

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	30	Maximum Rainfall (mm/hr)	250.0
Additional Flow (%)	10	Minimum Velocity (m/s)	0.75
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	19.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.300	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)
1	0.086	5.00	47.590	1500	372539.635	435912.383	1.640
2	0.008	5.00	47.244	1500	372517.918	435927.199	1.644
18	0.135	5.00	45.257	1500	372555.040	435983.420	1.318
21	0.130	5.00	45.296	1500	372539.789	435973.962	1.320
19			45.437	1500	372545.802	435969.864	1.655
20	0.142	5.00	45.949	1500	372536.072	435956.042	2.219
3	0.014	5.00	47.269	1800	372512.756	435925.087	3.808
4	0.120	5.00	47.499	1800	372505.093	435914.914	4.064
5	0.043	5.00	47.414	1800	372500.306	435915.039	3.989
6			46.797	1800	372479.042	435931.125	3.425
7	0.048	5.00	46.172	1800	372475.227	435955.884	2.851
8			45.000	1800	372450.965	435972.681	1.891
9			45.000	1800	372455.273	435978.250	1.907
10			45.250	1800	372461.659	435976.717	2.172
11			43.331	1200	372481.322	436003.342	0.447
12			43.314	1200	372503.756	436008.465	0.565
13			43.152	1200	372512.051	436019.432	0.484
14			43.149	1200	372528.215	436035.829	0.617
15			43.496	1200	372552.136	436044.598	1.114
22		5.00	48.530	1200	372559.490	435901.868	3.530
23			47.380	1200	372534.307	435918.885	2.650
24			47.156	1200	372519.568	435930.004	2.756
25			45.821	1200	372541.037	435958.451	2.421
26			45.050	1200	372584.516	436023.037	2.330
17			43.229	1200	372558.153	436041.057	0.887
24_OUT			43.229	1200	372558.153	436041.057	0.887

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	1	2	26.290	0.600	45.950	45.600	0.350	75.1	225	5.29	102.7
1.001	2	3	5.577	0.600	45.600	45.042	0.558	10.0	225	5.31	102.5
2.000	18	19	16.405	0.600	43.939	43.857	0.082	200.1	300	5.25	103.0
3.000	21	19	7.278	0.600	43.976	43.932	0.044	165.4	225	5.12	103.9
2.001	19	20	16.903	0.600	43.782	43.730	0.052	325.1	375	5.53	101.1
2.002	20	3	38.753	0.600	43.730	43.611	0.119	325.7	375	6.18	97.0
1.002	3	4	12.737	0.600	43.461	43.435	0.026	489.9	525	6.39	95.7
1.003	4	5	4.789	0.600	43.435	43.425	0.010	478.9	525	6.47	95.3
1.004	5	6	26.663	0.600	43.426	43.372	0.054	493.8	525	6.91	92.8
1.005	6	7	25.051	0.600	43.372	43.321	0.051	491.2	525	7.33	90.6
1.006	7	8	29.509	0.600	43.321	43.261	0.060	491.8	525	7.82	88.3
1.007	8	9	7.041	0.600	43.109	43.093	0.016	440.1	525	7.93	87.7
1.008	9	10	6.567	0.600	43.093	43.078	0.015	437.8	525	8.03	87.3
1.009	10	11	33.099	0.600	43.079	42.884	0.195	169.7	225	8.58	84.9
1.010	11	12	23.012	0.600	42.884	42.749	0.135	170.5	225	8.96	83.3
1.011	12	13	13.750	0.600	42.749	42.668	0.081	169.8	225	9.19	82.4
1.012	13	14	23.025	0.600	42.668	42.533	0.135	170.6	225	9.58	80.9
1.013	14	15	25.478	0.600	42.532	42.382	0.150	169.9	225	10.00	79.3
1.014	15	17	6.982	0.600	42.383	42.342	0.041	170.3	225	10.12	78.9
4.000	22	23	30.393	0.600	45.000	44.730	0.270	112.6	225	5.41	101.9
4.001	23	24	18.462	0.600	44.730	44.400	0.330	55.9	225	5.59	100.7
4.002	24	25	35.640	0.600	44.400	43.400	1.000	35.6	225	5.86	98.9
4.003	25	26	77.857	0.600	43.400	42.720	0.680	114.5	225	6.92	92.7
4.004	26	24_OUT	31.933	0.600	42.720	42.342	0.378	84.5	225	7.29	90.8

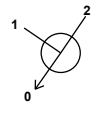
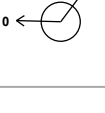
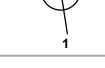
Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
1.000	1.510	60.0	26.3	1.415	1.419	0.086	0.0
1.001	4.163	165.5	28.7	1.419	2.002	0.094	0.0
2.000	1.108	78.3	41.5	1.018	1.280	0.135	0.0
3.000	1.014	40.3	40.3	1.095	1.280	0.130	0.0
2.001	0.999	110.4	79.8	1.280	1.844	0.265	0.0
2.002	0.998	110.3	117.7	1.844	3.283	0.407	0.0
1.002	1.005	217.6	147.0	3.283	3.539	0.515	0.0
1.003	1.017	220.1	180.4	3.539	3.464	0.635	0.0
1.004	1.001	216.7	187.6	3.463	2.900	0.678	0.0
1.005	1.004	217.3	183.2	2.900	2.326	0.678	0.0
1.006	1.003	217.1	191.0	2.326	1.214	0.726	0.0
1.007	1.061	229.7	189.9	1.366	1.382	0.726	0.0
1.008	1.064	230.3	188.9	1.382	1.647	0.726	0.0
1.009	1.000	39.8	183.7	1.946	0.222	0.726	0.0
1.010	0.998	39.7	180.2	0.222	0.340	0.726	0.0
1.011	1.000	39.8	178.3	0.340	0.259	0.726	0.0
1.012	0.998	39.7	175.1	0.259	0.391	0.726	0.0
1.013	1.000	39.8	171.7	0.392	0.889	0.726	0.0
1.014	0.999	39.7	170.9	0.888	0.662	0.726	0.0
4.000	1.231	49.0	0.0	3.305	2.425	0.000	0.0
4.001	1.752	69.7	0.0	2.425	2.531	0.000	0.0
4.002	2.198	87.4	0.0	2.531	2.196	0.000	0.0
4.003	1.221	48.5	0.0	2.196	2.105	0.000	0.0
4.004	1.423	56.6	0.0	2.105	0.662	0.000	0.0

Pipeline Schedule

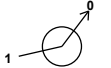
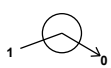
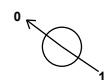
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	26.290	75.1	225	1 STANDARD	47.590	45.950	1.415	47.244	45.600	1.419
1.001	5.577	10.0	225	1 STANDARD	47.244	45.600	1.419	47.269	45.042	2.002
2.000	16.405	200.1	300	1 STANDARD	45.257	43.939	1.018	45.437	43.857	1.280
3.000	7.278	165.4	225	1 STANDARD	45.296	43.976	1.095	45.437	43.932	1.280
2.001	16.903	325.1	375	1 STANDARD	45.437	43.782	1.280	45.949	43.730	1.844
2.002	38.753	325.7	375	1 STANDARD	45.949	43.730	1.844	47.269	43.611	3.283
1.002	12.737	489.9	525	1 STANDARD	47.269	43.461	3.283	47.499	43.435	3.539
1.003	4.789	478.9	525	1 STANDARD	47.499	43.435	3.539	47.414	43.425	3.464
1.004	26.663	493.8	525	1 STANDARD	47.414	43.426	3.463	46.797	43.372	2.900
1.005	25.051	491.2	525	1 STANDARD	46.797	43.372	2.900	46.172	43.321	2.326
1.006	29.509	491.8	525	1 STANDARD	46.172	43.321	2.326	45.000	43.261	1.214
1.007	7.041	440.1	525	1 STANDARD	45.000	43.109	1.366	45.000	43.093	1.382
1.008	6.567	437.8	525	1 STANDARD	45.000	43.093	1.382	45.250	43.078	1.647
1.009	33.099	169.7	225	1 STANDARD	45.250	43.079	1.946	43.331	42.884	0.222
1.010	23.012	170.5	225	1 STANDARD	43.331	42.884	0.222	43.314	42.749	0.340
1.011	13.750	169.8	225	1 STANDARD	43.314	42.749	0.340	43.152	42.668	0.259
1.012	23.025	170.6	225	1 STANDARD	43.152	42.668	0.259	43.149	42.533	0.391
1.013	25.478	169.9	225	1 STANDARD	43.149	42.532	0.392	43.496	42.382	0.889
1.014	6.982	170.3	225	1 STANDARD	43.496	42.383	0.888	43.229	42.342	0.662
4.000	30.393	112.6	225	1 STANDARD	48.530	45.000	3.305	47.380	44.730	2.425
4.001	18.462	55.9	225	1 STANDARD	47.380	44.730	2.425	47.156	44.400	2.531
4.002	35.640	35.6	225	1 STANDARD	47.156	44.400	2.531	45.821	43.400	2.196
4.003	77.857	114.5	225	1 STANDARD	45.821	43.400	2.196	45.050	42.720	2.105
4.004	31.933	84.5	225	1 STANDARD	45.050	42.720	2.105	43.229	42.342	0.662

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1500	Manhole	1 STANDARD	2	1500	Manhole	1 STANDARD
1.001	2	1500	Manhole	1 STANDARD	3	1800	Manhole	1 STANDARD
2.000	18	1500	Manhole	1 STANDARD	19	1500	Manhole	1 STANDARD
3.000	21	1500	Manhole	1 STANDARD	19	1500	Manhole	1 STANDARD
2.001	19	1500	Manhole	1 STANDARD	20	1500	Manhole	1 STANDARD
2.002	20	1500	Manhole	1 STANDARD	3	1800	Manhole	1 STANDARD
1.002	3	1800	Manhole	1 STANDARD	4	1800	Manhole	1 STANDARD
1.003	4	1800	Manhole	1 STANDARD	5	1800	Manhole	1 STANDARD
1.004	5	1800	Manhole	1 STANDARD	6	1800	Manhole	1 STANDARD
1.005	6	1800	Manhole	1 STANDARD	7	1800	Manhole	1 STANDARD
1.006	7	1800	Manhole	1 STANDARD	8	1800	Manhole	1 STANDARD
1.007	8	1800	Manhole	1 STANDARD	9	1800	Manhole	1 STANDARD
1.008	9	1800	Manhole	1 STANDARD	10	1800	Manhole	1 STANDARD
1.009	10	1800	Manhole	1 STANDARD	11	1200	Manhole	1 STANDARD
1.010	11	1200	Manhole	1 STANDARD	12	1200	Manhole	1 STANDARD
1.011	12	1200	Manhole	1 STANDARD	13	1200	Manhole	1 STANDARD
1.012	13	1200	Manhole	1 STANDARD	14	1200	Manhole	1 STANDARD
1.013	14	1200	Manhole	1 STANDARD	15	1200	Manhole	1 STANDARD
1.014	15	1200	Manhole	1 STANDARD	17	1200	Manhole	1 STANDARD
4.000	22	1200	Manhole	1 STANDARD	23	1200	Manhole	1 STANDARD
4.001	23	1200	Manhole	1 STANDARD	24	1200	Manhole	1 STANDARD
4.002	24	1200	Manhole	1 STANDARD	25	1200	Manhole	1 STANDARD
4.003	25	1200	Manhole	1 STANDARD	26	1200	Manhole	1 STANDARD
4.004	26	1200	Manhole	1 STANDARD	24_OUT	1200	Manhole	1 STANDARD

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
1	372539.635	435912.383	47.590	1.640	1500		0	1.000	45.950	225
2	372517.918	435927.199	47.244	1.644	1500		1	1.000	45.600	225
							0	1.001	45.600	225
18	372555.040	435983.420	45.257	1.318	1500		0	2.000	43.939	300
21	372539.789	435973.962	45.296	1.320	1500		0	3.000	43.976	225
19	372545.802	435969.864	45.437	1.655	1500		1	3.000	43.932	225
							2	2.000	43.857	300
							0	2.001	43.782	375
20	372536.072	435956.042	45.949	2.219	1500		1	2.001	43.730	375
							0	2.002	43.730	375
3	372512.756	435925.087	47.269	3.808	1800		1	2.002	43.611	375
							2	1.001	45.042	225
							0	1.002	43.461	525
4	372505.093	435914.914	47.499	4.064	1800		1	1.002	43.435	525
							0	1.003	43.435	525
5	372500.306	435915.039	47.414	3.989	1800		1	1.003	43.425	525
							0	1.004	43.426	525
6	372479.042	435931.125	46.797	3.425	1800		1	1.004	43.372	525
							0	1.005	43.372	525
7	372475.227	435955.884	46.172	2.851	1800		1	1.005	43.321	525
							0	1.006	43.321	525
8	372450.965	435972.681	45.000	1.891	1800		1	1.006	43.261	525
							0	1.007	43.109	525
9	372455.273	435978.250	45.000	1.907	1800		1	1.007	43.093	525
							0	1.008	43.093	525

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
10	372461.659	435976.717	45.250	2.172	1800		1	1.008	43.078	525
							0	1.009	43.079	225
11	372481.322	436003.342	43.331	0.447	1200		1	1.009	42.884	225
							0	1.010	42.884	225
12	372503.756	436008.465	43.314	0.565	1200		1	1.010	42.749	225
							0	1.011	42.749	225
13	372512.051	436019.432	43.152	0.484	1200		1	1.011	42.668	225
							0	1.012	42.668	225
14	372528.215	436035.829	43.149	0.617	1200		1	1.012	42.533	225
							0	1.013	42.532	225
15	372552.136	436044.598	43.496	1.114	1200		1	1.013	42.382	225
							0	1.014	42.383	225
22	372559.490	435901.868	48.530	3.530	1200					
							0	4.000	45.000	225
23	372534.307	435918.885	47.380	2.650	1200		1	4.000	44.730	225
							0	4.001	44.730	225
24	372519.568	435930.004	47.156	2.756	1200		1	4.001	44.400	225
							0	4.002	44.400	225
25	372541.037	435958.451	45.821	2.421	1200		1	4.002	43.400	225
							0	4.003	43.400	225
26	372584.516	436023.037	45.050	2.330	1200		1	4.003	42.720	225
							0	4.004	42.720	225
17	372558.153	436041.057	43.229	0.887	1200		1	1.014	42.342	225
24_OUT	372558.153	436041.057	43.229	0.887	1200		1	4.004	42.342	225

Simulation Settings

Rainfall Methodology	FSR	Skip Steady State	x
FSR Region	England and Wales	Drain Down Time (mins)	240
M5-60 (mm)	19.000	Additional Storage (m ³ /ha)	20.0
Ratio-R	0.300	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x
Analysis Speed	Normal		

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	0	0	0
100	40	0	0

Node 10 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	43.079	Product Number	CTL-SHE-0129-8300-1340-8300
Design Depth (m)	1.340	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	8.3	Min Node Diameter (mm)	1200

Node 8 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	43.262
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	350.0	0.0	2.000	861.0	0.0

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	46.028	0.078	13.5	0.2200	0.0000	OK
15 minute winter	2	10	45.649	0.049	14.6	0.0910	0.0000	OK
15 minute winter	18	10	44.050	0.111	21.2	0.4245	0.0000	OK
15 minute winter	21	10	44.099	0.123	20.4	0.4592	0.0000	OK
15 minute winter	19	11	43.965	0.183	40.7	0.3236	0.0000	OK
15 minute winter	20	11	43.937	0.207	62.0	0.6309	0.0000	OK
15 minute winter	3	11	43.740	0.279	77.9	0.7317	0.0000	OK
15 minute winter	4	11	43.722	0.287	95.1	0.8999	0.0000	OK
15 minute winter	5	11	43.696	0.271	100.5	0.7471	0.0000	OK
15 minute winter	6	12	43.640	0.268	98.8	0.6813	0.0000	OK
15 minute winter	7	12	43.579	0.258	104.4	0.7420	0.0000	OK
120 minute winter	8	102	43.440	0.331	41.6	67.5599	0.0000	OK
120 minute winter	9	102	43.440	0.347	8.7	0.8841	0.0000	OK
120 minute winter	10	102	43.440	0.362	8.3	0.9221	0.0000	SURCHARGED
120 minute winter	11	104	42.955	0.071	8.2	0.0800	0.0000	OK
120 minute winter	12	104	42.821	0.072	8.2	0.0815	0.0000	OK
120 minute winter	13	104	42.739	0.071	8.2	0.0802	0.0000	OK
120 minute winter	14	104	42.602	0.070	8.2	0.0795	0.0000	OK
120 minute winter	15	106	42.457	0.075	8.2	0.0848	0.0000	OK
15 minute winter	22	1	45.000	0.000	0.0	0.0000	0.0000	OK
15 minute winter	23	1	44.730	0.000	0.0	0.0000	0.0000	OK
15 minute winter	24	1	44.400	0.000	0.0	0.0000	0.0000	OK
15 minute winter	25	1	43.400	0.000	0.0	0.0000	0.0000	OK
15 minute winter	26	1	42.720	0.000	0.0	0.0000	0.0000	OK
120 minute winter	17	106	42.411	0.069	8.2	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)
15 minute winter	1	1.000	2	13.3	1.448	0.221	0.2439	
15 minute winter	2	1.001	3	14.4	2.422	0.087	0.0332	
15 minute winter	18	2.000	19	20.7	0.907	0.264	0.3790	
15 minute winter	21	3.000	19	20.0	0.960	0.496	0.1515	
15 minute winter	19	2.001	20	40.3	0.706	0.365	0.9788	
15 minute winter	20	2.002	3	61.5	1.072	0.558	2.2250	
15 minute winter	3	1.002	4	77.3	0.651	0.355	1.5129	
15 minute winter	4	1.003	5	94.1	0.808	0.427	0.5578	
15 minute winter	5	1.004	6	98.8	0.902	0.456	2.9604	
15 minute winter	6	1.005	7	98.5	0.914	0.454	2.7048	
15 minute winter	7	1.006	8	103.6	1.107	0.477	2.7709	
120 minute winter	8	1.007	9	8.7	0.395	0.038	1.0395	
120 minute winter	9	1.008	10	8.3	0.416	0.036	1.0198	
120 minute winter	10	1.009	11	8.2	0.771	0.205	0.3507	
120 minute winter	11	1.010	12	8.2	0.756	0.206	0.2488	
120 minute winter	12	1.011	13	8.2	0.754	0.205	0.1489	
120 minute winter	13	1.012	14	8.2	0.775	0.206	0.2425	
120 minute winter	14	1.013	15	8.2	0.738	0.205	0.2820	
120 minute winter	15	1.014	17	8.2	0.757	0.206	0.0754	120.4
15 minute winter	22	4.000	23	0.0	0.000	0.000	0.0000	
15 minute winter	23	4.001	24	0.0	0.000	0.000	0.0000	
15 minute winter	24	4.002	25	0.0	0.000	0.000	0.0000	
15 minute winter	25	4.003	26	0.0	0.000	0.000	0.0000	
15 minute winter	26	4.004	24_OUT	0.0	0.000	0.000	0.0000	0.0

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
15 minute winter	24_OUT	1	42.342	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 (m ³)	Discharge Vol (m ³)
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Results for 30 year Critical Storm Duration. Lowest mass balance: 99.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	46.061	0.111	25.6	0.3134	0.0000	OK
15 minute winter	2	10	45.670	0.070	27.6	0.1304	0.0000	OK
15 minute winter	18	11	44.118	0.179	40.1	0.6817	0.0000	OK
15 minute winter	21	10	44.171	0.195	38.6	0.7290	0.0000	OK
15 minute winter	19	11	44.092	0.310	76.5	0.5469	0.0000	OK
15 minute winter	20	11	44.060	0.330	114.7	1.0046	0.0000	OK
15 minute winter	3	11	43.895	0.434	145.1	1.1357	0.0000	OK
15 minute winter	4	11	43.871	0.436	176.9	1.3673	0.0000	OK
15 minute winter	5	11	43.839	0.414	187.4	1.1416	0.0000	OK
15 minute winter	6	12	43.771	0.399	184.8	1.0163	0.0000	OK
15 minute winter	7	12	43.694	0.373	194.4	1.0752	0.0000	OK
180 minute winter	8	176	43.657	0.548	58.5	159.8665	0.0000	SURCHARGED
180 minute winter	9	176	43.658	0.565	9.4	1.4370	0.0000	SURCHARGED
180 minute winter	10	176	43.657	0.579	10.1	1.4732	0.0000	SURCHARGED
60 minute winter	11	119	42.955	0.071	8.3	0.0807	0.0000	OK
30 minute winter	12	35	42.822	0.073	8.3	0.0822	0.0000	OK
60 minute winter	13	120	42.739	0.071	8.3	0.0808	0.0000	OK
30 minute winter	14	36	42.603	0.071	8.3	0.0802	0.0000	OK
30 minute winter	15	37	42.458	0.076	8.3	0.0855	0.0000	OK
15 minute winter	22	1	45.000	0.000	0.0	0.0000	0.0000	OK
15 minute winter	23	1	44.730	0.000	0.0	0.0000	0.0000	OK
15 minute winter	24	1	44.400	0.000	0.0	0.0000	0.0000	OK
15 minute winter	25	1	43.400	0.000	0.0	0.0000	0.0000	OK
15 minute winter	26	1	42.720	0.000	0.0	0.0000	0.0000	OK
30 minute winter	17	37	42.411	0.069	8.3	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)
15 minute winter	1	1.000	2	25.2	1.689	0.420	0.3952	
15 minute winter	2	1.001	3	27.4	2.841	0.166	0.0538	
15 minute winter	18	2.000	19	38.7	0.910	0.494	0.8434	
15 minute winter	21	3.000	19	37.8	1.115	0.938	0.2452	
15 minute winter	19	2.001	20	74.8	0.778	0.678	1.6903	
15 minute winter	20	2.002	3	114.2	1.216	1.036	3.7238	
15 minute winter	3	1.002	4	143.3	0.749	0.659	2.4367	
15 minute winter	4	1.003	5	175.4	0.939	0.797	0.8962	
15 minute winter	5	1.004	6	184.8	1.038	0.853	4.7710	
15 minute winter	6	1.005	7	183.3	1.080	0.844	4.2641	
15 minute winter	7	1.006	8	195.7	1.343	0.901	4.2889	
180 minute winter	8	1.007	9	9.4	0.423	0.041	1.5211	
180 minute winter	9	1.008	10	10.1	0.287	0.044	1.4187	
180 minute winter	10	1.009	11	8.3	0.774	0.208	0.3547	
60 minute winter	11	1.010	12	8.3	0.758	0.209	0.2516	
30 minute winter	12	1.011	13	8.3	0.806	0.208	0.1506	
60 minute winter	13	1.012	14	8.3	0.778	0.209	0.2453	
30 minute winter	14	1.013	15	8.3	0.753	0.209	0.2852	
30 minute winter	15	1.014	17	8.3	0.760	0.209	0.0762	123.0
15 minute winter	22	4.000	23	0.0	0.000	0.000	0.0000	
15 minute winter	23	4.001	24	0.0	0.000	0.000	0.0000	
15 minute winter	24	4.002	25	0.0	0.000	0.000	0.0000	
15 minute winter	25	4.003	26	0.0	0.000	0.000	0.0000	
15 minute winter	26	4.004	24_OUT	0.0	0.000	0.000	0.0000	0.0

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	24_OUT	1	42.342	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)
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Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	46.112	0.162	46.2	0.4573	0.0000	OK
15 minute winter	2	10	45.700	0.100	49.8	0.1866	0.0000	OK
15 minute winter	18	12	44.904	0.965	72.5	3.6812	0.0000	SURCHARGED
15 minute winter	21	12	44.987	1.011	69.8	3.7789	0.0000	SURCHARGED
15 minute winter	19	12	44.832	1.050	120.4	1.8562	0.0000	SURCHARGED
15 minute winter	20	12	44.735	1.005	185.6	3.0626	0.0000	SURCHARGED
15 minute winter	3	11	44.329	0.868	236.0	2.2732	0.0000	SURCHARGED
15 minute winter	4	11	44.269	0.834	294.2	2.6140	0.0000	SURCHARGED
15 minute winter	5	11	44.205	0.780	313.2	2.1517	0.0000	SURCHARGED
360 minute winter	6	352	44.081	0.709	59.9	1.8055	0.0000	SURCHARGED
480 minute winter	7	456	44.081	0.760	50.6	2.1907	0.0000	SURCHARGED
360 minute winter	8	352	44.081	0.972	61.0	375.2224	0.0000	SURCHARGED
480 minute winter	9	464	44.081	0.988	9.0	2.5145	0.0000	SURCHARGED
360 minute winter	10	352	44.082	1.004	9.2	2.5545	0.0000	SURCHARGED
15 minute winter	11	113	42.955	0.071	8.3	0.0807	0.0000	OK
15 minute winter	12	114	42.822	0.073	8.3	0.0822	0.0000	OK
15 minute winter	13	114	42.739	0.071	8.3	0.0808	0.0000	OK
15 minute winter	14	115	42.603	0.071	8.3	0.0802	0.0000	OK
15 minute winter	15	116	42.458	0.076	8.3	0.0855	0.0000	OK
15 minute winter	22	1	45.000	0.000	0.0	0.0000	0.0000	OK
15 minute winter	23	1	44.730	0.000	0.0	0.0000	0.0000	OK
15 minute winter	24	1	44.400	0.000	0.0	0.0000	0.0000	OK
15 minute winter	25	1	43.400	0.000	0.0	0.0000	0.0000	OK
15 minute winter	26	1	42.720	0.000	0.0	0.0000	0.0000	OK
15 minute winter	17	115	42.411	0.069	8.3	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)
15 minute winter	1	1.000	2	45.5	1.896	0.759	0.6275	
15 minute winter	2	1.001	3	49.5	3.244	0.299	0.0851	
15 minute winter	18	2.000	19	61.4	0.924	0.784	1.1552	
15 minute winter	21	3.000	19	59.1	1.485	1.466	0.2895	
15 minute winter	19	2.001	20	122.5	1.111	1.110	1.8644	
15 minute winter	20	2.002	3	185.9	1.686	1.687	4.2743	
15 minute winter	3	1.002	4	237.0	1.097	1.089	2.7516	
15 minute winter	4	1.003	5	291.5	1.350	1.325	1.0346	
15 minute winter	5	1.004	6	311.1	1.440	1.436	5.7601	
360 minute winter	6	1.005	7	58.2	0.679	0.268	5.4118	
480 minute winter	7	1.006	8	49.3	0.705	0.227	6.3749	
360 minute winter	8	1.007	9	9.1	0.359	0.040	1.5211	
480 minute winter	9	1.008	10	8.6	0.121	0.037	1.4187	
360 minute winter	10	1.009	11	8.3	0.774	0.208	0.3547	
15 minute winter	11	1.010	12	8.3	0.805	0.209	0.2516	
15 minute winter	12	1.011	13	8.3	0.882	0.208	0.1506	
15 minute winter	13	1.012	14	8.3	0.778	0.209	0.2453	
15 minute winter	14	1.013	15	8.3	0.781	0.209	0.2852	
15 minute winter	15	1.014	17	8.3	0.760	0.209	0.0762	121.0
15 minute winter	22	4.000	23	0.0	0.000	0.000	0.0000	
15 minute winter	23	4.001	24	0.0	0.000	0.000	0.0000	
15 minute winter	24	4.002	25	0.0	0.000	0.000	0.0000	
15 minute winter	25	4.003	26	0.0	0.000	0.000	0.0000	
15 minute winter	26	4.004	24_OUT	0.0	0.000	0.000	0.0000	0.0

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
15 minute winter	24_OUT	1	42.342	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 (m ³)	Discharge Vol (m ³)
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