	0.544	1.0366	
60 minute summer	S31	11.002	S35	40.3	1.385	0.387	0.8095	
60 minute summer	S32	12.000	S33	21.3	0.527	0.192	1.5515	
60 minute summer	S33	12.001	S34	41.9	0.727	0.463	1.7151	
720 minute winter	S34	12.002	S35	5.6	0.550	0.043	1.3618	
720 minute winter	S35	11.003	S36	11.2	0.433	0.079	1.4367	
720 minute winter	S36	11.004	S38	13.2	0.445	0.093	4.2612	
720 minute winter	S37	13.000	S38	5.8	0.564	0.043	2.3984	
720 minute winter	S38	11.005	FCMH4	20.8	0.143	0.091	4.5381	
720 minute winter	FCMH4	11.006	S41	1.8	0.503	0.005	2.0748	
600 minute winter	S39	14.000	S40	2.1	0.255	0.018	5.9941	
600 minute winter	S40	14.001	S41	4.8	0.614	0.021	0.8163	
600 minute winter	S41	11.007	S42	7.7	0.399	0.017	3.9239	
600 minute winter	S42	1.012	S43	26.2	0.671	0.141	8.5694	
600 minute winter	S43	1.013	S44	27.4	0.667	0.147	1.8844	
600 minute winter	S44	1.014	S46	29.4	0.645	0.158	3.3825	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	S45	585	15.086	1.086	6.2	2.4789	0.0000	SURCHARGED
600 minute winter	S46	585	15.086	1.452	40.0	2.9820	0.0000	SURCHARGED
60 minute summer	S47	32	15.503	0.128	29.6	0.3096	0.0000	OK
60 minute summer	S48	32	15.417	0.180	44.7	0.3258	0.0000	OK
60 minute summer	S49	33	15.317	0.189	64.4	0.4278	0.0000	OK
60 minute summer	S50	33	15.170	0.216	86.0	0.4961	0.0000	OK
60 minute summer	S51	34	15.087	0.236	110.2	0.5488	0.0000	OK
600 minute winter	S52	600	15.085	0.432	15.7	0.9589	0.0000	OK
60 minute summer	S53	32	15.382	0.082	14.3	0.0702	0.0000	OK
60 minute summer	S54	32	15.180	0.080	21.2	0.0426	0.0000	OK
60 minute summer	S55	32	15.277	0.077	18.0	0.0753	0.0000	OK
600 minute winter	S56	600	15.085	0.285	13.0	75.8980	0.0000	OK
600 minute winter	S57	600	15.085	0.566	25.7	1.4455	0.0000	SURCHARGED
60 minute summer	S58	32	15.888	0.088	15.7	0.0938	0.0000	OK
60 minute summer	S59	32	15.597	0.077	24.9	0.0508	0.0000	OK
600 minute winter	S60	600	15.085	0.768	30.7	1.6832	0.0000	SURCHARGED
600 minute winter	S61	600	15.085	0.964	30.6	2.1063	0.0000	SURCHARGED
60 minute summer	S62	34	15.355	0.205	22.3	0.4355	0.0000	OK
60 minute summer	S63	34	15.324	0.265	42.8	0.5432	0.0000	SURCHARGED
60 minute summer	S64	34	15.180	0.300	52.7	0.4614	0.0000	OK
60 minute summer	S65	37	15.135	0.135	38.1	12.6035	0.0000	OK
60 minute summer	S66	35	15.137	0.345	78.3	0.7128	0.0000	SURCHARGED
60 minute summer	S67	32	15.193	0.068	11.7	0.0524	0.0000	OK
60 minute summer	S68	34	15.145	0.177	25.9	0.1431	0.0000	OK
60 minute summer	S69	34	15.135	0.367	41.9	0.7209	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	S45	15.000	S46	6.1	0.179	0.023	8.6917	
600 minute winter	S46	1.015	FCMH5	39.8	0.260	0.177	5.4687	
60 minute summer	S47	16.000	S48	29.4	0.807	0.375	1.0056	
60 minute summer	S48	16.001	S49	44.2	1.078	0.564	0.2783	
60 minute summer	S49	16.002	S50	64.4	1.216	0.456	1.0452	
60 minute summer	S50	16.003	S51	86.3	1.085	0.378	1.6319	
60 minute summer	S51	16.004	S52	110.7	1.393	0.481	2.1616	
600 minute winter	S52	16.005	S57	15.7	0.691	0.046	5.3943	
60 minute summer	S53	17.000	S54	14.2	0.928	0.157	0.4612	
60 minute summer	S54	17.001	S56	21.2	1.416	0.146	0.3843	
60 minute summer	S55	18.000	S56	18.0	1.255	0.141	0.6479	
600 minute winter	S56	17.002	S57	-8.5	0.692	-0.102	1.6163	
600 minute winter	S57	16.006	S60	25.2	0.823	0.074	8.7238	
60 minute summer	S58	19.000	S59	15.6	1.185	0.300	0.3688	
60 minute summer	S59	19.001	S60	24.7	1.913	0.253	0.7203	
600 minute winter	S60	16.007	S61	28.4	0.797	0.058	11.1119	
600 minute winter	S61	16.008	S73	29.3	0.491	0.060	9.8317	
60 minute summer	S62	20.000	S63	21.5	0.631	0.585	0.7039	
60 minute summer	S63	20.001	S64	42.1	1.096	1.149	0.8256	
60 minute summer	S64	20.002	S66	52.2	0.848	0.668	1.2456	
60 minute summer	S65	21.000	S66	35.5	0.688	0.244	0.6174	
60 minute summer	S66	20.003	S71	73.0	1.213	0.933	2.3120	
60 minute summer	S67	22.000	S68	11.6	0.693	0.114	0.5014	
60 minute summer	S68	22.001	S69	25.6	1.037	0.157	1.3382	
60 minute summer	S69	22.002	S70	39.0	0.898	0.239	1.5773	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S70	34	15.129	0.532	132.3	2.2971	0.0000	SURCHARGED
60 minute summer	S71	34	15.087	0.609	204.3	1.0035	0.0000	SURCHARGED
600 minute winter	S72	600	15.085	0.657	33.1	1.5166	0.0000	SURCHARGED
600 minute winter	S73	600	15.085	1.139	63.7	2.4000	0.0000	SURCHARGED
600 minute winter	S74	600	15.085	1.284	65.7	2.9008	0.0000	SURCHARGED
600 minute winter	FCMH5	600	15.085	1.620	105.2	806.0753	0.0000	SURCHARGED
480 minute summer	Ex MH 45	208	13.028	0.058	29.2	0.0000	0.0000	OK
60 minute summer	Swale 4_Dummy	1	17.000	0.000	0.0	0.0000	0.0000	OK
60 minute summer	Swale 5	37	16.356	0.006	0.8	0.0685	0.0000	OK
60 minute summer	S18	36	16.366	0.266	13.0	0.1046	0.0000	SURCHARGED
60 minute summer	S17	36	16.376	0.096	6.0	0.0484	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	S70	22.003	S71	124.1	1.019	0.483	2.9692	
60 minute summer	S71	20.004	S72	189.6	1.573	0.829	1.5751	
600 minute winter	S72	20.005	S73	32.4	1.136	0.092	4.4827	
600 minute winter	S73	16.009	S74	62.8	0.718	0.129	8.2405	
600 minute winter	S74	16.010	FCMH5	65.4	0.279	0.133	18.5563	
600 minute winter	FCMH5	1.016	Ex MH 45	29.2	2.778	0.083	0.0526	1217.7
60 minute summer	Swale 4_Dummy	7.000	Swale 4	0.0	0.000	0.000	0.0068	
60 minute summer	Swale 5	7.000_1	S17	-0.8	-0.124	-0.016	0.0612	
60 minute summer	S18	7.002_1	S22	11.9	0.563	0.263	1.5679	
60 minute summer	S17	7.001_1	S18	5.9	0.673	0.136	0.7071	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S1	11	15.925	0.250	9.6	0.3587	0.0000	OK
15 minute summer	S2	11	15.931	0.304	27.8	0.5260	0.0000	SURCHARGED
15 minute summer	S3	11	15.919	0.381	56.3	0.7684	0.0000	SURCHARGED
15 minute summer	S4	12	15.875	0.442	93.0	1.0198	0.0000	SURCHARGED
15 minute summer	Swale 1	12	15.789	0.164	16.3	0.2846	0.0000	OK
15 minute summer	S6	12	15.796	0.253	39.3	0.4880	0.0000	OK
15 minute summer	S7	12	15.781	0.543	139.2	21.6014	0.0000	SURCHARGED
30 minute summer	Swale 2	20	15.738	0.263	15.5	0.4545	0.0000	OK
15 minute summer	S8	12	15.742	0.366	29.1	0.5410	0.0000	SURCHARGED
15 minute summer	S9	11	15.752	0.600	136.9	1.2402	0.0000	SURCHARGED
15 minute summer	S10	9	16.112	0.112	24.4	0.1272	0.0000	OK
15 minute summer	S11	10	15.926	0.152	32.1	0.0770	0.0000	OK
15 minute summer	S12	10	15.847	0.158	38.8	0.0739	0.0000	OK
15 minute summer	S13	10	15.972	0.147	42.2	0.2437	0.0000	OK
15 minute summer	S14	10	15.787	0.192	60.6	0.1454	0.0000	OK
30 minute summer	S15	23	15.660	0.288	138.3	44.8606	0.0000	OK
30 minute summer	S16	23	15.651	0.728	108.1	1.1824	0.0000	SURCHARGED
30 minute summer	S19	22	15.622	0.777	108.8	1.2246	0.0000	SURCHARGED
15 minute summer	Swale 4	11	16.915	0.151	74.7	0.8832	0.0000	OK
30 minute winter	S20	32	16.891	1.638	43.6	2.3441	0.0000	SURCHARGED
30 minute winter	FCMH1	32	16.891	1.816	40.1	17.1233	0.0000	SURCHARGED
30 minute summer	S21	22	15.592	0.824	138.3	2.1870	0.0000	SURCHARGED
15 minute summer	S22	11	16.635	0.835	33.3	0.5329	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 summer	S1	1.000	S2	8.9	0.411	0.113	0.6371	
15 minute summer	S2	1.001	S3	24.2	0.632	0.309	1.2541	
15 minute summer	S3	1.002	S4	48.9	0.809	0.626	1.4823	
15 minute summer	S4	1.003	S7	84.1	1.292	1.076	1.6946	
15 minute summer	Swale 1	2.000	S6	16.3	0.722	0.180	0.6319	
15 minute summer	S6	2.001	S7	39.4	1.203	0.359	1.5750	
15 minute summer	S7	1.004	S9	84.9	0.912	0.600	1.8884	
30 minute summer	Swale 2	3.000	S8	15.2	0.787	0.167	1.0054	
15 minute summer	S8	3.001	S9	28.1	0.852	0.283	1.3145	
15 minute summer	S9	1.005	S16	112.0	1.214	0.793	3.3884	
15 minute summer	S10	4.000	S11	24.4	1.009	0.470	0.5460	
15 minute summer	S11	4.001	S12	32.1	1.102	0.618	0.2478	
15 minute summer	S12	4.002	S15	38.8	1.373	0.747	0.4697	
15 minute summer	S13	5.000	S14	42.4	1.035	0.468	1.4132	
15 minute summer	S14	5.001	S15	60.4	1.330	0.665	1.0039	
30 minute summer	S15	4.003	S16	56.9	0.947	0.227	2.4002	
30 minute summer	S16	1.006	S19	107.0	1.014	0.470	2.4819	
30 minute summer	S19	1.007	S21	109.0	0.863	0.478	2.4465	
15 minute summer	Swale 4	Flow through pond	S20	55.0	0.250	0.048	10.3489	
30 minute winter	S20	7.001	FCMH1	40.1	0.482	0.125	0.7673	
30 minute winter	FCMH1	7.002	S21	-5.4	0.672	-0.093	0.2572	
30 minute summer	S21	1.008	S24	128.6	0.811	0.691	9.4467	
15 minute summer	S22	8.000	FCMH2	27.8	0.699	0.542	1.2256	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S23	10	17.488	0.070	37.4	0.1043	0.0000	OK
15 minute summer	FCMH2	11	16.589	1.089	69.3	4.0042	0.0000	SURCHARGED
30 minute summer	S24	18	15.489	0.920	170.3	1.3160	0.0000	SURCHARGED
30 minute summer	S25	18	15.449	0.902	243.2	2.4222	0.0000	SURCHARGED
30 minute summer	S26	42	15.412	0.611	58.8	1.2095	0.0000	SURCHARGED
30 minute winter	S27	43	15.411	0.907	55.8	1.2270	0.0000	SURCHARGED
30 minute winter	S28	43	15.411	1.015	55.1	1.1479	0.0000	SURCHARGED
30 minute winter	FCMH3	43	15.411	1.254	279.3	264.5849	0.0000	SURCHARGED
15 minute summer	S29	11	16.904	0.404	26.4	0.7526	0.0000	SURCHARGED
15 minute summer	S30	11	16.859	0.564	45.4	0.9025	0.0000	SURCHARGED
15 minute summer	S31	11	16.694	0.660	54.2	1.0510	0.0000	SURCHARGED
15 minute summer	S32	12	16.520	0.720	32.6	2.7080	0.0000	SURCHARGED
15 minute summer	S33	11	16.510	0.930	63.9	1.6925	0.0000	SURCHARGED
15 minute summer	S34	11	16.467	1.050	71.7	0.6291	0.0000	SURCHARGED
15 minute summer	S35	11	16.413	1.339	116.7	2.1340	0.0000	SURCHARGED
15 minute summer	S36	11	16.343	1.334	139.3	2.5267	0.0000	SURCHARGED
15 minute summer	S37	10	16.304	0.904	77.6	1.7579	0.0000	SURCHARGED
30 minute summer	S38	19	16.127	1.387	210.8	2.4866	0.0000	SURCHARGED
30 minute winter	FCMH4	33	16.114	1.517	179.5	113.3611	0.0000	SURCHARGED
30 minute summer	S39	20	14.699	0.199	22.0	0.3448	0.0000	OK
15 minute summer	S40	11	14.694	0.244	62.6	0.4640	0.0000	OK
30 minute summer	S41	20	14.692	0.268	66.5	0.4413	0.0000	OK
30 minute winter	S42	37	14.675	0.750	103.2	1.7001	0.0000	SURCHARGED
30 minute winter	S43	37	14.670	0.925	93.2	1.4870	0.0000	SURCHARGED
30 minute winter	S44	36	14.669	0.964	105.9	1.6395	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 summer	S23	9.001	FCMH2	37.4	1.374	0.209	0.4133	
15 minute summer	FCMH2	8.001	S24	42.0	2.899	0.114	0.2698	
30 minute summer	S24	1.009	S25	170.3	1.075	0.926	1.0663	
30 minute summer	S25	1.010	FCMH3	240.7	1.519	1.014	11.4043	
30 minute summer	S26	10.000	S27	56.7	0.806	0.725	4.1740	
30 minute winter	S27	10.001	S28	55.1	0.783	0.705	1.5130	
30 minute winter	S28	10.002	FCMH3	54.5	0.863	0.505	0.6647	
30 minute winter	FCMH3	1.011	S42	-17.3	0.462	-0.093	11.0283	
15 minute summer	S29	11.000	S30	26.2	0.953	0.504	0.8172	
15 minute summer	S30	11.001	S31	37.2	1.369	0.716	1.0366	
15 minute summer	S31	11.002	S35	54.2	1.863	0.520	0.8095	
15 minute summer	S32	12.000	S33	45.2	0.786	0.407	1.5515	
15 minute summer	S33	12.001	S34	59.7	1.043	0.660	1.7151	
15 minute summer	S34	12.002	S35	68.2	1.262	0.521	1.3618	
15 minute summer	S35	11.003	S36	114.4	1.037	0.811	1.4367	
15 minute summer	S36	11.004	S38	138.0	1.252	0.976	4.2612	
15 minute summer	S37	13.000	S38	76.6	1.170	0.562	2.3984	
30 minute summer	S38	11.005	FCMH4	210.1	1.326	0.922	4.5381	
30 minute winter	FCMH4	11.006	S41	2.4	0.289	0.006	0.7249	
30 minute summer	S39	14.000	S40	22.7	0.485	0.195	2.9243	
15 minute summer	S40	14.001	S41	62.2	1.400	0.271	0.4276	
30 minute summer	S41	11.007	S42	65.7	0.699	0.143	3.1813	
30 minute winter	S42	1.012	S43	84.0	0.797	0.453	8.5694	
30 minute winter	S43	1.013	S44	91.7	0.735	0.491	1.8844	
30 minute winter	S44	1.014	S46	105.5	0.666	0.569	3.3825	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	S45	36	14.669	0.669	47.0	1.5272	0.0000	SURCHARGED
30 minute winter	S46	36	14.668	1.034	175.2	2.1241	0.0000	SURCHARGED
15 minute summer	S47	10	15.540	0.165	42.6	0.4012	0.0000	OK
15 minute summer	S48	10	15.470	0.233	64.6	0.4208	0.0000	OK
15 minute summer	S49	10	15.369	0.241	93.6	0.5457	0.0000	OK
15 minute summer	S50	10	15.233	0.279	125.3	0.6403	0.0000	OK
15 minute summer	S51	10	15.149	0.298	160.0	0.6938	0.0000	OK
15 minute summer	S52	12	14.991	0.338	177.0	0.7509	0.0000	OK
15 minute summer	S53	10	15.399	0.099	20.6	0.0851	0.0000	OK
15 minute summer	S54	9	15.208	0.108	30.7	0.0573	0.0000	OK
15 minute summer	S55	9	15.305	0.105	25.9	0.1029	0.0000	OK
30 minute summer	S56	22	14.915	0.115	76.1	30.6431	0.0000	OK
15 minute summer	S57	11	15.008	0.489	222.9	1.2491	0.0000	OK
15 minute summer	S58	10	15.908	0.108	22.5	0.1152	0.0000	OK
15 minute summer	S59	9	15.615	0.095	35.8	0.0626	0.0000	OK
30 minute summer	S60	19	14.932	0.615	226.7	1.3478	0.0000	SURCHARGED
30 minute summer	S61	19	14.912	0.791	224.6	1.7287	0.0000	SURCHARGED
15 minute summer	S62	11	15.667	0.517	32.1	1.0988	0.0000	SURCHARGED
15 minute summer	S63	11	15.597	0.538	58.9	1.1022	0.0000	SURCHARGED
15 minute summer	S64	11	15.298	0.418	70.0	0.6429	0.0000	SURCHARGED
15 minute summer	S65	13	15.148	0.148	60.8	13.8182	0.0000	OK
15 minute summer	S66	11	15.213	0.421	102.2	0.8686	0.0000	SURCHARGED
15 minute summer	S67	11	15.245	0.120	16.8	0.0929	0.0000	OK
15 minute summer	S68	11	15.217	0.249	37.2	0.2019	0.0000	OK
15 minute summer	S69	11	15.230	0.462	60.6	0.9092	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)
30 minute winter	S45	15.000	S46	39.7	0.554	0.150	8.6917	
30 minute winter	S46	1.015	FCMH5	174.0	1.099	0.771	5.4687	
15 minute summer	S47	16.000	S48	42.6	0.857	0.544	1.3612	
15 minute summer	S48	16.001	S49	64.4	1.189	0.821	0.3663	
15 minute summer	S49	16.002	S50	93.2	1.318	0.659	1.3947	
15 minute summer	S50	16.003	S51	124.5	1.161	0.545	2.1996	
15 minute summer	S51	16.004	S52	156.9	1.513	0.682	2.5302	
15 minute summer	S52	16.005	S57	174.5	1.260	0.508	4.6155	
15 minute summer	S53	17.000	S54	20.6	0.960	0.227	0.6439	
15 minute summer	S54	17.001	S56	31.3	2.150	0.216	0.2850	
15 minute summer	S55	18.000	S56	26.2	1.941	0.205	0.4562	
30 minute summer	S56	17.002	S57	25.3	0.991	0.305	1.0133	
15 minute summer	S57	16.006	S60	213.3	1.394	0.624	8.5912	
15 minute summer	S58	19.000	S59	22.4	1.298	0.432	0.4847	
15 minute summer	S59	19.001	S60	36.2	2.175	0.371	0.7520	
30 minute summer	S60	16.007	S61	202.6	1.283	0.417	11.1119	
30 minute summer	S61	16.008	S73	194.9	0.810	0.401	9.8317	
15 minute summer	S62	20.000	S63	28.0	0.704	0.763	0.7199	
15 minute summer	S63	20.001	S64	55.8	1.403	1.522	0.8259	
15 minute summer	S64	20.002	S66	68.3	0.970	0.874	1.2461	
15 minute summer	S65	21.000	S66	45.6	0.857	0.314	0.6403	
15 minute summer	S66	20.003	S71	83.6	1.312	1.069	2.3120	
15 minute summer	S67	22.000	S68	18.8	0.791	0.183	0.8233	
15 minute summer	S68	22.001	S69	41.0	1.030	0.251	1.7599	
15 minute summer	S69	22.002	S70	58.7	0.883	0.359	1.5821	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S70	11	15.240	0.643	181.6	2.7759	0.0000	SURCHARGED
15 minute summer	S71	11	15.171	0.693	250.6	1.1429	0.0000	SURCHARGED
15 minute summer	S72	11	15.086	0.658	290.3	1.5209	0.0000	SURCHARGED
30 minute summer	S73	19	14.865	0.919	419.4	1.9367	0.0000	SURCHARGED
30 minute summer	S74	21	14.713	0.912	443.7	2.0604	0.0000	SURCHARGED
30 minute winter	FCMH5	41	14.667	1.202	560.7	407.4409	0.0000	SURCHARGED
30 minute winter	Ex MH 45	17	13.028	0.058	29.2	0.0000	0.0000	OK
15 minute summer	Swale 4_Dummy	1	17.000	0.000	0.0	0.0000	0.0000	OK
15 minute summer	Swale 5	13	16.519	0.169	22.7	2.6157	0.0000	OK
15 minute summer	S18	11	16.643	0.543	30.4	0.2139	0.0000	SURCHARGED
15 minute summer	S17	11	16.533	0.253	24.7	0.1279	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 summer	S70	22.003	S71	164.7	1.139	0.640	2.9692	
15 minute summer	S71	20.004	S72	246.7	1.632	1.079	1.5751	
15 minute summer	S72	20.005	S73	281.8	2.105	0.806	4.4827	
30 minute summer	S73	16.009	S74	417.8	1.484	0.861	8.2405	
30 minute summer	S74	16.010	FCMH5	438.5	1.557	0.894	18.5563	
30 minute winter	FCMH5	1.016	Ex MH 45	29.2	2.778	0.083	0.0526	449.0
15 minute summer	Swale 4_Dummy	7.000	Swale 4	0.0	0.000	0.000	0.0016	
15 minute summer	Swale 5	7.000_1	S17	-22.7	-0.810	-0.454	0.2718	
15 minute summer	S18	7.002_1	S22	22.0	0.553	0.485	1.5679	
15 minute summer	S17	7.001_1	S18	-20.4	0.741	-0.465	1.0067	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S1	37	16.796	1.121	13.9	3.0684	0.0000	FLOOD RISK
60 minute summer	S2	37	16.795	1.168	41.8	2.0175	0.0000	FLOOD RISK
60 minute summer	S3	37	16.783	1.245	87.1	8.9504	0.0000	FLOOD RISK
60 minute summer	S4	36	16.725	1.292	126.8	3.6931	0.0000	FLOOD RISK
480 minute winter	Swale 1	472	16.708	1.083	3.3	1.8795	0.0000	FLOOD RISK
480 minute winter	S6	472	16.708	1.165	11.3	34.2881	0.0000	FLOOD RISK
480 minute winter	S7	472	16.708	1.470	30.0	59.5056	0.0000	FLOOD RISK
480 minute winter	Swale 2	472	16.708	1.233	3.7	2.1297	0.0000	FLOOD RISK
480 minute winter	S8	472	16.708	1.332	5.7	1.9716	0.0000	FLOOD RISK
480 minute winter	S9	472	16.708	1.556	35.6	3.2151	0.0000	SURCHARGED
480 minute winter	S10	472	16.708	0.708	4.9	0.8023	0.0000	SURCHARGED
480 minute winter	S11	472	16.708	0.934	6.4	0.4736	0.0000	SURCHARGED
480 minute winter	S12	472	16.708	1.019	7.7	0.4769	0.0000	SURCHARGED
480 minute winter	S13	472	16.708	0.883	8.5	1.4685	0.0000	SURCHARGED
480 minute winter	S14	472	16.708	1.113	12.2	0.8415	0.0000	SURCHARGED
480 minute winter	S15	472	16.708	1.336	30.1	172.9600	0.0000	SURCHARGED
480 minute winter	S16	472	16.708	1.785	37.3	2.9008	0.0000	SURCHARGED
480 minute winter	S19	472	16.708	1.863	44.3	270.7778	0.0000	SURCHARGED
240 minute winter	Swale 4	236	17.174	0.410	26.0	2.4002	0.0000	OK
240 minute winter	S20	236	17.174	1.921	20.1	2.7493	0.0000	FLOOD RISK
240 minute winter	FCMH1	236	17.174	2.099	14.5	62.7681	0.0000	FLOOD RISK
480 minute winter	S21	472	16.708	1.940	47.0	5.1485	0.0000	SURCHARGED
60 minute summer	S22	35	17.826	2.026	50.7	1.2928	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)
60 minute summer	S1	1.000	S2	15.0	0.413	0.192	0.6735	
60 minute summer	S2	1.001	S3	40.4	0.620	0.516	1.2541	
60 minute summer	S3	1.002	S4	64.6	0.918	0.826	1.4823	
60 minute summer	S4	1.003	S7	118.0	1.676	1.509	1.6946	
480 minute winter	Swale 1	2.000	S6	3.0	0.448	0.033	0.8652	
480 minute winter	S6	2.001	S7	-8.3	0.788	-0.076	1.6568	
480 minute winter	S7	1.004	S9	23.8	0.735	0.168	1.8884	
480 minute winter	Swale 2	3.000	S8	3.4	0.480	0.038	1.0418	
480 minute winter	S8	3.001	S9	5.5	0.652	0.056	1.3145	
480 minute winter	S9	1.005	S16	35.2	0.855	0.250	3.3884	
480 minute winter	S10	4.000	S11	4.9	0.743	0.094	0.8991	
480 minute winter	S11	4.001	S12	6.4	0.790	0.123	0.3382	
480 minute winter	S12	4.002	S15	7.3	0.879	0.140	0.6618	
480 minute winter	S13	5.000	S14	8.5	0.693	0.094	2.4312	
480 minute winter	S14	5.001	S15	11.0	0.821	0.122	1.5580	
480 minute winter	S15	4.003	S16	13.9	0.975	0.055	2.6341	
480 minute winter	S16	1.006	S19	33.4	0.778	0.147	2.4819	
480 minute winter	S19	1.007	S21	34.5	0.631	0.152	2.4465	
240 minute winter	Swale 4	Flow through pond	S20	20.1	0.120	0.018	56.6303	
240 minute winter	S20	7.001	FCMH1	14.5	0.425	0.045	0.7673	
240 minute winter	FCMH1	7.002	S21	2.6	0.720	0.044	0.2572	
480 minute winter	S21	1.008	S24	46.7	0.635	0.251	9.4467	
60 minute summer	S22	8.000	FCMH2	30.3	0.761	0.590	1.2256	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S23	34	18.042	0.624	54.4	0.9360	0.0000	SURCHARGED
60 minute summer	FCMH2	35	17.888	2.388	72.7	8.7794	0.0000	SURCHARGED
480 minute winter	S24	472	16.707	2.138	58.8	3.0598	0.0000	SURCHARGED
480 minute winter	S25	472	16.707	2.160	73.9	5.7974	0.0000	SURCHARGED
480 minute winter	S26	472	16.706	1.906	13.9	3.7693	0.0000	SURCHARGED
480 minute winter	S27	472	16.706	2.202	17.5	2.9788	0.0000	SURCHARGED
480 minute winter	S28	472	16.706	2.310	17.3	2.6122	0.0000	SURCHARGED
480 minute winter	FCMH3	472	16.706	2.549	85.5	648.1638	0.0000	SURCHARGED
60 minute summer	S29	34	17.924	1.424	38.4	2.6548	0.0000	FLOOD RISK
60 minute summer	S30	34	17.811	1.516	61.0	2.4249	0.0000	FLOOD RISK
60 minute summer	S31	34	17.394	1.360	87.6	2.1653	0.0000	SURCHARGED
1440 minute winter	S32	1440	16.780	0.980	2.7	31.6520	0.0000	FLOOD RISK
1440 minute winter	S33	1440	16.780	1.200	5.3	34.3732	0.0000	FLOOD RISK
1440 minute winter	S34	1440	16.780	1.363	6.2	0.8164	0.0000	FLOOD RISK
1440 minute winter	S35	1440	16.780	1.706	12.3	2.7193	0.0000	SURCHARGED
1440 minute winter	S36	1440	16.780	1.771	14.6	3.3542	0.0000	SURCHARGED
60 minute summer	S37	33	16.882	1.482	113.0	2.8813	0.0000	SURCHARGED
1440 minute winter	S38	1440	16.780	2.040	22.7	3.6577	0.0000	SURCHARGED
1440 minute winter	FCMH4	1440	16.780	2.183	23.7	603.1671	0.0000	SURCHARGED
60 minute summer	S39	34	16.131	1.631	37.7	2.8227	0.0000	SURCHARGED
60 minute summer	S40	34	16.128	1.678	86.1	3.1970	0.0000	SURCHARGED
60 minute summer	S41	34	16.118	1.694	105.3	2.7876	0.0000	SURCHARGED
60 minute summer	S42	34	16.078	2.153	211.8	4.8837	0.0000	SURCHARGED
720 minute winter	S43	705	16.052	2.307	39.7	3.7074	0.0000	SURCHARGED
720 minute winter	S44	705	16.051	2.346	43.1	3.9888	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)
60 minute summer	S23	9.001	FCMH2	50.4	1.412	0.282	0.6550	
60 minute summer	FCMH2	8.001	S24	41.9	2.381	0.114	0.4612	
480 minute winter	S24	1.009	S25	58.4	0.724	0.317	1.0663	
480 minute winter	S25	1.010	FCMH3	73.4	0.463	0.309	11.4043	
480 minute winter	S26	10.000	S27	13.6	0.445	0.174	4.1740	
480 minute winter	S27	10.001	S28	17.3	0.474	0.221	1.5130	
480 minute winter	S28	10.002	FCMH3	17.1	0.467	0.159	0.6647	
480 minute winter	FCMH3	1.011	S42	14.0	0.611	0.075	11.0283	
60 minute summer	S29	11.000	S30	34.5	0.917	0.664	0.8172	
60 minute summer	S30	11.001	S31	59.6	1.499	1.146	1.0366	
60 minute summer	S31	11.002	S35	86.4	2.172	0.829	0.8095	
1440 minute winter	S32	12.000	S33	2.7	0.294	0.024	1.5515	
1440 minute winter	S33	12.001	S34	5.2	0.412	0.058	1.7151	
1440 minute winter	S34	12.002	S35	6.2	0.550	0.047	1.3618	
1440 minute winter	S35	11.003	S36	12.3	0.414	0.087	1.4367	
1440 minute winter	S36	11.004	S38	14.5	0.433	0.103	4.2612	
60 minute summer	S37	13.000	S38	110.8	1.573	0.814	2.3984	
1440 minute winter	S38	11.005	FCMH4	22.7	0.143	0.100	4.5381	
1440 minute winter	FCMH4	11.006	S41	1.8	0.527	0.005	2.0748	
60 minute summer	S39	14.000	S40	35.6	0.429	0.306	5.9941	
60 minute summer	S40	14.001	S41	83.7	1.094	0.365	0.8163	
60 minute summer	S41	11.007	S42	106.2	0.720	0.231	3.9239	
60 minute summer	S42	1.012	S43	193.4	1.221	1.042	8.5694	
720 minute winter	S43	1.013	S44	39.5	0.683	0.212	1.8844	
720 minute winter	S44	1.014	S46	42.9	0.547	0.231	3.3825	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	S45	705	16.050	2.050	10.5	4.6810	0.0000	SURCHARGED
720 minute winter	S46	705	16.050	2.416	61.0	4.9632	0.0000	SURCHARGED
60 minute summer	S47	34	16.373	0.998	62.1	3.0700	0.0000	SURCHARGED
60 minute summer	S48	34	16.302	1.065	84.9	1.9234	0.0000	FLOOD RISK
60 minute summer	S49	34	16.237	1.109	121.3	2.5057	0.0000	SURCHARGED
60 minute summer	S50	34	16.142	1.188	164.0	2.7293	0.0000	SURCHARGED
60 minute summer	S51	34	16.068	1.217	210.5	2.8343	0.0000	SURCHARGED
720 minute winter	S52	705	16.049	1.396	24.1	3.1020	0.0000	SURCHARGED
720 minute winter	S53	705	16.049	0.749	3.0	0.6412	0.0000	SURCHARGED
720 minute winter	S54	705	16.049	0.949	4.5	0.5030	0.0000	SURCHARGED
720 minute winter	S55	705	16.049	0.849	3.8	0.8321	0.0000	SURCHARGED
720 minute winter	S56	705	16.049	1.249	33.7	333.1362	0.0000	SURCHARGED
720 minute winter	S57	705	16.049	1.530	33.5	3.9108	0.0000	SURCHARGED
60 minute summer	S58	34	16.191	0.391	32.8	0.4163	0.0000	SURCHARGED
60 minute summer	S59	34	16.083	0.563	50.1	0.3724	0.0000	SURCHARGED
720 minute winter	S60	705	16.049	1.732	38.5	3.7983	0.0000	SURCHARGED
720 minute winter	S61	705	16.049	1.928	40.3	4.2145	0.0000	SURCHARGED
60 minute summer	S62	37	16.394	1.244	46.7	7.1741	0.0000	FLOOD RISK
60 minute summer	S63	37	16.333	1.274	73.8	8.7368	0.0000	FLOOD RISK
60 minute summer	S64	35	16.120	1.240	83.4	1.9073	0.0000	SURCHARGED
720 minute winter	S65	705	16.049	1.049	12.0	100.9882	0.0000	SURCHARGED
720 minute winter	S66	705	16.049	1.257	17.2	2.5947	0.0000	SURCHARGED
60 minute summer	S67	34	16.361	1.236	24.4	0.9563	0.0000	FLOOD RISK
60 minute summer	S68	34	16.350	1.382	51.5	1.1198	0.0000	FLOOD RISK
60 minute summer	S69	34	16.334	1.566	83.2	3.0796	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	S45	15.000	S46	10.2	0.181	0.039	8.6917	
720 minute winter	S46	1.015	FCMH5	60.7	0.383	0.269	5.4687	
60 minute summer	S47	16.000	S48	58.2	0.866	0.743	1.9458	
60 minute summer	S48	16.001	S49	83.8	1.193	1.069	0.4775	
60 minute summer	S49	16.002	S50	118.7	1.277	0.840	2.1762	
60 minute summer	S50	16.003	S51	160.5	1.100	0.703	3.2508	
60 minute summer	S51	16.004	S52	206.9	1.377	0.900	3.8346	
720 minute winter	S52	16.005	S57	23.4	0.695	0.068	5.7411	
720 minute winter	S53	17.000	S54	3.0	0.606	0.033	2.1115	
720 minute winter	S54	17.001	S56	4.5	0.764	0.031	1.2487	
720 minute winter	S55	18.000	S56	3.8	0.715	0.030	2.1304	
720 minute winter	S56	17.002	S57	-23.0	0.688	-0.277	1.6318	
720 minute winter	S57	16.006	S60	31.1	0.778	0.091	8.7238	
60 minute summer	S58	19.000	S59	31.2	1.318	0.600	1.1143	
60 minute summer	S59	19.001	S60	47.0	1.872	0.481	1.1075	
720 minute winter	S60	16.007	S61	37.1	0.718	0.076	11.1119	
720 minute winter	S61	16.008	S73	40.0	0.502	0.082	9.8317	
60 minute summer	S62	20.000	S63	33.9	0.852	0.923	0.7199	
60 minute summer	S63	20.001	S64	61.1	1.535	1.667	0.8259	
60 minute summer	S64	20.002	S66	79.7	1.131	1.020	1.2461	
720 minute winter	S65	21.000	S66	-9.3	0.225	-0.064	0.8590	
720 minute winter	S66	20.003	S71	16.1	0.818	0.206	2.3120	
60 minute summer	S67	22.000	S68	22.4	0.723	0.219	1.3047	
60 minute summer	S68	22.001	S69	50.1	1.024	0.307	2.0642	
60 minute summer	S69	22.002	S70	80.9	0.919	0.495	1.5821	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	S70	34	16.297	1.700	277.3	7.3397	0.0000	SURCHARGED
60 minute summer	S71	34	16.108	1.630	285.1	2.6882	0.0000	SURCHARGED
720 minute winter	S72	705	16.049	1.621	47.1	3.7445	0.0000	SURCHARGED
720 minute winter	S73	705	16.049	2.103	85.6	4.4330	0.0000	SURCHARGED
720 minute winter	S74	705	16.049	2.248	89.3	5.0802	0.0000	SURCHARGED
720 minute winter	FCMH5	705	16.049	2.584	139.5	1703.1110	0.0000	SURCHARGED
60 minute winter	Ex MH 45	21	13.028	0.058	29.2	0.0000	0.0000	OK
240 minute winter	Swale 4_Dummy	236	17.174	0.174	0.1	0.0000	0.0000	SURCHARGED
60 minute summer	Swale 5	41	17.236	0.886	63.1	32.7497	0.0000	FLOOD RISK
60 minute summer	S18	35	17.458	1.358	54.8	0.5351	0.0000	SURCHARGED
60 minute summer	S17	39	17.244	0.964	64.4	0.4868	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)
60 minute summer	S70	22.003	S71	270.3	1.706	1.051	2.9692	
60 minute summer	S71	20.004	S72	229.2	1.591	1.002	1.5751	
720 minute winter	S72	20.005	S73	46.9	1.023	0.134	4.4827	
720 minute winter	S73	16.009	S74	85.3	0.758	0.176	8.2405	
720 minute winter	S74	16.010	FCMH5	89.1	0.316	0.182	18.5563	
720 minute winter	FCMH5	1.016	Ex MH 45	29.2	2.779	0.083	0.0526	1552.1
240 minute winter	Swale 4_Dummy	7.000	Swale 4	-0.1	-0.016	-0.010	0.0341	
60 minute summer	Swale 5	7.000_1	S17	-63.1	-1.586	-1.262	0.3009	
60 minute summer	S18	7.002_1	S22	-48.7	-1.224	-1.075	1.5679	
60 minute summer	S17	7.001_1	S18	-53.5	-1.346	-1.223	1.0067	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S1	12	16.755	1.080	17.4	1.5822	0.0000	FLOOD RISK
15 minute summer	S2	11	16.755	1.128	52.3	1.9491	0.0000	FLOOD RISK
15 minute summer	S3	12	16.740	1.202	112.0	6.5932	0.0000	SURCHARGED
15 minute summer	S4	11	16.654	1.221	141.5	2.8141	0.0000	SURCHARGED
30 minute summer	Swale 1	20	16.409	0.784	25.9	1.3600	0.0000	SURCHARGED
30 minute summer	S6	20	16.407	0.864	58.3	1.6635	0.0000	SURCHARGED
30 minute summer	S7	21	16.391	1.152	196.7	46.4463	0.0000	SURCHARGED
30 minute summer	Swale 2	20	16.290	0.815	28.5	1.4068	0.0000	SURCHARGED
30 minute summer	S8	20	16.287	0.911	45.7	1.3483	0.0000	SURCHARGED
30 minute summer	S9	21	16.277	1.125	184.0	2.3237	0.0000	SURCHARGED
15 minute summer	S10	10	16.423	0.423	44.5	0.4790	0.0000	SURCHARGED
15 minute summer	S11	10	16.231	0.457	56.7	0.2318	0.0000	SURCHARGED
15 minute summer	S12	10	16.079	0.390	67.6	0.1826	0.0000	SURCHARGED
15 minute summer	S13	10	16.133	0.308	76.8	0.5124	0.0000	SURCHARGED
30 minute summer	S14	25	16.052	0.457	93.7	0.3453	0.0000	SURCHARGED
30 minute summer	S15	25	16.046	0.674	278.4	111.5352	0.0000	SURCHARGED
30 minute summer	S16	25	16.038	1.115	194.6	1.8122	0.0000	SURCHARGED
30 minute summer	S19	27	16.001	1.156	144.1	38.0115	0.0000	SURCHARGED
30 minute summer	Swale 4	33	17.013	0.249	116.8	1.4555	0.0000	OK
30 minute summer	S20	33	17.013	1.760	103.7	2.5184	0.0000	SURCHARGED
30 minute summer	FCMH1	34	17.013	1.938	65.9	33.2873	0.0000	SURCHARGED
30 minute winter	S21	29	15.970	1.202	134.5	3.1905	0.0000	SURCHARGED
15 minute summer	S22	11	17.861	2.061	59.2	1.3146	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 summer	S1	1.000	S2	16.5	0.407	0.211	0.6735	
15 minute summer	S2	1.001	S3	53.6	0.762	0.685	1.2541	
15 minute summer	S3	1.002	S4	71.7	1.019	0.917	1.4823	
15 minute summer	S4	1.003	S7	139.4	1.979	1.782	1.6946	
30 minute summer	Swale 1	2.000	S6	22.4	0.741	0.248	0.8652	
30 minute summer	S6	2.001	S7	51.0	0.984	0.464	1.6568	
30 minute summer	S7	1.004	S9	132.2	1.199	0.935	1.8884	
30 minute summer	Swale 2	3.000	S8	28.8	0.738	0.317	1.0418	
30 minute summer	S8	3.001	S9	50.3	0.774	0.507	1.3145	
30 minute summer	S9	1.005	S16	182.0	1.650	1.289	3.3884	
15 minute summer	S10	4.000	S11	42.7	1.095	0.821	0.8991	
15 minute summer	S11	4.001	S12	55.4	1.393	1.066	0.3382	
15 minute summer	S12	4.002	S15	66.6	1.674	1.282	0.6618	
15 minute summer	S13	5.000	S14	73.5	1.123	0.812	2.4312	
30 minute summer	S14	5.001	S15	89.8	1.408	0.989	1.5580	
30 minute summer	S15	4.003	S16	-118.8	-1.121	-0.474	2.6341	
30 minute summer	S16	1.006	S19	141.4	1.021	0.621	2.4819	
30 minute summer	S19	1.007	S21	117.2	0.918	0.515	2.4465	
30 minute summer	Swale 4	Flow through pond	S20	103.7	0.281	0.091	28.3437	
30 minute summer	S20	7.001	FCMH1	65.9	0.597	0.206	0.7673	
30 minute summer	FCMH1	7.002	S21	11.8	0.672	0.202	0.2572	
30 minute winter	S21	1.008	S24	134.2	0.850	0.722	9.4467	
15 minute summer	S22	8.000	FCMH2	36.5	0.919	0.712	1.2256	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S23	11	18.157	0.739	68.0	1.1083	0.0000	SURCHARGED
15 minute summer	FCMH2	11	17.935	2.435	94.3	8.9548	0.0000	SURCHARGED
30 minute winter	S24	30	15.873	1.304	174.0	1.8661	0.0000	SURCHARGED
30 minute winter	S25	30	15.830	1.283	270.3	3.4441	0.0000	SURCHARGED
15 minute summer	S26	10	16.601	1.801	125.6	3.5622	0.0000	SURCHARGED
30 minute winter	S27	53	15.818	1.314	102.9	1.7777	0.0000	SURCHARGED
30 minute winter	S28	53	15.817	1.421	101.7	1.6076	0.0000	SURCHARGED
30 minute winter	FCMH3	53	15.817	1.660	375.3	439.3274	0.0000	SURCHARGED
15 minute summer	S29	11	18.000	1.500	48.0	2.7960	0.5504	FLOOD
15 minute summer	S30	11	17.904	1.609	70.2	2.5744	0.0000	FLOOD RISK
15 minute summer	S31	11	17.472	1.438	97.6	2.2886	0.0000	SURCHARGED
15 minute summer	S32	13	16.653	0.853	71.6	17.5062	0.0000	FLOOD RISK
15 minute summer	S33	12	16.636	1.056	95.8	16.8920	0.0000	FLOOD RISK
15 minute summer	S34	11	16.636	1.219	71.7	0.7304	0.0000	SURCHARGED
15 minute summer	S35	10	16.639	1.565	118.5	2.4946	0.0000	SURCHARGED
15 minute summer	S36	10	16.596	1.587	147.6	3.0058	0.0000	SURCHARGED
15 minute summer	S37	10	17.028	1.628	141.3	3.1644	0.0000	SURCHARGED
30 minute summer	S38	18	16.372	1.632	285.8	2.9254	0.0000	SURCHARGED
30 minute summer	FCMH4	36	16.338	1.741	303.6	232.8806	0.0000	SURCHARGED
30 minute summer	S39	18	15.932	1.432	89.3	2.4780	0.0000	SURCHARGED
15 minute summer	S40	11	15.985	1.535	176.3	2.9233	0.0000	SURCHARGED
15 minute summer	S41	11	15.997	1.573	115.6	2.5883	0.0000	SURCHARGED
15 minute summer	S42	11	15.958	2.033	245.8	4.6114	0.0000	SURCHARGED
15 minute summer	S43	11	15.648	1.903	236.5	3.0574	0.0000	SURCHARGED
15 minute summer	S44	11	15.523	1.818	266.5	3.0912	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 summer	S23	9.001	FCMH2	63.2	1.764	0.354	0.6550	
15 minute summer	FCMH2	8.001	S24	44.7	2.867	0.122	0.4610	
30 minute winter	S24	1.009	S25	173.9	1.097	0.945	1.0663	
30 minute winter	S25	1.010	FCMH3	267.6	1.689	1.127	11.4043	
15 minute summer	S26	10.000	S27	119.0	1.690	1.520	4.1740	
30 minute winter	S27	10.001	S28	101.7	1.444	1.301	1.5130	
30 minute winter	S28	10.002	FCMH3	100.8	1.431	0.934	0.6647	
30 minute winter	FCMH3	1.011	S42	-39.2	0.403	-0.211	11.0283	
15 minute summer	S29	11.000	S30	35.4	0.951	0.682	0.8172	
15 minute summer	S30	11.001	S31	62.0	1.559	1.192	1.0366	
15 minute summer	S31	11.002	S35	94.0	2.364	0.902	0.8095	
15 minute summer	S32	12.000	S33	53.0	0.790	0.477	1.5515	
15 minute summer	S33	12.001	S34	71.7	1.031	0.792	1.7151	
15 minute summer	S34	12.002	S35	72.0	1.319	0.550	1.3618	
15 minute summer	S35	11.003	S36	120.6	1.094	0.856	1.4367	
15 minute summer	S36	11.004	S38	143.9	1.305	1.018	4.2612	
15 minute summer	S37	13.000	S38	139.6	1.982	1.025	2.3984	
30 minute summer	S38	11.005	FCMH4	284.1	1.793	1.247	4.5381	
30 minute summer	FCMH4	11.006	S41	25.1	0.243	0.068	2.0748	
30 minute summer	S39	14.000	S40	51.4	0.499	0.442	5.9941	
15 minute summer	S40	14.001	S41	101.3	1.474	0.442	0.8163	
15 minute summer	S41	11.007	S42	115.2	0.850	0.250	3.9239	
15 minute summer	S42	1.012	S43	212.7	1.343	1.146	8.5694	
15 minute summer	S43	1.013	S44	229.7	1.450	1.231	1.8844	
15 minute summer	S44	1.014	S46	259.5	1.638	1.398	3.3825	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S45	11	15.361	1.361	130.0	3.1068	0.0000	SURCHARGED
15 minute summer	S46	11	15.301	1.667	446.7	3.4247	0.0000	SURCHARGED
15 minute summer	S47	11	16.384	1.009	77.6	3.8484	0.0000	SURCHARGED
15 minute summer	S48	11	16.330	1.093	108.6	1.9735	0.0000	FLOOD RISK
15 minute summer	S49	11	16.269	1.141	154.8	2.5788	0.0000	SURCHARGED
15 minute summer	S50	11	16.167	1.213	203.6	2.7880	0.0000	SURCHARGED
15 minute summer	S51	11	16.076	1.225	255.4	2.8529	0.0000	SURCHARGED
15 minute summer	S52	11	15.903	1.250	281.1	2.7769	0.0000	SURCHARGED
15 minute summer	S53	10	15.440	0.140	37.5	0.1200	0.0000	OK
15 minute summer	S54	9	15.245	0.145	55.8	0.0770	0.0000	OK
15 minute summer	S55	9	15.340	0.140	47.1	0.1372	0.0000	OK
30 minute summer	S56	24	15.198	0.398	281.7	106.2701	0.0000	SURCHARGED
15 minute summer	S57	11	15.794	1.275	323.3	3.2580	0.0000	SURCHARGED
15 minute summer	S58	11	16.269	0.469	41.0	0.4997	0.0000	SURCHARGED
15 minute summer	S59	11	16.124	0.604	64.1	0.3992	0.0000	SURCHARGED
15 minute summer	S60	11	15.750	1.433	283.4	3.1428	0.0000	SURCHARGED
15 minute summer	S61	11	15.694	1.573	276.3	3.4382	0.0000	SURCHARGED
15 minute summer	S62	12	16.371	1.221	58.4	6.5666	0.0000	FLOOD RISK
15 minute summer	S63	12	16.293	1.234	84.9	6.7423	0.0000	FLOOD RISK
15 minute summer	S64	11	16.068	1.188	100.4	1.8277	0.0000	SURCHARGED
30 minute summer	S65	23	15.669	0.669	210.8	64.2692	0.0000	SURCHARGED
15 minute summer	S66	11	15.973	1.181	214.4	2.4376	0.0000	SURCHARGED
15 minute summer	S67	11	16.508	1.383	30.5	1.0702	0.0000	FLOOD RISK
15 minute summer	S68	11	16.494	1.526	61.7	1.2357	0.0000	FLOOD RISK
15 minute summer	S69	11	16.468	1.700	98.2	3.3426	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	S45	15.000	S46	107.6	0.714	0.408	8.6917	
15 minute summer	S46	1.015	FCMH5	442.3	2.792	1.961	5.4687	
15 minute summer	S47	16.000	S48	72.3	1.027	0.924	1.9458	
15 minute summer	S48	16.001	S49	101.6	1.443	1.295	0.4775	
15 minute summer	S49	16.002	S50	145.2	1.320	1.027	2.1762	
15 minute summer	S50	16.003	S51	190.9	1.220	0.835	3.2508	
15 minute summer	S51	16.004	S52	244.5	1.590	1.063	3.8346	
15 minute summer	S52	16.005	S57	259.9	1.251	0.757	5.7411	
15 minute summer	S53	17.000	S54	37.5	1.158	0.414	0.9877	
15 minute summer	S54	17.001	S56	56.8	2.266	0.392	0.7535	
15 minute summer	S55	18.000	S56	47.8	2.100	0.374	1.2550	
30 minute summer	S56	17.002	S57	-167.4	-2.545	-2.017	1.6318	
15 minute summer	S57	16.006	S60	197.6	1.352	0.578	8.7238	
15 minute summer	S58	19.000	S59	39.7	1.360	0.764	1.1143	
15 minute summer	S59	19.001	S60	57.3	2.265	0.586	1.1075	
15 minute summer	S60	16.007	S61	237.4	1.298	0.489	11.1119	
15 minute summer	S61	16.008	S73	277.5	0.985	0.571	9.8317	
15 minute summer	S62	20.000	S63	47.0	1.182	1.280	0.7199	
15 minute summer	S63	20.001	S64	72.9	1.834	1.991	0.8259	
15 minute summer	S64	20.002	S66	88.8	1.261	1.137	1.2461	
30 minute summer	S65	21.000	S66	-181.6	-2.680	-1.249	0.8590	
15 minute summer	S66	20.003	S71	108.6	1.542	1.388	2.3120	
15 minute summer	S67	22.000	S68	26.9	0.828	0.263	1.3047	
15 minute summer	S68	22.001	S69	59.4	1.056	0.364	2.0642	
15 minute summer	S69	22.002	S70	106.7	0.968	0.653	1.5821	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S70	11	16.411	1.814	358.8	7.8327	0.0000	FLOOD RISK
15 minute summer	S71	11	16.137	1.659	344.4	2.7365	0.0000	SURCHARGED
15 minute summer	S72	11	16.007	1.579	344.8	3.6473	0.0000	SURCHARGED
15 minute summer	S73	11	15.616	1.670	642.1	3.5196	0.0000	SURCHARGED
15 minute summer	S74	11	15.241	1.439	692.1	3.2533	0.0000	SURCHARGED
30 minute winter	FCMH5	47	15.053	1.588	870.8	775.7747	0.0000	SURCHARGED
30 minute summer	Ex MH 45	15	13.028	0.058	29.2	0.0000	0.0000	OK
30 minute summer	Swale 4_Dummy	33	17.013	0.013	0.1	0.0000	0.0000	OK
30 minute summer	Swale 5	24	17.021	0.671	62.2	20.4776	0.0000	FLOOD RISK
15 minute summer	S18	12	17.378	1.278	61.9	0.5036	0.0000	SURCHARGED
30 minute summer	S17	22	17.036	0.756	64.6	0.3816	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 summer	S70	22.003	S71	325.2	2.053	1.264	2.9692	
15 minute summer	S71	20.004	S72	279.3	1.763	1.221	1.5751	
15 minute summer	S72	20.005	S73	330.3	2.127	0.944	4.4827	
15 minute summer	S73	16.009	S74	636.5	2.260	1.312	8.2405	
15 minute summer	S74	16.010	FCMH5	684.0	2.429	1.394	18.5563	
30 minute winter	FCMH5	1.016	Ex MH 45	29.2	2.778	0.083	0.0526	390.8
30 minute summer	Swale 4_Dummy	7.000	Swale 4	-0.1	-0.022	-0.010	0.0183	
30 minute summer	Swale 5	7.000_1	S17	-62.2	-1.563	-1.244	0.3009	
15 minute summer	S18	7.002_1	S22	-54.7	-1.376	-1.208	1.5679	
30 minute summer	S17	7.001_1	S18	-52.7	-1.325	-1.205	1.0067	