

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)	20.000	Minimum Backdrop Height (m)	0.000
Ratio-R	0.400	Preferred Cover Depth (m)	0.900
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	4.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)
1	0.059	4.00	3.910	1500	1.500
2	0.059	4.00	3.868	1500	1.575
3	0.059	4.00	3.834	1500	1.575
4	0.059	4.00	3.802	1500	1.575
5	0.059	4.00	3.763	1500	1.575
6	0.059	4.00	3.726	1500	1.575
7	0.059	4.00	3.691	1500	1.575
8	0.059	4.00	3.669	1500	1.575
9	0.059	4.00	3.716	1500	1.500
10	0.059	4.00	3.713	1500	1.500
11	0.059	4.00	3.688	1500	1.500
12	0.059	4.00	3.648	1500	1.500
13	0.059	4.00	3.604	1500	1.575
14	0.059	4.00	3.554	1500	1.575
15	0.059	4.00	3.605	1500	1.500
16	0.059	4.00	3.581	1500	1.500
17	0.059	4.00	3.558	1500	1.500
18	0.059	4.00	3.513	1500	1.575
19	0.059	4.00	3.614	1500	1.500
20	0.059	4.00	3.578	1500	1.500
21	0.059	4.00	3.628	1500	1.500
22	0.059	4.00	3.588	1500	1.500
23	0.059	4.00	3.561	1500	1.500
24	0.059	4.00	3.544	1500	1.500
25	0.059	4.00	3.506	1500	1.500
26	0.055	4.00	3.479	1500	1.575
27	0.000	4.00	3.500	600	1.674
28	0.000	4.00	3.500	600	1.725
29	0.000	4.00	3.500	1500	1.804
30	0.000	4.00	3.500	1500	1.824

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	1	2	20.974	0.600	2.410	2.368	0.042	500.0	600	4.32	50.0
1.001	2	3	16.813	0.600	2.293	2.259	0.034	500.0	675	4.56	50.0
1.002	3	4	15.813	0.600	2.259	2.227	0.032	500.0	675	4.79	50.0
1.003	4	5	19.282	0.600	2.227	2.188	0.039	500.0	675	5.07	50.0
1.004	5	6	18.431	0.600	2.188	2.151	0.037	500.0	675	5.33	50.0
1.005	6	7	17.664	0.600	2.151	2.116	0.035	500.0	675	5.58	50.0

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)
1.006	7	8	11.233	0.600	2.116	2.094	0.022	500.0	675	5.74	50.0
1.007	8	13	32.105	0.600	2.094	2.030	0.064	500.0	675	6.20	50.0
2.000	9	11	13.685	0.600	2.216	2.189	0.027	500.0	600	4.21	50.0
3.000	10	11	12.406	0.600	2.213	2.188	0.025	500.0	600	4.19	50.0
2.001	11	12	19.561	0.600	2.188	2.148	0.040	489.0	600	4.51	50.0
2.002	12	13	21.620	0.600	2.148	2.104	0.044	491.4	600	4.84	50.0
1.008	13	14	24.923	0.600	2.029	1.979	0.050	498.5	675	6.56	50.0
1.009	14	18	20.152	0.600	1.979	1.939	0.040	500.0	675	6.85	50.0
4.000	15	16	11.615	0.600	2.105	2.081	0.024	484.0	600	4.18	50.0
4.001	16	17	11.089	0.600	2.081	2.058	0.023	482.1	600	4.34	50.0
4.002	17	18	22.302	0.600	2.058	2.013	0.045	500.0	600	4.69	50.0
1.010	18	26	16.853	0.600	1.938	1.904	0.034	500.0	675	7.09	50.0
5.000	19	20	17.659	0.600	2.114	2.078	0.036	490.5	600	4.27	50.0
5.001	20	23	8.303	0.600	2.078	2.061	0.017	500.0	600	4.40	50.0
6.000	21	22	19.979	0.600	2.128	2.088	0.040	500.0	600	4.31	50.0
6.001	22	23	13.571	0.600	2.088	2.061	0.027	500.0	600	4.52	50.0
5.002	23	24	8.348	0.600	2.061	2.044	0.017	500.0	600	4.65	50.0
5.003	24	25	18.854	0.600	2.044	2.006	0.038	500.0	600	4.94	50.0
5.004	25	26	13.135	0.600	2.006	1.980	0.026	500.0	600	5.14	50.0
1.011	26	27	38.953	0.600	1.904	1.826	0.078	500.0	675	7.64	50.0
1.012	27	28	22.438	0.600	1.826	1.775	0.051	440.0	675	7.95	50.0
1.013	28	29	39.313	0.600	1.775	1.696	0.079	500.0	675	8.51	50.0
1.014	29	30	10.000	0.600	1.696	1.676	0.020	500.0	675	8.65	50.0

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	20.974	500.0	600	Circular	3.910	2.410	0.900	3.868	2.368	0.900
1.001	16.813	500.0	675	Circular	3.868	2.293	0.900	3.834	2.259	0.900
1.002	15.813	500.0	675	Circular	3.834	2.259	0.900	3.802	2.227	0.900
1.003	19.282	500.0	675	Circular	3.802	2.227	0.900	3.763	2.188	0.900
1.004	18.431	500.0	675	Circular	3.763	2.188	0.900	3.726	2.151	0.900
1.005	17.664	500.0	675	Circular	3.726	2.151	0.900	3.691	2.116	0.900
1.006	11.233	500.0	675	Circular	3.691	2.116	0.900	3.669	2.094	0.900
1.007	32.105	500.0	675	Circular	3.669	2.094	0.900	3.604	2.030	0.899
2.000	13.685	500.0	600	Circular	3.716	2.216	0.900	3.688	2.189	0.899
3.000	12.406	500.0	600	Circular	3.713	2.213	0.900	3.688	2.188	0.900
2.001	19.561	489.0	600	Circular	3.688	2.188	0.900	3.648	2.148	0.900

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1500	Manhole	Adoptable	2	1500	Manhole	Adoptable
1.001	2	1500	Manhole	Adoptable	3	1500	Manhole	Adoptable
1.002	3	1500	Manhole	Adoptable	4	1500	Manhole	Adoptable
1.003	4	1500	Manhole	Adoptable	5	1500	Manhole	Adoptable
1.004	5	1500	Manhole	Adoptable	6	1500	Manhole	Adoptable
1.005	6	1500	Manhole	Adoptable	7	1500	Manhole	Adoptable
1.006	7	1500	Manhole	Adoptable	8	1500	Manhole	Adoptable
1.007	8	1500	Manhole	Adoptable	13	1500	Manhole	Adoptable
2.000	9	1500	Manhole	Adoptable	11	1500	Manhole	Adoptable
3.000	10	1500	Manhole	Adoptable	11	1500	Manhole	Adoptable
2.001	11	1500	Manhole	Adoptable	12	1500	Manhole	Adoptable

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)
2.002	21.620	491.4	600	Circular	3.648	2.148	0.900	3.604	2.104	0.900
1.008	24.923	498.5	675	Circular	3.604	2.029	0.900	3.554	1.979	0.900
1.009	20.152	500.0	675	Circular	3.554	1.979	0.900	3.513	1.939	0.899
4.000	11.615	484.0	600	Circular	3.605	2.105	0.900	3.581	2.081	0.900
4.001	11.089	482.1	600	Circular	3.581	2.081	0.900	3.558	2.058	0.900
4.002	22.302	500.0	600	Circular	3.558	2.058	0.900	3.513	2.013	0.900
1.010	16.853	500.0	675	Circular	3.513	1.938	0.900	3.479	1.904	0.900
5.000	17.659	490.5	600	Circular	3.614	2.114	0.900	3.578	2.078	0.900
5.001	8.303	500.0	600	Circular	3.578	2.078	0.900	3.561	2.061	0.900
6.000	19.979	500.0	600	Circular	3.628	2.128	0.900	3.588	2.088	0.900
6.001	13.571	500.0	600	Circular	3.588	2.088	0.900	3.561	2.061	0.900
5.002	8.348	500.0	600	Circular	3.561	2.061	0.900	3.544	2.044	0.900
5.003	18.854	500.0	600	Circular	3.544	2.044	0.900	3.506	2.006	0.900
5.004	13.135	500.0	600	Circular	3.506	2.006	0.900	3.479	1.980	0.899
1.011	38.953	500.0	675	Circular	3.479	1.904	0.900	3.500	1.826	0.999
1.012	22.438	440.0	675	Circular	3.500	1.826	0.999	3.500	1.775	1.050
1.013	39.313	500.0	675	Circular	3.500	1.775	1.050	3.500	1.696	1.129
1.014	10.000	500.0	675	Circular	3.500	1.696	1.129	3.500	1.676	1.149

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
2.002	12	1500	Manhole	Adoptable	13	1500	Manhole	Adoptable
1.008	13	1500	Manhole	Adoptable	14	1500	Manhole	Adoptable
1.009	14	1500	Manhole	Adoptable	18	1500	Manhole	Adoptable
4.000	15	1500	Manhole	Adoptable	16	1500	Manhole	Adoptable
4.001	16	1500	Manhole	Adoptable	17	1500	Manhole	Adoptable
4.002	17	1500	Manhole	Adoptable	18	1500	Manhole	Adoptable
1.010	18	1500	Manhole	Adoptable	26	1500	Manhole	Adoptable
5.000	19	1500	Manhole	Adoptable	20	1500	Manhole	Adoptable
5.001	20	1500	Manhole	Adoptable	23	1500	Manhole	Adoptable
6.000	21	1500	Manhole	Adoptable	22	1500	Manhole	Adoptable
6.001	22	1500	Manhole	Adoptable	23	1500	Manhole	Adoptable
5.002	23	1500	Manhole	Adoptable	24	1500	Manhole	Adoptable
5.003	24	1500	Manhole	Adoptable	25	1500	Manhole	Adoptable
5.004	25	1500	Manhole	Adoptable	26	1500	Manhole	Adoptable
1.011	26	1500	Manhole	Adoptable	27	600	Manhole	Adoptable
1.012	27	600	Manhole	Adoptable	28	600	Manhole	Adoptable
1.013	28	600	Manhole	Adoptable	29	1500	Manhole	Adoptable
1.014	29	1500	Manhole	Adoptable	30	1500	Manhole	Adoptable

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Detailed
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	20.000	Drain Down Time (mins)	240
Ratio-R	0.400	Additional Storage (m³/ha)	20.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	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 %)
1	0	0	0
30	0	0	0
100	40	0	0

Node 29 Online Pump Control

Flap Valve	x	Design Depth (m)	1.079	Switch off depth (m)	0.000
Replaces Downstream Link	✓	Design Flow (l/s)	5.0		
Invert Level (m)	1.696	Switch on depth (m)	1.079		

Depth (m)	Flow (l/s)
1.079	5.000

Node 28 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	1.775
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	534.0	0.0	1.425	1086.0	0.0	1.725	1217.0	0.0

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	2.481	0.071	8.8	0.1809	0.0000	OK
10080 minute winter	2	7380	2.416	0.123	0.3	0.3097	0.0000	OK
10080 minute winter	3	9780	2.416	0.157	0.3	0.3952	0.0000	OK
10080 minute winter	4	9900	2.416	0.189	0.4	0.4757	0.0000	OK
10080 minute winter	5	9900	2.416	0.228	0.5	0.5738	0.0000	OK
10080 minute winter	6	8640	2.416	0.265	0.7	0.6669	0.0000	OK
10080 minute winter	7	8580	2.416	0.300	0.8	0.7549	0.0000	OK
10080 minute winter	8	10020	2.416	0.322	0.9	0.8102	0.0000	OK
10080 minute winter	9	9660	2.416	0.200	0.1	0.5110	0.0000	OK
10080 minute winter	10	9780	2.416	0.203	0.1	0.5186	0.0000	OK
10080 minute winter	11	9780	2.416	0.228	0.3	0.5825	0.0000	OK
10080 minute winter	12	9720	2.416	0.268	0.4	0.6844	0.0000	OK
10080 minute winter	13	8580	2.416	0.387	1.3	0.9737	0.0000	OK
10080 minute winter	14	8580	2.416	0.437	1.4	1.0995	0.0000	OK
10080 minute winter	15	9300	2.416	0.311	0.1	0.7945	0.0000	OK
10080 minute winter	16	9300	2.416	0.335	0.2	0.8558	0.0000	OK
10080 minute winter	17	8520	2.416	0.358	0.4	0.9145	0.0000	OK
10080 minute winter	18	8520	2.416	0.478	1.8	1.2027	0.0000	OK
10080 minute winter	19	9720	2.416	0.302	0.1	0.7714	0.0000	OK
10080 minute winter	20	9660	2.416	0.338	0.2	0.8632	0.0000	OK
10080 minute winter	21	8940	2.416	0.288	0.1	0.7356	0.0000	OK
10080 minute winter	22	9840	2.416	0.328	0.3	0.8377	0.0000	OK
10080 minute winter	23	9720	2.416	0.355	0.6	0.9066	0.0000	OK
10080 minute winter	24	9720	2.416	0.372	0.7	0.9500	0.0000	OK
10080 minute winter	25	6960	2.416	0.410	0.8	1.0471	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	8.7	0.540	0.028	0.3388	
10080 minute winter	2	1.001	3	0.2	0.149	0.001	0.9016	
10080 minute winter	3	1.002	4	0.3	0.165	0.001	1.1429	
10080 minute winter	4	1.003	5	0.4	0.181	0.001	1.8091	
10080 minute winter	5	1.004	6	0.6	0.194	0.001	2.1739	
10080 minute winter	6	1.005	7	0.7	0.205	0.002	2.5004	
10080 minute winter	7	1.006	8	0.8	0.217	0.002	1.8035	
10080 minute winter	8	1.007	13	0.9	0.205	0.002	6.0812	
10080 minute winter	9	2.000	11	0.1	0.089	0.000	1.2305	
10080 minute winter	10	3.000	11	0.1	0.084	0.000	1.1297	
10080 minute winter	11	2.001	12	0.3	0.162	0.001	2.1514	
10080 minute winter	12	2.002	13	0.4	0.319	0.001	2.9160	
10080 minute winter	13	1.008	14	1.3	0.267	0.003	5.6821	
10080 minute winter	14	1.009	18	1.4	0.264	0.003	5.1793	
10080 minute winter	15	4.000	16	0.1	0.099	0.000	1.7960	
10080 minute winter	16	4.001	17	0.3	0.138	0.001	1.8694	
10080 minute winter	17	4.002	18	0.4	0.299	0.001	4.1999	
10080 minute winter	18	1.010	26	1.8	0.266	0.004	4.7247	
10080 minute winter	19	5.000	20	0.1	0.099	0.000	2.6982	
10080 minute winter	20	5.001	23	0.2	0.112	0.001	1.3994	
10080 minute winter	21	6.000	22	0.2	0.098	0.001	2.9094	
10080 minute winter	22	6.001	23	0.3	0.111	0.001	2.2470	
10080 minute winter	23	5.002	24	0.6	0.196	0.002	1.4905	
10080 minute winter	24	5.003	25	0.7	0.208	0.002	3.6641	
10080 minute winter	25	5.004	26	0.7	0.346	0.002	2.7881	

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
10080 minute winter	26	10020	2.416	0.512	2.6	1.2625	0.0000	OK
10080 minute winter	27	7680	2.416	0.590	2.6	0.1670	0.0000	OK
10080 minute winter	28	7980	2.416	0.641	2.9	421.9986	0.0000	OK
10080 minute winter	29	7980	2.416	0.720	0.2	1.2724	0.0000	SURCHARGED
15 minute summer	30	1	1.676	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)
10080 minute winter	26	1.011	27	2.6	0.337	0.006	12.1010	
10080 minute winter	27	1.012	28	2.6	0.638	0.006	7.6414	
10080 minute winter	28	1.013	29	-0.3	0.062	-0.001	13.9016	
10080 minute winter	29	Pump	30	0.0				0.0

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
5760 minute winter	1	3840	2.776	0.366	0.3	0.9347	0.0000	OK
5760 minute winter	2	3840	2.776	0.483	0.6	1.2152	0.0000	OK
5760 minute winter	3	3840	2.776	0.517	0.9	1.3007	0.0000	OK
5760 minute winter	4	3840	2.776	0.549	1.1	1.3813	0.0000	OK
5760 minute winter	5	3840	2.776	0.588	1.4	1.4794	0.0000	OK
5760 minute winter	6	3840	2.776	0.625	1.6	1.5725	0.0000	OK
5760 minute winter	7	3840	2.776	0.660	1.8	1.6605	0.0000	OK
5760 minute winter	8	3840	2.776	0.682	2.0	1.7159	0.0000	SURCHARGED
5760 minute winter	9	3840	2.776	0.560	0.3	1.4302	0.0000	OK
5760 minute winter	10	3840	2.776	0.563	0.3	1.4378	0.0000	OK
5760 minute winter	11	3840	2.776	0.588	0.8	1.5017	0.0000	OK
5760 minute winter	12	3840	2.776	0.628	1.0	1.6038	0.0000	SURCHARGED
5760 minute winter	13	3840	2.776	0.747	3.1	1.8794	0.0000	SURCHARGED
5760 minute winter	14	3840	2.776	0.797	3.3	2.0052	0.0000	SURCHARGED
5760 minute winter	15	3840	2.776	0.671	0.3	1.7137	0.0000	SURCHARGED
5760 minute winter	16	3840	2.776	0.695	0.6	1.7749	0.0000	SURCHARGED
5760 minute winter	17	3840	2.776	0.718	0.8	1.8337	0.0000	SURCHARGED
5760 minute winter	18	3840	2.776	0.838	4.2	2.1083	0.0000	SURCHARGED
5760 minute winter	19	3840	2.776	0.662	0.3	1.6907	0.0000	SURCHARGED
5760 minute winter	20	3840	2.776	0.698	0.6	1.7826	0.0000	SURCHARGED
5760 minute winter	21	3840	2.776	0.648	0.3	1.6549	0.0000	SURCHARGED
5760 minute winter	22	3840	2.776	0.688	0.6	1.7571	0.0000	SURCHARGED
5760 minute winter	23	3840	2.776	0.715	1.3	1.8260	0.0000	SURCHARGED
5760 minute winter	24	3840	2.776	0.732	1.6	1.8694	0.0000	SURCHARGED
5760 minute winter	25	3840	2.776	0.770	1.9	1.9665	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)
5760 minute winter	1	1.000	2	0.3	0.299	0.001	4.0280	
5760 minute winter	2	1.001	3	0.6	0.165	0.001	4.7633	
5760 minute winter	3	1.002	4	0.8	0.196	0.002	4.7775	
5760 minute winter	4	1.003	5	1.1	0.219	0.003	6.1788	
5760 minute winter	5	1.004	6	1.3	0.237	0.003	6.2209	
5760 minute winter	6	1.005	7	1.5	0.249	0.004	6.1819	
5760 minute winter	7	1.006	8	1.7	0.223	0.004	3.9978	
5760 minute winter	8	1.007	13	1.9	0.205	0.005	11.4599	
5760 minute winter	9	2.000	11	0.3	0.108	0.001	3.7896	
5760 minute winter	10	3.000	11	0.3	0.103	0.001	3.4419	
5760 minute winter	11	2.001	12	0.7	0.200	0.002	5.4964	
5760 minute winter	12	2.002	13	0.9	0.319	0.003	6.0899	
5760 minute winter	13	1.008	14	3.0	0.267	0.007	8.8970	
5760 minute winter	14	1.009	18	3.1	0.264	0.007	7.1938	
5760 minute winter	15	4.000	16	0.3	0.099	0.001	3.2717	
5760 minute winter	16	4.001	17	0.5	0.138	0.002	3.1235	
5760 minute winter	17	4.002	18	0.8	0.299	0.003	6.2820	
5760 minute winter	18	1.010	26	4.2	0.263	0.010	6.0162	
5760 minute winter	19	5.000	20	0.3	0.099	0.001	4.9741	
5760 minute winter	20	5.001	23	0.5	0.112	0.002	2.3388	
5760 minute winter	21	6.000	22	0.3	0.098	0.001	5.6276	
5760 minute winter	22	6.001	23	0.5	0.111	0.002	3.8226	
5760 minute winter	23	5.002	24	1.3	0.196	0.004	2.3514	
5760 minute winter	24	5.003	25	1.6	0.208	0.005	5.3107	
5760 minute winter	25	5.004	26	1.9	0.346	0.006	3.6998	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
5760 minute winter	26	3840	2.776	0.872	6.3	2.1503	0.0000	SURCHARGED
5760 minute winter	27	3840	2.776	0.950	6.2	0.2688	0.0000	SURCHARGED
5760 minute winter	28	3840	2.776	1.001	6.2	728.8615	0.0000	SURCHARGED
2880 minute winter	29	2640	2.780	1.084	9.3	1.9158	0.0000	SURCHARGED
15 minute summer	30	1	1.676	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)
5760 minute winter	26	1.011	27	6.2	0.337	0.015	13.9054	
5760 minute winter	27	1.012	28	6.2	0.638	0.014	8.0099	
5760 minute winter	28	1.013	29	5.3	0.062	0.013	14.0339	
2880 minute winter	29	Pump	30	5.0				147.3

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	11	3.402	0.992	68.5	2.5342	0.0000	SURCHARGED
15 minute winter	2	11	3.410	1.117	203.7	2.8108	0.0000	SURCHARGED
15 minute winter	3	11	3.442	1.183	254.8	2.9771	0.0000	SURCHARGED
15 minute summer	4	11	3.438	1.211	173.6	3.0477	0.0000	SURCHARGED
15 minute winter	5	11	3.408	1.220	215.6	3.0696	0.0000	SURCHARGED
15 minute winter	6	11	3.353	1.202	228.0	3.0237	0.0000	SURCHARGED
15 minute winter	7	11	3.291	1.175	305.9	2.9556	0.0000	SURCHARGED
15 minute winter	8	11	3.243	1.149	369.9	2.8907	0.0000	SURCHARGED
15 minute winter	9	11	3.297	1.081	53.8	2.7617	0.0000	SURCHARGED
15 minute winter	10	11	3.284	1.071	53.1	2.7352	0.0000	SURCHARGED
15 minute winter	11	11	3.274	1.086	123.3	2.7735	0.0000	SURCHARGED
15 minute winter	12	11	3.249	1.101	189.9	2.8122	0.0000	SURCHARGED
15 minute winter	13	11	3.185	1.156	400.7	2.9083	0.0000	SURCHARGED
2880 minute winter	14	2700	3.173	1.194	11.7	3.0048	0.0000	SURCHARGED
2880 minute winter	15	2700	3.173	1.068	1.0	2.7284	0.0000	SURCHARGED
2880 minute winter	16	2700	3.173	1.092	1.9	2.7897	0.0000	SURCHARGED
2880 minute winter	17	2700	3.173	1.115	2.9	2.8485	0.0000	SURCHARGED
2880 minute winter	18	2700	3.173	1.235	15.2	3.1080	0.0000	SURCHARGED
2880 minute winter	19	2700	3.173	1.059	1.0	2.7054	0.0000	SURCHARGED
2880 minute winter	20	2700	3.173	1.095	1.9	2.7974	0.0000	SURCHARGED
2880 minute winter	21	2700	3.173	1.045	1.0	2.6697	0.0000	SURCHARGED
2880 minute winter	22	2700	3.173	1.085	1.9	2.7718	0.0000	SURCHARGED
2880 minute winter	23	2700	3.173	1.112	4.7	2.8408	0.0000	SURCHARGED
2880 minute winter	24	2700	3.173	1.129	5.7	2.8842	0.0000	SURCHARGED
2880 minute winter	25	2700	3.173	1.167	6.6	2.9813	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	1	1.000	2	44.9	0.646	0.147	5.9079	
15 minute winter	2	1.001	3	-164.5	-0.488	-0.395	6.0019	
15 minute winter	3	1.002	4	-215.6	-0.604	-0.517	5.6449	
15 minute summer	4	1.003	5	171.6	0.610	0.412	6.8833	
15 minute winter	5	1.004	6	194.6	0.631	0.467	6.5795	
15 minute winter	6	1.005	7	272.4	0.763	0.653	6.3057	
15 minute winter	7	1.006	8	336.4	0.942	0.807	4.0099	
15 minute winter	8	1.007	13	367.3	1.029	0.881	11.4608	
15 minute winter	9	2.000	11	48.8	0.299	0.159	3.8548	
15 minute winter	10	3.000	11	38.8	0.289	0.127	3.4945	
15 minute winter	11	2.001	12	150.7	0.605	0.487	5.5099	
15 minute winter	12	2.002	13	201.8	0.717	0.654	6.0899	
15 minute winter	13	1.008	14	403.2	1.130	0.966	8.8970	
2880 minute winter	14	1.009	18	11.6	0.319	0.028	7.1938	
2880 minute winter	15	4.000	16	0.9	0.138	0.003	3.2717	
2880 minute winter	16	4.001	17	1.9	0.191	0.006	3.1235	
2880 minute winter	17	4.002	18	2.8	0.334	0.009	6.2820	
2880 minute winter	18	1.010	26	15.2	0.325	0.036	6.0162	
2880 minute winter	19	5.000	20	0.9	0.138	0.003	4.9741	
2880 minute winter	20	5.001	23	1.9	0.155	0.006	2.3388	
2880 minute winter	21	6.000	22	0.9	0.137	0.003	5.6276	
2880 minute winter	22	6.001	23	1.9	0.154	0.006	3.8226	
2880 minute winter	23	5.002	24	4.7	0.246	0.015	2.3514	
2880 minute winter	24	5.003	25	5.6	0.256	0.018	5.3107	
2880 minute winter	25	5.004	26	6.6	0.346	0.021	3.6998	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
2880 minute winter	26	2700	3.173	1.269	22.6	3.1301	0.0000	SURCHARGED
2880 minute winter	27	2700	3.173	1.347	22.6	0.3813	0.0000	SURCHARGED
2880 minute winter	28	2700	3.173	1.398	22.6	1125.7440	0.0000	SURCHARGED
2880 minute winter	29	2700	3.173	1.477	5.1	2.6103	0.0000	SURCHARGED
15 minute summer	30	1	1.676	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)
2880 minute winter	26	1.011	27	22.6	0.416	0.054	13.9054	
2880 minute winter	27	1.012	28	22.6	0.645	0.051	8.0099	
2880 minute winter	28	1.013	29	5.1	0.067	0.012	14.0339	
2880 minute winter	29	Pump	30	5.0				477.0