

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)	18.600	Minimum Backdrop Height (m)	0.600
Ratio-R	0.321	Preferred Cover Depth (m)	0.900
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

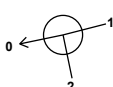
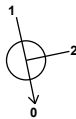
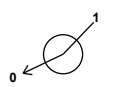
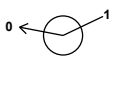
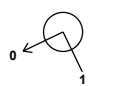
Name	Area (ha)	T of E (mins)	Add Inflow (l/s)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
GULLY	0.016	5.00		85.200	350	387981.969	400626.428	0.700
1	0.052	5.00		85.330	1500	387985.081	400623.137	1.465
2A				85.770	1200	388008.276	400634.201	2.066
2	0.041	5.00		85.880	1200	388011.992	400638.105	2.210
2B	0.015	5.00		86.070	1200	388012.550	400652.163	2.488
2C	0.045	5.00		86.600	1200	388040.308	400657.912	3.195
3	0.014	5.00		87.230	450	388067.415	400655.551	1.430
4	0.009	5.00		87.080	450	388061.385	400647.560	1.380
5	0.018	5.00		86.930	600	388053.488	400653.756	1.430
5A				86.870	1200	388052.121	400660.358	3.615
11	0.002	5.00		87.270	450	388074.747	400643.142	1.400
12	0.014	5.00		87.390	450	388083.843	400645.662	1.635
13	0.009	5.00		87.200	450	388070.555	400692.236	1.030
14	0.013	5.00		87.340	1200	388076.237	400672.721	1.866
7	0.023	5.00		86.620	450	388025.230	400684.167	1.170
6	0.005	5.00		87.190	450	388064.864	400692.237	1.050
8	0.011	5.00		87.010	450	388052.262	400689.600	1.836
9	0.023	5.00		86.580	450	388023.626	400670.596	1.536
10	0.007	5.00		86.920	600	388055.137	400676.940	2.197
10A				86.880	600	388055.903	400671.113	2.215
15				86.970	600	388056.776	400667.714	2.340
16	0.000	5.00		86.990	1200	388050.909	400666.207	3.772
TANK		5.00		86.650	600	388026.925	400663.780	3.539
17	0.023	5.00		86.340	1200	388027.471	400661.340	3.242
18	0.000	5.00		86.340	1200	388028.274	400657.462	3.262
18A				86.000	1200	388010.634	400653.809	3.012
19				85.840	1200	388010.569	400639.333	2.924
20				85.700	1500	388006.310	400634.894	2.815
20A			20.5	85.330	1200	387986.578	400625.481	2.582
C01				85.260	1500	387984.187	400625.938	2.727
C01A				85.580	1200	387980.974	400632.614	3.096
C01B				85.000	1200	387966.533	400625.664	2.623
C02_OUT				84.860	1200	387957.160	400632.167	3.340

Links (Input)

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	GULLY	1	4.529	0.600	84.500	84.274	0.226	20.0	150	5.03	45.5
1.001	1	2A	25.699	0.600	83.865	83.704	0.161	160.0	225	5.45	44.0
1.002	2A	2	5.390	0.600	83.704	83.670	0.034	160.0	225	5.54	43.7
1.003	2	2B	14.069	0.600	83.670	83.582	0.088	160.0	225	5.76	43.0
1.004	2B	2C	28.347	0.600	83.582	83.405	0.177	160.0	225	6.22	41.6
1.005	2C	5A	12.064	0.600	83.405	83.330	0.075	160.0	225	6.42	41.0
2.000	3	5	14.042	0.600	85.800	85.500	0.300	46.8	150	5.16	45.0
3.000	4	5	10.038	0.600	85.700	85.500	0.200	50.2	150	5.12	45.2
2.001	5	5A	6.742	0.600	85.500	85.433	0.067	100.0	150	5.27	44.6
1.006	5A	16	5.973	0.600	83.255	83.218	0.037	160.0	300	6.50	40.8
4.000	11	12	9.439	0.600	85.870	85.755	0.115	82.1	150	5.14	45.1
4.001	12	14	28.108	0.600	85.755	85.474	0.281	100.0	150	5.61	43.5
5.000	13	14	20.325	0.600	86.170	85.474	0.696	29.2	150	5.18	45.0
4.002	14	15	20.095	0.600	85.474	84.630	0.844	23.8	150	5.77	43.0
6.000	7	8	27.573	0.600	85.450	85.174	0.276	100.0	150	5.46	44.0
7.000	6	8	12.875	0.600	86.140	86.011	0.129	100.0	150	5.21	44.8
6.001	8	10	12.982	0.600	85.174	84.724	0.450	28.8	150	5.57	43.6
8.000	9	10	32.143	0.600	85.044	84.723	0.321	100.0	150	5.53	43.8
6.002	10	10A	5.877	0.600	84.724	84.665	0.059	100.0	150	5.67	43.3
6.003	10A	15	3.509	0.600	84.665	84.630	0.035	100.0	150	5.73	43.1
4.003	15	16	6.057	0.600	84.630	84.569	0.061	100.0	150	5.87	42.7
1.007	16	17	23.938	0.600	83.218	83.098	0.120	200.0	300	6.86	39.8
9.000	TANK	17	2.500	0.600	83.111	83.098	0.013	200.0	300	5.04	45.5
1.008	17	18	3.960	0.600	83.098	83.078	0.020	200.0	300	6.92	39.7
1.009	18	18A	18.014	0.600	83.078	82.988	0.090	200.0	300	7.19	39.0
1.010	18A	19	14.476	0.600	82.988	82.916	0.072	200.0	300	7.41	38.4
1.011	19	20	6.152	0.600	82.916	82.885	0.031	200.0	300	7.50	38.2
1.012	20	20A	21.862	0.600	82.885	82.748	0.137	160.0	225	7.85	37.4
1.013	20A	C01	2.434	0.600	82.748	82.533	0.215	11.3	225	7.86	37.3
1.014	C01	C01A	7.409	0.600	82.533	82.484	0.049	150.0	300	7.96	37.1
1.015	C01A	C01B	16.026	0.600	82.484	82.377	0.107	150.0	300	8.17	36.7
1.016	C01B	C02_OUT	11.408	0.600	82.499	81.520	0.979	11.7	300	8.21	36.6

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
GULLY	387981.969	400626.428	85.200	0.700	350	 0	1.000	84.500	150
1	387985.081	400623.137	85.330	1.465	1500	 0	1.000	84.274	150
2A	388008.276	400634.201	85.770	2.066	1200	 0	1.001	83.865	225
2	388011.992	400638.105	85.880	2.210	1200	 0	1.001	83.704	225
2B	388012.550	400652.163	86.070	2.488	1200	 0	1.002	83.704	225
2C	388040.308	400657.912	86.600	3.195	1200	 0	1.002	83.670	225
3	388067.415	400655.551	87.230	1.430	450	 0	1.003	83.670	225
4	388061.385	400647.560	87.080	1.380	450	 0	1.003	83.582	225
5	388053.488	400653.756	86.930	1.430	600	 0	1.004	83.582	225
5A	388052.121	400660.358	86.870	3.615	1200	 0	1.004	83.405	225
11	388074.747	400643.142	87.270	1.400	450	 0	1.005	83.405	225
12	388083.843	400645.662	87.390	1.635	450	 0	2.000	85.800	150
13	388070.555	400692.236	87.200	1.030	450	 0	3.000	85.700	150
14	388076.237	400672.721	87.340	1.866	1200	 0	3.000	85.500	150
7	388025.230	400684.167	86.620	1.170	450	 0	2.000	85.500	150
6	388064.864	400692.237	87.190	1.050	450	 0	2.001	85.500	150
8	388052.262	400689.600	87.010	1.836	450	 0	2.001	85.433	150
9	388023.626	400670.596	86.580	1.536	450	 0	2.005	83.330	225
10	388055.137	400676.940	86.920	2.197	600	 0	1.006	83.255	300
10A	388055.903	400671.113	86.880	2.215	600	 0	4.000	85.870	150
						 0	4.000	85.755	150
						 0	4.001	85.755	150
						 0	5.000	86.170	150
						 0	5.000	85.474	150
						 0	4.001	85.474	150
						 0	4.002	85.474	150
						 0	6.000	85.450	150
						 0			

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
15	388056.776	400667.714	86.970	2.340	600		1	6.003	84.630	150
							2	4.002	84.630	150
							0	4.003	84.630	150
16	388050.909	400666.207	86.990	3.772	1200		1	4.003	84.569	150
							2	1.006	83.218	300
							0	1.007	83.218	300
TANK	388026.925	400663.780	86.650	3.539	600		0	9.000	83.111	300
17	388027.471	400661.340	86.340	3.242	1200		1	9.000	83.098	300
							2	1.007	83.098	300
							0	1.008	83.098	300
18	388028.274	400657.462	86.340	3.262	1200		1	1.008	83.078	300
							0	1.009	83.078	300
							1	1.009	82.988	300
18A	388010.634	400653.809	86.000	3.012	1200		0	1.010	82.988	300
							1	1.010	82.916	300
							0	1.011	82.916	300
20	388006.310	400634.894	85.700	2.815	1500		1	1.011	82.885	300
							0	1.012	82.885	225
							1	1.012	82.748	225
20A	387986.578	400625.481	85.330	2.582	1200		0	1.013	82.748	225
							1	1.013	82.533	225
							0	1.014	82.533	300
C01	387984.187	400625.938	85.260	2.727	1500		1	1.014	82.484	300
							0	1.015	82.484	300
							1	1.015	82.377	300
C01A	387980.974	400632.614	85.580	3.096	1200		0	1.016	82.499	300
							1	1.016	81.520	300
							0	1.016	81.520	300
C02_OUT	387957.160	400632.167	84.860	3.340	1200		1	1.016	81.520	300

Simulation Settings

Rainfall Methodology	FSR	Summer CV	0.750	Drain Down Time (mins)	240
FSR Region	England and Wales	Winter CV	0.840	Additional Storage (m³/ha)	20.0
M5-60 (mm)	18.600	Analysis Speed	Normal	Check Discharge Rate(s)	x
Ratio-R	0.321	Skip Steady State	x	Check Discharge Volume	x

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 %)	Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0	100	40	0	0
30	0	0	0				

Node C02_OUT Surcharged Outfall

Overrides Design Area	x	Depression Storage Area (m²)	0	Evapo-transpiration (mm/day)	0
Overrides Design Additional Inflow	x	Depression Storage Depth (mm)	0		

Applies to 30yr, 100yr+40% CC 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440 minute storms

Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
0	1.300	180	1.300	360	1.300	540	1.300	720	1.300	900	1.300	1080	1.300	1260	1.300
60	1.300	240	1.300	420	1.300	600	1.300	780	1.300	960	1.300	1140	1.300	1320	1.300
120	1.300	300	1.300	480	1.300	660	1.300	840	1.300	1020	1.300	1200	1.300	1380	1.300

Node 20 Online Hydro-Brake® Control

Flap Valve	✓	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	82.885	Product Number	CTL-SHE-0102-4200-0700-4200
Design Depth (m)	0.700	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	4.2	Min Node Diameter (mm)	1200

Node 20 Online Orifice Control

Flap Valve	✓	Invert Level (m)	83.750	Design Flow (l/s)	10.5	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Depth (m)	1.400	Diameter (m)	0.065		

Node 17 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	83.098
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	128

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	70.0	0.0	1.600	70.0	0.0	1.601	0.0	0.0

Results for 1 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 winter	GULLY	10	84.523	0.023	1.9	0.0128	0.0000	OK
15 minute winter	1	10	83.934	0.069	8.2	0.1697	0.0000	OK
15 minute winter	2A	11	83.782	0.078	8.0	0.0883	0.0000	OK
15 minute winter	2	11	83.761	0.091	12.8	0.1372	0.0000	OK
15 minute winter	2B	11	83.675	0.093	14.5	0.1158	0.0000	OK
15 minute winter	2C	11	83.523	0.118	19.8	0.1662	0.0000	OK
15 minute winter	3	10	85.826	0.026	1.7	0.0092	0.0000	OK
15 minute winter	4	10	85.721	0.021	1.1	0.0061	0.0000	OK
15 minute winter	5	10	85.557	0.057	5.0	0.0305	0.0000	OK
15 minute winter	5A	11	83.391	0.136	24.4	0.1541	0.0000	OK
30 minute winter	11	20	85.881	0.011	0.2	0.0020	0.0000	OK
15 minute winter	12	10	85.788	0.033	1.9	0.0107	0.0000	OK
15 minute winter	13	10	86.189	0.019	1.1	0.0062	0.0000	OK
15 minute winter	14	11	85.509	0.035	4.5	0.0448	0.0000	OK
15 minute winter	7	10	85.491	0.041	2.8	0.0225	0.0000	OK
15 minute winter	6	11	86.159	0.019	0.6	0.0048	0.0000	OK
15 minute winter	8	11	85.212	0.038	4.6	0.0105	0.0000	OK
15 minute winter	9	10	85.084	0.040	2.8	0.0182	0.0000	OK
15 minute winter	10	11	84.805	0.082	8.2	0.0284	0.0000	OK
15 minute winter	10A	11	84.755	0.090	8.1	0.0254	0.0000	OK
15 minute winter	15	11	84.733	0.103	12.5	0.0291	0.0000	OK
15 minute winter	16	11	83.367	0.149	36.7	0.1687	0.0000	OK
120 minute winter	TANK	96	83.357	0.246	0.2	0.0697	0.0000	OK
120 minute winter	17	94	83.357	0.259	15.0	17.5710	0.0000	OK
120 minute winter	18	94	83.357	0.279	8.8	0.3157	0.0000	OK
120 minute winter	18A	94	83.357	0.369	8.7	0.4172	0.0000	SURCHARGED
120 minute winter	19	94	83.357	0.441	6.6	0.4983	0.0000	SURCHARGED
120 minute winter	20	94	83.356	0.471	5.2	0.8331	0.0000	SURCHARGED
15 minute summer	20A	55	82.821	0.073	24.7	0.0822	0.0000	OK
15 minute summer	C01	55	82.652	0.119	24.7	0.2101	0.0000	OK
15 minute summer	C01A	55	82.594	0.110	24.7	0.1242	0.0000	OK
15 minute winter	C01B	63	82.558	0.181	24.7	0.2043	0.0000	OK
15 minute summer	C02_OUT	55	81.575	0.055	24.7	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	GULLY	1.000	1	1.9	1.125	0.047	0.0076	
15 minute winter	1	1.001	2A	8.0	0.729	0.196	0.2860	
15 minute winter	2A	1.002	2	8.1	0.590	0.197	0.0737	
15 minute winter	2	1.003	2B	12.8	0.842	0.313	0.2144	
15 minute winter	2B	1.004	2C	14.6	0.802	0.355	0.5153	
15 minute winter	2C	1.005	5A	19.6	0.980	0.477	0.2409	
15 minute winter	3	2.000	5	1.7	0.423	0.064	0.0574	
15 minute winter	4	3.000	5	1.1	0.294	0.043	0.0385	
15 minute winter	5	2.001	5A	4.8	0.822	0.273	0.0397	
15 minute winter	5A	1.006	16	24.3	0.737	0.278	0.1973	
30 minute winter	11	4.000	12	0.2	0.148	0.010	0.0146	
15 minute winter	12	4.001	14	1.8	0.620	0.103	0.0837	
15 minute winter	13	5.000	14	1.1	0.505	0.032	0.0443	
15 minute winter	14	4.002	15	4.4	0.749	0.121	0.1608	
15 minute winter	7	6.000	8	2.7	0.748	0.154	0.1006	
15 minute winter	6	7.000	8	0.6	0.465	0.034	0.0166	
15 minute winter	8	6.001	10	4.6	0.735	0.139	0.0855	
15 minute winter	9	8.000	10	2.7	0.425	0.153	0.2172	
15 minute winter	10	6.002	10A	8.1	0.786	0.456	0.0609	
15 minute winter	10A	6.003	15	8.1	0.675	0.454	0.0419	
15 minute winter	15	4.003	16	12.3	1.024	0.695	0.0730	
15 minute winter	16	1.007	17	36.5	1.520	0.466	0.6981	
15 minute winter	TANK	9.000	17	-0.8	-0.194	-0.010	0.0936	
15 minute winter	17	1.008	18	22.5	0.837	0.288	0.1690	
15 minute winter	18	1.009	18A	20.9	0.842	0.266	1.0319	
15 minute summer	18A	1.010	19	17.0	0.670	0.217	0.9763	
15 minute summer	19	1.011	20	10.2	0.568	0.130	0.4332	
15 minute summer	20	1.012	20A	4.2	0.490	0.102	0.1891	
15 minute summer	20	Orifice	20A	0.0				
15 minute summer	20A	1.013	C01	24.7	1.538	0.159	0.0394	
15 minute summer	C01	1.014	C01A	24.7	1.006	0.273	0.1827	
15 minute summer	C01A	1.015	C01B	24.7	0.855	0.273	0.5422	
15 minute summer	C01B	1.016	C02_OUT	24.7	2.653	0.075	0.1062	328.5

Results for 30 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 winter	GULLY	10	84.538	0.038	4.8	0.0209	0.0000	OK
15 minute winter	1	10	83.977	0.112	20.3	0.2780	0.0000	OK
180 minute winter	2A	136	83.904	0.200	5.4	0.2256	0.0000	OK
180 minute winter	2	136	83.903	0.233	8.6	0.3506	0.0000	SURCHARGED
180 minute winter	2B	136	83.903	0.321	9.8	0.4019	0.0000	SURCHARGED
180 minute winter	2C	136	83.902	0.497	13.3	0.7025	0.0000	SURCHARGED
15 minute winter	3	10	85.841	0.041	4.2	0.0144	0.0000	OK
15 minute winter	4	10	85.733	0.033	2.7	0.0095	0.0000	OK
15 minute winter	5	10	85.600	0.100	12.2	0.0533	0.0000	OK
180 minute winter	5A	136	83.901	0.646	15.7	0.7310	0.0000	SURCHARGED
15 minute winter	11	11	85.888	0.018	0.6	0.0034	0.0000	OK
15 minute winter	12	10	85.808	0.053	4.8	0.0175	0.0000	OK
15 minute winter	13	10	86.199	0.029	2.7	0.0096	0.0000	OK
15 minute winter	14	10	85.530	0.056	11.2	0.0715	0.0000	OK
15 minute winter	7	10	85.516	0.066	6.8	0.0364	0.0000	OK
15 minute winter	6	10	86.170	0.030	1.5	0.0075	0.0000	OK
15 minute winter	8	10	85.234	0.060	11.4	0.0168	0.0000	OK
15 minute winter	9	12	85.111	0.067	6.8	0.0307	0.0000	OK
15 minute winter	10	12	85.080	0.357	20.1	0.1237	0.0000	SURCHARGED
15 minute winter	10A	12	84.994	0.329	17.8	0.0930	0.0000	SURCHARGED
15 minute winter	15	12	84.930	0.300	28.1	0.0849	0.0000	SURCHARGED
180 minute winter	16	136	83.901	0.683	23.1	0.7726	0.0000	SURCHARGED
180 minute winter	TANK	136	83.900	0.789	0.3	0.2233	0.0000	SURCHARGED
180 minute winter	17	136	83.900	0.802	24.6	54.3496	0.0000	SURCHARGED
180 minute winter	18	136	83.899	0.821	7.9	0.9290	0.0000	SURCHARGED
180 minute winter	18A	136	83.898	0.910	7.9	1.0294	0.0000	SURCHARGED
180 minute winter	19	136	83.897	0.981	7.8	1.1097	0.0000	SURCHARGED
180 minute winter	20	136	83.896	1.011	7.8	1.7873	0.0000	SURCHARGED
180 minute winter	20A	136	82.854	0.106	28.3	0.1195	0.0000	OK
180 minute winter	C01	136	82.856	0.323	28.3	0.5706	0.0000	SURCHARGED
180 minute winter	C01A	136	82.847	0.363	28.3	0.4104	0.0000	SURCHARGED
15 minute summer	C01B	3	82.842	0.465	25.9	0.5258	0.0000	SURCHARGED
15 minute summer	C02_OUT	1	82.820	1.300	25.4	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	GULLY	1.000	1	4.8	1.447	0.119	0.0149	
15 minute winter	1	1.001	2A	20.1	0.849	0.489	0.6073	
15 minute winter	2A	1.002	2	19.8	0.658	0.483	0.1623	
15 minute winter	2	1.003	2B	31.3	0.995	0.764	0.4703	
15 minute winter	2B	1.004	2C	34.3	0.911	0.837	1.0592	
15 minute winter	2C	1.005	5A	46.7	1.192	1.140	0.4798	
15 minute winter	3	2.000	5	4.2	0.514	0.159	0.1143	
15 minute winter	4	3.000	5	2.7	0.354	0.106	0.0769	
15 minute winter	5	2.001	5A	11.9	1.015	0.669	0.0790	
15 minute winter	5A	1.006	16	58.1	0.913	0.663	0.4206	
15 minute winter	11	4.000	12	0.6	0.191	0.031	0.0319	
15 minute winter	12	4.001	14	4.7	0.806	0.264	0.1632	
15 minute winter	13	5.000	14	2.7	0.648	0.080	0.0854	
15 minute winter	14	4.002	15	11.0	0.879	0.300	0.2376	
15 minute winter	7	6.000	8	6.7	0.951	0.377	0.1940	
15 minute winter	6	7.000	8	1.5	0.601	0.082	0.0311	
15 minute winter	8	6.001	10	11.3	0.835	0.340	0.1572	
15 minute winter	9	8.000	10	6.7	0.489	0.376	0.4052	
15 minute winter	10	6.002	10A	17.8	1.010	1.002	0.1035	
15 minute winter	10A	6.003	15	17.8	1.009	1.000	0.0618	
15 minute winter	15	4.003	16	27.8	1.581	1.568	0.1055	
15 minute winter	16	1.007	17	84.0	1.680	1.073	1.6857	
15 minute winter	TANK	9.000	17	-1.5	-0.234	-0.020	0.1760	
15 minute winter	17	1.008	18	39.7	0.920	0.508	0.2789	
15 minute summer	18	1.009	18A	37.5	0.912	0.479	1.2685	
15 minute winter	18A	1.010	19	24.1	0.769	0.308	1.0194	
15 minute winter	19	1.011	20	13.5	0.600	0.173	0.4332	
180 minute winter	20	1.012	20A	4.9	0.419	0.118	0.2754	
180 minute winter	20	Orifice	20A	3.0				
180 minute winter	20A	1.013	C01	28.3	0.846	0.182	0.0707	
180 minute winter	C01	1.014	C01A	28.3	0.402	0.313	0.5217	
180 minute winter	C01A	1.015	C01B	28.3	0.402	0.313	1.1285	
180 minute winter	C01B	1.016	C02_OUT	28.3	0.402	0.087	0.8033	624.7

Results for 100 year +40% CC 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 winter	GULLY	13	84.700	0.200	8.6	0.1105	0.0000	SURCHARGED
15 minute winter	1	13	84.692	0.827	36.8	2.0482	0.0000	SURCHARGED
180 minute winter	2A	132	84.658	0.954	8.7	1.0794	0.0000	SURCHARGED
180 minute winter	2	132	84.658	0.988	14.0	1.4840	0.0000	SURCHARGED
180 minute winter	2B	136	84.656	1.074	15.5	1.3452	0.0000	SURCHARGED
180 minute winter	2C	136	84.653	1.248	21.4	1.7638	0.0000	SURCHARGED
15 minute winter	3	10	85.855	0.055	7.5	0.0195	0.0000	OK
15 minute winter	4	10	85.744	0.044	4.8	0.0128	0.0000	OK
15 minute winter	5	10	85.703	0.203	21.9	0.1082	0.0000	SURCHARGED
180 minute winter	5A	136	84.650	1.395	26.7	1.5780	0.0000	SURCHARGED
15 minute winter	11	10	85.894	0.024	1.1	0.0045	0.0000	OK
15 minute winter	12	10	85.828	0.073	8.6	0.0242	0.0000	OK
15 minute winter	13	10	86.209	0.039	4.8	0.0129	0.0000	OK
15 minute winter	14	11	85.568	0.094	20.2	0.1200	0.0000	OK
15 minute winter	7	12	85.807	0.357	12.4	0.1971	0.0000	SURCHARGED
15 minute winter	6	10	86.180	0.040	2.7	0.0102	0.0000	OK
15 minute winter	8	12	85.722	0.548	19.3	0.1529	0.0000	SURCHARGED
15 minute winter	9	12	85.697	0.653	12.4	0.2999	0.0000	SURCHARGED
15 minute winter	10	12	85.598	0.875	27.7	0.3028	0.0000	SURCHARGED
15 minute winter	10A	12	85.394	0.729	26.9	0.2062	0.0000	SURCHARGED
15 minute winter	15	12	85.253	0.623	44.1	0.1762	0.0000	SURCHARGED
180 minute winter	16	136	84.649	1.431	41.5	1.6190	0.0000	SURCHARGED
180 minute winter	TANK	136	84.645	1.534	0.5	0.4341	0.0000	SURCHARGED
180 minute winter	17	136	84.645	1.547	44.3	104.8459	0.0000	SURCHARGED
180 minute winter	18	136	84.643	1.565	14.8	1.7703	0.0000	SURCHARGED
180 minute winter	18A	136	84.639	1.651	14.6	1.8673	0.0000	SURCHARGED
180 minute winter	19	136	84.635	1.719	14.5	1.9447	0.0000	SURCHARGED
180 minute winter	20	136	84.633	1.748	14.4	3.0892	0.0000	SURCHARGED
180 minute winter	20A	136	82.887	0.139	34.9	0.1568	0.0000	OK
180 minute winter	C01	136	82.875	0.342	34.9	0.6037	0.0000	SURCHARGED
180 minute winter	C01A	136	82.861	0.377	34.9	0.4261	0.0000	SURCHARGED
15 minute winter	C01B	4	82.844	0.467	29.5	0.5285	0.0000	SURCHARGED
15 minute summer	C02_OUT	1	82.820	1.300	28.2	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	GULLY	1.000	1	8.9	1.645	0.224	0.0797	
30 minute summer	1	1.001	2A	28.8	0.878	0.704	1.0221	
15 minute summer	2A	1.002	2	25.0	0.628	0.609	0.2144	
15 minute winter	2	1.003	2B	39.1	0.990	0.953	0.5595	
15 minute winter	2B	1.004	2C	44.0	1.107	1.074	1.1274	
15 minute winter	2C	1.005	5A	62.2	1.564	1.517	0.4798	
15 minute winter	3	2.000	5	7.4	0.553	0.286	0.1645	
15 minute winter	4	3.000	5	4.8	0.381	0.190	0.1101	
15 minute winter	5	2.001	5A	21.3	1.212	1.200	0.1148	
15 minute winter	5A	1.006	16	81.0	1.151	0.924	0.4206	
15 minute winter	11	4.000	12	1.1	0.217	0.055	0.0489	
15 minute winter	12	4.001	14	8.5	0.901	0.476	0.2811	
15 minute winter	13	5.000	14	4.8	0.747	0.144	0.1543	
15 minute winter	14	4.002	15	19.3	1.198	0.526	0.2942	
15 minute summer	7	6.000	8	11.7	1.003	0.659	0.4854	
15 minute winter	6	7.000	8	2.6	0.710	0.148	0.0476	
15 minute winter	8	6.001	10	15.4	0.953	0.462	0.2285	
15 minute winter	9	8.000	10	9.9	0.582	0.556	0.5659	
15 minute winter	10	6.002	10A	26.9	1.528	1.515	0.1035	
15 minute winter	10A	6.003	15	27.2	1.547	1.534	0.0618	
15 minute winter	15	4.003	16	43.7	2.482	2.461	0.1056	
15 minute winter	16	1.007	17	121.3	1.751	1.549	1.6857	
15 minute winter	TANK	9.000	17	-2.4	-0.262	-0.030	0.1760	
15 minute winter	17	1.008	18	43.4	0.976	0.554	0.2789	
15 minute winter	18	1.009	18A	40.2	0.934	0.513	1.2685	
15 minute summer	18A	1.010	19	25.6	0.764	0.327	1.0194	
15 minute summer	19	1.011	20	16.9	0.556	0.216	0.4332	
180 minute winter	20	1.012	20A	6.3	0.420	0.154	0.3716	
180 minute winter	20	Orifice	20A	8.1				
180 minute winter	20A	1.013	C01	34.9	0.961	0.225	0.0796	
180 minute winter	C01	1.014	C01A	34.9	0.496	0.385	0.5217	
180 minute winter	C01A	1.015	C01B	34.9	0.496	0.385	1.1285	
180 minute winter	C01B	1.016	C02_OUT	34.9	0.496	0.107	0.8033	699.0