Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	1.00
Return Period (years)	2	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	0.200
CV	0.750	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	✓
Maximum Rainfall (mm/hr)	50.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Width (mm)	Easting (m)	Northing (m)	Depth (m)
SW MH 01.00			8.300	475		510559.540	103772.120	1.070
SW MH 02.00	0.004	5.00	8.445	1200		510590.100	103777.450	0.895
SW MH 03.00	0.047	5.00	8.750	475		510585.580	103807.060	1.075
SW MH 04.00	0.029	5.00	9.000	475		510614.660	103782.370	1.175
SW MH 05.00	0.019	5.00	8.800	475		510608.400	103826.630	0.525
SW MH 06.00	0.067	5.00	8.750	475		510595.400	103807.760	0.600
SW MH 07.00	0.025	5.00	8.800	475		510590.300	103852.730	0.742
SW MH 08.00	0.021	5.00	8.800	475		510603.810	103855.800	0.600
EX SW MH			8.300	900	670	510557.810	103769.670	1.100
ATT TANK			8.300	50		510592.150	103809.440	0.600
DIFFUSER NORTH		5.00	8.450	50		510581.390	103815.530	0.600
DIFFUSER SOUTH		5.00	8.450	50		510588.780	103779.600	0.600

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	SW MH 08.00	SW MH 07.00	13.854	0.600	8.200	8.058	0.142	97.6	150	5.23	50.0
1.001	SW MH 07.00	ATT TANK	43.330	0.600	8.058	7.700	0.358	121.0	150	6.02	50.0
2.000	SW MH 06.00	ATT TANK	3.659	0.600	8.150	7.700	0.450	8.1	150	5.02	50.0
4.000	SW MH 05.00	SW MH 04.00	44.701	0.600	8.275	7.825	0.450	99.3	225	5.57	50.0
4.001	SW MH 04.00	SW MH 02.00	25.048	0.600	7.825	7.625	0.200	125.2	225	5.93	50.0
1.004	SW MH 02.00	SW MH 01.00	31.021	0.600	7.550	7.230	0.320	96.9	100	7.31	47.4
1.005	SW MH 01.00	EX SW MH	2.999	0.600	7.230	7.200	0.030	100.0	100	7.37	47.2
1.002	ATT TANK	SW MH 03.00	6.988	0.600	7.700	7.675	0.025	279.5	300	6.14	50.0
1.003	SW MH 03.00	SW MH 02.00	29.953	0.600	7.675	7.555	0.120	249.6	300	6.65	49.6

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
1.000	1.017	18.0	2.8	0.450	0.592	0.021	0.0
1.001	0.912	16.1	6.2	0.592	0.450	0.046	0.0
2.000	3.555	62.8	9.1	0.450	0.450	0.067	0.0
4.000	1.312	52.1	2.6	0.300	0.950	0.019	0.0
4.001	1.167	46.4	6.5	0.950	0.595	0.048	0.0
1.004	0.781	6.1	27.2	0.795	0.970	0.212	0.0
1.005	0.769	6.0	27.1	0.970	1.000	0.212	0.0
1.002	0.935	66.1	15.3	0.300	0.775	0.113	0.0
1.003	0.990	70.0	21.5	0.775	0.590	0.160	0.0

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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)
3.000	DIFFUSER NORTH	SW MH 03.00	9.450	0.600	7.850	7.750	0.100	94.5	150	5.15	50.0
5.000	DIFFUSER SOUTH	SW MH 02.00	2.523	0.600	7.850	7.650	0.200	12.6	150	5.01	50.0

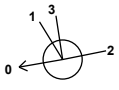
Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
3.000	1.034	18.3	0.0	0.450	0.850	0.000	0.0
5.000	2.852	50.4	0.0	0.450	0.645	0.000	0.0

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	13.854	97.6	150	Circular	8.800	8.200	0.450	8.800	8.058	0.592
1.001	43.330	121.0	150	Circular	8.800	8.058	0.592	8.300	7.700	0.450
2.000	3.659	8.1	150	Circular	8.750	8.150	0.450	8.300	7.700	0.450
4.000	44.701	99.3	225	Circular	8.800	8.275	0.300	9.000	7.825	0.950
4.001	25.048	125.2	225	Circular	9.000	7.825	0.950	8.445	7.625	0.595
1.004	31.021	96.9	100	Circular	8.445	7.550	0.795	8.300	7.230	0.970
1.005	2.999	100.0	100	Circular	8.300	7.230	0.970	8.300	7.200	1.000
1.002	6.988	279.5	300	Circular	8.300	7.700	0.300	8.750	7.675	0.775
1.003	29.953	249.6	300	Circular	8.750	7.675	0.775	8.445	7.555	0.590
3.000	9.450	94.5	150	Circular	8.450	7.850	0.450	8.750	7.750	0.850
5.000	2.523	12.6	150	Circular	8.450	7.850	0.450	8.445	7.650	0.645

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Width (mm)	Node Type	MH Type
1.000	SW MH 08.00	475	Manhole	Adoptable	SW MH 07.00	475		Manhole	Adoptable
1.001	SW MH 07.00	475	Manhole	Adoptable	ATT TANK	50		Manhole	Adoptable
2.000	SW MH 06.00	475	Manhole	Adoptable	ATT TANK	50		Manhole	Adoptable
4.000	SW MH 05.00	475	Manhole	Adoptable	SW MH 04.00	475		Manhole	Adoptable
4.001	SW MH 04.00	475	Manhole	Adoptable	SW MH 02.00	1200		Manhole	Adoptable
1.004	SW MH 02.00	1200	Manhole	Adoptable	SW MH 01.00	475		Manhole	Adoptable
1.005	SW MH 01.00	475	Manhole	Adoptable	EX SW MH	900	670	Manhole	Adoptable
1.002	ATT TANK	50	Manhole	Adoptable	SW MH 03.00	475		Manhole	Adoptable
1.003	SW MH 03.00	475	Manhole	Adoptable	SW MH 02.00	1200		Manhole	Adoptable
3.000	DIFFUSER NORTH	50	Manhole	Adoptable	SW MH 03.00	475		Manhole	Adoptable
5.000	DIFFUSER SOUTH	50	Manhole	Adoptable	SW MH 02.00	1200		Manhole	Adoptable

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections		Link	IL (m)	Dia (mm)
SW MH 01.00	510559.540	103772.120	8.300	1.070	475		1		1.004	7.230	100
											
							0		1.005	7.230	100
SW MH 02.00	510590.100	103777.450	8.445	0.895	1200			1	5.000	7.650	150
								2	4.001	7.625	225
								3	1.003	7.555	300
								0	1.004	7.550	100

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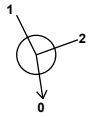
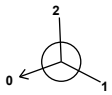
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)
SW MH 03.00	510585.580	103807.060	8.750	1.075	475			1 3.000	7.750	150
								2 1.002	7.675	300
								0 1.003	7.675	300
SW MH 04.00	510614.660	103782.370	9.000	1.175	475			1 4.000	7.825	225
								0 4.001	7.825	225
SW MH 05.00	510608.400	103826.630	8.800	0.525	475			0 4.000	8.275	225
SW MH 06.00	510595.400	103807.760	8.750	0.600	475			0 2.000	8.150	150
SW MH 07.00	510590.300	103852.730	8.800	0.742	475			1 1.000	8.058	150
								0 1.001	8.058	150
SW MH 08.00	510603.810	103855.800	8.800	0.600	475			0 1.000	8.200	150
EX SW MH	510557.810	103769.670	8.300	1.100	900	670		1 1.005	7.200	100
ATT TANK	510592.150	103809.440	8.300	0.600	50			1 2.000	7.700	150
								2 1.001	7.700	150
								0 1.002	7.700	300
DIFFUSER NORTH	510581.390	103815.530	8.450	0.600	50			0 3.000	7.850	150
DIFFUSER SOUTH	510588.780	103779.600	8.450	0.600	50			0 5.000	7.850	150

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Starting Level (m)	
Rainfall Events	Singular	Skip Steady State	x	Check Discharge Rate(s)	x
Summer CV	0.750	Drain Down Time (mins)	240	Check Discharge Volume	x
Winter CV	0.840	Additional Storage (m³/ha)	20.0		

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

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Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0
30	40	0	0
100	0	0	0
100	45	0	0

Node SW MH 02.00 Online Head/Flow Control

Flap Valve	x	Invert Level (m)	7.550	Design Flow (l/s)	2.0
Replaces Downstream Link	✓	Design Depth (m)	0.800		

Head (m)	Flow (l/s)	Head (m)	Flow (l/s)	Head (m)	Flow (l/s)	Head (m)	Flow (l/s)	Head (m)	Flow (l/s)	Head (m)	Flow (l/s)
0.028	0.321	0.166	1.957	0.303	1.985	0.441	1.836	0.579	1.733	0.717	1.908
0.055	1.019	0.193	1.987	0.331	1.969	0.469	1.768	0.607	1.770	0.745	1.941
0.083	1.578	0.221	2.000	0.359	1.948	0.497	1.676	0.634	1.805	0.772	1.973
0.110	1.818	0.248	2.002	0.386	1.922	0.524	1.657	0.662	1.840	0.800	2.005
0.138	1.904	0.276	1.996	0.414	1.886	0.552	1.696	0.690	1.875		

Node ATT TANK Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	1.5	Invert Level (m)	7.700
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	203.5	0.0	0.610	203.5	0.0	0.611	0.0	0.0

Node DIFFUSER NORTH Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	7.900	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	0.390
Safety Factor	2.0	Width (m)	8.000	Inf Depth (m)	
Porosity	0.32	Length (m)	37.125		

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
2 year 15 minute summer	114.502	32.400
2 year 15 minute winter	80.352	32.400
2 year 30 minute summer	75.172	21.271
2 year 30 minute winter	52.752	21.271
2 year 60 minute summer	50.840	13.436
2 year 60 minute winter	33.777	13.436
2 year 120 minute summer	35.604	9.409
2 year 120 minute winter	23.655	9.409
2 year 180 minute summer	28.605	7.361
2 year 180 minute winter	18.594	7.361
2 year 240 minute summer	23.066	6.096
2 year 240 minute winter	15.324	6.096
2 year 360 minute summer	17.799	4.580
2 year 360 minute winter	11.570	4.580
2 year 480 minute summer	13.994	3.698
2 year 480 minute winter	9.297	3.698

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Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
2 year 600 minute summer	11.411	3.121
2 year 600 minute winter	7.796	3.121
2 year 720 minute summer	10.120	2.712
2 year 720 minute winter	6.801	2.712
2 year 960 minute summer	8.238	2.169
2 year 960 minute winter	5.457	2.169
2 year 1440 minute summer	5.943	1.593
2 year 1440 minute winter	3.994	1.593
2 year 2160 minute summer	4.276	1.182
2 year 2160 minute winter	2.947	1.182
2 year 2880 minute summer	3.603	0.966
2 year 2880 minute winter	2.421	0.966
2 year 4320 minute summer	2.843	0.743
2 year 4320 minute winter	1.872	0.743
2 year 5760 minute summer	2.452	0.628
2 year 5760 minute winter	1.587	0.628
2 year 7200 minute summer	2.181	0.556
2 year 7200 minute winter	1.408	0.556
2 year 8640 minute summer	1.991	0.508
2 year 8640 minute winter	1.285	0.508
2 year 10080 minute summer	1.853	0.473
2 year 10080 minute winter	1.196	0.473
30 year +40% CC 15 minute summer	422.556	119.569
30 year +40% CC 15 minute winter	296.531	119.569
30 year +40% CC 30 minute summer	281.126	79.549
30 year +40% CC 30 minute winter	197.281	79.549
30 year +40% CC 60 minute summer	191.261	50.545
30 year +40% CC 60 minute winter	127.069	50.545
30 year +40% CC 120 minute summer	116.915	30.897
30 year +40% CC 120 minute winter	77.676	30.897
30 year +40% CC 180 minute summer	88.819	22.856
30 year +40% CC 180 minute winter	57.735	22.856
30 year +40% CC 240 minute summer	69.381	18.335
30 year +40% CC 240 minute winter	46.095	18.335
30 year +40% CC 360 minute summer	51.697	13.304
30 year +40% CC 360 minute winter	33.605	13.304
30 year +40% CC 480 minute summer	39.899	10.544
30 year +40% CC 480 minute winter	26.508	10.544
30 year +40% CC 600 minute summer	32.123	8.786
30 year +40% CC 600 minute winter	21.948	8.786
30 year +40% CC 720 minute summer	28.215	7.562
30 year +40% CC 720 minute winter	18.962	7.562
30 year +40% CC 960 minute summer	22.623	5.957
30 year +40% CC 960 minute winter	14.986	5.957
30 year +40% CC 1440 minute summer	15.893	4.260
30 year +40% CC 1440 minute winter	10.681	4.260
30 year +40% CC 2160 minute summer	11.112	3.071
30 year +40% CC 2160 minute winter	7.656	3.071
30 year +40% CC 2880 minute summer	9.150	2.452
30 year +40% CC 2880 minute winter	6.149	2.452
30 year +40% CC 4320 minute summer	6.926	1.811
30 year +40% CC 4320 minute winter	4.561	1.811

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Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
30 year +40% CC 5760 minute summer	5.774	1.478
30 year +40% CC 5760 minute winter	3.737	1.478
30 year +40% CC 7200 minute summer	4.996	1.275
30 year +40% CC 7200 minute winter	3.225	1.275
30 year +40% CC 8640 minute summer	4.455	1.137
30 year +40% CC 8640 minute winter	2.875	1.137
30 year +40% CC 10080 minute summer	4.064	1.037
30 year +40% CC 10080 minute winter	2.623	1.037
100 year 15 minute summer	379.868	107.489
100 year 15 minute winter	266.574	107.489
100 year 30 minute summer	254.577	72.036
100 year 30 minute winter	178.650	72.036
100 year 60 minute summer	175.095	46.272
100 year 60 minute winter	116.329	46.272
100 year 120 minute summer	104.832	27.704
100 year 120 minute winter	69.648	27.704
100 year 180 minute summer	79.113	20.358
100 year 180 minute winter	51.425	20.358
100 year 240 minute summer	61.670	16.298
100 year 240 minute winter	40.972	16.298
100 year 360 minute summer	46.001	11.838
100 year 360 minute winter	29.902	11.838
100 year 480 minute summer	35.584	9.404
100 year 480 minute winter	23.641	9.404
100 year 600 minute summer	28.703	7.851
100 year 600 minute winter	19.611	7.851
100 year 720 minute summer	25.245	6.766
100 year 720 minute winter	16.966	6.766
100 year 960 minute summer	20.263	5.336
100 year 960 minute winter	13.423	5.336
100 year 1440 minute summer	14.244	3.817
100 year 1440 minute winter	9.573	3.817
100 year 2160 minute summer	9.913	2.740
100 year 2160 minute winter	6.831	2.740
100 year 2880 minute summer	8.113	2.174
100 year 2880 minute winter	5.452	2.174
100 year 4320 minute summer	6.061	1.585
100 year 4320 minute winter	3.991	1.585
100 year 5760 minute summer	4.991	1.278
100 year 5760 minute winter	3.230	1.278
100 year 7200 minute summer	4.276	1.091
100 year 7200 minute winter	2.760	1.091
100 year 8640 minute summer	3.779	0.964
100 year 8640 minute winter	2.439	0.964
100 year 10080 minute summer	3.419	0.872
100 year 10080 minute winter	2.207	0.872
100 year +45% CC 15 minute summer	550.808	155.860
100 year +45% CC 15 minute winter	386.532	155.860
100 year +45% CC 30 minute summer	369.136	104.453
100 year +45% CC 30 minute winter	259.043	104.453
100 year +45% CC 60 minute summer	253.887	67.095
100 year +45% CC 60 minute winter	168.677	67.095

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Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
100 year +45% CC 120 minute summer	152.006	40.171
100 year +45% CC 120 minute winter	100.989	40.171
100 year +45% CC 180 minute summer	114.713	29.520
100 year +45% CC 180 minute winter	74.567	29.520
100 year +45% CC 240 minute summer	89.422	23.632
100 year +45% CC 240 minute winter	59.410	23.632
100 year +45% CC 360 minute summer	66.702	17.165
100 year +45% CC 360 minute winter	43.358	17.165
100 year +45% CC 480 minute summer	51.597	13.636
100 year +45% CC 480 minute winter	34.280	13.636
100 year +45% CC 600 minute summer	41.619	11.384
100 year +45% CC 600 minute winter	28.437	11.384
100 year +45% CC 720 minute summer	36.605	9.810
100 year +45% CC 720 minute winter	24.601	9.810
100 year +45% CC 960 minute summer	29.381	7.737
100 year +45% CC 960 minute winter	19.463	7.737
100 year +45% CC 1440 minute summer	20.653	5.535
100 year +45% CC 1440 minute winter	13.880	5.535
100 year +45% CC 2160 minute summer	14.374	3.973
100 year +45% CC 2160 minute winter	9.904	3.973
100 year +45% CC 2880 minute summer	11.763	3.153
100 year +45% CC 2880 minute winter	7.906	3.153
100 year +45% CC 4320 minute summer	8.788	2.298
100 year +45% CC 4320 minute winter	5.787	2.298
100 year +45% CC 5760 minute summer	7.237	1.853
100 year +45% CC 5760 minute winter	4.684	1.853
100 year +45% CC 7200 minute summer	6.200	1.582
100 year +45% CC 7200 minute winter	4.001	1.582
100 year +45% CC 8640 minute summer	5.479	1.398
100 year +45% CC 8640 minute winter	3.536	1.398
100 year +45% CC 10080 minute summer	4.958	1.265
100 year +45% CC 10080 minute winter	3.200	1.265

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Results for 2 year Critical Storm Duration. Lowest mass balance: 99.14%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	SW MH 01.00	124	7.273	0.043	2.0	0.0076	0.0000	OK
180 minute winter	SW MH 02.00	144	7.807	0.257	2.9	0.3133	0.0000	SURCHARGED
180 minute winter	SW MH 03.00	144	7.807	0.132	2.0	0.1387	0.0000	OK
15 minute winter	SW MH 04.00	11	7.883	0.058	7.0	0.0387	0.0000	OK
15 minute winter	SW MH 05.00	10	8.310	0.035	2.8	0.0311	0.0000	OK
15 minute summer	SW MH 06.00	8	8.211	0.061	9.4	0.1462	0.0000	OK
15 minute winter	SW MH 07.00	10	8.138	0.080	6.8	0.0683	0.0000	OK
15 minute winter	SW MH 08.00	10	8.242	0.042	3.1	0.0366	0.0000	OK
120 minute winter	EX SW MH	124	7.240	0.040	2.0	0.0000	0.0000	OK
180 minute winter	ATT TANK	144	7.807	0.107	6.7	20.6754	0.0000	OK
15 minute summer	DIFFUSER NORTH	1	7.850	0.000	0.0	0.0000	0.0000	OK
15 minute summer	DIFFUSER SOUTH	1	7.850	0.000	0.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	SW MH 01.00	1.005	EX SW MH	2.0	0.655	0.332	0.0092	31.0
180 minute winter	SW MH 02.00	Head/Flow	SW MH 01.00	2.0				
180 minute winter	SW MH 03.00	1.003	SW MH 02.00	1.9	0.231	0.027	1.3921	
15 minute winter	SW MH 04.00	4.001	SW MH 02.00	6.8	0.604	0.146	0.5293	
15 minute winter	SW MH 05.00	4.000	SW MH 04.00	2.7	0.465	0.051	0.2650	
15 minute summer	SW MH 06.00	2.000	ATT TANK	9.6	3.066	0.153	0.0131	
15 minute winter	SW MH 07.00	1.001	ATT TANK	6.8	1.314	0.423	0.2448	
15 minute winter	SW MH 08.00	1.000	SW MH 07.00	3.1	0.454	0.170	0.0942	
180 minute winter	ATT TANK	1.002	SW MH 03.00	1.9	0.347	0.028	0.1828	
15 minute summer	DIFFUSER NORTH	3.000	SW MH 03.00	0.0	0.000	0.000	0.0234	
15 minute summer	DIFFUSER SOUTH	5.000	SW MH 02.00	0.0	0.000	0.000	0.0222	

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Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.14%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW MH 01.00	219	7.273	0.043	2.0	0.0076	0.0000	OK
240 minute winter	SW MH 02.00	240	8.113	0.563	4.9	0.6869	0.0000	SURCHARGED
240 minute winter	SW MH 03.00	240	8.113	0.438	7.7	0.4609	0.0000	SURCHARGED
240 minute winter	SW MH 04.00	240	8.113	0.288	5.1	0.1932	0.0000	SURCHARGED
15 minute winter	SW MH 05.00	10	8.342	0.067	10.3	0.0601	0.0000	OK
15 minute summer	SW MH 06.00	9	8.257	0.107	34.7	0.2568	0.0000	OK
15 minute winter	SW MH 07.00	12	8.503	0.445	23.0	0.3790	0.0000	FLOOD RISK
15 minute winter	SW MH 08.00	12	8.553	0.353	11.4	0.3097	0.0000	FLOOD RISK
15 minute summer	EX SW MH	219	7.240	0.040	2.0	0.0000	0.0000	OK
240 minute winter	ATT TANK	240	8.113	0.413	17.8	79.8660	0.0000	FLOOD RISK
240 minute winter	DIFFUSER NORTH	240	8.113	0.263	6.5	18.4549	0.0000	SURCHARGED
240 minute winter	DIFFUSER SOUTH	240	8.113	0.263	0.1	0.0005	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	SW MH 01.00	1.005	EX SW MH	2.0	0.655	0.332	0.0092	29.9
240 minute winter	SW MH 02.00	Head/Flow	SW MH 01.00	2.0				
240 minute winter	SW MH 03.00	1.003	SW MH 02.00	-2.7	0.261	-0.039	2.1093	
240 minute winter	SW MH 04.00	4.001	SW MH 02.00	4.5	0.450	0.097	0.9962	
15 minute winter	SW MH 05.00	4.000	SW MH 04.00	10.1	0.634	0.193	0.7965	
15 minute summer	SW MH 06.00	2.000	ATT TANK	34.9	3.458	0.555	0.0484	
15 minute winter	SW MH 07.00	1.001	ATT TANK	21.9	1.419	1.357	0.7628	
15 minute winter	SW MH 08.00	1.000	SW MH 07.00	10.1	0.571	0.559	0.2439	
240 minute winter	ATT TANK	1.002	SW MH 03.00	-6.2	0.198	-0.094	0.4921	
240 minute winter	DIFFUSER NORTH	3.000	SW MH 03.00	-6.5	-0.377	-0.357	0.1664	
240 minute winter	DIFFUSER SOUTH	5.000	SW MH 02.00	-0.1	-0.010	-0.002	0.0444	

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Results for 100 year Critical Storm Duration. Lowest mass balance: 99.14%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW MH 01.00	179	7.273	0.043	2.0	0.0076	0.0000	OK
240 minute winter	SW MH 02.00	240	8.064	0.514	4.6	0.6270	0.0000	SURCHARGED
240 minute winter	SW MH 03.00	236	8.064	0.389	6.6	0.4092	0.0000	SURCHARGED
240 minute winter	SW MH 04.00	236	8.064	0.239	4.6	0.1603	0.0000	SURCHARGED
15 minute winter	SW MH 05.00	10	8.338	0.063	9.3	0.0569	0.0000	OK
15 minute summer	SW MH 06.00	9	8.250	0.100	31.2	0.2412	0.0000	OK
15 minute winter	SW MH 07.00	11	8.401	0.343	21.0	0.2916	0.0000	SURCHARGED
15 minute winter	SW MH 08.00	11	8.448	0.248	10.3	0.2175	0.0000	SURCHARGED
15 minute winter	EX SW MH	223	7.240	0.040	2.0	0.0000	0.0000	OK
240 minute winter	ATT TANK	240	8.064	0.364	16.5	70.3652	0.0000	FLOOD RISK
240 minute winter	DIFFUSER NORTH	236	8.064	0.214	5.2	13.7922	0.0000	SURCHARGED
240 minute winter	DIFFUSER SOUTH	236	8.064	0.214	0.1	0.0004	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	SW MH 01.00	1.005	EX SW MH	2.0	0.655	0.332	0.0092	30.0
240 minute winter	SW MH 02.00	Head/Flow	SW MH 01.00	2.0				
240 minute winter	SW MH 03.00	1.003	SW MH 02.00	-2.2	0.254	-0.032	2.1093	
240 minute winter	SW MH 04.00	4.001	SW MH 02.00	4.2	0.445	0.091	0.9962	
15 minute winter	SW MH 05.00	4.000	SW MH 04.00	9.1	0.636	0.174	0.6693	
15 minute summer	SW MH 06.00	2.000	ATT TANK	31.4	3.453	0.499	0.0445	
15 minute winter	SW MH 07.00	1.001	ATT TANK	19.9	1.419	1.234	0.7628	
15 minute winter	SW MH 08.00	1.000	SW MH 07.00	9.2	0.582	0.512	0.2439	
240 minute winter	ATT TANK	1.002	SW MH 03.00	-5.9	0.240	-0.089	0.4921	
240 minute winter	DIFFUSER NORTH	3.000	SW MH 03.00	-5.2	-0.313	-0.287	0.1664	
240 minute winter	DIFFUSER SOUTH	5.000	SW MH 02.00	-0.1	-0.009	-0.002	0.0444	

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Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.14%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
2160 minute summer	SW MH 01.00	1020	7.273	0.043	2.0	0.0076	0.0000	OK
480 minute winter	SW MH 02.00	464	8.243	0.693	3.8	0.8461	0.0000	FLOOD RISK
480 minute winter	SW MH 03.00	464	8.243	0.568	5.7	0.5980	0.0000	SURCHARGED
480 minute winter	SW MH 04.00	464	8.243	0.418	3.8	0.2807	0.0000	SURCHARGED
15 minute winter	SW MH 05.00	10	8.352	0.077	13.5	0.0692	0.0000	OK
15 minute winter	SW MH 06.00	10	8.281	0.131	47.5	0.3155	0.0000	OK
15 minute winter	SW MH 07.00	11	8.769	0.711	29.2	0.6047	0.0000	FLOOD RISK
15 minute winter	SW MH 08.00	11	8.800	0.600	14.9	0.5262	0.5410	FLOOD
2160 minute summer	EX SW MH	1020	7.240	0.040	2.0	0.0000	0.0000	OK
480 minute winter	ATT TANK	464	8.243	0.543	10.9	105.0574	0.0000	FLOOD RISK
480 minute winter	DIFFUSER NORTH	464	8.243	0.393	4.8	30.8220	0.0000	FLOOD RISK
480 minute winter	DIFFUSER SOUTH	464	8.244	0.394	0.1	0.0008	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)
2160 minute summer	SW MH 01.00	1.005	EX SW MH	2.0	0.655	0.332	0.0092	214.9
480 minute winter	SW MH 02.00	Head/Flow	SW MH 01.00	2.0				
480 minute winter	SW MH 03.00	1.003	SW MH 02.00	-2.0	0.183	-0.029	2.1093	
480 minute winter	SW MH 04.00	4.001	SW MH 02.00	3.5	0.427	0.076	0.9962	
15 minute winter	SW MH 05.00	4.000	SW MH 04.00	13.2	0.646	0.254	1.1511	
15 minute winter	SW MH 06.00	2.000	ATT TANK	47.3	3.476	0.752	0.0605	
15 minute winter	SW MH 07.00	1.001	ATT TANK	24.2	1.418	1.503	0.7628	
15 minute winter	SW MH 08.00	1.000	SW MH 07.00	11.5	0.652	0.639	0.2439	
480 minute winter	ATT TANK	1.002	SW MH 03.00	-3.6	0.264	-0.054	0.4921	
480 minute winter	DIFFUSER NORTH	3.000	SW MH 03.00	-4.8	-0.276	-0.263	0.1664	
480 minute winter	DIFFUSER SOUTH	5.000	SW MH 02.00	-0.1	-0.006	-0.001	0.0444	

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