

Simulation Settings

Rainfall Methodology	FEH-13	Analysis Speed	Detailed	Starting Level (m)	
Rainfall Events	Singular	Skip Steady State	x	Check Discharge Rate(s)	x
Summer CV	1.000	Drain Down Time (mins)	2000	Check Discharge Volume	x
Winter CV	1.000	Additional Storage (m ³ /ha)	0.0		

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440
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Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
10	0	0	0
30	0	0	0
30	40	0	0
100	0	0	0
100	40	0	0

Design Settings

Rainfall Methodology	FEH-13	Minimum Velocity (m/s)	1.00
Return Period (years)	10	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	0.200
CV	1.000	Preferred Cover Depth (m)	1.200
Time of Entry (mins)	5.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	x
Maximum Rainfall (mm/hr)	50.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)	Invert Level (m)
SW1	0.028	5.00	144.419	1350	538333.349	236219.566	1.425	142.994
SW2	0.028	5.00	143.846	1350	538336.790	236190.866	1.905	141.941
SW3	0.087	5.00	143.292	1350	538339.400	236168.581	2.253	141.039
SW4	0.049	5.00	143.647	1350	538337.711	236182.844	2.656	140.991
SW5	0.067	5.00	143.841	1350	538368.937	236218.514	1.378	142.463
SW6	0.050	5.00	143.500	1350	538369.376	236203.718	1.680	141.820
SW7	0.120	5.00	143.116	1350	538371.451	236186.870	2.238	140.878
SW8	0.134	5.00	143.338	1350	538419.482	236240.399	1.635	141.703
SW9	0.053	5.00	142.548	1350	538425.401	236193.121	1.970	140.578
SW10	0.181	5.00	142.446	1350	538442.783	236194.715	1.987	140.459
SW11		5.00	141.580	1350	538484.286	236165.432	1.498	140.082
SW12	0.023	5.00	141.877	1350	538492.419	236206.897	1.648	140.229
SW13	0.040	5.00	141.729	1350	538488.346	236186.195	1.860	139.869
SW14	0.025	5.00	141.263	1350	538519.408	236180.332	1.473	139.790
SW15			141.500	1350	538530.025	236192.450	1.907	139.593
SW16	0.122	5.00	145.103	1350	538372.108	236316.954	1.500	143.603
SW17	0.037	5.00	144.790	1350	538364.187	236278.217	1.768	143.022
SW18	0.027	5.00	144.697	1350	538363.508	236266.107	1.715	142.982
SW19	0.064	5.00	144.703	1350	538302.113	236237.897	1.417	143.286
SW20			144.772	1350	538314.309	236238.786	1.542	143.230
SW21	0.041	5.00	145.234	1350	538331.617	236266.797	1.521	143.713
SW22	0.081	5.00	144.928	1350	538333.978	236245.836	1.802	143.126
SW23	0.173	5.00	144.628	1350	538365.281	236250.111	1.810	142.818
SW24	0.043	5.00	143.403	1350	538435.913	236258.827	1.850	141.553
SW25	0.142	5.00	143.185	1350	538448.739	236258.753	1.950	141.235
SW26	0.037	5.00	142.092	1350	538497.148	236223.123	1.273	140.819
SW27	0.021	5.00	142.255	1350	538502.074	236248.663	1.791	140.464
SW28	0.044	5.00	142.238	1350	538527.265	236266.016	1.575	140.663
SW29	0.018	5.00	141.888	1350	538522.922	236244.738	2.088	139.800
SW30			141.500	1350	538536.553	236234.025	1.907	139.593
SW31A		5.00	141.500	1350	538539.041	236235.435	1.907	139.593
SW31B			141.500	1350	538543.019	236264.503	2.000	139.500
SW32A	0.069	5.00	144.781	1350	538408.700	236313.408	2.558	142.223
SW32B	0.018	5.00	144.449	1200	538428.041	236309.734	2.750	141.699
SW33	0.082	5.00	144.135	1200	538446.366	236308.463	2.510	141.625
SW34	0.032	5.00	143.304	1200	538495.148	236306.861	1.874	141.430
SW35	0.008	5.00	143.075	1350	538508.640	236303.967	1.700	141.375
SW36	0.016	5.00	142.821	1350	538522.029	236297.134	1.500	141.321
SW37	0.014	5.00	142.635	1350	538528.491	236288.597	1.425	141.210
SW38			142.439	1200	538530.402	236279.174	1.725	140.714
SW39			141.500	1200	538543.070	236281.181	1.999	139.501
SW40	0.041	5.00	141.673	1350	538583.453	236298.561	1.200	140.473

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)	Invert Level (m)
SW41			141.500	1350	538577.763	236301.813	1.100	140.400
SW42	0.039	5.00	141.888	1350	538576.067	236267.231	1.300	140.588
SW43			141.500	1350	538568.727	236267.842	1.100	140.400
SW44		5.00	141.500	1350	538566.280	236258.214	1.100	140.400
SW45			141.525	1350	538560.662	236254.565	1.335	140.190
SW46			141.611	1350	538549.147	236255.444	1.777	139.834
SW47			141.500	1350	538544.968	236264.490	1.999	139.501
SW48		5.00	141.500	1200	538517.970	236310.818	2.000	139.500
SW49			143.006	1350	538499.738	236312.764	3.566	139.440

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	SW1	SW2	28.906	0.600	142.994	141.941	1.053	27.5	225	5.19	50.0
1.001	SW2	SW4	8.075	0.600	141.941	141.216	0.725	11.1	225	5.23	50.0
2.000	SW3	SW4	14.362	0.600	141.039	140.991	0.048	299.2	450	5.20	50.0
1.002	SW4	SW7	33.979	0.600	140.991	140.878	0.113	300.7	450	5.71	50.0
3.000	SW5	SW6	14.803	0.600	142.463	141.820	0.643	23.0	300	5.07	50.0
3.001	SW6	SW7	16.975	0.600	141.820	140.878	0.942	18.0	300	5.15	50.0
1.003	SW7	SW9	54.311	0.600	140.878	140.653	0.225	241.4	450	6.41	50.0
4.000	SW8	SW9	47.647	0.600	141.703	140.772	0.931	51.2	375	5.31	50.0
1.004	SW9	SW10	17.455	0.600	140.578	140.459	0.119	146.7	450	6.58	50.0
1.005	SW10	SW13	46.353	0.600	140.459	139.869	0.590	78.6	525	6.89	50.0
5.000	SW11	SW13	21.156	0.600	140.082	140.023	0.059	358.6	375	5.37	50.0
6.000	SW12	SW13	21.098	0.600	140.229	140.124	0.105	200.9	225	5.38	50.0
1.006	SW13	SW14	31.610	0.600	139.869	139.790	0.079	400.1	525	7.36	50.0
1.007	SW14	SW15	16.111	0.600	139.790	139.593	0.197	81.8	525	7.47	50.0
7.000	SW16	SW17	39.539	0.600	143.603	143.090	0.513	77.1	300	5.37	50.0
7.001	SW17	SW18	12.129	0.600	143.022	142.982	0.040	303.2	375	5.56	50.0
7.002	SW18	SW23	16.094	0.600	142.982	142.928	0.054	298.0	375	5.82	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	2.506	99.7	5.0	1.200	1.680	0.028	0.0	34	1.315
1.001	3.942	156.8	10.2	1.680	2.206	0.056	0.0	38	2.231
2.000	1.170	186.1	15.6	1.803	2.206	0.087	0.0	87	0.721
1.002	1.167	185.6	34.7	2.206	1.788	0.192	0.0	131	0.900
3.000	3.290	232.6	12.2	1.078	1.380	0.067	0.0	46	1.758
3.001	3.721	263.0	21.3	1.380	1.938	0.118	0.0	57	2.263
1.003	1.304	207.4	77.5	1.788	1.445	0.429	0.0	190	1.213
4.000	2.537	280.2	24.3	1.260	1.401	0.134	0.0	74	1.574
1.004	1.676	266.6	111.5	1.520	1.537	0.617	0.0	203	1.604
1.005	2.528	547.3	144.2	1.462	1.335	0.798	0.0	183	2.146
5.000	0.951	105.0	0.0	1.123	1.331	0.000	0.0	0	0.000
6.000	0.919	36.5	4.1	1.423	1.380	0.023	0.0	51	0.615
1.006	1.113	241.0	155.6	1.335	0.948	0.861	0.0	308	1.181
1.007	2.478	536.4	160.1	0.948	1.382	0.886	0.0	196	2.174
7.000	1.792	126.7	22.1	1.200	1.400	0.122	0.0	84	1.354
7.001	1.035	114.3	28.8	1.393	1.340	0.159	0.0	128	0.867
7.002	1.044	115.3	33.7	1.340	1.325	0.187	0.0	139	0.911

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
8.000	SW19	SW20	12.228	0.600	143.286	143.230	0.056	218.4	300	5.19	50.0
8.001	SW20	SW22	20.894	0.600	143.230	143.126	0.104	200.9	300	5.51	50.0
9.000	SW21	SW22	21.093	0.600	143.713	143.286	0.427	49.4	150	5.25	50.0
8.002	SW22	SW23	31.594	0.600	143.126	142.968	0.158	200.0	300	5.98	50.0
7.003	SW23	SW24	71.168	0.600	142.818	141.553	1.265	56.3	450	6.42	50.0
7.004	SW24	SW25	12.826	0.600	141.553	141.235	0.318	40.3	450	6.49	50.0
7.005	SW25	SW27	54.281	0.600	141.235	140.539	0.696	78.0	450	6.88	50.0
10.000	SW26	SW27	26.011	0.600	140.819	140.689	0.130	200.1	225	5.47	50.0
7.006	SW27	SW29	21.214	0.600	140.464	139.800	0.664	31.9	450	6.98	50.0
11.000	SW28	SW29	21.717	0.600	140.663	140.025	0.638	34.0	225	5.16	50.0
7.007	SW29	SW30	17.337	0.600	139.800	139.593	0.207	83.8	450	7.11	50.0
1.009	SW31A	SW31B	29.339	0.600	139.593	139.500	0.093	315.5	450	5.43	50.0
12.000	SW32A	SW32B	19.687	0.600	142.223	141.774	0.449	43.8	225	5.17	50.0
12.001	SW32B	SW33	18.369	0.600	141.699	141.625	0.074	248.2	300	5.47	50.0
12.002	SW33	SW34	48.808	0.600	141.625	141.430	0.195	250.3	300	6.30	50.0
12.003	SW34	SW35	13.799	0.600	141.430	141.375	0.055	250.9	300	6.53	50.0
12.004	SW35	SW36	15.032	0.600	141.375	141.321	0.054	278.4	300	6.80	50.0
12.005	SW36	SW37	10.707	0.600	141.321	141.210	0.111	96.5	300	6.91	50.0
12.006	SW37	SW38	9.615	0.600	141.210	140.714	0.496	19.4	300	6.95	50.0
12.007	SW38	SW39	12.826	0.600	140.714	139.575	1.139	11.3	300	7.00	50.0
13.000	SW40	SW41	6.554	0.600	140.473	140.420	0.053	123.7	150	5.12	50.0
14.000	SW42	SW43	7.365	0.600	140.588	140.410	0.178	41.4	150	5.08	50.0
13.002	SW44	SW45	6.699	0.600	140.400	140.190	0.210	31.9	375	5.03	50.0
13.003	SW45	SW46	11.548	0.600	140.190	139.834	0.356	32.4	375	5.10	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
8.000	1.060	74.9	11.6	1.117	1.242	0.064	0.0	79	0.775
8.001	1.105	78.1	11.6	1.242	1.502	0.064	0.0	78	0.798
9.000	1.435	25.4	7.4	1.371	1.492	0.041	0.0	55	1.246
8.002	1.108	78.3	33.5	1.502	1.360	0.185	0.0	137	1.066
7.003	2.714	431.7	98.4	1.360	1.400	0.545	0.0	145	2.218
7.004	3.208	510.2	106.1	1.400	1.500	0.587	0.0	138	2.556
7.005	2.303	366.4	131.8	1.500	1.266	0.729	0.0	186	2.121
10.000	0.920	36.6	6.7	1.048	1.341	0.037	0.0	65	0.702
7.006	3.606	573.5	142.3	1.341	1.638	0.788	0.0	152	3.010
11.000	2.250	89.4	7.9	1.350	1.638	0.044	0.0	45	1.405
7.007	2.222	353.4	153.5	1.638	1.457	0.849	0.0	207	2.147
1.009	1.139	181.1	0.0	1.457	1.550	0.000	0.0	0	0.000
12.000	1.981	78.7	12.5	2.333	2.450	0.069	0.0	60	1.455
12.001	0.993	70.2	15.7	2.450	2.210	0.087	0.0	96	0.803
12.002	0.989	69.9	30.4	2.210	1.574	0.168	0.0	139	0.956
12.003	0.988	69.8	36.2	1.574	1.400	0.200	0.0	153	0.996
12.004	0.937	66.2	37.6	1.400	1.200	0.208	0.0	162	0.966
12.005	1.601	113.2	40.5	1.200	1.125	0.224	0.0	124	1.472
12.006	3.587	253.5	43.0	1.125	1.425	0.238	0.0	83	2.692
12.007	4.710	332.9	43.0	1.425	1.625	0.238	0.0	72	3.281
13.000	0.902	15.9	7.5	1.050	0.930	0.041	0.0	72	0.889
14.000	1.569	27.7	7.1	1.150	0.940	0.039	0.0	52	1.318
13.002	3.217	355.3	0.0	0.725	0.960	0.000	0.0	0	0.000
13.003	3.190	352.4	0.0	0.960	1.402	0.000	0.0	0	0.000

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
13.004	SW46	SW47	9.965	0.600	139.834	139.520	0.314	31.7	375	5.15	50.0
1.011	SW48	SW49	18.336	0.600	139.500	139.440	0.060	305.6	300	5.34	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
13.004	3.226	356.3	0.0	1.402	1.605	0.000	0.0	0	0.000
1.011	0.894	63.2	0.0	1.700	3.266	0.000	0.0	0	0.000

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	28.906	27.5	225	Circular	144.419	142.994	1.200	143.846	141.941	1.680
1.001	8.075	11.1	225	Circular	143.846	141.941	1.680	143.647	141.216	2.206
2.000	14.362	299.2	450	Circular	143.292	141.039	1.803	143.647	140.991	2.206
1.002	33.979	300.7	450	Circular	143.647	140.991	2.206	143.116	140.878	1.788
3.000	14.803	23.0	300	Circular	143.841	142.463	1.078	143.500	141.820	1.380
3.001	16.975	18.0	300	Circular	143.500	141.820	1.380	143.116	140.878	1.938
1.003	54.311	241.4	450	Circular	143.116	140.878	1.788	142.548	140.653	1.445
4.000	47.647	51.2	375	Circular	143.338	141.703	1.260	142.548	140.772	1.401
1.004	17.455	146.7	450	Circular	142.548	140.578	1.520	142.446	140.459	1.537
1.005	46.353	78.6	525	Circular	142.446	140.459	1.462	141.729	139.869	1.335
5.000	21.156	358.6	375	Circular	141.580	140.082	1.123	141.729	140.023	1.331
6.000	21.098	200.9	225	Circular	141.877	140.229	1.423	141.729	140.124	1.380
1.006	31.610	400.1	525	Circular	141.729	139.869	1.335	141.263	139.790	0.948
1.007	16.111	81.8	525	Circular	141.263	139.790	0.948	141.500	139.593	1.382
7.000	39.539	77.1	300	Circular	145.103	143.603	1.200	144.790	143.090	1.400
7.001	12.129	303.2	375	Circular	144.790	143.022	1.393	144.697	142.982	1.340
7.002	16.094	298.0	375	Circular	144.697	142.982	1.340	144.628	142.928	1.325
8.000	12.228	218.4	300	Circular	144.703	143.286	1.117	144.772	143.230	1.242

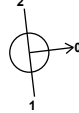
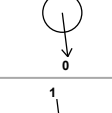
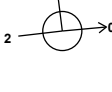
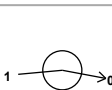
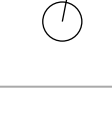
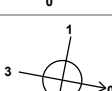
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	SW1	1350	Manhole	Adoptable	SW2	1350	Manhole	Adoptable
1.001	SW2	1350	Manhole	Adoptable	SW4	1350	Manhole	Adoptable
2.000	SW3	1350	Manhole	Adoptable	SW4	1350	Manhole	Adoptable
1.002	SW4	1350	Manhole	Adoptable	SW7	1350	Manhole	Adoptable
3.000	SW5	1350	Manhole	Adoptable	SW6	1350	Manhole	Adoptable
3.001	SW6	1350	Manhole	Adoptable	SW7	1350	Manhole	Adoptable
1.003	SW7	1350	Manhole	Adoptable	SW9	1350	Manhole	Adoptable
4.000	SW8	1350	Manhole	Adoptable	SW9	1350	Manhole	Adoptable
1.004	SW9	1350	Manhole	Adoptable	SW10	1350	Manhole	Adoptable
1.005	SW10	1350	Manhole	Adoptable	SW13	1350	Manhole	Adoptable
5.000	SW11	1350	Manhole	Adoptable	SW13	1350	Manhole	Adoptable
6.000	SW12	1350	Manhole	Adoptable	SW13	1350	Manhole	Adoptable
1.006	SW13	1350	Manhole	Adoptable	SW14	1350	Manhole	Adoptable
1.007	SW14	1350	Manhole	Adoptable	SW15	1350	Manhole	Adoptable
7.000	SW16	1350	Manhole	Adoptable	SW17	1350	Manhole	Adoptable
7.001	SW17	1350	Manhole	Adoptable	SW18	1350	Manhole	Adoptable
7.002	SW18	1350	Manhole	Adoptable	SW23	1350	Manhole	Adoptable
8.000	SW19	1350	Manhole	Adoptable	SW20	1350	Manhole	Adoptable

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
8.001	20.894	200.9	300	Circular	144.772	143.230	1.242	144.928	143.126	1.502
9.000	21.093	49.4	150	Circular	145.234	143.713	1.371	144.928	143.286	1.492
8.002	31.594	200.0	300	Circular	144.928	143.126	1.502	144.628	142.968	1.360
7.003	71.168	56.3	450	Circular	144.628	142.818	1.360	143.403	141.553	1.400
7.004	12.826	40.3	450	Circular	143.403	141.553	1.400	143.185	141.235	1.500
7.005	54.281	78.0	450	Circular	143.185	141.235	1.500	142.255	140.539	1.266
10.000	26.011	200.1	225	Circular	142.092	140.819	1.048	142.255	140.689	1.341
7.006	21.214	31.9	450	Circular	142.255	140.464	1.341	141.888	139.800	1.638
11.000	21.717	34.0	225	Circular	142.238	140.663	1.350	141.888	140.025	1.638
7.007	17.337	83.8	450	Circular	141.888	139.800	1.638	141.500	139.593	1.457
1.009	29.339	315.5	450	Circular	141.500	139.593	1.457	141.500	139.500	1.550
12.000	19.687	43.8	225	Circular	144.781	142.223	2.333	144.449	141.774	2.450
12.001	18.369	248.2	300	Circular	144.449	141.699	2.450	144.135	141.625	2.210
12.002	48.808	250.3	300	Circular	144.135	141.625	2.210	143.304	141.430	1.574
12.003	13.799	250.9	300	Circular	143.304	141.430	1.574	143.075	141.375	1.400
12.004	15.032	278.4	300	Circular	143.075	141.375	1.400	142.821	141.321	1.200
12.005	10.707	96.5	300	Circular	142.821	141.321	1.200	142.635	141.210	1.125
12.006	9.615	19.4	300	Circular	142.635	141.210	1.125	142.439	140.714	1.425
12.007	12.826	11.3	300	Circular	142.439	140.714	1.425	141.500	139.575	1.625
13.000	6.554	123.7	150	Circular	141.673	140.473	1.050	141.500	140.420	0.930
14.000	7.365	41.4	150	Circular	141.888	140.588	1.150	141.500	140.410	0.940
13.002	6.699	31.9	375	Circular	141.500	140.400	0.725	141.525	140.190	0.960
13.003	11.548	32.4	375	Circular	141.525	140.190	0.960	141.611	139.834	1.402
13.004	9.965	31.7	375	Circular	141.611	139.834	1.402	141.500	139.520	1.605
1.011	18.336	305.6	300	Circular	141.500	139.500	1.700	143.006	139.440	3.266

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
8.001	SW20	1350	Manhole	Adoptable	SW22	1350	Manhole	Adoptable
9.000	SW21	1350	Manhole	Adoptable	SW22	1350	Manhole	Adoptable
8.002	SW22	1350	Manhole	Adoptable	SW23	1350	Manhole	Adoptable
7.003	SW23	1350	Manhole	Adoptable	SW24	1350	Manhole	Adoptable
7.004	SW24	1350	Manhole	Adoptable	SW25	1350	Manhole	Adoptable
7.005	SW25	1350	Manhole	Adoptable	SW27	1350	Manhole	Adoptable
10.000	SW26	1350	Manhole	Adoptable	SW27	1350	Manhole	Adoptable
7.006	SW27	1350	Manhole	Adoptable	SW29	1350	Manhole	Adoptable
11.000	SW28	1350	Manhole	Adoptable	SW29	1350	Manhole	Adoptable
7.007	SW29	1350	Manhole	Adoptable	SW30	1350	Manhole	Adoptable
1.009	SW31A	1350	Manhole	Adoptable	SW31B	1350	Manhole	Adoptable
12.000	SW32A	1350	Manhole	Adoptable	SW32B	1200	Manhole	Adoptable
12.001	SW32B	1200	Manhole	Adoptable	SW33	1200	Manhole	Adoptable
12.002	SW33	1200	Manhole	Adoptable	SW34	1200	Manhole	Adoptable
12.003	SW34	1200	Manhole	Adoptable	SW35	1350	Manhole	Adoptable
12.004	SW35	1350	Manhole	Adoptable	SW36	1350	Manhole	Adoptable
12.005	SW36	1350	Manhole	Adoptable	SW37	1350	Manhole	Adoptable
12.006	SW37	1350	Manhole	Adoptable	SW38	1200	Manhole	Adoptable
12.007	SW38	1200	Manhole	Adoptable	SW39	1200	Manhole	Adoptable
13.000	SW40	1350	Manhole	Adoptable	SW41	1350	Manhole	Adoptable
14.000	SW42	1350	Manhole	Adoptable	SW43	1350	Manhole	Adoptable
13.002	SW44	1350	Manhole	Adoptable	SW45	1350	Manhole	Adoptable
13.003	SW45	1350	Manhole	Adoptable	SW46	1350	Manhole	Adoptable
13.004	SW46	1350	Manhole	Adoptable	SW47	1350	Manhole	Adoptable
1.011	SW48	1200	Manhole	Adoptable	SW49	1350	Manhole	Adoptable

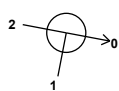
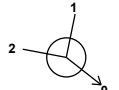
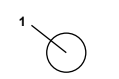
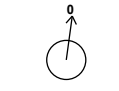
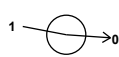
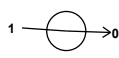
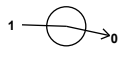
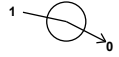
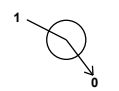
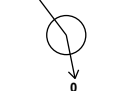
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW1	538333.349	236219.566	144.419	1.425	1350		0	1.000	142.994	225
SW2	538336.790	236190.866	143.846	1.905	1350	1 	1	1.000	141.941	225
							0	1.001	141.941	225
SW3	538339.400	236168.581	143.292	2.253	1350	0 	0	2.000	141.039	450
SW4	538337.711	236182.844	143.647	2.656	1350	2 	1	2.000	140.991	450
						2 	2	1.001	141.216	225
						1 	0	1.002	140.991	450
SW5	538368.937	236218.514	143.841	1.378	1350		0	3.000	142.463	300
SW6	538369.376	236203.718	143.500	1.680	1350	1 	1	3.000	141.820	300
							0	3.001	141.820	300
SW7	538371.451	236186.870	143.116	2.238	1350	1 	1	3.001	140.878	300
						2 	2	1.002	140.878	450
							0	1.003	140.878	450
SW8	538419.482	236240.399	143.338	1.635	1350		0	4.000	141.703	375
SW9	538425.401	236193.121	142.548	1.970	1350	1 	1	4.000	140.772	375
						2 	2	1.003	140.653	450
							0	1.004	140.578	450
SW10	538442.783	236194.715	142.446	1.987	1350		1	1.004	140.459	450
						1	0	1.005	140.459	525
SW11	538484.286	236165.432	141.580	1.498	1350	0	0	5.000	140.082	375
SW12	538492.419	236206.897	141.877	1.648	1350		0	6.000	140.229	225
SW13	538488.346	236186.195	141.729	1.860	1350	1	1	6.000	140.124	225
						3	2	5.000	140.023	375
						2	3	1.005	139.869	525
						2	0	1.006	139.869	525

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW14	538519.408	236180.332	141.263	1.473	1350	1	1	1.006	139.790	525
							0	1.007	139.790	525
SW15	538530.025	236192.450	141.500	1.907	1350	1	1	1.007	139.593	525
SW16	538372.108	236316.954	145.103	1.500	1350	0	0	7.000	143.603	300
SW17	538364.187	236278.217	144.790	1.768	1350	1	1	7.000	143.090	300
							0	7.001	143.022	375
SW18	538363.508	236266.107	144.697	1.715	1350	1	1	7.001	142.982	375
							0	7.002	142.982	375
SW19	538302.113	236237.897	144.703	1.417	1350	0	0	8.000	143.286	300
SW20	538314.309	236238.786	144.772	1.542	1350	1	1	8.000	143.230	300
							0	8.001	143.230	300
SW21	538331.617	236266.797	145.234	1.521	1350	0	0	9.000	143.713	150
SW22	538333.978	236245.836	144.928	1.802	1350	1	1	9.000	143.286	150
							2	8.001	143.126	300
							0	8.002	143.126	300
SW23	538365.281	236250.111	144.628	1.810	1350	2	1	8.002	142.968	300
							2	7.002	142.928	375
							0	7.003	142.818	450
SW24	538435.913	236258.827	143.403	1.850	1350	1	1	7.003	141.553	450
							0	7.004	141.553	450
SW25	538448.739	236258.753	143.185	1.950	1350	1	1	7.004	141.235	450
							0	7.005	141.235	450
SW26	538497.148	236223.123	142.092	1.273	1350	0	0	10.000	140.819	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW27	538502.074	236248.663	142.255	1.791	1350		1	10.000	140.689	225
							2	7.005	140.539	450
							0	7.006	140.464	450
SW28	538527.265	236266.016	142.238	1.575	1350		0	11.000	140.663	225
SW29	538522.922	236244.738	141.888	2.088	1350		1	11.000	140.025	225
							2	7.006	139.800	450
							0	7.007	139.800	450
SW30	538536.553	236234.025	141.500	1.907	1350		1	7.007	139.593	450
SW31A	538539.041	236235.435	141.500	1.907	1350		0	1.009	139.593	450
SW31B	538543.019	236264.503	141.500	2.000	1350		1	1.009	139.500	450
SW32A	538408.700	236313.408	144.781	2.558	1350		0	12.000	142.223	225
SW32B	538428.041	236309.734	144.449	2.750	1200		1	12.000	141.774	225
SW33	538446.366	236308.463	144.135	2.510	1200		0	12.001	141.699	300
							1	12.001	141.625	300
							0	12.002	141.625	300
SW34	538495.148	236306.861	143.304	1.874	1200		1	12.002	141.430	300
SW35	538508.640	236303.967	143.075	1.700	1350		0	12.003	141.430	300
							1	12.003	141.375	300
							0	12.004	141.375	300
SW36	538522.029	236297.134	142.821	1.500	1350		1	12.004	141.321	300
SW37	538528.491	236288.597	142.635	1.425	1350		0	12.005	141.321	300
							1	12.005	141.210	300
							0	12.006	141.210	300

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW38	538530.402	236279.174	142.439	1.725	1200	1 0	1	12.006	140.714	300
							0	12.007	140.714	300
SW39	538543.070	236281.181	141.500	1.999	1200	1	1	12.007	139.575	300
SW40	538583.453	236298.561	141.673	1.200	1350	0	0	13.000	140.473	150
SW41	538577.763	236301.813	141.500	1.100	1350	1	1	13.000	140.420	150
SW42	538576.067	236267.231	141.888	1.300	1350	0	0	14.000	140.588	150
SW43	538568.727	236267.842	141.500	1.100	1350	1	1	14.000	140.410	150
SW44	538566.280	236258.214	141.500	1.100	1350	0	0	13.002	140.400	375
SW45	538560.662	236254.565	141.525	1.335	1350	0 1	1	13.002	140.190	375
							0	13.003	140.190	375
SW46	538549.147	236255.444	141.611	1.777	1350	0 1	1	13.003	139.834	375
							0	13.004	139.834	375
SW47	538544.968	236264.490	141.500	1.999	1350	1	1	13.004	139.520	375
SW48	538517.970	236310.818	141.500	2.000	1200	0	0	1.011	139.500	300
SW49	538499.738	236312.764	143.006	3.566	1350	1	1	1.011	139.440	300

Node SW48 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	65.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	139.500	Main Channel Slope (1:X)	99999.0
Safety Factor	2.0	Time to half empty (mins)		Main Channel n	0.050

Inlets

SW47 | SW31B | SW39

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	454.6	0.0	0.600	715.4	0.0	1.200	1002.7	0.0	1.800	1315.6	0.0
0.100	495.6	0.0	0.700	761.5	0.0	1.300	1053.1	0.0	1.900	1370.3	0.0
0.200	538.1	0.0	0.800	808.3	0.0	1.400	1104.2	0.0	2.000	1425.6	0.0
0.300	581.4	0.0	0.900	855.9	0.0	1.500	1156.0	0.0			
0.400	625.4	0.0	1.000	904.1	0.0	1.600	1208.5	0.0			
0.500	670.0	0.0	1.100	953.0	0.0	1.700	1261.7	0.0			

Node SW44 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	49.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	140.400	Main Channel Slope (1:X)	99999.0
Safety Factor	2.0	Time to half empty (mins)	270	Main Channel n	0.050

Inlets

SW41 | SW43

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	153.2	0.0	0.300	253.9	0.0	0.600	361.2	0.0	0.900	474.4	0.0
0.100	185.6	0.0	0.400	289.0	0.0	0.700	398.2	0.0	1.000	513.4	0.0
0.200	219.4	0.0	0.500	324.8	0.0	0.800	436.0	0.0	1.100	553.1	0.0

Node SW31A Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	45.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	139.593	Main Channel Slope (1:X)	9999.0
Safety Factor	2.0	Time to half empty (mins)		Main Channel n	0.050

Inlets

SW15 | SW30

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	309.7	0.0	0.600	503.3	0.0	1.200	725.4	0.0	1.800	975.5	0.0
0.100	339.5	0.0	0.700	538.3	0.0	1.300	765.1	0.0	1.900	1019.9	0.0
0.200	370.7	0.0	0.800	574.2	0.0	1.400	805.7	0.0	2.000	1065.1	0.0
0.300	402.7	0.0	0.900	610.8	0.0	1.500	847.0	0.0			
0.400	435.4	0.0	1.000	648.2	0.0	1.600	889.0	0.0			
0.500	469.0	0.0	1.100	686.4	0.0	1.700	931.9	0.0			

Node SW49 Deep Bore Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	139.343	Borehole Diameter	0.300
Side Inf Coefficient (m/hr)	0.09000	Time to half empty (mins)	459	Borehole Depth (m)	21.500
Safety Factor	3.0	Diameter (m)	1.800	Inf Depth (m)	19.800
Porosity	1.00	Depth (m)		Number Required	22

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
10 year 15 minute summer	202.582	57.324	30 year +40% CC 60 minute summer	155.995	41.225
10 year 15 minute winter	142.163	57.324	30 year +40% CC 60 minute winter	103.639	41.225
10 year 30 minute summer	129.107	36.533	30 year +40% CC 120 minute summer	100.439	26.543
10 year 30 minute winter	90.601	36.533	30 year +40% CC 120 minute winter	66.729	26.543
10 year 60 minute summer	84.517	22.335	30 year +40% CC 180 minute summer	77.784	20.016
10 year 60 minute winter	56.151	22.335	30 year +40% CC 180 minute winter	50.561	20.016
10 year 120 minute summer	56.093	14.824	30 year +40% CC 240 minute summer	61.324	16.206
10 year 120 minute winter	37.267	14.824	30 year +40% CC 240 minute winter	40.742	16.206
10 year 180 minute summer	43.938	11.307	30 year +40% CC 360 minute summer	46.026	11.844
10 year 180 minute winter	28.561	11.307	30 year +40% CC 360 minute winter	29.918	11.844
10 year 240 minute summer	34.858	9.212	30 year +40% CC 480 minute summer	35.519	9.387
10 year 240 minute winter	23.159	9.212	30 year +40% CC 480 minute winter	23.598	9.387
10 year 360 minute summer	26.345	6.780	30 year +40% CC 600 minute summer	28.551	7.809
10 year 360 minute winter	17.125	6.780	30 year +40% CC 600 minute winter	19.507	7.809
10 year 480 minute summer	20.403	5.392	30 year +40% CC 720 minute summer	25.026	6.707
10 year 480 minute winter	13.555	5.392	30 year +40% CC 720 minute winter	16.819	6.707
10 year 600 minute summer	16.441	4.497	30 year +40% CC 960 minute summer	19.996	5.265
10 year 600 minute winter	11.233	4.497	30 year +40% CC 960 minute winter	13.246	5.265
10 year 720 minute summer	14.440	3.870	30 year +40% CC 1440 minute summer	13.966	3.743
10 year 720 minute winter	9.705	3.870	30 year +40% CC 1440 minute winter	9.386	3.743
10 year 960 minute summer	11.580	3.049	100 year 15 minute summer	339.045	95.938
10 year 960 minute winter	7.671	3.049	100 year 15 minute winter	237.926	95.938
10 year 1440 minute summer	8.119	2.176	100 year 30 minute summer	219.944	62.237
10 year 1440 minute winter	5.456	2.176	100 year 30 minute winter	154.347	62.237
30 year 15 minute summer	262.893	74.390	100 year 60 minute summer	145.574	38.471
30 year 15 minute winter	184.486	74.390	100 year 60 minute winter	96.716	38.471
30 year 30 minute summer	169.202	47.878	100 year 120 minute summer	93.499	24.709
30 year 30 minute winter	118.738	47.878	100 year 120 minute winter	62.119	24.709
30 year 60 minute summer	111.425	29.446	100 year 180 minute summer	72.690	18.706
30 year 60 minute winter	74.028	29.446	100 year 180 minute winter	47.250	18.706
30 year 120 minute summer	71.742	18.959	100 year 240 minute summer	57.501	15.196
30 year 120 minute winter	47.664	18.959	100 year 240 minute winter	38.203	15.196
30 year 180 minute summer	55.560	14.297	100 year 360 minute summer	43.330	11.150
30 year 180 minute winter	36.115	14.297	100 year 360 minute winter	28.165	11.150
30 year 240 minute summer	43.803	11.576	100 year 480 minute summer	33.499	8.853
30 year 240 minute winter	29.102	11.576	100 year 480 minute winter	22.256	8.853
30 year 360 minute summer	32.876	8.460	100 year 600 minute summer	26.921	7.363
30 year 360 minute winter	21.370	8.460	100 year 600 minute winter	18.394	7.363
30 year 480 minute summer	25.371	6.705	100 year 720 minute summer	23.567	6.316
30 year 480 minute winter	16.856	6.705	100 year 720 minute winter	15.839	6.316
30 year 600 minute summer	20.393	5.578	100 year 960 minute summer	18.737	4.934
30 year 600 minute winter	13.934	5.578	100 year 960 minute winter	12.412	4.934
30 year 720 minute summer	17.876	4.791	100 year 1440 minute summer	12.924	3.464
30 year 720 minute winter	12.014	4.791	100 year 1440 minute winter	8.686	3.464
30 year 960 minute summer	14.283	3.761	100 year +40% CC 15 minute summer	474.663	134.313
30 year 960 minute winter	9.461	3.761	100 year +40% CC 15 minute winter	333.097	134.313
30 year 1440 minute summer	9.975	2.674	100 year +40% CC 30 minute summer	307.922	87.131
30 year 1440 minute winter	6.704	2.674	100 year +40% CC 30 minute winter	216.085	87.131
30 year +40% CC 15 minute summer	368.050	104.146	100 year +40% CC 60 minute summer	203.804	53.859
30 year +40% CC 15 minute winter	258.281	104.146	100 year +40% CC 60 minute winter	135.402	53.859
30 year +40% CC 30 minute summer	236.882	67.030	100 year +40% CC 120 minute summer	130.899	34.593
30 year +40% CC 30 minute winter	166.233	67.030	100 year +40% CC 120 minute winter	86.966	34.593

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
100 year +40% CC 180 minute summer	101.765	26.188	100 year +40% CC 600 minute summer	37.689	10.309
100 year +40% CC 180 minute winter	66.150	26.188	100 year +40% CC 600 minute winter	25.752	10.309
100 year +40% CC 240 minute summer	80.502	21.274	100 year +40% CC 720 minute summer	32.994	8.843
100 year +40% CC 240 minute winter	53.484	21.274	100 year +40% CC 720 minute winter	22.174	8.843
100 year +40% CC 360 minute summer	60.661	15.610	100 year +40% CC 960 minute summer	26.232	6.908
100 year +40% CC 360 minute winter	39.431	15.610	100 year +40% CC 960 minute winter	17.377	6.908
100 year +40% CC 480 minute summer	46.898	12.394	100 year +40% CC 1440 minute summer	18.094	4.849
100 year +40% CC 480 minute winter	31.158	12.394	100 year +40% CC 1440 minute winter	12.160	4.849

Results for 10 year Critical Storm Duration. Lowest mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW1	10	143.040	0.046	9.2	0.0656	0.0000	OK
15 minute summer	SW2	10	141.997	0.056	18.5	0.0798	0.0000	OK
15 minute summer	SW3	11	141.195	0.156	28.6	0.2229	0.0000	OK
15 minute summer	SW4	11	141.187	0.196	62.2	0.2799	0.0000	OK
15 minute summer	SW5	10	142.526	0.063	22.3	0.0899	0.0000	OK
15 minute summer	SW6	10	141.897	0.077	38.8	0.1104	0.0000	OK
15 minute summer	SW7	11	141.156	0.278	137.9	0.3977	0.0000	OK
15 minute summer	SW8	10	141.804	0.101	44.4	0.1446	0.0000	OK
15 minute summer	SW9	11	140.894	0.316	196.0	0.4525	0.0000	OK
15 minute summer	SW10	11	140.722	0.263	253.8	0.3761	0.0000	OK
15 minute summer	SW11	12	140.317	0.234	12.1	0.3355	0.0000	OK
15 minute summer	SW12	12	140.327	0.098	7.6	0.1400	0.0000	OK
15 minute summer	SW13	12	140.311	0.442	276.1	0.6326	0.0000	OK
960 minute winter	SW14	945	140.244	0.454	18.8	0.6501	0.0000	OK
960 minute winter	SW15	945	140.244	0.651	18.4	0.9321	0.0000	OK
15 minute summer	SW16	10	143.720	0.117	40.4	0.1671	0.0000	OK
15 minute summer	SW17	10	143.227	0.205	52.5	0.2934	0.0000	OK
15 minute summer	SW18	11	143.186	0.204	60.6	0.2918	0.0000	OK
15 minute summer	SW19	10	143.402	0.116	21.2	0.1654	0.0000	OK
15 minute summer	SW20	11	143.343	0.113	20.9	0.1613	0.0000	OK
15 minute summer	SW21	10	143.794	0.081	13.5	0.1154	0.0000	OK
15 minute summer	SW22	11	143.333	0.207	59.8	0.2956	0.0000	OK
15 minute summer	SW23	10	143.018	0.200	174.8	0.2865	0.0000	OK
15 minute summer	SW24	11	141.780	0.227	189.2	0.3249	0.0000	OK
15 minute summer	SW25	11	141.512	0.277	234.7	0.3966	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	SW1	1.000	SW2	9.1	1.362	0.092	0.1942	
15 minute summer	SW2	1.001	SW4	18.4	2.528	0.117	0.0587	
15 minute summer	SW3	2.000	SW4	27.6	0.544	0.149	0.8238	
15 minute summer	SW4	1.002	SW7	60.9	0.750	0.328	2.8684	
15 minute summer	SW5	3.000	SW6	22.2	1.781	0.095	0.1850	
15 minute summer	SW6	3.001	SW7	38.6	1.003	0.147	0.6970	
15 minute summer	SW7	1.003	SW9	136.3	1.384	0.657	5.3526	
15 minute summer	SW8	4.000	SW9	44.7	1.783	0.160	1.2853	
15 minute summer	SW9	1.004	SW10	196.5	1.869	0.737	1.8778	
15 minute summer	SW10	1.005	SW13	256.6	1.690	0.469	6.9720	
15 minute summer	SW11	5.000	SW13	-12.1	-0.329	-0.115	1.7277	
15 minute summer	SW12	6.000	SW13	7.5	0.632	0.205	0.5468	
15 minute summer	SW13	1.006	SW14	264.0	1.531	1.095	5.4581	
960 minute winter	SW14	1.007	SW15	18.4	0.608	0.034	3.3401	
960 minute winter	SW15	Flow through Pond	SW31A	28.7	0.028	0.007	267.2522	
15 minute summer	SW16	7.000	SW17	40.1	1.456	0.316	1.1211	
15 minute summer	SW17	7.001	SW18	51.6	0.843	0.452	0.7430	
15 minute summer	SW18	7.002	SW23	60.8	1.074	0.527	0.9111	
15 minute summer	SW19	8.000	SW20	20.9	0.896	0.279	0.2999	
15 minute summer	SW20	8.001	SW22	20.6	0.562	0.264	0.7930	
15 minute summer	SW21	9.000	SW22	13.3	1.418	0.525	0.1980	
15 minute summer	SW22	8.002	SW23	59.5	1.205	0.760	1.5597	
15 minute summer	SW23	7.003	SW24	175.8	2.373	0.407	5.2751	
15 minute summer	SW24	7.004	SW25	189.8	2.078	0.372	1.1708	
15 minute summer	SW25	7.005	SW27	234.6	2.397	0.640	5.3114	

Results for 10 year Critical Storm Duration. Lowest mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW26	10	140.910	0.091	12.2	0.1299	0.0000	OK
15 minute summer	SW27	11	140.694	0.230	253.3	0.3296	0.0000	OK
15 minute summer	SW28	10	140.724	0.061	14.4	0.0868	0.0000	OK
960 minute winter	SW29	945	140.244	0.444	18.2	0.6359	0.0000	OK
960 minute winter	SW30	945	140.244	0.651	17.9	0.9321	0.0000	OK
960 minute winter	SW31A	945	140.244	0.651	28.7	0.9310	0.0000	SURCHARGED
960 minute winter	SW31B	945	140.246	0.746	21.4	1.0669	0.0000	OK
15 minute summer	SW32A	10	142.310	0.087	22.9	0.1239	0.0000	OK
15 minute summer	SW32B	11	141.851	0.152	28.5	0.1721	0.0000	OK
15 minute summer	SW33	11	141.828	0.203	55.0	0.2292	0.0000	OK
15 minute summer	SW34	11	141.692	0.261	64.5	0.2957	0.0000	OK
15 minute summer	SW35	11	141.619	0.244	66.6	0.3486	0.0000	OK
15 minute summer	SW36	11	141.512	0.191	71.1	0.2728	0.0000	OK
15 minute summer	SW37	11	141.339	0.129	75.2	0.1852	0.0000	OK
15 minute summer	SW38	11	140.819	0.105	74.9	0.1185	0.0000	OK
960 minute winter	SW39	945	140.244	0.743	5.1	0.8404	0.0000	OK
15 minute summer	SW40	10	140.599	0.126	13.7	0.1797	0.0000	OK
15 minute summer	SW41	11	140.546	0.145	13.5	0.2077	0.0000	OK
15 minute summer	SW42	10	140.667	0.078	13.0	0.1123	0.0000	OK
15 minute summer	SW43	12	140.526	0.126	12.9	0.1802	0.0000	OK
30 minute summer	SW44	24	140.449	0.049	16.7	0.0704	0.0000	OK
960 minute winter	SW45	945	140.244	0.054	1.7	0.0770	0.0000	OK
960 minute winter	SW46	945	140.244	0.410	1.7	0.5864	0.0000	SURCHARGED
960 minute winter	SW47	945	140.243	0.743	1.5	1.0629	0.0000	OK
960 minute winter	SW48	945	140.243	0.743	16.5	0.8408	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	SW26	10.000	SW27	11.9	0.817	0.325	0.3794	
15 minute summer	SW27	7.006	SW29	253.1	2.262	0.441	2.3646	
15 minute summer	SW28	11.000	SW29	14.3	1.584	0.160	0.4011	
960 minute winter	SW29	7.007	SW30	17.9	0.665	0.051	2.7438	
960 minute winter	SW30	Flow through Pond	SW31A	28.7	0.028	0.007	267.2522	
960 minute winter	SW31A	1.009	SW31B	21.4	0.524	0.118	4.6486	
960 minute winter	SW31B	Flow through Pond	SW48	16.5	0.025	0.013	456.7621	
15 minute summer	SW32A	12.000	SW32B	22.7	1.668	0.288	0.2674	
15 minute summer	SW32B	12.001	SW33	28.1	0.651	0.400	0.7944	
15 minute summer	SW33	12.002	SW34	54.5	0.948	0.779	2.8257	
15 minute summer	SW34	12.003	SW35	63.9	1.010	0.916	0.8724	
15 minute summer	SW35	12.004	SW36	66.2	1.216	0.999	0.8155	
15 minute summer	SW36	12.005	SW37	70.7	1.852	0.625	0.4084	
15 minute summer	SW37	12.006	SW38	74.9	3.027	0.296	0.2450	
15 minute summer	SW38	12.007	SW39	75.4	3.488	0.226	0.3570	
960 minute winter	SW39	Flow through Pond	SW48	16.5	0.025	0.013	456.7621	
15 minute summer	SW40	13.000	SW41	13.5	0.886	0.845	0.1027	
15 minute summer	SW41	Flow through Pond	SW44	15.9	0.089	0.066	9.3374	
15 minute summer	SW42	14.000	SW43	12.9	1.336	0.465	0.0865	
15 minute summer	SW43	Flow through Pond	SW44	15.9	0.089	0.066	9.3374	
30 minute summer	SW44	13.002	SW45	11.6	1.387	0.033	0.0562	
960 minute winter	SW45	13.003	SW46	1.7	0.793	0.005	0.6927	
960 minute winter	SW46	13.004	SW47	1.5	0.099	0.004	1.0991	
960 minute winter	SW47	Flow through Pond	SW48	16.5	0.025	0.013	456.7621	
960 minute winter	SW48	1.011	SW49	9.9	0.657	0.157	1.2912	

Results for 10 year Critical Storm Duration. Lowest mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	SW49	945	140.243	0.803	9.9	85.3143	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)
960 minute winter	SW49	Infiltration		3.4				568.4

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW1	10	143.046	0.052	12.0	0.0749	0.0000	OK
15 minute summer	SW2	10	142.005	0.064	24.0	0.0920	0.0000	OK
15 minute summer	SW3	11	141.253	0.214	37.2	0.3058	0.0000	OK
15 minute summer	SW4	11	141.246	0.255	79.4	0.3653	0.0000	OK
15 minute summer	SW5	10	142.535	0.072	29.0	0.1034	0.0000	OK
15 minute summer	SW6	10	141.908	0.088	50.5	0.1263	0.0000	OK
15 minute summer	SW7	11	141.216	0.338	177.2	0.4831	0.0000	OK
15 minute summer	SW8	10	141.817	0.114	57.7	0.1625	0.0000	OK
15 minute summer	SW9	11	140.957	0.379	254.0	0.5423	0.0000	OK
15 minute summer	SW10	10	140.765	0.306	329.8	0.4376	0.0000	OK
15 minute summer	SW11	11	140.454	0.372	10.4	0.5327	0.0000	OK
15 minute summer	SW12	12	140.461	0.232	9.9	0.3314	0.0000	SURCHARGED
15 minute summer	SW13	11	140.475	0.606	354.6	0.8678	0.0000	SURCHARGED
960 minute winter	SW14	945	140.397	0.607	22.4	0.8685	0.0000	SURCHARGED
960 minute winter	SW15	945	140.397	0.804	21.8	1.1504	0.0000	OK
15 minute summer	SW16	10	143.737	0.134	52.4	0.1923	0.0000	OK
15 minute summer	SW17	10	143.267	0.245	67.9	0.3501	0.0000	OK
15 minute summer	SW18	10	143.221	0.239	79.1	0.3422	0.0000	OK
15 minute summer	SW19	10	143.427	0.141	27.5	0.2019	0.0000	OK
15 minute summer	SW20	11	143.393	0.163	27.0	0.2333	0.0000	OK
15 minute summer	SW21	10	143.809	0.096	17.6	0.1376	0.0000	OK
15 minute summer	SW22	11	143.382	0.256	77.3	0.3659	0.0000	OK
15 minute summer	SW23	11	143.051	0.232	226.0	0.3327	0.0000	OK
15 minute summer	SW24	11	141.829	0.276	244.6	0.3956	0.0000	OK
15 minute summer	SW25	11	141.571	0.336	303.3	0.4803	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	SW1	1.000	SW2	11.9	1.461	0.119	0.2360	
15 minute summer	SW2	1.001	SW4	23.8	2.703	0.152	0.0712	
15 minute summer	SW3	2.000	SW4	35.8	0.555	0.193	1.1988	
15 minute summer	SW4	1.002	SW7	79.6	0.762	0.429	3.7439	
15 minute summer	SW5	3.000	SW6	28.9	1.910	0.124	0.2243	
15 minute summer	SW6	3.001	SW7	50.3	1.126	0.191	0.7442	
15 minute summer	SW7	1.003	SW9	176.5	1.487	0.851	6.5581	
15 minute summer	SW8	4.000	SW9	57.2	1.754	0.204	1.9439	
15 minute summer	SW9	1.004	SW10	255.5	2.037	0.958	2.2328	
15 minute summer	SW10	1.005	SW13	327.8	1.790	0.599	7.9156	
15 minute summer	SW11	5.000	SW13	-10.4	-0.341	-0.099	2.3320	
15 minute summer	SW12	6.000	SW13	9.9	0.664	0.272	0.8391	
15 minute summer	SW13	1.006	SW14	356.2	1.670	1.478	6.6793	
960 minute winter	SW14	1.007	SW15	21.8	0.684	0.041	3.4805	
960 minute winter	SW15	Flow through Pond	SW31A	34.4	0.028	0.008	350.7200	
15 minute summer	SW16	7.000	SW17	51.9	1.491	0.410	1.4572	
15 minute summer	SW17	7.001	SW18	67.4	0.897	0.589	0.9116	
15 minute summer	SW18	7.002	SW23	78.9	1.160	0.684	1.0938	
15 minute summer	SW19	8.000	SW20	27.0	0.919	0.361	0.4375	
15 minute summer	SW20	8.001	SW22	26.2	0.572	0.336	1.0769	
15 minute summer	SW21	9.000	SW22	17.4	1.502	0.684	0.2467	
15 minute summer	SW22	8.002	SW23	76.4	1.286	0.975	1.8672	
15 minute summer	SW23	7.003	SW24	227.2	2.460	0.526	6.5725	
15 minute summer	SW24	7.004	SW25	245.1	2.135	0.480	1.4682	
15 minute summer	SW25	7.005	SW27	302.8	2.518	0.826	6.5387	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW26	10	140.925	0.106	15.8	0.1512	0.0000	OK
15 minute summer	SW27	12	140.774	0.310	327.0	0.4430	0.0000	OK
15 minute summer	SW28	10	140.732	0.069	18.7	0.0992	0.0000	OK
15 minute summer	SW29	12	140.444	0.644	350.3	0.9221	0.0000	SURCHARGED
960 minute winter	SW30	945	140.397	0.804	21.9	1.1503	0.0000	OK
960 minute winter	SW31A	945	140.396	0.803	34.4	1.1491	0.0000	SURCHARGED
960 minute winter	SW31B	945	140.398	0.898	25.2	1.2847	0.0000	OK
15 minute summer	SW32A	9	142.320	0.097	29.7	0.1394	0.0000	OK
15 minute summer	SW32B	11	141.967	0.268	37.3	0.3028	0.0000	OK
15 minute summer	SW33	11	141.949	0.324	69.8	0.3662	0.0000	SURCHARGED
15 minute summer	SW34	11	141.759	0.329	76.8	0.3718	0.0000	SURCHARGED
15 minute summer	SW35	11	141.664	0.289	78.9	0.4139	0.0000	OK
15 minute summer	SW36	11	141.536	0.215	85.1	0.3078	0.0000	OK
15 minute summer	SW37	12	141.357	0.147	90.6	0.2103	0.0000	OK
15 minute summer	SW38	10	140.829	0.115	90.4	0.1299	0.0000	OK
960 minute winter	SW39	945	140.396	0.895	6.2	1.0126	0.0000	OK
15 minute summer	SW40	11	140.660	0.187	17.8	0.2671	0.0000	SURCHARGED
15 minute summer	SW41	11	140.574	0.173	17.3	0.2476	0.0000	OK
15 minute summer	SW42	10	140.684	0.096	16.9	0.1375	0.0000	OK
15 minute summer	SW43	11	140.558	0.157	16.7	0.2253	0.0000	OK
30 minute summer	SW44	23	140.461	0.061	23.6	0.0869	0.0000	OK
960 minute winter	SW45	960	140.396	0.206	2.1	0.2950	0.0000	OK
960 minute winter	SW46	960	140.396	0.562	2.1	0.8044	0.0000	SURCHARGED
960 minute winter	SW47	960	140.396	0.895	1.9	1.2810	0.0000	OK
960 minute winter	SW48	960	140.396	0.896	19.4	1.0131	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	SW26	10.000	SW27	15.4	0.873	0.422	0.4618	
15 minute summer	SW27	7.006	SW29	324.9	2.268	0.567	2.9139	
15 minute summer	SW28	11.000	SW29	18.6	1.580	0.208	0.5422	
15 minute summer	SW29	7.007	SW30	343.4	2.167	0.971	2.7469	
960 minute winter	SW30	Flow through Pond	SW31A	34.4	0.028	0.008	350.7200	
960 minute winter	SW31A	1.009	SW31B	25.2	0.546	0.139	4.6486	
960 minute winter	SW31B	Flow through Pond	SW48	19.4	0.027	0.015	581.2231	
15 minute summer	SW32A	12.000	SW32B	29.7	1.705	0.377	0.5089	
15 minute summer	SW32B	12.001	SW33	35.1	0.655	0.500	1.2564	
15 minute summer	SW33	12.002	SW34	64.1	0.979	0.917	3.4370	
15 minute summer	SW34	12.003	SW35	75.5	1.072	1.081	0.9664	
15 minute summer	SW35	12.004	SW36	79.0	1.258	1.192	0.9298	
15 minute summer	SW36	12.005	SW37	84.9	1.914	0.750	0.4728	
15 minute summer	SW37	12.006	SW38	90.4	3.192	0.356	0.2781	
15 minute summer	SW38	12.007	SW39	90.7	3.594	0.272	0.4880	
960 minute winter	SW39	Flow through Pond	SW48	19.4	0.027	0.015	581.2231	
15 minute summer	SW40	13.000	SW41	17.3	0.981	1.083	0.1154	
15 minute summer	SW41	Flow through Pond	SW44	23.6	0.105	0.099	11.5823	
15 minute summer	SW42	14.000	SW43	16.7	1.360	0.603	0.1072	
15 minute summer	SW43	Flow through Pond	SW44	23.6	0.105	0.099	11.5823	
30 minute summer	SW44	13.002	SW45	17.4	1.533	0.049	0.0761	
960 minute winter	SW45	13.003	SW46	2.1	0.792	0.006	0.9951	
960 minute winter	SW46	13.004	SW47	1.9	0.120	0.005	1.0991	
960 minute winter	SW47	Flow through Pond	SW48	19.4	0.027	0.015	581.2231	
960 minute winter	SW48	1.011	SW49	10.6	0.671	0.168	1.2912	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
960 minute winter	SW49	960	140.396	0.956	10.6	94.0600	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
960 minute winter	SW49	Infiltration		3.4				572.6

Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW1	10	143.056	0.062	16.8	0.0888	0.0000	OK
15 minute summer	SW2	9	142.016	0.075	33.7	0.1068	0.0000	OK
15 minute summer	SW3	12	141.880	0.841	52.1	1.2028	0.0000	SURCHARGED
15 minute summer	SW4	12	141.865	0.874	109.7	1.2504	0.0000	SURCHARGED
15 minute summer	SW5	10	142.550	0.087	40.5	0.1241	0.0000	OK
15 minute summer	SW6	12	141.930	0.110	70.5	0.1569	0.0000	OK
15 minute summer	SW7	12	141.829	0.951	232.2	1.3602	0.0000	SURCHARGED
15 minute summer	SW8	10	141.838	0.135	80.6	0.1937	0.0000	OK
15 minute summer	SW9	12	141.538	0.960	322.6	1.3735	0.0000	SURCHARGED
15 minute summer	SW10	12	141.273	0.814	410.1	1.1644	0.0000	SURCHARGED
15 minute summer	SW11	12	140.877	0.795	19.3	1.1375	0.0000	SURCHARGED
15 minute summer	SW12	12	140.887	0.658	15.2	0.9419	0.0000	SURCHARGED
15 minute summer	SW13	12	140.877	1.008	430.0	1.4420	0.0000	SURCHARGED
1440 minute winter	SW14	1410	140.676	0.886	21.9	1.2674	0.0000	SURCHARGED
1440 minute winter	SW15	1410	140.676	1.083	21.6	1.5493	0.0000	OK
15 minute summer	SW16	10	143.769	0.166	73.3	0.2380	0.0000	OK
15 minute summer	SW17	11	143.333	0.311	95.2	0.4449	0.0000	OK
15 minute summer	SW18	11	143.281	0.299	109.4	0.4272	0.0000	OK
15 minute summer	SW19	11	143.592	0.306	38.5	0.4385	0.0000	SURCHARGED
15 minute summer	SW20	11	143.572	0.342	36.2	0.4892	0.0000	SURCHARGED
15 minute summer	SW21	11	143.938	0.225	24.6	0.3222	0.0000	SURCHARGED
15 minute summer	SW22	11	143.542	0.416	104.7	0.5956	0.0000	SURCHARGED
15 minute summer	SW23	12	143.113	0.295	313.1	0.4217	0.0000	OK
15 minute summer	SW24	12	142.408	0.855	329.6	1.2231	0.0000	SURCHARGED
15 minute summer	SW25	12	142.188	0.953	391.2	1.3636	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	SW1	1.000	SW2	16.7	1.712	0.167	0.2883	
15 minute summer	SW2	1.001	SW4	33.5	2.877	0.214	0.2024	
15 minute summer	SW3	2.000	SW4	49.4	0.554	0.265	2.2756	
15 minute summer	SW4	1.002	SW7	97.4	0.777	0.525	5.3838	
15 minute summer	SW5	3.000	SW6	40.3	2.082	0.173	0.2894	
15 minute summer	SW6	3.001	SW7	70.3	1.285	0.267	0.7954	
15 minute summer	SW7	1.003	SW9	217.0	1.417	1.047	8.6052	
15 minute summer	SW8	4.000	SW9	80.1	1.855	0.286	3.4681	
15 minute summer	SW9	1.004	SW10	313.2	1.977	1.175	2.7656	
15 minute summer	SW10	1.005	SW13	400.1	1.858	0.731	10.0138	
15 minute summer	SW11	5.000	SW13	-19.3	-0.292	-0.183	2.3334	
15 minute summer	SW12	6.000	SW13	12.6	0.638	0.345	0.8391	
15 minute summer	SW13	1.006	SW14	428.8	1.985	1.779	6.8288	
1440 minute winter	SW14	1.007	SW15	21.6	0.606	0.040	3.4805	
1440 minute winter	SW15	Flow through Pond	SW31A	34.4	0.022	0.008	524.9537	
15 minute summer	SW16	7.000	SW17	72.7	1.470	0.574	1.9950	
15 minute summer	SW17	7.001	SW18	93.4	0.976	0.817	1.1632	
15 minute summer	SW18	7.002	SW23	110.1	1.288	0.954	1.3695	
15 minute summer	SW19	8.000	SW20	36.2	0.963	0.483	0.8611	
15 minute summer	SW20	8.001	SW22	36.3	0.585	0.465	1.4713	
15 minute summer	SW21	9.000	SW22	23.1	1.479	0.911	0.3713	
15 minute summer	SW22	8.002	SW23	104.0	1.493	1.328	2.1021	
15 minute summer	SW23	7.003	SW24	305.1	2.526	0.707	9.5516	
15 minute summer	SW24	7.004	SW25	311.5	2.148	0.611	2.0322	
15 minute summer	SW25	7.005	SW27	378.9	2.461	1.034	8.6005	

Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW26	12	141.320	0.501	22.2	0.7171	0.0000	SURCHARGED
15 minute summer	SW27	12	141.288	0.824	405.9	1.1788	0.0000	SURCHARGED
15 minute summer	SW28	13	140.807	0.144	26.2	0.2066	0.0000	OK
15 minute summer	SW29	13	140.789	0.989	430.1	1.4159	0.0000	SURCHARGED
1440 minute winter	SW30	1410	140.676	1.083	22.1	1.5492	0.0000	OK
1440 minute winter	SW31A	1440	140.675	1.082	34.4	1.5479	0.0000	SURCHARGED
1440 minute winter	SW31B	1440	140.677	1.177	25.1	1.6838	0.0000	OK
15 minute summer	SW32A	11	142.635	0.412	41.6	0.5900	0.0000	SURCHARGED
15 minute summer	SW32B	11	142.501	0.802	49.8	0.9070	0.0000	SURCHARGED
15 minute summer	SW33	11	142.453	0.828	93.7	0.9366	0.0000	SURCHARGED
15 minute summer	SW34	11	142.053	0.623	110.7	0.7050	0.0000	SURCHARGED
15 minute summer	SW35	11	141.852	0.477	114.3	0.6821	0.0000	SURCHARGED
15 minute summer	SW36	11	141.631	0.310	121.6	0.4429	0.0000	SURCHARGED
15 minute summer	SW37	12	141.396	0.186	127.8	0.2663	0.0000	OK
15 minute summer	SW38	10	140.845	0.131	127.6	0.1477	0.0000	OK
1440 minute winter	SW39	1410	140.675	1.174	6.2	1.3279	0.0000	OK
15 minute summer	SW40	11	140.783	0.310	24.9	0.4434	0.0000	SURCHARGED
1440 minute winter	SW41	1440	140.675	0.275	1.1	0.3930	0.0000	OK
15 minute summer	SW42	11	140.775	0.187	23.6	0.2678	0.0000	SURCHARGED
1440 minute winter	SW43	1440	140.675	0.275	1.0	0.3931	0.0000	OK
1440 minute winter	SW44	1440	140.675	0.275	2.1	0.3930	0.0000	OK
1440 minute winter	SW45	1440	140.675	0.485	2.2	0.6935	0.0000	SURCHARGED
1440 minute winter	SW46	1440	140.675	0.841	2.3	1.2030	0.0000	SURCHARGED
1440 minute winter	SW47	1440	140.674	1.174	2.3	1.6795	0.0000	OK
1440 minute winter	SW48	1440	140.674	1.174	19.2	1.3283	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	SW26	10.000	SW27	19.2	0.949	0.525	1.0345	
15 minute summer	SW27	7.006	SW29	405.1	2.557	0.706	3.3612	
15 minute summer	SW28	11.000	SW29	26.1	1.516	0.291	0.7240	
15 minute summer	SW29	7.007	SW30	426.9	2.695	1.208	2.7469	
1440 minute winter	SW30	Flow through Pond	SW31A	34.4	0.022	0.008	524.9537	
1440 minute winter	SW31A	1.009	SW31B	25.1	0.536	0.139	4.6486	
1440 minute winter	SW31B	Flow through Pond	SW48	19.2	0.026	0.015	837.6624	
15 minute summer	SW32A	12.000	SW32B	39.6	1.739	0.503	0.7830	
15 minute summer	SW32B	12.001	SW33	49.6	0.705	0.707	1.2935	
15 minute summer	SW33	12.002	SW34	92.6	1.315	1.325	3.4370	
15 minute summer	SW34	12.003	SW35	109.6	1.557	1.570	0.9717	
15 minute summer	SW35	12.004	SW36	112.6	1.600	1.700	1.0585	
15 minute summer	SW36	12.005	SW37	120.5	2.013	1.065	0.6228	
15 minute summer	SW37	12.006	SW38	127.6	3.422	0.503	0.3609	
15 minute summer	SW38	12.007	SW39	128.1	3.677	0.385	0.6346	
1440 minute winter	SW39	Flow through Pond	SW48	19.2	0.026	0.015	837.6624	
15 minute summer	SW40	13.000	SW41	24.1	1.371	1.514	0.1154	
1440 minute winter	SW41	Flow through Pond	SW44	2.1	0.025	0.009	54.5895	
15 minute summer	SW42	14.000	SW43	22.4	1.358	0.809	0.1297	
1440 minute winter	SW43	Flow through Pond	SW44	2.1	0.025	0.009	54.5895	
1440 minute winter	SW44	13.002	SW45	-2.1	0.864	-0.006	0.6592	
1440 minute winter	SW45	13.003	SW46	-2.2	0.732	-0.006	1.2737	
1440 minute winter	SW46	13.004	SW47	-2.3	0.116	-0.006	1.0991	
1440 minute winter	SW47	Flow through Pond	SW48	19.2	0.026	0.015	837.6624	
1440 minute winter	SW48	1.011	SW49	9.1	0.658	0.144	1.2912	

Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	SW49	1440	140.674	1.234	9.1	110.0618	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)
1440 minute winter	SW49	Infiltration		3.4				665.9

Results for 100 year Critical Storm Duration. Lowest mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW1	10	143.054	0.060	15.5	0.0852	0.0000	OK
15 minute summer	SW2	9	142.012	0.071	31.1	0.1018	0.0000	OK
15 minute summer	SW3	12	141.526	0.486	47.9	0.6961	0.0000	SURCHARGED
15 minute summer	SW4	12	141.511	0.520	102.9	0.7447	0.0000	SURCHARGED
15 minute summer	SW5	10	142.546	0.083	37.3	0.1186	0.0000	OK
15 minute summer	SW6	10	141.921	0.101	64.9	0.1440	0.0000	OK
15 minute summer	SW7	12	141.484	0.606	226.2	0.8678	0.0000	SURCHARGED
15 minute summer	SW8	10	141.833	0.130	74.3	0.1856	0.0000	OK
15 minute summer	SW9	12	141.246	0.668	313.3	0.9555	0.0000	SURCHARGED
15 minute summer	SW10	12	141.031	0.572	383.9	0.8189	0.0000	SURCHARGED
15 minute summer	SW11	12	140.708	0.626	14.5	0.8955	0.0000	SURCHARGED
15 minute summer	SW12	12	140.732	0.503	12.7	0.7199	0.0000	SURCHARGED
15 minute summer	SW13	12	140.712	0.842	406.4	1.2055	0.0000	SURCHARGED
1440 minute winter	SW14	1410	140.610	0.820	20.4	1.1731	0.0000	SURCHARGED
1440 minute winter	SW15	1410	140.610	1.017	20.1	1.4550	0.0000	OK
15 minute summer	SW16	10	143.760	0.157	67.5	0.2251	0.0000	OK
15 minute summer	SW17	11	143.314	0.291	87.7	0.4171	0.0000	OK
15 minute summer	SW18	11	143.264	0.282	100.8	0.4032	0.0000	OK
15 minute summer	SW19	11	143.522	0.236	35.4	0.3374	0.0000	OK
15 minute summer	SW20	11	143.509	0.279	32.9	0.3992	0.0000	OK
15 minute summer	SW21	10	143.827	0.114	22.7	0.1628	0.0000	OK
15 minute summer	SW22	11	143.487	0.361	96.1	0.5166	0.0000	SURCHARGED
15 minute summer	SW23	10	143.088	0.269	288.0	0.3856	0.0000	OK
15 minute summer	SW24	12	142.061	0.508	313.2	0.7265	0.0000	SURCHARGED
15 minute summer	SW25	12	141.873	0.638	371.9	0.9129	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	SW1	1.000	SW2	15.4	1.657	0.154	0.2705	
15 minute summer	SW2	1.001	SW4	31.5	2.819	0.201	0.1956	
15 minute summer	SW3	2.000	SW4	44.4	0.556	0.239	2.2756	
15 minute summer	SW4	1.002	SW7	98.6	0.772	0.531	5.3838	
15 minute summer	SW5	3.000	SW6	37.2	2.039	0.160	0.2704	
15 minute summer	SW6	3.001	SW7	64.7	1.232	0.246	0.7735	
15 minute summer	SW7	1.003	SW9	209.9	1.411	1.012	8.6052	
15 minute summer	SW8	4.000	SW9	73.8	1.861	0.263	3.4066	
15 minute summer	SW9	1.004	SW10	286.6	1.830	1.075	2.7656	
15 minute summer	SW10	1.005	SW13	364.9	1.833	0.667	10.0138	
15 minute summer	SW11	5.000	SW13	-14.5	-0.306	-0.138	2.3334	
15 minute summer	SW12	6.000	SW13	19.0	0.625	0.520	0.8391	
15 minute summer	SW13	1.006	SW14	394.0	1.824	1.635	6.8288	
1440 minute winter	SW14	1.007	SW15	20.1	0.612	0.037	3.4805	
1440 minute winter	SW15	Flow through Pond	SW31A	31.6	0.021	0.007	481.1187	
15 minute summer	SW16	7.000	SW17	67.0	1.485	0.529	1.8469	
15 minute summer	SW17	7.001	SW18	86.0	0.953	0.752	1.0962	
15 minute summer	SW18	7.002	SW23	101.5	1.255	0.880	1.2977	
15 minute summer	SW19	8.000	SW20	32.9	0.965	0.439	0.7807	
15 minute summer	SW20	8.001	SW22	35.0	0.560	0.448	1.4490	
15 minute summer	SW21	9.000	SW22	22.7	1.509	0.894	0.3368	
15 minute summer	SW22	8.002	SW23	95.4	1.380	1.218	2.0671	
15 minute summer	SW23	7.003	SW24	290.7	2.508	0.673	8.8600	
15 minute summer	SW24	7.004	SW25	293.2	2.182	0.575	2.0322	
15 minute summer	SW25	7.005	SW27	354.3	2.521	0.967	8.6005	

Results for 100 year Critical Storm Duration. Lowest mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	SW26	19	141.152	0.333	18.2	0.4768	0.0000	SURCHARGED
15 minute summer	SW27	12	141.104	0.640	387.4	0.9160	0.0000	SURCHARGED
15 minute summer	SW28	10	140.742	0.079	24.2	0.1135	0.0000	OK
30 minute summer	SW29	20	140.698	0.898	382.5	1.2853	0.0000	SURCHARGED
1440 minute winter	SW30	1410	140.610	1.017	20.1	1.4550	0.0000	OK
1440 minute winter	SW31A	1410	140.609	1.016	31.6	1.4536	0.0000	SURCHARGED
1440 minute winter	SW31B	1410	140.611	1.111	23.2	1.5892	0.0000	OK
15 minute summer	SW32A	11	142.433	0.210	38.3	0.3005	0.0000	OK
15 minute summer	SW32B	11	142.341	0.642	45.4	0.7257	0.0000	SURCHARGED
15 minute summer	SW33	11	142.302	0.677	85.5	0.7657	0.0000	SURCHARGED
15 minute summer	SW34	11	141.965	0.535	101.9	0.6054	0.0000	SURCHARGED
15 minute summer	SW35	11	141.791	0.416	106.0	0.5958	0.0000	SURCHARGED
15 minute summer	SW36	11	141.594	0.272	114.0	0.3899	0.0000	OK
15 minute summer	SW37	11	141.389	0.179	121.2	0.2564	0.0000	OK
15 minute summer	SW38	11	140.840	0.126	121.1	0.1430	0.0000	OK
1440 minute winter	SW39	1410	140.609	1.108	5.8	1.2534	0.0000	OK
15 minute summer	SW40	10	140.744	0.271	22.9	0.3871	0.0000	SURCHARGED
1440 minute winter	SW41	1440	140.609	0.209	1.0	0.2987	0.0000	OK
15 minute summer	SW42	11	140.711	0.123	21.7	0.1755	0.0000	OK
1440 minute winter	SW43	1440	140.609	0.209	0.9	0.2987	0.0000	OK
1440 minute winter	SW44	1440	140.609	0.209	1.9	0.2987	0.0000	OK
1440 minute winter	SW45	1440	140.609	0.419	1.9	0.5992	0.0000	SURCHARGED
1440 minute winter	SW46	1440	140.609	0.775	1.9	1.1087	0.0000	SURCHARGED
1440 minute winter	SW47	1440	140.608	1.108	1.8	1.5852	0.0000	OK
1440 minute winter	SW48	1440	140.609	1.109	18.0	1.2537	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 summer	SW26	10.000	SW27	18.4	0.891	0.502	1.0345	
15 minute summer	SW27	7.006	SW29	373.1	2.355	0.650	3.3612	
15 minute summer	SW28	11.000	SW29	24.1	1.572	0.269	0.5674	
30 minute summer	SW29	7.007	SW30	378.2	2.387	1.070	2.7469	
1440 minute winter	SW30	Flow through Pond	SW31A	31.6	0.021	0.007	481.1187	
1440 minute winter	SW31A	1.009	SW31B	23.2	0.531	0.128	4.6486	
1440 minute winter	SW31B	Flow through Pond	SW48	18.0	0.025	0.014	773.5819	
15 minute summer	SW32A	12.000	SW32B	36.5	1.732	0.463	0.7714	
15 minute summer	SW32B	12.001	SW33	46.6	0.669	0.664	1.2935	
15 minute summer	SW33	12.002	SW34	85.1	1.209	1.218	3.4370	
15 minute summer	SW34	12.003	SW35	101.7	1.444	1.456	0.9717	
15 minute summer	SW35	12.004	SW36	105.7	1.502	1.596	1.0345	
15 minute summer	SW36	12.005	SW37	113.7	2.005	1.005	0.5948	
15 minute summer	SW37	12.006	SW38	121.1	3.373	0.477	0.3465	
15 minute summer	SW38	12.007	SW39	121.3	3.695	0.364	0.6058	
1440 minute winter	SW39	Flow through Pond	SW48	18.0	0.025	0.014	773.5819	
15 minute summer	SW40	13.000	SW41	22.5	1.277	1.410	0.1154	
1440 minute winter	SW41	Flow through Pond	SW44	1.9	0.024	0.008	39.2270	
15 minute summer	SW42	14.000	SW43	21.3	1.346	0.769	0.1216	
1440 minute winter	SW43	Flow through Pond	SW44	1.9	0.024	0.008	39.2270	
1440 minute winter	SW44	13.002	SW45	1.9	0.847	0.005	0.5805	
1440 minute winter	SW45	13.003	SW46	1.9	0.751	0.005	1.2737	
1440 minute winter	SW46	13.004	SW47	1.8	0.107	0.005	1.0991	
1440 minute winter	SW47	Flow through Pond	SW48	18.0	0.025	0.014	773.5819	
1440 minute winter	SW48	1.011	SW49	9.4	0.646	0.149	1.2912	

Results for 100 year Critical Storm Duration. Lowest mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	SW49	1440	140.608	1.168	9.4	106.2762	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)
1440 minute winter	SW49	Infiltration		3.4				664.7

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW1	10	143.065	0.071	21.6	0.1011	0.0000	OK
15 minute summer	SW2	12	142.904	0.963	43.3	1.3786	0.0000	SURCHARGED
15 minute summer	SW3	12	142.852	1.813	67.0	2.5949	0.0000	SURCHARGED
15 minute summer	SW4	12	142.846	1.855	121.9	2.6538	0.0000	SURCHARGED
15 minute summer	SW5	12	142.912	0.449	52.3	0.6431	0.0000	SURCHARGED
15 minute summer	SW6	12	142.884	1.064	91.1	1.5228	0.0000	SURCHARGED
15 minute summer	SW7	12	142.780	1.902	264.8	2.7222	0.0000	SURCHARGED
15 minute summer	SW8	11	142.453	0.750	104.0	1.0735	0.0000	SURCHARGED
15 minute summer	SW9	12	142.330	1.752	388.6	2.5075	0.0000	FLOOD RISK
15 minute summer	SW10	12	141.936	1.477	506.8	2.1136	0.0000	SURCHARGED
15 minute summer	SW11	12	141.344	1.262	18.6	1.8061	0.0000	FLOOD RISK
15 minute summer	SW12	12	141.341	1.111	17.8	1.5905	0.0000	SURCHARGED
15 minute summer	SW13	12	141.336	1.467	532.6	2.0995	0.0000	SURCHARGED
1440 minute winter	SW14	1410	140.915	1.125	29.4	1.6098	0.0000	SURCHARGED
1440 minute winter	SW15	1410	140.915	1.322	29.4	1.8917	0.0000	OK
15 minute summer	SW16	12	144.538	0.935	94.5	1.3379	0.0000	SURCHARGED
15 minute summer	SW17	12	144.323	1.301	120.5	1.8618	0.0000	SURCHARGED
15 minute summer	SW18	12	144.272	1.290	126.9	1.8457	0.0000	SURCHARGED
15 minute summer	SW19	12	144.603	1.317	49.6	1.8847	0.0000	FLOOD RISK
15 minute summer	SW20	12	144.581	1.351	41.3	1.9332	0.0000	FLOOD RISK
15 minute summer	SW21	12	144.920	1.207	31.7	1.7268	0.0000	SURCHARGED
15 minute summer	SW22	12	144.546	1.420	114.5	2.0314	0.0000	SURCHARGED
15 minute summer	SW23	12	144.186	1.368	348.1	1.9576	0.0000	SURCHARGED
15 minute summer	SW24	12	143.334	1.780	366.4	2.5479	0.0000	FLOOD RISK
15 minute summer	SW25	12	143.050	1.814	443.2	2.5965	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	SW1	1.000	SW2	21.5	1.792	0.215	0.7286	
15 minute summer	SW2	1.001	SW4	49.1	2.874	0.313	0.3212	
15 minute summer	SW3	2.000	SW4	62.5	0.558	0.336	2.2756	
15 minute summer	SW4	1.002	SW7	127.0	0.802	0.685	5.3838	
15 minute summer	SW5	3.000	SW6	52.1	2.100	0.224	1.0424	
15 minute summer	SW6	3.001	SW7	81.7	1.428	0.311	1.1954	
15 minute summer	SW7	1.003	SW9	265.6	1.676	1.281	8.6052	
15 minute summer	SW8	4.000	SW9	96.6	1.812	0.345	5.2553	
15 minute summer	SW9	1.004	SW10	380.5	2.402	1.427	2.7656	
15 minute summer	SW10	1.005	SW13	491.4	2.275	0.898	10.0138	
15 minute summer	SW11	5.000	SW13	-18.6	-0.280	-0.177	2.3334	
15 minute summer	SW12	6.000	SW13	21.7	0.636	0.593	0.8391	
15 minute summer	SW13	1.006	SW14	530.9	2.458	2.203	6.8288	
1440 minute winter	SW14	1.007	SW15	29.4	0.618	0.055	3.4805	
1440 minute winter	SW15	Flow through Pond	SW31A	45.1	0.026	0.011	698.8778	
15 minute summer	SW16	7.000	SW17	91.5	1.493	0.723	2.7843	
15 minute summer	SW17	7.001	SW18	106.8	1.025	0.934	1.3378	
15 minute summer	SW18	7.002	SW23	122.5	1.311	1.062	1.7751	
15 minute summer	SW19	8.000	SW20	41.3	0.943	0.551	0.8611	
15 minute summer	SW20	8.001	SW22	49.8	0.707	0.637	1.4713	
15 minute summer	SW21	9.000	SW22	27.2	1.547	1.074	0.3713	
15 minute summer	SW22	8.002	SW23	118.6	1.685	1.515	2.2248	
15 minute summer	SW23	7.003	SW24	335.0	2.515	0.776	11.2761	
15 minute summer	SW24	7.004	SW25	354.0	2.234	0.694	2.0322	
15 minute summer	SW25	7.005	SW27	441.3	2.785	1.205	8.6005	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW26	12	141.886	1.066	28.6	1.5261	0.0000	FLOOD RISK
15 minute summer	SW27	12	141.829	1.365	476.5	1.9532	0.0000	SURCHARGED
15 minute summer	SW28	12	141.197	0.534	33.8	0.7646	0.0000	SURCHARGED
15 minute summer	SW29	12	141.134	1.334	512.6	1.9084	0.0000	SURCHARGED
1440 minute winter	SW30	1410	140.915	1.322	28.4	1.8916	0.0000	OK
1440 minute winter	SW31A	1440	140.914	1.321	45.1	1.8907	0.0000	SURCHARGED
1440 minute winter	SW31B	1410	140.915	1.415	34.1	2.0242	0.0000	OK
15 minute summer	SW32A	11	143.367	1.144	53.6	1.6373	0.0000	SURCHARGED
15 minute summer	SW32B	11	143.159	1.460	60.4	1.6508	0.0000	SURCHARGED
15 minute summer	SW33	11	143.088	1.463	118.0	1.6543	0.0000	SURCHARGED
15 minute summer	SW34	11	142.464	1.034	138.9	1.1690	0.0000	SURCHARGED
15 minute summer	SW35	11	142.146	0.771	143.2	1.1030	0.0000	SURCHARGED
15 minute summer	SW36	11	141.786	0.465	153.1	0.6648	0.0000	SURCHARGED
15 minute summer	SW37	11	141.432	0.222	162.4	0.3183	0.0000	OK
1440 minute winter	SW38	1440	140.915	0.201	8.1	0.2269	0.0000	OK
1440 minute winter	SW39	1440	140.914	1.414	8.1	1.5988	0.0000	OK
15 minute summer	SW40	11	140.978	0.505	32.1	0.7222	0.0000	SURCHARGED
1440 minute winter	SW41	1440	140.915	0.514	1.4	0.7357	0.0000	OK
15 minute summer	SW42	11	140.937	0.349	30.4	0.4999	0.0000	SURCHARGED
1440 minute winter	SW43	1440	140.915	0.514	1.3	0.7357	0.0000	OK
1440 minute winter	SW44	1440	140.914	0.514	4.2	0.7357	0.0000	SURCHARGED
1440 minute winter	SW45	1440	140.914	0.724	4.3	1.0362	0.0000	SURCHARGED
1440 minute winter	SW46	1440	140.914	1.080	4.3	1.5456	0.0000	SURCHARGED
1440 minute winter	SW47	1440	140.914	1.413	4.4	2.0221	0.0000	OK
1440 minute winter	SW48	1440	140.914	1.414	24.1	1.5994	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	SW26	10.000	SW27	24.4	0.882	0.665	1.0345	
15 minute summer	SW27	7.006	SW29	475.9	3.004	0.830	3.3612	
15 minute summer	SW28	11.000	SW29	31.6	1.629	0.354	0.8637	
15 minute summer	SW29	7.007	SW30	511.4	3.228	1.447	2.7469	
1440 minute winter	SW30	Flow through Pond	SW31A	45.1	0.026	0.011	698.8778	
1440 minute winter	SW31A	1.009	SW31B	34.1	0.560	0.188	4.6486	
1440 minute winter	SW31B	Flow through Pond	SW48	24.1	0.026	0.018	1089.3865	
15 minute summer	SW32A	12.000	SW32B	47.3	1.669	0.601	0.7830	
15 minute summer	SW32B	12.001	SW33	61.3	0.871	0.874	1.2935	
15 minute summer	SW33	12.002	SW34	115.5	1.640	1.651	3.4370	
15 minute summer	SW34	12.003	SW35	137.1	1.947	1.964	0.9717	
15 minute summer	SW35	12.004	SW36	142.3	2.021	2.148	1.0585	
15 minute summer	SW36	12.005	SW37	152.9	2.258	1.351	0.6768	
15 minute summer	SW37	12.006	SW38	162.1	3.480	0.639	0.4473	
1440 minute winter	SW38	12.007	SW39	8.1	1.166	0.024	0.7726	
1440 minute winter	SW39	Flow through Pond	SW48	24.1	0.026	0.018	1089.3865	
15 minute summer	SW40	13.000	SW41	30.6	1.738	1.919	0.1154	
1440 minute winter	SW41	Flow through Pond	SW44	2.7	0.029	0.011	123.4446	
15 minute summer	SW42	14.000	SW43	29.1	1.653	1.050	0.1297	
1440 minute winter	SW43	Flow through Pond	SW44	2.7	0.029	0.011	123.4446	
1440 minute winter	SW44	13.002	SW45	-4.2	0.906	-0.012	0.7389	
1440 minute winter	SW45	13.003	SW46	-4.3	0.718	-0.012	1.2737	
1440 minute winter	SW46	13.004	SW47	-4.3	0.085	-0.012	1.0991	
1440 minute winter	SW47	Flow through Pond	SW48	24.1	0.026	0.018	1089.3865	
1440 minute winter	SW48	1.011	SW49	11.4	0.698	0.180	1.2912	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	SW49	1440	140.914	1.474	11.4	123.8225	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)
1440 minute winter	SW49	Infiltration		3.4				670.6

Water Quality (TSS)

Node	Treatment	Effectiveness	SuDS Component	Mitigation TSS	Cumulative TSS
SW31A	Flow through Pond	1.0	Pond	0.700	0.000
SW48	Flow through Pond	1.0	Pond	0.700	0.000
SW49	Deep Bore Soakaway	1.0	Bioretention System	0.800	0.000
SW44	Flow through Pond	1.0	Pond	0.700	0.000

Water Quality (Metals)

Node	Treatment	Effectiveness	SuDS Component	Mitigation Metals	Cumulative Metals
SW31A	Flow through Pond	1.0	Pond	0.700	0.000
SW48	Flow through Pond	1.0	Pond	0.700	0.000
SW49	Deep Bore Soakaway	1.0	Bioretention System	0.800	0.000
SW44	Flow through Pond	1.0	Pond	0.700	0.000

Water Quality (Hydrocarbons)

Node	Treatment	Effectiveness	SuDS Component	Mitigation Hydrocarbons	Cumulative Hydrocarbons
SW31A	Flow through Pond	1.0	Pond	0.500	0.000
SW48	Flow through Pond	1.0	Pond	0.500	0.000
SW49	Deep Bore Soakaway	1.0	Bioretention System	0.800	0.000
SW44	Flow through Pond	1.0	Pond	0.500	0.000