Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	2	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)	19.000	Minimum Backdrop Height (m)	1.000
Ratio-R	0.340	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

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	1.067	42.4	11.2	1.850	2.715	0.083	0.0
1.001	1.478	163.2	26.0	2.715	3.716	0.192	0.0
1.002	1.479	163.3	37.4	3.716	2.957	0.276	0.0
1.003	1.475	162.9	43.6	2.957	1.984	0.322	0.0
2.000	1.063	42.3	13.1	1.870	1.983	0.097	0.0
1.004	2.358	260.4	60.2	1.984	2.199	0.444	0.0
1.005	1.048	115.7	81.7	2.199	1.830	0.603	0.0
3.000	3.377	134.3	15.2	1.200	1.239	0.112	0.0
3.001	4.717	521.0	26.4	1.239	1.200	0.195	0.0
3.002	5.536	880.5	42.6	1.200	1.744	0.314	0.0
3.003	1.006	159.9	66.1	1.744	1.752	0.488	0.0
4.000	1.966	78.2	10.0	1.450	1.752	0.074	0.0
3.004	1.007	160.1	84.7	1.752	1.884	0.625	0.0
3.005	1.020	162.2	92.7	1.884	1.208	0.684	0.0
3.006	3.932	625.4	92.7	1.208	1.830	0.684	0.0
1.006	3.747	596.0	183.1	1.830	2.334	1.351	0.0
5.000	0.939	66.4	27.1	2.979	2.606	0.200	0.0
5.001	0.781	55.2	37.3	2.606	2.186	0.275	0.0
5.002	1.020	162.3	44.0	2.186	2.108	0.325	0.0
5.003	1.112	240.8	50.6	2.108	1.826	0.373	0.0
5.004	1.116	241.6	74.3	1.826	1.630	0.548	0.0
5.005	1.112	240.7	87.3	1.630	2.145	0.646	0.0
5.006	1.107	239.6	85.3	2.140	2.413	0.646	0.0
5.007	1.103	238.8	82.9	2.413	2.210	0.646	0.0
5.008	1.405	397.1	90.2	2.210	2.334	0.711	0.0
1.007	1.301	465.6	260.3	2.334	2.823	2.098	0.0
1.008	1.303	466.3	259.5	2.823	3.037	2.111	0.0
1.009	1.299	464.8	264.8	3.037	2.943	2.210	0.0
6.000	1.002	17.7	10.3	1.200	1.452	0.076	0.0
1.010	1.165	417.0	270.7	2.943	3.628	2.304	0.0
1.011	1.180	422.3	276.4	3.628	3.668	2.368	0.0
1.012	2.123	5402.8	276.1	3.668	3.674	2.368	0.0
7.000	2.078	82.6	14.6	1.200	1.640	0.108	0.0
7.001	1.184	47.1	27.9	1.640	1.910	0.206	0.0
7.002	1.365	96.5	33.3	1.910	2.800	0.246	0.0
7.003	1.596	112.8	45.7	2.800	3.240	0.337	0.0
7.004	1.272	140.5	54.6	3.240	3.180	0.403	0.0
7.005	1.659	183.3	64.9	3.180	3.046	0.479	0.0
7.006	5.328	588.4	67.8	3.046	3.625	0.500	0.0
7.007	2.120	5394.1	67.8	3.625	3.674	0.500	0.0
1.013	1.165	416.9	333.7	4.799	4.805	2.868	0.0

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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)
1.014	1.037	224.4	332.1	5.005	4.868	2.868	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	33.488	149.5	225	1 Circular	63.025	60.950	1.850	63.666	60.726	2.715
1.001	39.698	149.8	375	1 Circular	63.666	60.576	2.715	64.402	60.311	3.716
1.002	17.949	149.6	375	1 Circular	64.402	60.311	3.716	63.523	60.191	2.957
1.003	26.315	150.4	375	1 Circular	63.523	60.191	2.957	62.375	60.016	1.984
2.000	28.917	150.6	225	1 Circular	62.454	60.359	1.870	62.375	60.167	1.983
1.004	30.564	59.2	375	1 Circular	62.375	60.016	1.984	62.074	59.500	2.199
1.005	31.076	296.0	375	1 Circular	62.074	59.500	2.199	61.600	59.395	1.830
3.000	22.372	15.2	225	1 Circular	66.300	64.875	1.200	64.864	63.400	1.239
3.001	16.677	14.9	375	1 Circular	64.864	63.250	1.239	63.704	62.129	1.200
3.002	25.195	13.6	450	1 Circular	63.704	62.054	1.200	62.394	60.200	1.744
3.003	20.988	403.6	450	1 Circular	62.394	60.200	1.744	62.350	60.148	1.752
4.000	42.369	44.5	225	1 Circular	63.000	61.325	1.450	62.350	60.373	1.752
3.004	33.011	402.6	450	1 Circular	62.350	60.148	1.752	62.400	60.066	1.884
3.005	9.420	392.5	450	1 Circular	62.400	60.066	1.884	61.700	60.042	1.208
3.006	19.415	26.9	450	1 Circular	61.700	60.042	1.208	61.600	59.320	1.830
1.006	28.233	29.6	450	1 Circular	61.600	59.320	1.830	61.150	58.366	2.334
5.000	49.117	277.5	300	1 Circular	62.500	59.221	2.979	61.950	59.044	2.606
5.001	31.922	399.0	300	1 Circular	61.950	59.044	2.606	61.450	58.964	2.186
5.002	8.625	392.0	450	1 Circular	61.450	58.814	2.186	61.350	58.792	2.108
5.003	35.270	400.8	525	1 Circular	61.350	58.717	2.108	60.980	58.629	1.826
5.004	25.088	398.2	525	1 Circular	60.980	58.629	1.826	60.721	58.566	1.630

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1200	Manhole	1 Adoptable	2	1200	Manhole	1 Adoptable
1.001	2	1200	Manhole	1 Adoptable	3	1200	Manhole	1 Adoptable
1.002	3	1200	Manhole	1 Adoptable	4	1200	Manhole	1 Adoptable
1.003	4	1200	Manhole	1 Adoptable	6	1500	Manhole	1 Adoptable
2.000	5	1200	Manhole	1 Adoptable	6	1500	Manhole	1 Adoptable
1.004	6	1500	Manhole	1 Adoptable	7	1500	Manhole	1 Adoptable
1.005	7	1500	Manhole	1 Adoptable	16	1800	Manhole	1 Adoptable
3.000	8	1200	Manhole	1 Adoptable	9	1500	Manhole	1 Adoptable
3.001	9	1500	Manhole	1 Adoptable	10	1500	Manhole	1 Adoptable
3.002	10	1500	Manhole	1 Adoptable	11	1500	Manhole	1 Adoptable
3.003	11	1500	Manhole	1 Adoptable	13	1800	Manhole	1 Adoptable
4.000	12	1200	Manhole	1 Adoptable	13	1800	Manhole	1 Adoptable
3.004	13	1800	Manhole	1 Adoptable	14	1500	Manhole	1 Adoptable
3.005	14	1500	Manhole	1 Adoptable	15	1500	Manhole	1 Adoptable
3.006	15	1500	Manhole	1 Adoptable	16	1800	Manhole	1 Adoptable
1.006	16	1800	Manhole	1 Adoptable	26	1500	Manhole	1 Adoptable
5.000	17	1800	Manhole	1 Adoptable	18	1800	Manhole	1 Adoptable
5.001	18	1800	Manhole	1 Adoptable	19	1800	Manhole	1 Adoptable
5.002	19	1800	Manhole	1 Adoptable	20	2100	Manhole	1 Adoptable
5.003	20	2100	Manhole	1 Adoptable	21	1800	Manhole	1 Adoptable
5.004	21	1800	Manhole	1 Adoptable	22	1500	Manhole	1 Adoptable

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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)
5.005	28.473	401.0	525	1 Circular	60.721	58.566	1.630	61.165	58.495	2.145
5.006	26.706	404.6	525	1 Circular	61.165	58.500	2.140	61.372	58.434	2.413
5.007	32.192	407.5	525	1 Circular	61.372	58.434	2.413	61.090	58.355	2.210
5.008	19.088	298.3	600	1 Circular	61.090	58.280	2.210	61.150	58.216	2.334
1.007	31.731	401.7	675	1 Circular	61.150	58.141	2.334	61.560	58.062	2.823
1.008	13.621	400.6	675	1 Circular	61.560	58.062	2.823	61.740	58.028	3.037
1.009	38.699	403.1	675	1 Circular	61.740	58.028	3.037	61.550	57.932	2.943
6.000	11.248	100.4	150	1 Circular	61.410	60.060	1.200	61.550	59.948	1.452
1.010	27.480	499.6	675	1 Circular	61.550	57.932	2.943	62.180	57.877	3.628
1.011	9.748	487.4	675	1 Circular	62.180	57.877	3.628	62.200	57.857	3.668
1.012	3.038	506.4	1800	1 Circular	62.200	56.732	3.668	62.200	56.726	3.674
7.000	40.244	39.8	225	1 Circular	62.910	61.485	1.200	62.340	60.475	1.640
7.001	29.210	121.7	225	1 Circular	62.340	60.475	1.640	62.370	60.235	1.910
7.002	43.650	132.3	300	1 Circular	62.370	60.160	1.910	62.930	59.830	2.800
7.003	40.764	97.1	300	1 Circular	62.930	59.830	2.800	62.950	59.410	3.240
7.004	8.063	201.6	375	1 Circular	62.950	59.335	3.240	62.850	59.295	3.180
7.005	31.659	119.0	375	1 Circular	62.850	59.295	3.180	62.450	59.029	3.046
7.006	9.675	11.7	375	1 Circular	62.450	59.029	3.046	62.200	58.200	3.625
7.007	24.892	508.0	1800	1 Circular	62.200	56.775	3.625	62.200	56.726	3.674
1.013	2.999	499.9	675	1 Circular	62.200	56.726	4.799	62.200	56.720	4.805
1.014	5.990	460.7	525	1 Circular	62.200	56.670	5.005	62.050	56.657	4.868

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
5.005	22	1500	Manhole	1 Adoptable	23	1500	Manhole	1 Adoptable
5.006	23	1500	Manhole	1 Adoptable	24	1500	Manhole	1 Adoptable
5.007	24	1500	Manhole	1 Adoptable	25	1500	Manhole	1 Adoptable
5.008	25	1500	Manhole	1 Adoptable	26	1500	Manhole	1 Adoptable
1.007	26	1500	Manhole	1 Adoptable	27	1500	Manhole	1 Adoptable
1.008	27	1500	Manhole	1 Adoptable	28	1800	Manhole	1 Adoptable
1.009	28	1800	Manhole	1 Adoptable	30	1500	Manhole	1 Adoptable
6.000	29	1200	Manhole	1 Adoptable	30	1500	Manhole	1 Adoptable
1.010	30	1500	Manhole	1 Adoptable	31	1500	Manhole	1 Adoptable
1.011	31	1500	Manhole	1 Adoptable	32	1200	Manhole	1 Adoptable
1.012	32	1200	Manhole	1 Adoptable	41	1200	Manhole	1 Adoptable
7.000	33	1200	Manhole	1 Adoptable	34	1200	Manhole	1 Adoptable
7.001	34	1200	Manhole	1 Adoptable	35	1200	Manhole	1 Adoptable
7.002	35	1200	Manhole	1 Adoptable	36	1500	Manhole	1 Adoptable
7.003	36	1500	Manhole	1 Adoptable	37	1500	Manhole	1 Adoptable
7.004	37	1500	Manhole	1 Adoptable	38	1500	Manhole	1 Adoptable
7.005	38	1500	Manhole	1 Adoptable	39	1500	Manhole	1 Adoptable
7.006	39	1500	Manhole	1 Adoptable	40	1200	Manhole	1 Adoptable
7.007	40	1200	Manhole	1 Adoptable	41	1200	Manhole	1 Adoptable
1.013	41	1200	Manhole	1 Adoptable	42	2100	Manhole	1 Adoptable
1.014	42	2100	Manhole	1 Adoptable	43	1500	Manhole	1 Adoptable

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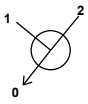
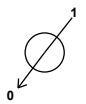
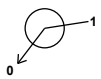
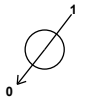
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
1	965.378	3369.153	63.025	2.075	1200		0 1.000	60.950	225
2	989.504	3345.929	63.666	3.090	1200		1 1.000 0 1.001	60.726 60.576	225 375
3	1014.998	3315.491	64.402	4.091	1200		1 1.001 0 1.002	60.311 60.311	375 375
4	1001.517	3303.641	63.523	3.332	1200		1 1.002 0 1.003	60.191 60.191	375 375
5	962.415	3301.621	62.454	2.095	1200		0 2.000	60.359	225
6	984.803	3283.315	62.375	2.359	1500		1 2.000 2 1.003 0 1.004	60.167 60.016 60.016	225 375 375
7	965.851	3259.336	62.074	2.574	1500		1 1.004 0 1.005	59.500 59.500	375 375
8	1057.044	3259.661	66.300	1.425	1200		0 3.000	64.875	225
9	1043.309	3242.002	64.864	1.614	1500		1 3.000 0 3.001	63.400 63.250	225 375
10	1026.828	3239.451	63.704	1.650	1500		1 3.001 0 3.002	62.129 62.054	375 450
11	1011.523	3219.438	62.394	2.194	1500		1 3.002 0 3.003	60.200 60.200	450 450
12	1031.760	3176.704	63.000	1.675	1200		0 4.000	61.325	225
13	998.514	3202.968	62.350	2.202	1800		1 4.000 2 3.003 0 3.004	60.373 60.148 60.148	225 450 450

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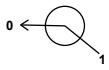
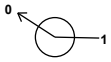
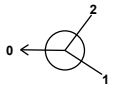
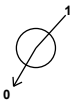
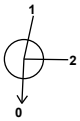
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
14	972.870	3223.755	62.400	2.334	1500	1	3.004	60.066	450
									
						0	3.005	60.066	450
15	963.452	3223.951	61.700	1.658	1500	1	3.005	60.042	450
									
						0	3.006	60.042	450
16	947.159	3234.510	61.600	2.280	1800	1	3.006	59.320	450
						2	1.005	59.395	375
									
						0	1.006	59.320	450
17	904.903	3423.510	62.500	3.279	1800				
						0	5.000	59.221	300
18	865.347	3394.393	61.950	2.906	1800	1	5.000	59.044	300
									
						0	5.001	59.044	300
19	884.850	3369.121	61.450	2.636	1800	1	5.001	58.964	300
									
						0	5.002	58.814	450
20	886.223	3360.606	61.350	2.633	2100	1	5.002	58.792	450
									
						0	5.003	58.717	525
21	911.377	3335.840	60.980	2.351	1800	1	5.003	58.629	525
									
						0	5.004	58.629	525
22	894.527	3317.253	60.721	2.155	1500	1	5.004	58.566	525
									
						0	5.005	58.566	525
23	880.164	3292.668	61.165	2.670	1500	1	5.005	58.495	525
									
						0	5.006	58.500	525
24	909.505	3282.783	61.372	2.938	1500	1	5.006	58.434	525
									
						0	5.007	58.434	525
25	923.005	3253.558	61.090	2.810	1500	1	5.007	58.355	525
									
						0	5.008	58.280	600
26	918.929	3234.910	61.150	3.009	1500	1	5.008	58.216	600
						2	1.006	58.366	450
									
						0	1.007	58.141	675

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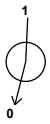
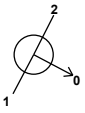
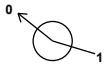
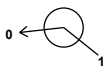
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
27	917.463	3203.213	61.560	3.498	1500	 1	1.007	58.062	675
						0	1.008	58.062	675
28	914.160	3189.999	61.740	3.712	1800	 1	1.008	58.028	675
						0	1.009	58.028	675
29	891.377	3145.552	61.410	1.350	1200				
						0	6.000	60.060	150
30	896.630	3155.498	61.550	3.618	1500	 1	6.000	59.948	150
						2	1.009	57.932	675
						0	1.010	57.932	675
31	920.928	3142.663	62.180	4.303	1500	 1	1.010	57.877	675
						0	1.011	57.877	675
32	916.375	3134.044	62.200	5.468	1200	 1	1.011	57.857	675
						0	1.012	56.732	1800
33	1087.197	3128.342	62.910	1.425	1200				
						0	7.000	61.485	225
34	1062.087	3096.893	62.340	1.865	1200	 1	7.000	60.475	225
						0	7.001	60.475	225
35	1034.120	3105.323	62.370	2.210	1200	 1	7.001	60.235	225
						0	7.002	60.160	300
36	1000.009	3132.558	62.930	3.100	1500	 1	7.002	59.830	300
						0	7.003	59.830	300
37	968.154	3157.993	62.950	3.615	1500	 1	7.003	59.410	300
						0	7.004	59.335	375
38	960.141	3157.095	62.850	3.555	1500	 1	7.004	59.295	375
						0	7.005	59.295	375
39	940.446	3132.308	62.450	3.421	1500	 1	7.005	59.029	375
						0	7.006	59.029	375

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections		Link	IL (m)	Dia (mm)
40	935.938	3123.747	62.200	5.425	1200		1	7.006	58.200	375
							0	7.007	56.775	1800
41	913.340	3134.184	62.200	5.474	1200		1	7.007	56.726	1800
							2	1.012	56.726	1800
							0	1.013	56.726	675
42	910.688	3135.585	62.200	5.530	2100		1	1.013	56.720	675
							0	1.014	56.670	525
43	905.392	3138.383	62.050	5.393	1500		1	1.014	56.657	525

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Detailed
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	19.000	Drain Down Time (mins)	240
Ratio-R	0.344	Additional Storage (m³/ha)	0.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	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 %)
2	0	0	0

Node 21 Online Orifice Control

Flap Valve	x	Invert Level (m)	58.629	Discharge Coefficient	0.600
Replaces Downstream Link	x	Diameter (m)	0.300		

Node 42 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	56.670	Product Number	CTL-SHE-0507-1923-1900-1923
Design Depth (m)	1.900	Min Outlet Diameter (m)	
Design Flow (l/s)	192.3	Min Node Diameter (mm)	

Node 41 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	56.726
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

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Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	350.0	0.0	1.800	350.0	0.0	1.801	0.0	0.0

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Results for 2 year Critical Storm Duration. Lowest mass balance: 99.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	61.039	0.089	13.7	0.1002	0.0000	OK
15 minute winter	2	10	60.687	0.111	31.1	0.1251	0.0000	OK
15 minute winter	3	11	60.455	0.144	44.5	0.1632	0.0000	OK
15 minute winter	4	11	60.343	0.152	51.4	0.1721	0.0000	OK
15 minute winter	5	10	60.457	0.098	16.0	0.1104	0.0000	OK
15 minute winter	6	11	60.148	0.132	71.1	0.2337	0.0000	OK
15 minute winter	7	11	59.769	0.269	95.8	0.4757	0.0000	OK
15 minute winter	8	10	64.933	0.058	18.4	0.0651	0.0000	OK
15 minute winter	9	10	63.315	0.065	31.9	0.1152	0.0000	OK
15 minute winter	10	10	62.127	0.073	51.3	0.1284	0.0000	OK
15 minute winter	11	11	60.456	0.256	79.7	0.4520	0.0000	OK
15 minute winter	12	10	61.385	0.060	12.2	0.0680	0.0000	OK
15 minute winter	13	11	60.416	0.268	99.2	0.6827	0.0000	OK
15 minute winter	14	11	60.301	0.235	109.0	0.4156	0.0000	OK
15 minute winter	15	11	60.170	0.128	102.3	0.2265	0.0000	OK
15 minute winter	16	11	59.521	0.201	214.6	0.5107	0.0000	OK
15 minute winter	17	10	59.366	0.145	32.9	0.3685	0.0000	OK
15 minute winter	18	11	59.246	0.202	44.3	0.5135	0.0000	OK
15 minute winter	19	12	59.025	0.211	50.4	0.5380	0.0000	OK
15 minute winter	20	12	59.009	0.292	56.4	1.0100	0.0000	OK
15 minute winter	21	12	59.003	0.374	75.4	0.9506	0.0000	OK
15 minute winter	22	12	58.799	0.233	85.7	0.4124	0.0000	OK
15 minute winter	23	13	58.734	0.239	85.1	0.4223	0.0000	OK
15 minute winter	24	13	58.671	0.237	84.3	0.4194	0.0000	OK
15 minute winter	25	13	58.610	0.330	90.0	0.5832	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	0.940	0.313	0.4744	
15 minute winter	2	1.001	3	30.7	0.935	0.188	1.3067	
15 minute winter	3	1.002	4	44.3	1.095	0.271	0.7265	
15 minute winter	4	1.003	6	51.8	1.353	0.318	1.0079	
15 minute winter	5	2.000	6	15.5	0.972	0.367	0.4640	
15 minute winter	6	1.004	7	71.3	1.191	0.274	1.8243	
15 minute winter	7	1.005	16	94.9	1.230	0.820	2.3953	
15 minute winter	8	3.000	9	18.2	2.329	0.136	0.1752	
15 minute winter	9	3.001	10	31.7	2.567	0.061	0.2061	
15 minute winter	10	3.002	11	51.1	1.001	0.058	1.3742	
15 minute winter	11	3.003	13	77.0	0.819	0.482	2.0099	
15 minute winter	12	4.000	13	11.9	1.415	0.152	0.3557	
15 minute winter	13	3.004	14	99.9	1.095	0.624	3.0099	
15 minute winter	14	3.005	15	102.3	1.763	0.631	0.5697	
15 minute winter	15	3.006	16	109.8	2.118	0.176	1.0239	
15 minute winter	16	1.006	26	216.7	3.202	0.364	2.0800	
15 minute winter	17	5.000	18	32.0	0.792	0.482	2.0565	
15 minute winter	18	5.001	19	42.7	0.963	0.774	1.4126	
15 minute winter	19	5.002	20	49.0	0.859	0.302	0.6408	
15 minute winter	20	5.003	21	52.7	0.396	0.219	5.0691	
15 minute winter	21	5.004	22	73.1	0.825	0.303	2.2404	
15 minute winter	22	5.005	23	85.1	0.915	0.353	2.6657	
15 minute winter	23	5.006	24	84.3	0.930	0.352	2.5069	
15 minute winter	24	5.007	25	84.1	1.051	0.352	3.1991	
15 minute winter	25	5.008	26	97.6	0.894	0.246	3.3385	

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Results for 2 year Critical Storm Duration. Lowest mass balance: 99.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	26	12	58.602	0.461	296.1	0.8144	0.0000	OK
15 minute winter	27	13	58.535	0.473	294.8	0.8366	0.0000	OK
15 minute winter	28	13	58.483	0.455	301.5	1.1571	0.0000	OK
15 minute winter	29	10	60.160	0.100	12.5	0.1126	0.0000	OK
15 minute winter	30	13	58.398	0.466	309.6	0.8227	0.0000	OK
15 minute winter	31	13	58.302	0.425	316.7	0.7516	0.0000	OK
60 minute winter	32	47	57.263	0.531	199.9	0.6011	0.0000	OK
15 minute winter	33	10	61.555	0.070	17.8	0.0794	0.0000	OK
15 minute winter	34	11	60.620	0.145	33.7	0.1638	0.0000	OK
15 minute winter	35	11	60.296	0.136	39.1	0.1537	0.0000	OK
15 minute winter	36	11	59.981	0.151	53.5	0.2661	0.0000	OK
15 minute winter	37	11	59.536	0.201	63.4	0.3545	0.0000	OK
15 minute winter	38	11	59.476	0.181	75.1	0.3199	0.0000	OK
15 minute winter	39	11	59.132	0.103	78.2	0.1820	0.0000	OK
60 minute winter	40	47	57.263	0.488	43.6	0.5518	0.0000	OK
60 minute winter	41	47	57.263	0.537	232.3	188.5243	0.0000	OK
60 minute winter	42	47	57.259	0.589	110.3	2.0411	0.0000	SURCHARGED
60 minute winter	43	47	56.878	0.221	110.2	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	26	1.007	27	293.1	1.122	0.629	8.3303	
15 minute winter	27	1.008	28	288.8	1.119	0.619	3.5627	
15 minute winter	28	1.009	30	300.0	1.160	0.646	10.0276	
15 minute winter	29	6.000	30	12.3	1.040	0.695	0.1332	
15 minute winter	30	1.010	31	310.7	1.244	0.745	6.8618	
15 minute winter	31	1.011	32	316.5	1.482	0.750	2.0806	
60 minute winter	32	1.012	41	198.6	1.404	0.037	1.9122	
15 minute winter	33	7.000	34	17.6	0.954	0.213	0.7515	
15 minute winter	34	7.001	35	32.9	1.257	0.699	0.7642	
15 minute winter	35	7.002	36	39.4	1.189	0.409	1.4489	
15 minute winter	36	7.003	37	53.2	1.550	0.471	1.3982	
15 minute winter	37	7.004	38	63.3	1.124	0.451	0.4540	
15 minute winter	38	7.005	39	74.9	1.962	0.409	1.2217	
15 minute winter	39	7.006	40	78.0	3.453	0.133	0.2187	
60 minute winter	40	7.007	41	35.5	0.810	0.007	14.7910	
60 minute winter	41	1.013	42	110.3	0.429	0.264	0.9149	
60 minute winter	42	1.014	43	110.2	1.143	0.491	0.5780	362.3

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