Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	1	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	1.000
Ratio-R	0.400	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
PS1	0.006	15.00	52.968	450	999.250	888.594	0.960
PS2			53.573	450	1002.771	880.098	1.626
PS3			53.674	450	1005.292	879.514	1.745
PS10	0.007	15.00	52.922	450	1006.680	894.844	0.268
PS11	0.002	15.00	53.585	450	1011.756	882.388	1.703
PS50			53.571	450	1013.300	879.306	1.712
PS6			53.645	450	1013.967	878.076	1.800
PS34	0.013	15.00	52.807	450	1006.506	898.830	1.427
PS35			53.172	450	1011.087	887.843	1.872
PS36			53.228	450	1011.532	886.805	1.935
PS37	0.003	15.00	53.208	450	1017.249	889.158	1.957
PS46			53.400	450	1019.079	885.184	2.178
PS7			53.509	450	1019.924	883.317	2.300
PS38	0.012	15.00	52.378	450	1019.047	904.359	1.032
PS39			52.932	180	1023.737	893.631	1.664
PS47	0.000	15.00	53.273	450	1021.849	891.141	2.026
PS41			53.428	450	1023.970	888.665	2.203
PS40			53.463	450	1024.907	887.513	2.319
PS42	0.004	60.00	51.827	450	1019.386	907.195	0.578
PS43	0.005	60.00	52.834	450	1024.816	895.004	1.673
PS44	0.002	15.00	52.799	450	1028.133	896.148	1.662
PS45	0.004	30.00	52.896	450	1031.083	895.432	1.779
PS8			53.056	450	1031.892	893.571	1.973
PS51			52.659	1200	1039.681	899.545	1.865
TANK 2		5.00	50.000		1027.139	916.226	2.640
S23A	0.019	60.00	50.000	1200	1031.389	921.055	2.650
PS20	0.008	15.00	49.274	450	1014.447	917.193	0.900
PS21	0.004	15.00	49.266	450	1025.694	922.174	1.046
PS22			49.253	450	1024.862	924.261	1.061
PS23			49.701	1200	1028.955	926.225	2.473
PS24			48.967	1200	1025.297	934.723	1.831
PS26	0.013	15.00	48.762	450	1009.033	929.622	0.900
PS27	0.002	15.00	48.701	450	1019.635	934.220	0.984
PS25			48.872	450	1024.641	936.302	1.827
PS19	0.012	15.00	48.712	450	1008.534	931.188	0.900
PS18	0.004	15.00	48.657	450	1018.869	935.527	0.986
PS17			48.729	450	1023.885	938.315	1.729
PS12	0.007	30.00	48.199	450	1003.095	943.668	0.950
PS13	0.004	30.00	48.091	450	1013.621	948.197	1.033
PS14			48.118	450	1016.022	947.006	1.087
PS15			48.100	600	1019.667	948.453	1.108

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
PS16			48.172	1200	1020.817	945.415	1.332
PS30			48.650	450	1025.942	947.557	1.866
paving 1	0.002	60.00	48.100		1017.143	944.997	0.500
paving 2	0.002	60.00	48.800		1023.763	930.673	0.500
paving 3	0.002	60.00	49.250		1024.775	927.463	0.500
paving 4	0.002	60.00	48.600		1019.348	939.842	0.500
paving 5	0.002	60.00	50.000		1030.949	916.653	0.500
tank		5.00	52.800		1037.718	899.793	1.950
Tank 4		5.00	48.000		1018.111	946.720	1.005
TANK 3		5.00	48.600		1019.987	943.153	1.700
Paving 6	0.002	30.00	53.900		1010.424	877.694	0.900
paving 7	0.002	30.00	53.510		1016.073	882.742	0.610
paving 8	0.002	30.00	53.350		1025.158	889.965	0.580
paving 9	0.002	30.00	53.000		1028.362	892.618	0.580

Simulation Settings

Rainfall Methodology	FEH-22	Skip Steady State	x	1 year (l/s)	0.5
Summer CV	0.750	Drain Down Time (mins)	240	30 year (l/s)	1.4
Winter CV	0.840	Additional Storage (m³/ha)	20.0	100 year (l/s)	1.8
Analysis Speed	Normal	Check Discharge Rate(s)	✓	Check Discharge Volume	x

Storm Durations

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

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

Pre-development Discharge Rate

Site Makeup	Greenfield	Growth Factor 30 year	2.40
Greenfield Method	IH124	Growth Factor 100 year	3.19
Positively Drained Area (ha)	0.269	Betterment (%)	0
SAAR (mm)	640	QBar	0.6
Soil Index	2	Q 1 year (l/s)	0.5
		Q 30 year (l/s)	1.4
Region	6	Q 100 year (l/s)	1.8
Growth Factor 1 year	0.85		

Node PS16 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Downstream Link	1.015	Sump Available	✓
Replaces Downstream Link	✓	Product Number	CTL-SHE-0067-2000-1000-2000
Invert Level (m)	46.840	Min Outlet Diameter (m)	0.100
Design Depth (m)	1.000	Min Node Diameter (mm)	1200
Design Flow (l/s)	2.0		

Node S23A Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Downstream Link	1.010	Sump Available	✓
Replaces Downstream Link	✓	Product Number	CTL-SHE-0061-2000-1500-2000
Invert Level (m)	47.350	Min Outlet Diameter (m)	0.075
Design Depth (m)	1.500	Min Node Diameter (mm)	1200
Design Flow (l/s)	2.0		

Node PS51 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Downstream Link	1.009	Sump Available	✓
Replaces Downstream Link	✓	Product Number	CTL-SHE-0079-2500-0750-2500
Invert Level (m)	50.794	Min Outlet Diameter (m)	0.100
Design Depth (m)	0.750	Min Node Diameter (mm)	1200
Design Flow (l/s)	2.5		

Node TANK 2 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	47.360
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	20.0	0.0	1.500	20.0	0.0	1.501	0.0	0.0

Node Paving 6 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	53.400
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	0

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	14.0	0.0	0.450	14.0	0.0

Node paving 7 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	52.900
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.35	Time to half empty (mins)	0

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	14.0	0.0	0.450	14.0	0.0

Node paving 1 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	47.600
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.35	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	10.0	0.0	0.500	10.0	0.0

Node paving 2 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	48.300
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.35	Time to half empty (mins)	0

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	10.0	0.0	0.500	10.0	0.0

Node paving 3 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	48.750
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.35	Time to half empty (mins)	0

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	10.0	0.0	0.500	10.0	0.0

Node paving 4 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	48.100
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.35	Time to half empty (mins)	0

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	10.0	0.0	0.500	10.0	0.0

Node paving 5 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	49.500
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.35	Time to half empty (mins)	24

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	10.0	0.0	0.500	10.0	0.0

Node tank Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	50.850
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	110

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	17.0	0.0	1.000	17.0	0.0	1.001	0.0	0.0

Node Tank 4 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	46.995
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	18.0	0.0	0.500	18.0	0.0	0.501	0.0	0.0

Node TANK 3 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	46.900
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	28.0	0.0	1.000	28.0	0.0	1.001	0.0	0.0

Node paving 8 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	52.770
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.35	Time to half empty (mins)	0

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	14.0	0.0	0.450	14.0	0.0

Node paving 9 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	52.420
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.35	Time to half empty (mins)	0

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	14.0	0.0	0.450	14.0	0.0

Results for 2 year Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	PS1	13	52.025	0.017	0.4	0.0049	0.0000	OK
15 minute winter	PS2	16	51.965	0.018	0.4	0.0028	0.0000	OK
15 minute winter	PS3	18	51.946	0.017	0.4	0.0027	0.0000	OK
30 minute winter	PS10	25	52.672	0.018	0.5	0.0119	0.0000	OK
30 minute winter	PS11	25	51.910	0.028	1.0	0.0051	0.0000	OK
30 minute winter	PS50	25	51.885	0.026	1.0	0.0041	0.0000	OK
30 minute winter	PS6	25	51.860	0.015	1.1	0.0024	0.0000	OK
30 minute winter	PS34	21	51.405	0.025	0.9	0.0088	0.0000	OK
30 minute winter	PS35	25	51.328	0.028	0.9	0.0045	0.0000	OK
30 minute winter	PS36	25	51.319	0.026	0.9	0.0041	0.0000	OK
15 minute winter	PS37	16	51.280	0.029	1.1	0.0056	0.0000	OK
30 minute winter	PS46	26	51.256	0.034	1.2	0.0054	0.0000	OK
30 minute winter	PS7	26	51.247	0.038	2.3	0.0060	0.0000	OK
15 minute winter	PS38	13	51.374	0.028	0.8	0.0109	0.0000	OK
15 minute winter	PS39	17	51.297	0.029	0.8	0.0007	0.0000	OK
15 minute winter	PS47	17	51.276	0.029	0.8	0.0046	0.0000	OK
30 minute winter	PS41	26	51.256	0.031	0.9	0.0050	0.0000	OK
30 minute winter	PS40	26	51.194	0.050	3.2	0.0080	0.0000	OK
15 minute summer	PS42	29	51.258	0.009	0.1	0.0027	0.0000	OK
120 minute winter	PS43	96	51.176	0.015	0.3	0.0034	0.0000	OK
180 minute winter	PS44	120	51.154	0.017	0.4	0.0031	0.0000	OK
120 minute winter	PS45	84	51.141	0.024	0.7	0.0049	0.0000	OK
30 minute winter	PS8	26	51.119	0.036	3.8	0.0057	0.0000	OK
30 minute winter	PS51	34	50.911	0.117	3.8	0.1323	0.0000	OK
180 minute winter	TANK 2	144	47.595	0.235	1.3	4.4666	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	PS1	1.000	PS2	0.4	0.354	0.028	0.0106	
15 minute winter	PS2	1.001	PS3	0.4	0.384	0.027	0.0029	
15 minute winter	PS3	1.002	PS11	0.4	0.249	0.028	0.0120	
30 minute winter	PS10	2.000	PS11	0.5	0.440	0.028	0.0153	
30 minute winter	PS11	1.003	PS50	1.0	0.467	0.069	0.0074	
30 minute winter	PS50	1.004	PS6	1.0	0.688	0.056	0.0021	
30 minute winter	PS6	1.005	PS7	1.1	0.537	0.022	0.0174	
30 minute winter	PS34	3.000	PS35	0.9	0.426	0.062	0.0254	
30 minute winter	PS35	3.001	PS36	0.9	0.420	0.065	0.0024	
30 minute winter	PS36	3.002	PS37	0.9	0.407	0.062	0.0137	
15 minute winter	PS37	3.003	PS46	1.1	0.424	0.076	0.0116	
30 minute winter	PS46	3.004	PS7	1.2	0.410	0.085	0.0066	
30 minute winter	PS7	1.006	PS40	2.3	0.534	0.129	0.0281	
15 minute winter	PS38	4.000	PS39	0.8	0.444	0.163	0.0213	
15 minute winter	PS39	4.001	PS47	0.8	0.428	0.162	0.0059	
15 minute winter	PS47	4.002	PS41	0.8	0.463	0.162	0.0065	
30 minute winter	PS41	4.003	PS40	0.9	0.453	0.182	0.0030	
30 minute winter	PS40	1.007	PS8	3.2	0.768	0.222	0.0387	
15 minute summer	PS42	5.000	PS43	0.1	0.182	0.007	0.0075	
120 minute winter	PS43	5.001	PS44	0.3	0.324	0.021	0.0036	
180 minute winter	PS44	5.002	PS45	0.4	0.293	0.028	0.0041	
120 minute winter	PS45	5.003	PS8	0.7	0.400	0.050	0.0036	
30 minute winter	PS8	1.008	PS51	3.8	0.780	0.124	0.0844	
30 minute winter	PS51	Hydro-Brake®	S23A	2.3				
180 minute winter	TANK 2	6.000	S23A	-1.3	-0.192	-0.130	0.0555	

Results for 2 year Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	S23A	144	47.595	0.245	2.9	0.3122	0.0000	SURCHARGED
30 minute winter	PS20	23	48.394	0.020	0.6	0.0068	0.0000	OK
30 minute winter	PS21	23	48.247	0.027	0.9	0.0064	0.0000	OK
30 minute winter	PS22	23	48.205	0.013	0.9	0.0020	0.0000	OK
120 minute winter	PS23	74	47.264	0.036	2.0	0.0411	0.0000	OK
120 minute winter	PS24	76	47.159	0.023	2.0	0.0265	0.0000	OK
30 minute winter	PS26	22	47.889	0.027	0.9	0.0120	0.0000	OK
30 minute winter	PS27	23	47.732	0.015	1.0	0.0031	0.0000	OK
30 minute winter	PS25	24	47.083	0.038	2.8	0.0060	0.0000	OK
15 minute winter	PS19	13	47.837	0.025	0.8	0.0106	0.0000	OK
15 minute winter	PS18	14	47.687	0.016	1.1	0.0039	0.0000	OK
180 minute winter	PS17	172	47.048	0.048	3.3	0.0077	0.0000	OK
30 minute summer	PS12	32	47.262	0.013	0.3	0.0041	0.0000	OK
120 minute winter	PS13	84	47.078	0.020	0.5	0.0048	0.0000	OK
120 minute summer	PS14	84	47.049	0.018	0.5	0.0029	0.0000	OK
180 minute winter	PS15	172	47.048	0.056	0.8	0.0159	0.0000	OK
180 minute winter	PS16	172	47.048	0.208	3.6	0.2354	0.0000	SURCHARGED
15 minute summer	PS30	1	46.784	0.000	1.7	0.0000	0.0000	OK
15 minute summer	paving 1	1	47.600	0.000	0.0	0.0000	0.0000	OK
120 minute summer	paving 2	104	48.306	0.006	0.1	0.0223	0.0000	OK
15 minute summer	paving 3	1	48.750	0.000	0.0	0.0000	0.0000	OK
120 minute summer	paving 4	106	48.106	0.006	0.1	0.0223	0.0000	OK
120 minute summer	paving 5	102	49.506	0.006	0.1	0.0223	0.0000	OK
30 minute winter	tank	34	50.911	0.061	1.5	0.9875	0.0000	OK
180 minute winter	Tank 4	168	47.048	0.053	0.7	0.9048	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)
180 minute winter	S23A	Hydro-Brake®	PS23	1.6				
30 minute winter	PS20	7.000	PS21	0.6	0.423	0.088	0.0174	
30 minute winter	PS21	7.001	PS22	0.9	0.803	0.131	0.0026	
30 minute winter	PS22	7.002	PS23	0.9	1.568	0.032	0.0025	
120 minute winter	PS23	1.011	PS24	2.0	0.798	0.112	0.0233	
120 minute winter	PS24	1.012	PS25	2.0	0.848	0.048	0.0044	
30 minute winter	PS26	8.000	PS27	0.9	0.749	0.133	0.0142	
30 minute winter	PS27	8.001	PS25	1.0	1.336	0.048	0.0041	
30 minute winter	PS25	1.013	PS17	2.8	0.783	0.108	0.0077	
15 minute winter	PS19	9.000	PS18	0.8	0.699	0.118	0.0132	
15 minute winter	PS18	9.001	PS17	1.1	1.345	0.055	0.0047	
180 minute winter	PS17	1.014	PS16	3.3	0.394	0.128	0.0874	
30 minute summer	PS12	10.000	PS13	0.3	0.441	0.038	0.0101	
120 minute winter	PS13	10.001	PS14	0.5	0.490	0.083	0.0028	
120 minute summer	PS14	10.002	PS15	0.5	0.521	0.028	0.0056	
180 minute winter	PS15	10.003	PS16	-0.5	0.401	-0.015	0.0382	
180 minute winter	PS16	Hydro-Brake®	PS30	1.9				22.9
15 minute summer	paving 1	20.000	PS14	0.0	0.000	0.000	0.0000	
120 minute summer	paving 2	16.000	PS27	0.1	0.502	0.007	0.0011	
15 minute summer	paving 3	14.000	PS22	0.0	0.000	0.000	0.0000	
120 minute summer	paving 4	18.000_1	PS18	0.1	0.501	0.007	0.0009	
120 minute summer	paving 5	11.000	S23A	0.1	0.501	0.007	0.0009	
30 minute winter	tank	10.000_1	PS51	-1.5	-0.675	-0.466	0.0105	
180 minute winter	Tank 4	21.000	PS15	-0.7	-0.411	-0.119	0.0135	

Results for 2 year Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	TANK 3	172	47.048	0.148	1.7	3.9346	0.0000	SURCHARGED
15 minute winter	Paving 6	18	53.004	0.004	0.1	0.0001	0.0000	OK
120 minute winter	paving 7	86	52.904	0.004	0.1	0.0191	0.0000	OK
15 minute summer	paving 8	29	52.773	0.003	0.1	0.0136	0.0000	OK
30 minute winter	paving 9	43	52.424	0.004	0.1	0.0203	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)
180 minute winter	TANK 3	18.000	PS16	-1.7	-0.488	-0.442	0.0188	
15 minute winter	Paving 6	3.000_1	PS6	0.1	0.965	0.003	0.0004	
120 minute winter	paving 7	5.000_1	PS46	0.1	1.083	0.003	0.0004	
15 minute summer	paving 8	7.000_1	PS41	0.1	0.412	0.002	0.0017	
30 minute winter	paving 9	9.000_1	PS45	0.1	0.977	0.003	0.0004	

Results for 30 year Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	PS1	14	52.038	0.030	1.2	0.0085	0.0000	OK
30 minute winter	PS2	25	51.978	0.031	1.2	0.0049	0.0000	OK
30 minute winter	PS3	25	51.958	0.029	1.2	0.0046	0.0000	OK
30 minute winter	PS10	24	52.683	0.029	1.4	0.0198	0.0000	OK
30 minute winter	PS11	25	51.932	0.050	3.0	0.0091	0.0000	OK
30 minute winter	PS50	25	51.904	0.045	3.0	0.0072	0.0000	OK
30 minute winter	PS6	25	51.871	0.026	3.2	0.0041	0.0000	OK
30 minute winter	PS34	22	51.425	0.045	2.7	0.0154	0.0000	OK
30 minute winter	PS35	23	51.351	0.051	2.7	0.0082	0.0000	OK
30 minute winter	PS36	23	51.339	0.046	2.7	0.0074	0.0000	OK
120 minute winter	PS37	108	51.316	0.065	2.0	0.0124	0.0000	OK
120 minute winter	PS46	108	51.316	0.094	2.2	0.0150	0.0000	OK
120 minute winter	PS7	108	51.316	0.107	4.1	0.0171	0.0000	OK
30 minute winter	PS38	22	51.398	0.052	2.5	0.0204	0.0000	OK
30 minute winter	PS39	24	51.325	0.057	2.5	0.0014	0.0000	OK
120 minute winter	PS47	110	51.316	0.069	1.5	0.0110	0.0000	OK
120 minute winter	PS41	110	51.316	0.091	1.7	0.0145	0.0000	OK
120 minute winter	PS40	108	51.316	0.172	5.8	0.0274	0.0000	SURCHARGED
120 minute winter	PS42	108	51.316	0.067	0.3	0.0199	0.0000	OK
120 minute winter	PS43	108	51.316	0.155	0.7	0.0339	0.0000	SURCHARGED
120 minute winter	PS44	110	51.316	0.179	0.9	0.0327	0.0000	SURCHARGED
120 minute winter	PS45	110	51.316	0.199	1.5	0.0405	0.0000	SURCHARGED
120 minute winter	PS8	110	51.316	0.233	7.2	0.0370	0.0000	SURCHARGED
120 minute winter	PS51	110	51.314	0.520	7.2	0.5879	0.0000	SURCHARGED
240 minute winter	TANK 2	256	48.271	0.911	2.1	17.3083	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	PS1	1.000	PS2	1.2	0.472	0.083	0.0234	
30 minute winter	PS2	1.001	PS3	1.2	0.480	0.081	0.0065	
30 minute winter	PS3	1.002	PS11	1.2	0.324	0.083	0.0266	
30 minute winter	PS10	2.000	PS11	1.4	0.595	0.079	0.0316	
30 minute winter	PS11	1.003	PS50	3.0	0.629	0.208	0.0165	
30 minute winter	PS50	1.004	PS6	3.0	0.951	0.169	0.0045	
30 minute winter	PS6	1.005	PS7	3.2	0.667	0.063	0.0402	
30 minute winter	PS34	3.000	PS35	2.7	0.557	0.186	0.0579	
30 minute winter	PS35	3.001	PS36	2.7	0.544	0.194	0.0056	
30 minute winter	PS36	3.002	PS37	2.7	0.519	0.185	0.0322	
120 minute winter	PS37	3.003	PS46	2.0	0.464	0.139	0.0417	
120 minute winter	PS46	3.004	PS7	2.2	0.425	0.155	0.0258	
120 minute winter	PS7	1.006	PS40	4.1	0.614	0.230	0.1013	
30 minute winter	PS38	4.000	PS39	2.5	0.575	0.510	0.0511	
30 minute winter	PS39	4.001	PS47	2.5	0.539	0.507	0.0145	
120 minute winter	PS47	4.002	PS41	1.5	0.462	0.303	0.0217	
120 minute winter	PS41	4.003	PS40	1.7	0.534	0.344	0.0114	
120 minute winter	PS40	1.007	PS8	5.8	0.895	0.402	0.1628	
120 minute winter	PS42	5.000	PS43	0.3	0.247	0.023	0.1676	
120 minute winter	PS43	5.001	PS44	0.7	0.365	0.049	0.0623	
120 minute winter	PS44	5.002	PS45	0.9	0.334	0.059	0.0524	
120 minute winter	PS45	5.003	PS8	1.4	0.483	0.099	0.0361	
120 minute winter	PS8	1.008	PS51	7.2	0.748	0.234	0.1728	
120 minute winter	PS51	Hydro-Brake®	S23A	2.5				
240 minute winter	TANK 2	6.000	S23A	-2.1	-0.240	-0.217	0.0555	

Results for 30 year Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	S23A	256	48.271	0.921	3.8	1.1732	0.0000	SURCHARGED
30 minute winter	PS20	24	48.407	0.033	1.6	0.0112	0.0000	OK
30 minute winter	PS21	22	48.266	0.046	2.4	0.0108	0.0000	OK
30 minute winter	PS22	25	48.213	0.021	2.5	0.0034	0.0000	OK
240 minute winter	PS23	244	47.329	0.101	2.6	0.1143	0.0000	OK
240 minute winter	PS24	244	47.328	0.192	2.6	0.2174	0.0000	SURCHARGED
30 minute winter	PS26	23	47.910	0.048	2.7	0.0215	0.0000	OK
30 minute winter	PS27	23	47.745	0.028	3.2	0.0056	0.0000	OK
240 minute winter	PS25	244	47.328	0.283	7.3	0.0450	0.0000	SURCHARGED
30 minute winter	PS19	23	47.857	0.045	2.5	0.0194	0.0000	OK
30 minute winter	PS18	22	47.700	0.029	3.4	0.0069	0.0000	OK
240 minute winter	PS17	248	47.327	0.327	6.3	0.0521	0.0000	SURCHARGED
240 minute winter	PS12	244	47.327	0.078	0.5	0.0238	0.0000	OK
240 minute winter	PS13	244	47.326	0.268	0.8	0.0633	0.0000	SURCHARGED
240 minute winter	PS14	244	47.327	0.296	1.7	0.0470	0.0000	SURCHARGED
240 minute winter	PS15	244	47.327	0.335	1.9	0.0947	0.0000	SURCHARGED
240 minute winter	PS16	248	47.326	0.486	4.9	0.5501	0.0000	SURCHARGED
15 minute summer	PS30	1	46.784	0.000	1.9	0.0000	0.0000	OK
15 minute summer	paving 1	38	47.606	0.006	0.1	0.0204	0.0000	OK
120 minute winter	paving 2	98	48.309	0.009	0.2	0.0308	0.0000	OK
15 minute summer	paving 3	42	48.756	0.006	0.1	0.0223	0.0000	OK
60 minute winter	paving 4	69	48.109	0.009	0.2	0.0308	0.0000	OK
120 minute winter	paving 5	98	49.509	0.009	0.2	0.0308	0.0000	OK
120 minute winter	tank	110	51.314	0.464	4.3	7.4907	0.0000	SURCHARGED
240 minute winter	Tank 4	244	47.326	0.331	2.1	5.6663	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)
240 minute winter	S23A	Hydro-Brake®	PS23	1.6				
30 minute winter	PS20	7.000	PS21	1.6	0.558	0.236	0.0354	
30 minute winter	PS21	7.001	PS22	2.4	1.044	0.356	0.0053	
30 minute winter	PS22	7.002	PS23	2.5	2.114	0.091	0.0054	
240 minute winter	PS23	1.011	PS24	2.6	0.876	0.147	0.1400	
240 minute winter	PS24	1.012	PS25	6.2	0.791	0.149	0.0299	
30 minute winter	PS26	8.000	PS27	2.7	0.991	0.399	0.0318	
30 minute winter	PS27	8.001	PS25	3.2	1.849	0.155	0.0182	
240 minute winter	PS25	1.013	PS17	5.1	0.834	0.199	0.0379	
30 minute winter	PS19	9.000	PS18	2.5	0.948	0.368	0.0299	
30 minute winter	PS18	9.001	PS17	3.4	1.836	0.171	0.0243	
240 minute winter	PS17	1.014	PS16	4.9	0.394	0.193	0.1366	
240 minute winter	PS12	10.000	PS13	0.5	0.424	0.064	0.0822	
240 minute winter	PS13	10.001	PS14	1.6	0.492	0.260	0.0208	
240 minute winter	PS14	10.002	PS15	1.2	0.515	0.067	0.0680	
240 minute winter	PS15	10.003	PS16	-1.2	0.235	-0.038	0.0570	
240 minute winter	PS16	Hydro-Brake®	PS30	2.0				49.6
15 minute summer	paving 1	20.000	PS14	0.1	0.479	0.003	0.0005	
120 minute winter	paving 2	16.000	PS27	0.2	0.622	0.015	0.0018	
15 minute summer	paving 3	14.000	PS22	0.1	0.501	0.007	0.0006	
60 minute winter	paving 4	18.000_1	PS18	0.2	0.622	0.015	0.0014	
120 minute winter	paving 5	11.000	S23A	0.2	0.622	0.015	0.0014	
120 minute winter	tank	10.000_1	PS51	-4.3	-0.551	-1.312	0.0155	
240 minute winter	Tank 4	21.000	PS15	-2.1	-0.528	-0.334	0.0410	

Results for 30 year Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	TANK 3	248	47.326	0.426	2.3	11.3399	0.0000	SURCHARGED
15 minute winter	Paving 6	17	53.006	0.006	0.2	0.0002	0.0000	OK
60 minute summer	paving 7	54	52.905	0.005	0.2	0.0260	0.0000	OK
30 minute winter	paving 8	33	52.775	0.004	0.3	0.0224	0.0000	OK
60 minute winter	paving 9	48	52.427	0.007	0.3	0.0331	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	TANK 3	18.000	PS16	-2.3	-0.342	-0.608	0.0188	
15 minute winter	Paving 6	3.000_1	PS6	0.2	1.175	0.006	0.0006	
60 minute summer	paving 7	5.000_1	PS46	0.2	1.316	0.005	0.0010	
30 minute winter	paving 8	7.000_1	PS41	0.3	0.194	0.005	0.0044	
60 minute winter	paving 9	9.000_1	PS45	0.3	1.247	0.009	0.0157	

Results for 100 year Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	PS1	21	52.043	0.035	1.6	0.0098	0.0000	OK
30 minute winter	PS2	25	51.983	0.036	1.6	0.0057	0.0000	OK
30 minute winter	PS3	25	51.963	0.034	1.6	0.0053	0.0000	OK
30 minute winter	PS10	24	52.688	0.034	1.9	0.0231	0.0000	OK
30 minute winter	PS11	24	51.940	0.058	4.0	0.0107	0.0000	OK
30 minute winter	PS50	24	51.911	0.052	4.0	0.0083	0.0000	OK
30 minute winter	PS6	25	51.874	0.029	4.2	0.0047	0.0000	OK
120 minute winter	PS34	120	51.492	0.111	2.1	0.0384	0.0000	OK
120 minute winter	PS35	120	51.495	0.195	2.1	0.0310	0.0000	SURCHARGED
120 minute winter	PS36	114	51.489	0.196	2.4	0.0312	0.0000	SURCHARGED
120 minute winter	PS37	114	51.488	0.237	2.6	0.0450	0.0000	SURCHARGED
120 minute winter	PS46	114	51.487	0.265	2.8	0.0422	0.0000	SURCHARGED
120 minute winter	PS7	116	51.486	0.277	5.4	0.0440	0.0000	SURCHARGED
120 minute winter	PS38	118	51.487	0.141	1.9	0.0554	0.0000	SURCHARGED
120 minute winter	PS39	118	51.486	0.218	1.9	0.0054	0.0000	SURCHARGED
120 minute winter	PS47	118	51.486	0.239	1.9	0.0380	0.0000	SURCHARGED
120 minute winter	PS41	118	51.486	0.261	2.2	0.0414	0.0000	SURCHARGED
120 minute winter	PS40	118	51.485	0.341	7.6	0.0543	0.0000	SURCHARGED
120 minute winter	PS42	118	51.484	0.235	0.5	0.0699	0.0000	SURCHARGED
120 minute winter	PS43	118	51.485	0.324	0.9	0.0710	0.0000	SURCHARGED
120 minute winter	PS44	118	51.485	0.348	1.0	0.0638	0.0000	SURCHARGED
120 minute winter	PS45	118	51.484	0.367	1.7	0.0749	0.0000	SURCHARGED
120 minute winter	PS8	118	51.485	0.402	8.7	0.0639	0.0000	SURCHARGED
120 minute winter	PS51	118	51.482	0.688	8.2	0.7785	0.0000	SURCHARGED
480 minute winter	TANK 2	424	48.591	1.231	2.2	23.3829	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	PS1	1.000	PS2	1.6	0.509	0.111	0.0290	
30 minute winter	PS2	1.001	PS3	1.6	0.518	0.108	0.0080	
30 minute winter	PS3	1.002	PS11	1.6	0.351	0.111	0.0329	
30 minute winter	PS10	2.000	PS11	1.9	0.649	0.107	0.0393	
30 minute winter	PS11	1.003	PS50	4.0	0.679	0.277	0.0204	
30 minute winter	PS50	1.004	PS6	4.0	1.035	0.225	0.0055	
30 minute winter	PS6	1.005	PS7	4.2	0.692	0.084	0.0779	
120 minute winter	PS34	3.000	PS35	2.1	0.525	0.145	0.1883	
120 minute winter	PS35	3.001	PS36	2.3	0.534	0.166	0.0199	
120 minute winter	PS36	3.002	PS37	2.1	0.492	0.144	0.1089	
120 minute winter	PS37	3.003	PS46	2.6	0.489	0.180	0.0770	
120 minute winter	PS46	3.004	PS7	2.8	0.465	0.200	0.0361	
120 minute winter	PS7	1.006	PS40	5.4	0.648	0.305	0.1147	
120 minute winter	PS38	4.000	PS39	1.9	0.542	0.387	0.0916	
120 minute winter	PS39	4.001	PS47	1.9	0.511	0.385	0.0244	
120 minute winter	PS47	4.002	PS41	1.9	0.489	0.384	0.0255	
120 minute winter	PS41	4.003	PS40	2.2	0.569	0.446	0.0116	
120 minute winter	PS40	1.007	PS8	7.4	0.931	0.514	0.1628	
120 minute winter	PS42	5.000	PS43	0.5	0.242	0.032	0.2342	
120 minute winter	PS43	5.001	PS44	0.9	0.352	0.062	0.0623	
120 minute winter	PS44	5.002	PS45	1.5	0.341	0.106	0.0524	
120 minute winter	PS45	5.003	PS8	1.6	0.503	0.116	0.0361	
120 minute winter	PS8	1.008	PS51	8.2	0.734	0.269	0.1728	
120 minute winter	PS51	Hydro-Brake®	S23A	2.5				
480 minute winter	TANK 2	6.000	S23A	-2.2	-0.181	-0.223	0.0555	

Results for 100 year Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	S23A	424	48.591	1.241	3.6	1.5806	0.0000	SURCHARGED
30 minute winter	PS20	23	48.413	0.039	2.2	0.0132	0.0000	OK
30 minute winter	PS21	23	48.275	0.055	3.3	0.0129	0.0000	OK
30 minute winter	PS22	23	48.217	0.025	3.4	0.0040	0.0000	OK
480 minute winter	PS23	480	47.559	0.331	2.3	0.3747	0.0000	SURCHARGED
480 minute winter	PS24	480	47.558	0.422	2.9	0.4771	0.0000	SURCHARGED
30 minute winter	PS26	23	47.918	0.056	3.5	0.0252	0.0000	OK
30 minute winter	PS27	21	47.749	0.032	4.2	0.0063	0.0000	OK
360 minute winter	PS25	368	47.558	0.513	3.6	0.0816	0.0000	SURCHARGED
30 minute winter	PS19	22	47.865	0.053	3.2	0.0224	0.0000	OK
30 minute winter	PS18	24	47.703	0.032	4.5	0.0077	0.0000	OK
480 minute winter	PS17	480	47.557	0.557	5.4	0.0886	0.0000	SURCHARGED
480 minute winter	PS12	480	47.557	0.308	0.4	0.0941	0.0000	SURCHARGED
480 minute winter	PS13	480	47.557	0.499	0.6	0.1177	0.0000	SURCHARGED
480 minute winter	PS14	480	47.557	0.526	0.8	0.0836	0.0000	SURCHARGED
480 minute winter	PS15	480	47.557	0.565	1.5	0.1598	0.0000	SURCHARGED
480 minute winter	PS16	480	47.557	0.717	4.7	0.8104	0.0000	SURCHARGED
15 minute summer	PS30	1	46.784	0.000	2.0	0.0000	0.0000	OK
60 minute winter	paving 1	63	47.608	0.008	0.2	0.0279	0.0000	OK
30 minute summer	paving 2	50	48.309	0.009	0.2	0.0308	0.0000	OK
120 minute winter	paving 3	100	48.759	0.009	0.2	0.0307	0.0000	OK
30 minute summer	paving 4	48	48.109	0.009	0.2	0.0308	0.0000	OK
30 minute summer	paving 5	49	49.509	0.009	0.2	0.0308	0.0000	OK
120 minute winter	tank	118	51.483	0.633	5.3	10.2171	0.0000	SURCHARGED
480 minute winter	Tank 4	480	47.557	0.562	1.8	8.5586	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)
480 minute winter	S23A	Hydro-Brake®	PS23	1.7				
30 minute winter	PS20	7.000	PS21	2.2	0.610	0.325	0.0444	
30 minute winter	PS21	7.001	PS22	3.3	1.133	0.488	0.0066	
30 minute winter	PS22	7.002	PS23	3.4	2.298	0.124	0.0067	
480 minute winter	PS23	1.011	PS24	2.3	0.852	0.132	0.1631	
480 minute winter	PS24	1.012	PS25	2.3	0.804	0.056	0.0299	
30 minute winter	PS26	8.000	PS27	3.5	1.076	0.517	0.0382	
30 minute winter	PS27	8.001	PS25	4.2	1.956	0.202	0.0264	
360 minute winter	PS25	1.013	PS17	3.5	0.804	0.136	0.0379	
30 minute winter	PS19	9.000	PS18	3.2	1.016	0.472	0.0356	
30 minute winter	PS18	9.001	PS17	4.5	1.883	0.223	0.0287	
480 minute winter	PS17	1.014	PS16	4.5	0.473	0.177	0.1366	
480 minute winter	PS12	10.000	PS13	0.4	0.378	0.051	0.0897	
480 minute winter	PS13	10.001	PS14	0.7	0.473	0.122	0.0208	
480 minute winter	PS14	10.002	PS15	1.5	0.446	0.083	0.0680	
480 minute winter	PS15	10.003	PS16	-1.0	0.400	-0.033	0.0570	
480 minute winter	PS16	Hydro-Brake®	PS30	2.0				65.9
60 minute winter	paving 1	20.000	PS14	0.2	0.581	0.005	0.0008	
30 minute summer	paving 2	16.000	PS27	0.2	0.622	0.015	0.0018	
120 minute winter	paving 3	14.000	PS22	0.2	0.620	0.015	0.0010	
30 minute summer	paving 4	18.000_1	PS18	0.2	0.622	0.015	0.0014	
30 minute summer	paving 5	11.000	S23A	0.2	0.622	0.015	0.0014	
120 minute winter	tank	10.000_1	PS51	-5.3	-0.683	-1.626	0.0155	
480 minute winter	Tank 4	21.000	PS15	-1.8	-0.399	-0.287	0.0410	

Results for 100 year Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	TANK 3	480	47.557	0.657	2.1	17.4642	0.0000	SURCHARGED
30 minute winter	Paving 6	28	53.007	0.007	0.3	0.0002	0.0000	OK
60 minute winter	paving 7	49	52.906	0.006	0.3	0.0305	0.0000	OK
15 minute winter	paving 8	22	52.775	0.004	0.3	0.0224	0.0000	OK
60 minute winter	paving 9	36	52.427	0.007	0.3	0.0336	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)
480 minute winter	TANK 3	18.000	PS16	-2.1	-0.270	-0.532	0.0188	
30 minute winter	Paving 6	3.000_1	PS6	0.3	1.330	0.009	0.0008	
60 minute winter	paving 7	5.000_1	PS46	0.3	1.163	0.008	0.0155	
15 minute winter	paving 8	7.000_1	PS41	0.3	0.120	0.005	0.0063	
60 minute winter	paving 9	9.000_1	PS45	0.3	1.343	0.009	0.0157	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	PS1	23	52.050	0.042	2.3	0.0119	0.0000	OK
30 minute winter	PS2	23	51.991	0.044	2.3	0.0069	0.0000	OK
30 minute winter	PS3	23	51.969	0.040	2.3	0.0064	0.0000	OK
30 minute winter	PS10	24	52.694	0.040	2.6	0.0271	0.0000	OK
30 minute winter	PS11	23	51.953	0.071	5.7	0.0130	0.0000	OK
30 minute winter	PS50	23	51.922	0.063	5.7	0.0100	0.0000	OK
30 minute winter	PS6	23	51.880	0.035	6.0	0.0055	0.0000	OK
120 minute winter	PS34	126	51.787	0.407	2.9	0.1401	0.0000	SURCHARGED
120 minute winter	PS35	126	51.794	0.494	2.9	0.0785	0.0000	SURCHARGED
120 minute winter	PS36	120	51.786	0.492	3.6	0.0783	0.0000	SURCHARGED
120 minute winter	PS37	120	51.785	0.534	3.4	0.1016	0.0000	SURCHARGED
120 minute winter	PS46	120	51.785	0.563	3.4	0.0896	0.0000	SURCHARGED
120 minute winter	PS7	120	51.785	0.576	6.6	0.0916	0.0000	SURCHARGED
120 minute winter	PS38	120	51.786	0.440	2.7	0.1734	0.0000	SURCHARGED
120 minute winter	PS39	120	51.786	0.518	2.7	0.0129	0.0000	SURCHARGED
120 minute winter	PS47	120	51.785	0.538	2.5	0.0856	0.0000	SURCHARGED
120 minute winter	PS41	120	51.785	0.560	2.7	0.0891	0.0000	SURCHARGED
120 minute winter	PS40	120	51.785	0.641	8.8	0.1019	0.0000	SURCHARGED
120 minute winter	PS42	120	51.785	0.536	0.6	0.1591	0.0000	FLOOD RISK
120 minute winter	PS43	120	51.785	0.624	1.2	0.1365	0.0000	SURCHARGED
120 minute winter	PS44	120	51.784	0.647	1.3	0.1185	0.0000	SURCHARGED
120 minute winter	PS45	120	51.784	0.667	2.1	0.1361	0.0000	SURCHARGED
120 minute winter	PS8	120	51.784	0.701	9.2	0.1114	0.0000	SURCHARGED
120 minute winter	PS51	122	51.780	0.986	8.8	1.1157	0.0000	SURCHARGED
480 minute winter	TANK 2	536	49.843	2.483	2.5	28.5095	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)
30 minute winter	PS1	1.000	PS2	2.3	0.557	0.160	0.0380	
30 minute winter	PS2	1.001	PS3	2.3	0.571	0.155	0.0104	
30 minute winter	PS3	1.002	PS11	2.3	0.385	0.159	0.0427	
30 minute winter	PS10	2.000	PS11	2.6	0.709	0.147	0.0493	
30 minute winter	PS11	1.003	PS50	5.7	0.746	0.394	0.0264	
30 minute winter	PS50	1.004	PS6	5.7	1.141	0.320	0.0071	
30 minute winter	PS6	1.005	PS7	6.0	0.720	0.118	0.0821	
120 minute winter	PS34	3.000	PS35	2.9	0.565	0.203	0.2096	
120 minute winter	PS35	3.001	PS36	3.3	0.568	0.238	0.0199	
120 minute winter	PS36	3.002	PS37	2.8	0.518	0.195	0.1089	
120 minute winter	PS37	3.003	PS46	3.2	0.500	0.225	0.0770	
120 minute winter	PS46	3.004	PS7	3.3	0.445	0.237	0.0361	
120 minute winter	PS7	1.006	PS40	6.3	0.654	0.352	0.1147	
120 minute winter	PS38	4.000	PS39	2.7	0.573	0.547	0.0916	
120 minute winter	PS39	4.001	PS47	2.5	0.534	0.498	0.0244	
120 minute winter	PS47	4.002	PS41	2.4	0.506	0.489	0.0255	
120 minute winter	PS41	4.003	PS40	2.6	0.590	0.517	0.0116	
120 minute winter	PS40	1.007	PS8	8.6	0.953	0.601	0.1628	
120 minute winter	PS42	5.000	PS43	0.5	0.242	0.038	0.2342	
120 minute winter	PS43	5.001	PS44	1.2	0.351	0.082	0.0623	
120 minute winter	PS44	5.002	PS45	1.4	0.346	0.098	0.0524	
120 minute winter	PS45	5.003	PS8	1.9	0.510	0.133	0.0361	
120 minute winter	PS8	1.008	PS51	8.8	0.635	0.288	0.1728	
120 minute winter	PS51	Hydro-Brake®	S23A	2.8				
480 minute winter	TANK 2	6.000	S23A	-2.5	-0.203	-0.251	0.0555	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	S23A	536	49.843	2.493	4.1	3.1765	0.0000	FLOOD RISK
30 minute winter	PS20	22	48.421	0.047	3.0	0.0157	0.0000	OK
30 minute winter	PS21	22	48.286	0.066	4.5	0.0155	0.0000	OK
30 minute winter	PS22	24	48.222	0.030	4.7	0.0047	0.0000	OK
480 minute winter	PS23	552	47.998	0.770	2.5	0.8713	0.0000	SURCHARGED
480 minute winter	PS24	552	47.997	0.861	2.5	0.9733	0.0000	SURCHARGED
480 minute winter	PS26	552	47.996	0.134	1.1	0.0601	0.0000	SURCHARGED
480 minute winter	PS27	552	47.996	0.279	1.5	0.0558	0.0000	SURCHARGED
480 minute winter	PS25	552	47.996	0.951	5.5	0.1512	0.0000	SURCHARGED
480 minute winter	PS19	552	47.996	0.184	1.0	0.0783	0.0000	SURCHARGED
480 minute winter	PS18	552	47.995	0.324	1.5	0.0776	0.0000	SURCHARGED
480 minute winter	PS17	552	47.995	0.995	6.8	0.1583	0.0000	SURCHARGED
480 minute winter	PS12	552	47.994	0.745	0.6	0.2280	0.0000	FLOOD RISK
480 minute winter	PS13	552	47.994	0.936	0.8	0.2209	0.0000	FLOOD RISK
480 minute winter	PS14	552	47.994	0.963	0.8	0.1531	0.0000	FLOOD RISK
480 minute winter	PS15	552	47.994	1.002	1.6	0.2835	0.0000	FLOOD RISK
480 minute winter	PS16	552	47.994	1.154	5.0	1.3050	0.0000	FLOOD RISK
15 minute summer	PS30	1	46.784	0.000	2.0	0.0000	0.0000	OK
480 minute winter	paving 1	552	47.994	0.394	0.3	1.4029	0.0000	FLOOD RISK
60 minute winter	paving 2	59	48.310	0.010	0.3	0.0373	0.0000	OK
30 minute summer	paving 3	46	48.759	0.009	0.2	0.0307	0.0000	OK
60 minute winter	paving 4	58	48.110	0.010	0.3	0.0374	0.0000	OK
480 minute winter	paving 5	536	49.843	0.343	0.3	1.2291	0.0000	FLOOD RISK
120 minute winter	tank	122	51.781	0.931	5.9	15.0276	0.0000	SURCHARGED
480 minute winter	Tank 4	552	47.994	0.999	2.2	8.5586	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)
480 minute winter	S23A	Hydro-Brake®	PS23	2.2				
30 minute winter	PS20	7.000	PS21	3.0	0.663	0.443	0.0555	
30 minute winter	PS21	7.001	PS22	4.5	1.238	0.667	0.0083	
30 minute winter	PS22	7.002	PS23	4.7	2.505	0.171	0.0208	
480 minute winter	PS23	1.011	PS24	2.5	0.864	0.143	0.1631	
480 minute winter	PS24	1.012	PS25	4.4	0.796	0.107	0.0299	
480 minute winter	PS26	8.000	PS27	1.1	0.779	0.162	0.0904	
480 minute winter	PS27	8.001	PS25	1.5	1.295	0.072	0.0424	
480 minute winter	PS25	1.013	PS17	5.5	0.793	0.212	0.0379	
480 minute winter	PS19	9.000	PS18	1.0	0.739	0.147	0.0877	
480 minute winter	PS18	9.001	PS17	1.5	1.227	0.075	0.0449	
480 minute winter	PS17	1.014	PS16	5.0	0.473	0.195	0.1366	
480 minute winter	PS12	10.000	PS13	0.5	0.359	0.066	0.0897	
480 minute winter	PS13	10.001	PS14	0.7	0.470	0.121	0.0208	
480 minute winter	PS14	10.002	PS15	0.9	0.446	0.053	0.0680	
480 minute winter	PS15	10.003	PS16	-0.8	0.400	-0.027	0.0570	
480 minute winter	PS16	Hydro-Brake®	PS30	2.0				78.4
480 minute winter	paving 1	20.000	PS14	0.4	0.479	0.011	0.0405	
60 minute winter	paving 2	16.000	PS27	0.3	0.701	0.022	0.0023	
30 minute summer	paving 3	14.000	PS22	0.2	0.620	0.015	0.0010	
60 minute winter	paving 4	18.000_1	PS18	0.3	0.701	0.022	0.0019	
480 minute winter	paving 5	11.000	S23A	1.2	0.622	0.089	0.0346	
120 minute winter	tank	10.000_1	PS51	-5.9	-0.757	-1.803	0.0155	
480 minute winter	Tank 4	21.000	PS15	-2.2	-0.358	-0.358	0.0410	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 96.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	TANK 3	552	47.994	1.094	2.9	26.6133	0.0000	SURCHARGED
30 minute winter	Paving 6	28	53.008	0.008	0.4	0.0003	0.0000	OK
60 minute winter	paving 7	48	52.907	0.007	0.4	0.0349	0.0000	OK
30 minute winter	paving 8	33	52.776	0.006	0.5	0.0282	0.0000	OK
60 minute winter	paving 9	49	52.428	0.008	0.5	0.0417	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)
480 minute winter	TANK 3	18.000	PS16	-2.9	-0.366	-0.743	0.0188	
30 minute winter	Paving 6	3.000_1	PS6	0.4	1.452	0.012	0.0010	
60 minute winter	paving 7	5.000_1	PS46	0.4	1.251	0.010	0.0156	
30 minute winter	paving 8	7.000_1	PS41	0.5	0.115	0.009	0.0070	
60 minute winter	paving 9	9.000_1	PS45	0.5	1.336	0.014	0.0159	