

Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	0.75
Return Period (years)	2	Connection Type	Level Soffits
Additional Flow (%)	10	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	x
Maximum Rainfall (mm/hr)	50.0		

Links (Results)

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	1.333	23.6	11.2	0.800	0.825	0.075	0.0
1.001	0.800	14.1	14.5	0.825	0.880	0.097	0.0
1.002	0.791	14.0	20.4	1.000	1.030	0.137	0.0
1.003	0.867	34.5	20.4	0.955	1.013	0.137	0.0
1.004	0.958	38.1	24.6	1.013	1.155	0.165	0.0
1.005	0.867	34.5	24.6	1.155	0.861	0.165	0.0
1.006	0.867	34.5	29.7	0.861	0.906	0.199	0.0
1.007	0.861	34.2	29.2	0.905	0.675	0.199	0.0
1.008	0.856	34.0	29.5	0.675	0.615	0.204	0.0
1.009	0.867	34.5	31.5	0.615	0.689	0.223	0.0
1.010	1.252	49.8	38.8	0.689	0.840	0.278	0.0
1.011	0.807	57.0	38.2	0.765	1.073	0.278	0.0
1.012	0.807	57.0	37.7	1.073	1.391	0.278	0.0
2.000	0.879	15.5	20.0	0.960	0.970	0.134	0.0
2.001	0.962	68.0	20.0	0.820	0.940	0.134	0.0
2.002	2.517	177.9	22.1	0.940	1.391	0.148	0.0
1.013	0.807	57.0	61.2	1.391	1.276	0.468	0.0
1.014	0.790	55.8	69.9	1.276	1.010	0.554	0.0
3.000	0.818	14.5	0.9	0.700	0.617	0.006	0.0
3.001	1.148	20.3	6.1	0.617	0.800	0.041	0.0
3.002	1.059	18.7	6.1	0.800	0.825	0.041	0.0
3.003	1.275	22.5	8.9	0.825	0.880	0.060	0.0
3.004	0.970	38.6	8.9	0.805	0.752	0.060	0.0
4.000	1.060	18.7	13.3	1.080	0.810	0.089	0.0
4.001	1.380	24.4	13.3	0.810	0.827	0.089	0.0
3.005	0.792	31.5	26.0	0.752	0.730	0.175	0.0
3.006	2.000	141.4	25.8	0.655	0.758	0.175	0.0
3.007	2.090	147.8	35.0	0.758	0.850	0.239	0.0
3.008	1.048	74.1	34.6	0.850	0.850	0.239	0.0
3.009	1.056	74.7	40.6	0.850	1.500	0.284	0.0
3.010	1.034	73.1	40.0	1.500	1.000	0.284	0.0
3.011	1.118	79.0	43.1	1.000	1.010	0.309	0.0
1.015	1.100	175.0	108.2	0.860	0.880	0.863	0.0
1.016	1.279	90.4	107.8	1.030	1.060	0.863	0.0

Simulation Settings

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

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

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

Node MHS1 Online Orifice Control

Flap Valve	x	Invert Level (m)	16.000	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.075		

Node MHS2 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.800	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.075		

Node MHS3 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.720	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.075		

Node MHS4 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.620	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.075		

Node MHS6 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.480	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.075		

Node MHS7 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.255	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.075		

Node MHS10 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.199	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.075		

Node MHS8 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.630	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.090		

Node MHS13 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.850	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.050		

Node MHS11 Online Orifice Control

Flap Valve	x	Invert Level (m)	16.000	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.050		

Node MHS12 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.750	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.050		

Node MHS14 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.675	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.050		

Node MHS15 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.250	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.050		

Node MHS16 Online Orifice Control

Flap Valve	x	Invert Level (m)	15.150	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.150		

Node MHS18 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	15.030	Product Number	CTL-SHE-0152-1000-0500-1000
Design Depth (m)	0.500	Min Outlet Diameter (m)	0.225
Design Flow (l/s)	10.0	Min Node Diameter (mm)	1200

Node PP2 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.830	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	0.790
Safety Factor	2.0	Width (m)	6.121	Inf Depth (m)	
Porosity	1.00	Length (m)	24.000		

Node PP3 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.762	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	88	Depth (m)	0.440
Safety Factor	2.0	Width (m)	5.000	Inf Depth (m)	
Porosity	1.00	Length (m)	18.000		

Node PP4 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.664	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	0.630
Safety Factor	2.0	Width (m)	8.679	Inf Depth (m)	
Porosity	1.00	Length (m)	28.229		

Node PP5 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.406	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	0.700
Safety Factor	2.0	Width (m)	8.000	Inf Depth (m)	
Porosity	1.00	Length (m)	30.500		

Node PP6 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.227	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	1.000
Safety Factor	2.0	Width (m)	9.000	Inf Depth (m)	
Porosity	1.00	Length (m)	29.400		

Node PP7 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.640	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	0.700
Safety Factor	2.0	Width (m)	18.000	Inf Depth (m)	
Porosity	1.00	Length (m)	32.500		

Node PP8 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.124	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	1.190
Safety Factor	2.0	Width (m)	9.000	Inf Depth (m)	
Porosity	1.00	Length (m)	57.400		

Node PP1 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.050	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	0.740
Safety Factor	2.0	Width (m)	6.000	Inf Depth (m)	
Porosity	1.00	Length (m)	58.000		

Node PP11 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.870	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	0.850
Safety Factor	2.0	Width (m)	8.000	Inf Depth (m)	
Porosity	1.00	Length (m)	42.250		

Node PP12 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.713	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	
Safety Factor	2.0	Width (m)	13.000	Inf Depth (m)	0.550
Porosity	1.00	Length (m)	10.307		

Node PP9 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	16.233	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	0.490
Safety Factor	2.0	Width (m)	6.000	Inf Depth (m)	
Porosity	1.00	Length (m)	37.000		

Node PP10 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.875	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	0.740
Safety Factor	2.0	Width (m)	8.000	Inf Depth (m)	
Porosity	1.00	Length (m)	10.625		

Node PP14 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.200	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	0.740
Safety Factor	2.0	Width (m)	9.000	Inf Depth (m)	
Porosity	1.00	Length (m)	27.200		

Node PP13 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.462	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	0.740
Safety Factor	2.0	Width (m)	9.000	Inf Depth (m)	
Porosity	1.00	Length (m)	31.600		

Node PP15 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.100	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	0.740
Safety Factor	2.0	Width (m)	8.000	Inf Depth (m)	
Porosity	1.00	Length (m)	10.870		

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.71%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
30 minute summer	PP1	23	16.151	0.101	9.4	3.2333	0.0000	OK
30 minute summer	MHS1	23	16.151	0.151	5.5	0.2386	0.0000	SURCHARGED
120 minute summer	PP2	92	15.952	0.122	6.3	4.6430	0.0000	OK
120 minute summer	MHS2	92	15.950	0.150	3.5	0.1701	0.0000	OK
180 minute summer	PP3	132	15.863	0.101	4.9	2.6020	0.0000	OK
240 minute summer	MHS3	160	15.863	0.143	4.1	0.1616	0.0000	OK
240 minute summer	PP4	176	15.765	0.101	5.1	4.5146	0.0000	OK
240 minute summer	MHS4	176	15.765	0.146	3.8	0.1647	0.0000	OK
30 minute summer	MHS5	21	15.673	0.153	3.6	0.1898	0.0000	OK
60 minute summer	MHS6	36	15.672	0.192	4.9	0.3044	0.0000	OK
240 minute summer	PP5	228	15.551	0.145	7.8	8.5799	0.0000	OK
240 minute summer	MHS7	228	15.550	0.295	8.5	0.3340	0.0000	OK
360 minute summer	PP6	280	15.447	0.220	4.4	21.8078	0.0000	OK
120 minute summer	PP7	76	15.730	0.090	9.4	7.5464	0.0000	OK
120 minute summer	MHS8	76	15.729	0.099	3.9	0.1118	0.0000	OK
30 minute summer	MHS9	19	15.624	0.034	4.9	0.0460	0.0000	OK
360 minute summer	MHS10	280	15.447	0.248	5.4	0.4036	0.0000	OK
180 minute summer	PP8	124	15.223	0.099	9.1	4.5071	0.0000	OK
15 minute summer	MHS10a	11	16.394	0.024	0.8	0.0304	0.0000	OK
30 minute summer	PP9	21	16.281	0.048	5.0	0.7331	0.0000	OK
30 minute summer	MHS11	20	16.287	0.287	4.0	0.0000	0.0000	SURCHARGED
120 minute summer	PP10	80	15.940	0.065	4.4	1.7341	0.0000	OK
60 minute summer	MHS12	41	15.955	0.205	5.5	0.0000	0.0000	OK
120 minute summer	PP11	80	15.986	0.116	7.0	5.5375	0.0000	OK
120 minute summer	MHS13	80	15.986	0.136	2.8	0.1534	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
240 minute summer	PP1	1.000	MHS1	5.6	0.477	0.239	0.0346	
30 minute summer	MHS1	Orifice	PP2	4.0				
120 minute summer	PP2	1.002	MHS2	3.5	0.354	0.252	0.0791	
120 minute summer	MHS2	Orifice	PP3	3.5				
720 minute summer	PP3	1.004	MHS3	5.3	0.405	0.140	0.1250	
240 minute summer	MHS3	Orifice	PP4	3.8				
240 minute summer	PP4	1.006	MHS4	3.8	0.290	0.112	0.2229	
240 minute summer	MHS4	Orifice	MHS5	3.8				
240 minute summer	MHS5	1.008	MHS6	3.9	0.264	0.115	0.2762	
60 minute summer	MHS6	Orifice	PP5	4.6				
15 minute summer	PP5	1.010	MHS7	11.1	0.444	0.224	0.4201	
15 minute summer	MHS7	Orifice	PP6	5.1				
15 minute summer	PP6	1.012	MHS10	-6.6	-0.407	-0.116	0.3885	
120 minute summer	PP7	2.000	MHS8	3.9	0.355	0.253	0.0152	
120 minute summer	MHS8	Orifice	MHS9	3.9				
30 minute summer	MHS9	2.002	MHS10	4.8	0.334	0.027	0.3717	
360 minute summer	MHS10	Orifice	PP8	5.4				
30 minute summer	PP8	1.014	MHS17	9.4	0.441	0.169	0.7228	
15 minute summer	MHS10a	3.000	PP9	0.8	0.275	0.055	0.0652	
15 minute summer	PP9	3.001	MHS11	4.3	0.468	0.211	0.2007	
30 minute summer	MHS11	Orifice	PP10	2.7				
15 minute summer	PP10	3.003	MHS12	5.5	0.420	0.245	0.0916	
15 minute summer	MHS12	Orifice	PP12	2.2				
960 minute summer	PP11	4.000	MHS13	3.5	0.404	0.187	0.0158	
120 minute summer	MHS13	Orifice	PP12	1.7				

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.71%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
240 minute summer	PP12	196	15.847	0.134	4.7	11.1247	0.0000	OK
240 minute summer	MHS14	196	15.847	0.172	2.0	0.1944	0.0000	OK
180 minute summer	PP13	124	15.552	0.090	16.8	3.7813	0.0000	OK
120 minute summer	MHS15	82	15.618	0.368	20.2	0.0000	0.0000	SURCHARGED
30 minute summer	PP14	20	15.258	0.058	8.1	1.5592	0.0000	OK
120 minute summer	MHS16	70	15.247	0.097	5.5	0.0000	0.0000	OK
180 minute summer	PP15	124	15.220	0.120	6.3	5.7761	0.0000	OK
180 minute summer	MHS17	120	15.220	0.170	10.4	0.1925	0.0000	OK
180 minute summer	MHS18	120	15.219	0.189	10.0	0.4821	0.0000	OK
15 minute summer	34_OUT	1	15.000	0.000	9.7	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
15 minute summer	PP12	3.005	MHS14	2.0	0.307	0.065	0.1846	
240 minute summer	MHS14	Orifice	PP13	2.0				
60 minute summer	PP13	3.007	MHS15	20.8	0.433	0.141	0.5106	
120 minute summer	MHS15	Orifice	PP14	3.1				
30 minute summer	PP14	3.009	MHS16	6.2	0.455	0.083	0.1593	
30 minute summer	MHS16	Orifice	PP15	6.1				
15 minute summer	PP15	3.011	MHS17	6.1	0.327	0.077	0.2430	
30 minute summer	MHS17	1.015	MHS18	10.3	0.380	0.059	0.3439	
180 minute summer	MHS18	Hydro-Brake®	34_OUT	9.9				142.7

Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.71%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
60 minute summer	PP1	46	16.302	0.252	26.9	19.4880	0.0000	SURCHARGED
60 minute summer	MHS1	45	16.298	0.298	7.4	0.4722	0.0000	SURCHARGED
180 minute summer	PP2	184	16.111	0.281	11.9	23.7897	0.0000	SURCHARGED
180 minute summer	MHS2	184	16.107	0.307	4.0	0.3476	0.0000	SURCHARGED
240 minute summer	PP3	244	15.999	0.237	7.5	13.3149	0.0000	SURCHARGED
240 minute summer	MHS3	244	15.998	0.278	5.8	0.3145	0.0000	SURCHARGED
360 minute summer	PP4	376	15.898	0.234	7.3	23.9407	0.0000	SURCHARGED
360 minute summer	MHS4	376	15.898	0.279	3.6	0.3150	0.0000	SURCHARGED
15 minute summer	MHS5	12	15.860	0.340	4.4	0.4221	0.0000	SURCHARGED
15 minute summer	MHS6	12	15.860	0.380	9.2	0.6011	0.0000	SURCHARGED
480 minute summer	PP5	488	15.720	0.314	9.3	39.8046	0.0000	SURCHARGED
480 minute summer	MHS7	488	15.719	0.464	8.8	0.5249	0.0000	SURCHARGED
360 minute summer	PP6	360	15.644	0.417	9.8	71.5074	0.0000	SURCHARGED
120 minute summer	PP7	84	15.829	0.189	29.6	32.7026	0.0000	SURCHARGED
120 minute summer	MHS8	84	15.826	0.196	6.6	0.2212	0.0000	OK
360 minute summer	MHS9	360	15.644	0.054	7.0	0.0733	0.0000	OK
360 minute summer	MHS10	360	15.644	0.445	11.3	0.7246	0.0000	SURCHARGED
480 minute summer	PP8	480	15.374	0.250	12.4	28.3101	0.0000	OK
15 minute summer	MHS10a	10	16.415	0.045	2.9	0.0573	0.0000	OK
60 minute summer	PP9	44	16.379	0.146	13.7	6.5213	0.0000	OK
60 minute summer	MHS11	44	16.373	0.373	3.6	0.0000	0.0000	SURCHARGED
240 minute summer	PP10	200	16.076	0.201	5.5	12.6426	0.0000	SURCHARGED
240 minute summer	MHS12	200	16.075	0.325	4.8	0.0000	0.0000	SURCHARGED
180 minute summer	PP11	136	16.122	0.252	14.7	25.7081	0.0000	SURCHARGED
180 minute summer	MHS13	136	16.121	0.271	3.2	0.3066	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
30 minute summer	PP1	1.000	MHS1	5.7	0.384	0.242	0.0503	
60 minute summer	MHS1	Orifice	PP2	6.0				
60 minute summer	PP2	1.002	MHS2	4.1	0.426	0.291	0.0845	
60 minute summer	MHS2	Orifice	PP3	4.1				
240 minute summer	PP3	1.004	MHS3	5.8	0.348	0.151	0.3089	
15 minute summer	MHS3	Orifice	PP4	3.9				
15 minute summer	PP4	1.006	MHS4	4.0	0.377	0.117	0.3127	
15 minute summer	MHS4	Orifice	MHS5	4.0				
15 minute summer	MHS5	1.008	MHS6	4.0	0.128	0.119	0.3674	
15 minute summer	MHS6	Orifice	PP5	6.7				
15 minute summer	PP5	1.010	MHS7	11.4	0.536	0.229	0.5971	
15 minute summer	MHS7	Orifice	PP6	5.3				
15 minute summer	PP6	1.012	MHS10	-26.3	-0.777	-0.461	0.6944	
120 minute summer	PP7	2.000	MHS8	6.6	0.436	0.423	0.0229	
120 minute summer	MHS8	Orifice	MHS9	6.6				
15 minute summer	MHS9	2.002	MHS10	11.7	0.436	0.066	0.5521	
360 minute summer	MHS10	Orifice	PP8	6.1				
15 minute summer	PP8	1.014	MHS17	23.6	0.615	0.422	1.3929	
15 minute summer	MHS10a	3.000	PP9	2.9	0.399	0.197	0.1979	
15 minute summer	PP9	3.001	MHS11	6.5	0.571	0.319	0.3063	
60 minute summer	MHS11	Orifice	PP10	3.1				
60 minute summer	PP10	3.003	MHS12	5.1	0.440	0.228	0.1374	
15 minute summer	MHS12	Orifice	PP12	2.2				
15 minute summer	PP11	4.000	MHS13	4.4	0.598	0.234	0.0317	
60 minute summer	MHS13	Orifice	PP12	2.5				

Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.71%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
360 minute summer	PP12	360	15.991	0.278	6.7	30.4406	0.0000	SURCHARGED
360 minute summer	MHS14	360	15.990	0.315	2.8	0.3566	0.0000	SURCHARGED
480 minute summer	PP13	488	15.700	0.238	13.7	25.7949	0.0000	OK
480 minute summer	MHS15	488	15.700	0.450	7.9	0.0000	0.0000	SURCHARGED
480 minute summer	PP14	480	15.377	0.177	6.7	14.2916	0.0000	OK
480 minute summer	MHS16	480	15.377	0.227	4.9	0.0000	0.0000	OK
480 minute summer	PP15	480	15.373	0.273	6.4	19.0962	0.0000	OK
480 minute summer	MHS17	480	15.373	0.323	10.5	0.3650	0.0000	OK
480 minute summer	MHS18	480	15.373	0.343	10.1	0.8718	0.0000	SURCHARGED
15 minute summer	34_OUT	1	15.000	0.000	10.0	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
360 minute summer	PP12	3.005	MHS14	2.8	0.234	0.089	0.4066	
360 minute summer	MHS14	Orifice	PP13	2.8				
30 minute summer	PP13	3.007	MHS15	20.7	0.542	0.140	0.6878	
720 minute summer	MHS15	Orifice	PP14	3.1				
15 minute summer	PP14	3.009	MHS16	11.3	0.505	0.151	0.3297	
15 minute summer	MHS16	Orifice	PP15	11.0				
15 minute summer	PP15	3.011	MHS17	12.5	0.348	0.159	0.5121	
15 minute summer	MHS17	1.015	MHS18	11.9	0.495	0.068	0.5912	
15 minute summer	MHS18	Hydro-Brake®	34_OUT	10.0				147.6

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.71%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
60 minute summer	PP1	50	16.355	0.305	36.8	28.4220	0.0000	SURCHARGED
60 minute summer	MHS1	48	16.351	0.351	9.7	0.5556	0.0000	SURCHARGED
240 minute summer	PP2	240	16.166	0.336	12.7	31.9308	0.0000	SURCHARGED
240 minute summer	MHS2	240	16.162	0.362	4.1	0.4099	0.0000	SURCHARGED
360 minute summer	PP3	360	16.051	0.289	7.5	18.0511	0.0000	SURCHARGED
360 minute summer	MHS3	360	16.050	0.330	6.1	0.3737	0.0000	SURCHARGED
600 minute summer	PP4	600	15.953	0.289	6.7	36.3750	0.0000	SURCHARGED
600 minute summer	MHS4	600	15.952	0.333	3.4	0.3770	0.0000	SURCHARGED
15 minute summer	MHS5	12	15.985	0.465	5.9	0.5773	0.0000	SURCHARGED
15 minute summer	MHS6	12	15.985	0.505	12.0	0.7989	0.0000	SURCHARGED
600 minute summer	PP5	615	15.789	0.383	9.4	56.6732	0.0000	SURCHARGED
600 minute summer	MHS7	615	15.788	0.533	4.9	0.6027	0.0000	SURCHARGED
360 minute summer	PP6	368	15.713	0.486	12.0	89.7699	0.0000	SURCHARGED
120 minute summer	PP7	86	15.863	0.223	38.3	45.1366	0.0000	SURCHARGED
120 minute summer	MHS8	86	15.858	0.228	7.2	0.2580	0.0000	OK
360 minute summer	MHS9	368	15.713	0.123	8.0	0.1670	0.0000	OK
360 minute summer	MHS10	368	15.713	0.514	13.5	0.8369	0.0000	SURCHARGED
720 minute summer	PP8	735	15.443	0.319	12.2	46.2145	0.0000	SURCHARGED
15 minute summer	MHS10a	10	16.422	0.052	3.8	0.0659	0.0000	OK
60 minute summer	PP9	46	16.413	0.180	18.2	9.9147	0.0000	SURCHARGED
60 minute summer	MHS11	47	16.407	0.407	3.3	0.0000	0.0000	SURCHARGED
240 minute summer	PP10	240	16.137	0.262	6.3	17.8616	0.0000	SURCHARGED
240 minute summer	MHS12	240	16.136	0.386	2.7	0.0000	0.0000	SURCHARGED
180 minute summer	PP11	152	16.169	0.299	18.9	36.0956	0.0000	SURCHARGED
180 minute summer	MHS13	152	16.168	0.318	3.6	0.3596	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
15 minute summer	PP1	1.000	MHS1	-7.6	-0.433	-0.323	0.0503	
30 minute summer	MHS1	Orifice	PP2	6.3				
60 minute summer	PP2	1.002	MHS2	4.2	0.444	0.297	0.0845	
60 minute summer	MHS2	Orifice	PP3	4.2				
15 minute summer	PP3	1.004	MHS3	6.3	0.428	0.164	0.2813	
180 minute summer	MHS3	Orifice	PP4	4.0				
15 minute summer	PP4	1.006	MHS4	-4.6	0.393	-0.133	0.3522	
15 minute summer	MHS4	Orifice	MHS5	4.0				
15 minute summer	MHS5	1.008	MHS6	4.0	0.128	0.118	0.3674	
15 minute summer	MHS6	Orifice	PP5	7.6				
120 minute summer	PP5	1.010	MHS7	9.3	0.444	0.186	0.6538	
30 minute summer	MHS7	Orifice	PP6	5.1				
15 minute summer	PP6	1.012	MHS10	-34.5	-0.862	-0.606	0.7320	
120 minute summer	PP7	2.000	MHS8	7.2	0.456	0.466	0.0229	
120 minute summer	MHS8	Orifice	MHS9	7.2				
15 minute summer	MHS9	2.002	MHS10	14.1	0.464	0.079	0.5746	
480 minute summer	MHS10	Orifice	PP8	6.2				
15 minute summer	PP8	1.014	MHS17	26.7	0.631	0.478	1.5967	
15 minute summer	MHS10a	3.000	PP9	3.7	0.429	0.258	0.2278	
15 minute summer	PP9	3.001	MHS11	5.4	0.596	0.267	0.3151	
60 minute summer	MHS11	Orifice	PP10	3.2				
120 minute summer	PP10	3.003	MHS12	5.2	0.423	0.230	0.1374	
15 minute summer	MHS12	Orifice	PP12	2.1				
15 minute summer	PP11	4.000	MHS13	4.5	0.635	0.239	0.0317	
60 minute summer	MHS13	Orifice	PP12	2.7				

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.71%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
480 minute summer	PP12	464	16.049	0.336	6.7	38.2843	0.0000	SURCHARGED
480 minute summer	MHS14	464	16.049	0.374	2.9	0.4226	0.0000	SURCHARGED
600 minute summer	PP13	615	15.756	0.294	11.9	39.2577	0.0000	OK
600 minute summer	MHS15	615	15.756	0.506	16.4	0.0000	0.0000	SURCHARGED
720 minute summer	PP14	735	15.447	0.247	6.5	27.5568	0.0000	OK
720 minute summer	MHS16	735	15.446	0.296	4.4	0.0000	0.0000	OK
720 minute summer	PP15	735	15.442	0.342	5.6	25.1660	0.0000	SURCHARGED
720 minute summer	MHS17	735	15.442	0.392	10.3	0.4436	0.0000	OK
720 minute summer	MHS18	735	15.442	0.412	10.1	1.0488	0.0000	SURCHARGED
15 minute summer	34_OUT	1	15.000	0.000	10.0	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
15 minute summer	PP12	3.005	MHS14	2.9	0.358	0.092	0.3933	
480 minute summer	MHS14	Orifice	PP13	2.9				
120 minute summer	PP13	3.007	MHS15	20.8	0.480	0.141	0.8087	
240 minute summer	MHS15	Orifice	PP14	3.1				
15 minute summer	PP14	3.009	MHS16	14.1	0.504	0.189	0.4000	
15 minute summer	MHS16	Orifice	PP15	12.7				
15 minute summer	PP15	3.011	MHS17	-12.8	0.354	-0.162	0.5802	
15 minute summer	MHS17	1.015	MHS18	11.8	0.506	0.067	0.6728	
15 minute summer	MHS18	Hydro-Brake®	34_OUT	10.0				148.5