

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)	9.900
Ratio-R	0.400	Preferred Cover Depth (m)	1.500
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	0.105	5.00	118.014	1200	442544.663	292066.062	1.514
1A	0.050	5.00	118.250	1200	442549.684	292043.113	2.156
18	0.111	5.00	118.394	1200	442583.701	292024.196	1.807
2	0.095	5.00	118.131	1200	442555.265	292017.603	2.489
2A	0.123	5.00	117.750	1200	442561.689	291983.520	2.753
19	0.070	5.00	117.914	1200	442609.459	291969.648	1.794
20	0.084	5.00	117.546	1200	442586.971	291963.090	2.034
3	0.023	5.00	117.414	1200	442567.670	291961.582	2.914
4	0.041	5.00	116.754	1200	442565.426	291941.482	2.754
5A	0.067	5.00	115.450	1200	442531.014	291925.132	2.269
5	0.012	5.00	116.271	1200	442555.936	291929.955	2.471
6	0.071	5.00	114.550	1500	442507.184	291920.531	1.950
6A	0.104	5.00	112.950	1500	442473.167	291916.331	1.743
7	0.066	5.00	111.950	1500	442443.660	291912.688	1.950
8	0.145	5.00	109.900	1500	442447.199	291867.277	1.950
9	0.105	5.00	108.850	1500	442443.659	291836.262	2.350
21	0.131	5.00	115.154	1200	442572.711	291903.705	2.354
21A	0.090	5.00	113.450	1200	442588.990	291879.257	1.985
22	0.026	5.00	112.898	1500	442604.846	291855.460	2.854
23	0.093	5.00	112.941	1500	442579.726	291844.740	3.009
24	0.039	5.00	111.850	1500	442526.697	291831.449	3.511
26	0.101	5.00	113.249	1200	442507.019	291887.368	2.749
26A	0.070	5.00	112.300	1200	442508.853	291864.578	2.510
27	0.029	5.00	111.000	1500	442510.899	291839.288	3.000
25	0.046	5.00	111.000	1500	442496.062	291825.827	3.417
25A	0.036	5.00	109.000	1500	442462.556	291818.656	2.599
10	0.017	5.00	108.500	1500	442437.280	291813.247	3.067
11			108.243	1500	442389.304	291806.111	3.243
28A	0.062	5.00	111.500	1200	442401.204	291913.547	1.725
28	0.115	5.00	111.320	1200	442384.261	291913.666	1.820
29	0.026	5.00	111.250	1200	442371.844	291907.290	2.250
30	0.067	5.00	110.250	1200	442371.589	291878.590	1.850
12			107.997	1500	442337.190	291828.127	3.497
13			105.500	1500	442317.961	291800.790	1.400
14			105.500	1500	442326.815	291777.109	1.500
15			105.500	1500	442324.487	291766.573	1.700
16			104.500	1500	442332.982	291752.470	1.400
17			104.500	1500	442338.131	291749.033	1.500
31	0.242	5.00	113.000	1200	442668.260	291888.552	1.725
32	0.060	5.00	112.600	1200	442627.258	291861.347	2.200

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	1A	23.492	0.600	116.500	116.094	0.406	57.8	225	5.23	50.0
1.000A	1A	2	26.113	0.600	116.094	115.642	0.452	57.8	225	5.48	50.0
2.000	18	2	29.190	0.600	116.587	115.642	0.945	30.9	225	5.21	50.0
1.001	2	2A	34.683	0.600	115.642	114.997	0.645	53.8	225	5.80	50.0
1.002	2A	3	22.739	0.600	114.997	114.575	0.422	53.9	225	6.02	50.0
3.000	19	20	23.425	0.600	116.120	115.512	0.608	38.5	225	5.18	50.0
3.001	20	3	19.360	0.600	115.512	114.500	1.012	19.1	225	5.29	50.0
1.003	3	4	20.225	0.600	114.500	114.000	0.500	40.4	300	6.15	50.0
1.004	4	5	14.931	0.600	114.000	113.800	0.200	74.7	300	6.29	50.0
1.005	5	5A	25.384	0.600	113.800	113.181	0.619	41.0	300	6.46	50.0
1.006	5A	6	24.270	0.600	113.181	112.750	0.431	56.3	300	6.65	50.0
1.007	6	6A	34.275	0.600	112.600	111.207	1.393	24.6	450	6.79	50.0
1.007A	6A	7	29.731	0.600	111.207	110.000	1.207	24.6	450	6.91	50.0
1.008	7	8	45.549	0.600	110.000	107.950	2.050	22.2	450	7.09	50.0
1.009	8	9	31.216	0.600	107.950	106.500	1.450	21.5	450	7.21	50.0
1.010	9	10	23.883	0.600	106.500	105.433	1.067	22.4	450	7.30	50.0
4.000	21	21A	29.372	0.600	112.800	111.465	1.335	22.0	225	5.17	50.0
4.001	21A	22	28.596	0.600	111.465	110.119	1.346	21.2	225	5.34	50.0
4.002	22	23	27.312	0.600	110.044	109.932	0.112	243.9	375	6.13	50.0
4.003	23	24	54.669	0.600	109.932	108.339	1.593	34.3	375	6.43	50.0
4.004	24	27	17.636	0.600	108.339	108.000	0.339	52.0	375	6.54	50.0
5.000	26	26A	22.864	0.600	110.500	109.790	0.710	32.2	225	5.16	50.0
5.000A	26A	27	25.373	0.600	109.790	108.000	1.790	14.2	225	5.29	50.0
5.001	27	25	20.033	0.600	108.000	107.658	0.342	58.6	375	6.68	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	1.723	68.5	14.2	1.289	1.931	0.105	0.0	69	1.363
1.000A	1.724	68.5	21.0	1.931	2.264	0.155	0.0	86	1.524
2.000	2.362	93.9	15.0	1.582	2.264	0.111	0.0	60	1.736
1.001	1.787	71.1	48.9	2.264	2.528	0.361	0.0	138	1.923
1.002	1.785	71.0	65.6	2.528	2.614	0.484	0.0	172	2.018
3.000	2.114	84.0	9.5	1.569	1.809	0.070	0.0	51	1.407
3.001	3.005	119.5	20.9	1.809	2.689	0.154	0.0	64	2.280
1.003	2.479	175.2	89.6	2.614	2.454	0.661	0.0	152	2.493
1.004	1.821	128.7	95.1	2.454	2.171	0.702	0.0	192	1.986
1.005	2.462	174.0	96.8	2.171	1.969	0.714	0.0	160	2.523
1.006	2.099	148.4	105.8	1.969	1.500	0.781	0.0	188	2.273
1.007	4.111	653.8	115.5	1.500	1.293	0.852	0.0	127	3.131
1.007A	4.109	653.5	129.6	1.293	1.500	0.956	0.0	135	3.231
1.008	4.327	688.2	138.5	1.500	1.500	1.022	0.0	136	3.414
1.009	4.396	699.2	158.2	1.500	1.900	1.167	0.0	145	3.583
1.010	4.311	685.6	172.4	1.900	2.617	1.272	0.0	153	3.620
4.000	2.801	111.4	17.8	2.129	1.760	0.131	0.0	60	2.060
4.001	2.851	113.4	30.0	1.760	2.554	0.221	0.0	79	2.416
4.002	1.156	127.6	74.4	2.479	2.634	0.549	0.0	206	1.199
4.003	3.101	342.5	87.0	2.634	3.136	0.642	0.0	129	2.609
4.004	2.517	277.9	92.3	3.136	2.625	0.681	0.0	148	2.270
5.000	2.313	92.0	13.7	2.524	2.285	0.101	0.0	58	1.673
5.000A	3.493	138.9	23.2	2.285	2.775	0.171	0.0	62	2.610
5.001	2.371	261.9	119.4	2.625	2.967	0.881	0.0	178	2.318

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)
4.005	25	25A	34.265	0.600	107.583	106.401	1.182	29.0	375	6.85	50.0
4.005A	25A	10	25.848	0.600	106.401	105.583	0.818	31.6	375	6.99	50.0
1.011	10	11	48.504	0.600	105.433	105.000	0.433	112.0	450	7.72	50.0
1.012	11	12	56.574	0.600	105.000	104.500	0.500	113.1	525	8.17	50.0
6.000A	28A	28	16.943	0.600	109.775	109.500	0.275	61.6	225	5.17	50.0
6.000	28	29	13.958	0.600	109.500	109.000	0.500	27.9	225	5.26	50.0
6.001	29	30	28.701	0.600	109.000	108.400	0.600	47.8	225	5.52	50.0
6.002	30	12	61.072	0.600	108.400	104.800	3.600	17.0	225	5.83	50.0
1.013	12	13	33.423	0.600	104.500	104.100	0.400	83.6	525	8.39	50.0
1.014	13	14	25.282	0.600	104.100	104.000	0.100	252.8	600	8.67	50.0
1.015	14	15	10.790	0.600	104.000	103.800	0.200	54.0	600	8.72	50.0
1.016	15	16	16.464	0.600	103.800	103.100	0.700	23.5	600	8.78	50.0
1.017	16	17	6.191	0.600	103.100	103.000	0.100	61.9	600	8.81	50.0
7.000	31	32	49.206	0.600	111.275	110.400	0.875	56.2	225	5.47	50.0
7.001	32	22	23.172	0.600	110.400	110.119	0.281	82.5	225	5.74	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
4.005	3.376	372.8	125.6	3.042	2.224	0.927	0.0	150	3.059
4.005A	3.233	357.0	130.5	2.224	2.542	0.963	0.0	156	2.989
1.011	1.920	305.3	305.2	2.617	2.793	2.252	0.0	371	2.172
1.012	2.105	455.6	305.2	2.718	2.972	2.252	0.0	315	2.248
6.000A	1.669	66.4	8.4	1.500	1.595	0.062	0.0	54	1.154
6.000	2.485	98.8	24.0	1.595	2.025	0.177	0.0	75	2.057
6.001	1.896	75.4	27.5	2.025	1.625	0.203	0.0	94	1.748
6.002	3.192	126.9	36.6	1.625	2.972	0.270	0.0	82	2.765
1.013	2.451	530.6	341.8	2.972	0.875	2.522	0.0	307	2.597
1.014	1.527	431.6	341.8	0.800	0.900	2.522	0.0	405	1.684
1.015	3.320	938.6	341.8	0.900	1.100	2.522	0.0	250	3.070
1.016	5.035	1423.5	341.8	1.100	0.800	2.522	0.0	199	4.175
1.017	3.098	876.0	341.8	0.800	0.900	2.522	0.0	260	2.916
7.000	1.747	69.5	32.8	1.500	1.975	0.242	0.0	109	1.722
7.001	1.441	57.3	40.9	1.975	2.554	0.302	0.0	141	1.562

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	23.492	57.8	225	Circular_Default Sewer Type	118.014	116.500	1.289	118.250	116.094	1.931
1.000A	26.113	57.8	225	Circular_Default Sewer Type	118.250	116.094	1.931	118.131	115.642	2.264
2.000	29.190	30.9	225	Circular_Default Sewer Type	118.394	116.587	1.582	118.131	115.642	2.264
1.001	34.683	53.8	225	Circular_Default Sewer Type	118.131	115.642	2.264	117.750	114.997	2.528
1.002	22.739	53.9	225	Circular_Default Sewer Type	117.750	114.997	2.528	117.414	114.575	2.614

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1200	Manhole	Adoptable	1A	1200	Manhole	Adoptable
1.000A	1A	1200	Manhole	Adoptable	2	1200	Manhole	Adoptable
2.000	18	1200	Manhole	Adoptable	2	1200	Manhole	Adoptable
1.001	2	1200	Manhole	Adoptable	2A	1200	Manhole	Adoptable
1.002	2A	1200	Manhole	Adoptable	3	1200	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)
3.000	23.425	38.5	225	Circular_Default Sewer Type	117.914	116.120	1.569	117.546	115.512	1.809
3.001	19.360	19.1	225	Circular_Default Sewer Type	117.546	115.512	1.809	117.414	114.500	2.689
1.003	20.225	40.4	300	Circular_Default Sewer Type	117.414	114.500	2.614	116.754	114.000	2.454
1.004	14.931	74.7	300	Circular_Default Sewer Type	116.754	114.000	2.454	116.271	113.800	2.171
1.005	25.384	41.0	300	Circular_Default Sewer Type	116.271	113.800	2.171	115.450	113.181	1.969
1.006	24.270	56.3	300	Circular_Default Sewer Type	115.450	113.181	1.969	114.550	112.750	1.500
1.007	34.275	24.6	450	Circular_Default Sewer Type	114.550	112.600	1.500	112.950	111.207	1.293
1.007A	29.731	24.6	450	Circular_Default Sewer Type	112.950	111.207	1.293	111.950	110.000	1.500
1.008	45.549	22.2	450	Circular_Default Sewer Type	111.950	110.000	1.500	109.900	107.950	1.500
1.009	31.216	21.5	450	Circular_Default Sewer Type	109.900	107.950	1.500	108.850	106.500	1.900
1.010	23.883	22.4	450	Circular_Default Sewer Type	108.850	106.500	1.900	108.500	105.433	2.617
4.000	29.372	22.0	225	Circular_Default Sewer Type	115.154	112.800	2.129	113.450	111.465	1.760
4.001	28.596	21.2	225	Circular_Default Sewer Type	113.450	111.465	1.760	112.898	110.119	2.554
4.002	27.312	243.9	375	Circular_Default Sewer Type	112.898	110.044	2.479	112.941	109.932	2.634
4.003	54.669	34.3	375	Circular_Default Sewer Type	112.941	109.932	2.634	111.850	108.339	3.136
4.004	17.636	52.0	375	Circular_Default Sewer Type	111.850	108.339	3.136	111.000	108.000	2.625
5.000	22.864	32.2	225	Circular_Default Sewer Type	113.249	110.500	2.524	112.300	109.790	2.285
5.000A	25.373	14.2	225	Circular_Default Sewer Type	112.300	109.790	2.285	111.000	108.000	2.775
5.001	20.033	58.6	375	Circular_Default Sewer Type	111.000	108.000	2.625	111.000	107.658	2.967
4.005	34.265	29.0	375	Circular_Default Sewer Type	111.000	107.583	3.042	109.000	106.401	2.224
4.005A	25.848	31.6	375	Circular_Default Sewer Type	109.000	106.401	2.224	108.500	105.583	2.542
1.011	48.504	112.0	450	Circular_Default Sewer Type	108.500	105.433	2.617	108.243	105.000	2.793
1.012	56.574	113.1	525	Circular_Default Sewer Type	108.243	105.000	2.718	107.997	104.500	2.972
6.000A	16.943	61.6	225	Circular_Default Sewer Type	111.500	109.775	1.500	111.320	109.500	1.595
6.000	13.958	27.9	225	Circular_Default Sewer Type	111.320	109.500	1.595	111.250	109.000	2.025

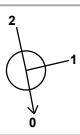
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
3.000	19	1200	Manhole	Adoptable	20	1200	Manhole	Adoptable
3.001	20	1200	Manhole	Adoptable	3	1200	Manhole	Adoptable
1.003	3	1200	Manhole	Adoptable	4	1200	Manhole	Adoptable
1.004	4	1200	Manhole	Adoptable	5	1200	Manhole	Adoptable
1.005	5	1200	Manhole	Adoptable	5A	1200	Manhole	Adoptable
1.006	5A	1200	Manhole	Adoptable	6	1500	Manhole	Adoptable
1.007	6	1500	Manhole	Adoptable	6A	1500	Manhole	Adoptable
1.007A	6A	1500	Manhole	Adoptable	7	1500	Manhole	Adoptable
1.008	7	1500	Manhole	Adoptable	8	1500	Manhole	Adoptable
1.009	8	1500	Manhole	Adoptable	9	1500	Manhole	Adoptable
1.010	9	1500	Manhole	Adoptable	10	1500	Manhole	Adoptable
4.000	21	1200	Manhole	Adoptable	21A	1200	Manhole	Adoptable
4.001	21A	1200	Manhole	Adoptable	22	1500	Manhole	Adoptable
4.002	22	1500	Manhole	Adoptable	23	1500	Manhole	Adoptable
4.003	23	1500	Manhole	Adoptable	24	1500	Manhole	Adoptable
4.004	24	1500	Manhole	Adoptable	27	1500	Manhole	Adoptable
5.000	26	1200	Manhole	Adoptable	26A	1200	Manhole	Adoptable
5.000A	26A	1200	Manhole	Adoptable	27	1500	Manhole	Adoptable
5.001	27	1500	Manhole	Adoptable	25	1500	Manhole	Adoptable
4.005	25	1500	Manhole	Adoptable	25A	1500	Manhole	Adoptable
4.005A	25A	1500	Manhole	Adoptable	10	1500	Manhole	Adoptable
1.011	10	1500	Manhole	Adoptable	11	1500	Manhole	Adoptable
1.012	11	1500	Manhole	Adoptable	12	1500	Manhole	Adoptable
6.000A	28A	1200	Manhole	Adoptable	28	1200	Manhole	Adoptable
6.000	28	1200	Manhole	Adoptable	29	1200	Manhole	Adoptable

Pipeline Schedule

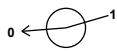
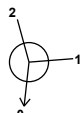
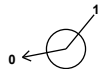
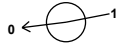
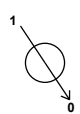
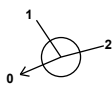
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
6.001	28.701	47.8	225	Circular_Default Sewer Type	111.250	109.000	2.025	110.250	108.400	1.625
6.002	61.072	17.0	225	Circular_Default Sewer Type	110.250	108.400	1.625	107.997	104.800	2.972
1.013	33.423	83.6	525	Circular_Default Sewer Type	107.997	104.500	2.972	105.500	104.100	0.875
1.014	25.282	252.8	600	Circular_Default Sewer Type	105.500	104.100	0.800	105.500	104.000	0.900
1.015	10.790	54.0	600	Circular_Default Sewer Type	105.500	104.000	0.900	105.500	103.800	1.100
1.016	16.464	23.5	600	Circular_Default Sewer Type	105.500	103.800	1.100	104.500	103.100	0.800
1.017	6.191	61.9	600	Circular_Default Sewer Type	104.500	103.100	0.800	104.500	103.000	0.900
7.000	49.206	56.2	225	Circular_Default Sewer Type	113.000	111.275	1.500	112.600	110.400	1.975
7.001	23.172	82.5	225	Circular_Default Sewer Type	112.600	110.400	1.975	112.898	110.119	2.554

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
6.001	29	1200	Manhole	Adoptable	30	1200	Manhole	Adoptable
6.002	30	1200	Manhole	Adoptable	12	1500	Manhole	Adoptable
1.013	12	1500	Manhole	Adoptable	13	1500	Manhole	Adoptable
1.014	13	1500	Manhole	Adoptable	14	1500	Manhole	Adoptable
1.015	14	1500	Manhole	Adoptable	15	1500	Manhole	Adoptable
1.016	15	1500	Manhole	Adoptable	16	1500	Manhole	Adoptable
1.017	16	1500	Manhole	Adoptable	17	1500	Manhole	Adoptable
7.000	31	1200	Manhole	Adoptable	32	1200	Manhole	Adoptable
7.001	32	1200	Manhole	Adoptable	22	1500	Manhole	Adoptable

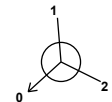
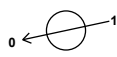
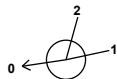
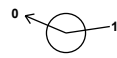
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
1	442544.663	292066.062	118.014	1.514	1200		0	1.000	116.500	225
1A	442549.684	292043.113	118.250	2.156	1200		1	1.000	116.094	225
							0	1.000A	116.094	225
18	442583.701	292024.196	118.394	1.807	1200		0	2.000	116.587	225
2	442555.265	292017.603	118.131	2.489	1200		1	2.000	115.642	225
							2	1.000A	115.642	225
							0	1.001	115.642	225
2A	442561.689	291983.520	117.750	2.753	1200		1	1.001	114.997	225
							0	1.002	114.997	225
19	442609.459	291969.648	117.914	1.794	1200		0	3.000	116.120	225

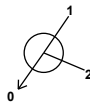
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
20	442586.971	291963.090	117.546	2.034	1200	 1	3.000	115.512	225
3	442567.670	291961.582	117.414	2.914	1200	0	3.001	115.512	225
						 1	3.001	114.500	225
						2	1.002	114.575	225
4	442565.426	291941.482	116.754	2.754	1200	0	1.003	114.500	300
						 1	1.003	114.000	300
5A	442531.014	291925.132	115.450	2.269	1200	0	1.004	114.000	300
						 1	1.005	113.181	300
5	442555.936	291929.955	116.271	2.471	1200	0	1.006	113.181	300
						 1	1.004	113.800	300
6	442507.184	291920.531	114.550	1.950	1500	0	1.005	113.800	300
						 1	1.006	112.750	300
6A	442473.167	291916.331	112.950	1.743	1500	0	1.007	112.600	450
						 1	1.007	111.207	450
7	442443.660	291912.688	111.950	1.950	1500	0	1.007A	111.207	450
						 1	1.007A	110.000	450
8	442447.199	291867.277	109.900	1.950	1500	0	1.008	110.000	450
						 1	1.008	107.950	450
9	442443.659	291836.262	108.850	2.350	1500	0	1.009	107.950	450
						 1	1.009	106.500	450
21	442572.711	291903.705	115.154	2.354	1200	0	1.010	106.500	450
						 1	4.000	112.800	225
21A	442588.990	291879.257	113.450	1.985	1200	0	4.000	111.465	225
						 1	4.001	111.465	225
22	442604.846	291855.460	112.898	2.854	1500	0	4.001	110.119	225
						 1	7.001	110.119	225
						0	4.002	110.044	375

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
23	442579.726	291844.740	112.941	3.009	1500	 1	4.002	109.932	375
						0	4.003	109.932	375
24	442526.697	291831.449	111.850	3.511	1500	 1	4.003	108.339	375
						0	4.004	108.339	375
26	442507.019	291887.368	113.249	2.749	1200	 0	5.000	110.500	225
26A	442508.853	291864.578	112.300	2.510	1200	 1	5.000	109.790	225
						0	5.000A	109.790	225
27	442510.899	291839.288	111.000	3.000	1500	 1	5.000A	108.000	225
						2	4.004	108.000	375
						0	5.001	108.000	375
25	442496.062	291825.827	111.000	3.417	1500	 1	5.001	107.658	375
						0	4.005	107.583	375
25A	442462.556	291818.656	109.000	2.599	1500	 1	4.005	106.401	375
						0	4.005A	106.401	375
10	442437.280	291813.247	108.500	3.067	1500	 2	4.005A	105.583	375
						2	1.010	105.433	450
						0	1.011	105.433	450
11	442389.304	291806.111	108.243	3.243	1500	 1	1.011	105.000	450
						0	1.012	105.000	525
28A	442401.204	291913.547	111.500	1.725	1200	 0	6.000A	109.775	225
28	442384.261	291913.666	111.320	1.820	1200	 1	6.000A	109.500	225
						0	6.000	109.500	225
29	442371.844	291907.290	111.250	2.250	1200	 1	6.000	109.000	225
						0	6.001	109.000	225
30	442371.589	291878.590	110.250	1.850	1200	 1	6.001	108.400	225
						0	6.002	108.400	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
12	442337.190	291828.127	107.997	3.497	1500		1	6.002	104.800	225
							2	1.012	104.500	525
							0	1.013	104.500	525
13	442317.961	291800.790	105.500	1.400	1500		1	1.013	104.100	525
							0	1.014	104.100	600
14	442326.815	291777.109	105.500	1.500	1500		1	1.014	104.000	600
							0	1.015	104.000	600
15	442324.487	291766.573	105.500	1.700	1500		1	1.015	103.800	600
							0	1.016	103.800	600
16	442332.982	291752.470	104.500	1.400	1500		1	1.016	103.100	600
							0	1.017	103.100	600
17	442338.131	291749.033	104.500	1.500	1500		1	1.017	103.000	600
31	442668.260	291888.552	113.000	1.725	1200		0	7.000	111.275	225
							1	7.000	110.400	225
32	442627.258	291861.347	112.600	2.200	1200		0	7.001	110.400	225

Simulation Settings

Rainfall Methodology	FSR	Skip Steady State	✓
FSR Region	England and Wales	Drain Down Time (mins)	240
M5-60 (mm)	20.000	Additional Storage (m³/ha)	20.0
Ratio-R	0.400	Check Discharge Rate(s)	✓
Summer CV	0.750	Check Discharge Volume	✓
Winter CV	0.840	100 year 360 minute (m³)	
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 %)
1	0	0	0
30	0	0	0
100	40	0	0

Pre-development Discharge Rate

Site Makeup	Greenfield	Growth Factor 30 year	1.95
Greenfield Method	IH124	Growth Factor 100 year	2.48
Positively Drained Area (ha)		Betterment (%)	0
SAAR (mm)		QBar	
Soil Index	1	Q 1 year (l/s)	
SPR	0.10	Q 30 year (l/s)	
Region	1	Q 100 year (l/s)	
Growth Factor 1 year	0.85		

Pre-development Discharge Volume

Site Makeup	Greenfield	Return Period (years)	100
Greenfield Method	FSR/FEH	Climate Change (%)	0
Positively Drained Area (ha)		Storm Duration (mins)	360
Soil Index	1	Betterment (%)	0
SPR	0.10	PR	
CWI		Runoff Volume (m³)	

Node 15 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	103.800	Product Number	CTL-SHE-0159-1350-1500-1350
Design Depth (m)	1.500	Min Outlet Diameter (m)	0.225
Design Flow (l/s)	13.5	Min Node Diameter (mm)	1500

Node 15 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	104.000
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	1508.0	0.0	1.500	2443.0	0.0

Results for 1 year Critical Storm Duration. Lowest mass balance: 94.61%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	116.571	0.071	14.8	0.1778	0.0000	OK
15 minute winter	1A	10	116.180	0.086	21.7	0.1368	0.0000	OK
15 minute winter	18	10	116.649	0.062	15.7	0.1455	0.0000	OK
15 minute winter	2	10	115.781	0.139	50.3	0.2632	0.0000	OK
15 minute winter	2A	11	115.189	0.192	66.2	0.3896	0.0000	OK
15 minute winter	19	10	116.172	0.052	9.9	0.0988	0.0000	OK
15 minute winter	20	10	115.576	0.064	21.6	0.1257	0.0000	OK
15 minute winter	3	11	114.662	0.162	90.2	0.2091	0.0000	OK
15 minute winter	4	11	114.218	0.218	95.8	0.3117	0.0000	OK
15 minute winter	5A	11	113.387	0.206	106.5	0.3553	0.0000	OK
15 minute winter	5	11	113.969	0.169	97.6	0.2072	0.0000	OK
15 minute winter	6	11	112.730	0.130	115.2	0.3244	0.0000	OK
15 minute winter	6A	11	111.349	0.142	128.7	0.4194	0.0000	OK
15 minute winter	7	11	110.137	0.137	136.8	0.3342	0.0000	OK
15 minute winter	8	11	108.100	0.150	155.2	0.4889	0.0000	OK
15 minute winter	9	11	106.649	0.149	168.2	0.3972	0.0000	OK
15 minute winter	21	10	112.862	0.062	18.5	0.1381	0.0000	OK
15 minute winter	21A	10	111.545	0.080	31.0	0.1623	0.0000	OK
15 minute winter	22	11	110.251	0.207	74.7	0.4029	0.0000	OK
15 minute winter	23	11	110.060	0.128	87.7	0.3055	0.0000	OK
15 minute winter	24	11	108.502	0.163	93.3	0.3235	0.0000	OK
15 minute winter	26	10	110.561	0.061	14.2	0.1129	0.0000	OK
15 minute winter	26A	10	109.853	0.063	24.0	0.1060	0.0000	OK
15 minute winter	27	11	108.197	0.197	120.2	0.3864	0.0000	OK
15 minute winter	25	11	107.739	0.156	126.1	0.3182	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	1A	14.6	1.193	0.213	0.2881	
15 minute winter	1A	1.000A	2	21.4	1.078	0.312	0.5172	
15 minute winter	18	2.000	2	15.5	0.912	0.165	0.5041	
15 minute winter	2	1.001	2A	49.6	1.600	0.699	1.0718	
15 minute winter	2A	1.002	3	66.4	1.939	0.935	0.7782	
15 minute winter	19	3.000	20	9.8	1.213	0.117	0.1896	
15 minute winter	20	3.001	3	21.4	1.100	0.179	0.3848	
15 minute winter	3	1.003	4	90.4	1.920	0.516	0.9481	
15 minute winter	4	1.004	5	96.0	1.998	0.745	0.7143	
15 minute winter	5A	1.006	6	105.8	2.178	0.713	1.1801	
15 minute winter	5	1.005	5A	97.6	2.108	0.561	1.1734	
15 minute winter	6	1.007	6A	114.9	2.852	0.176	1.3815	
15 minute winter	6A	1.007A	7	128.0	3.073	0.196	1.2392	
15 minute winter	7	1.008	8	136.0	3.138	0.198	1.9804	
15 minute winter	8	1.009	9	154.3	3.348	0.221	1.4391	
15 minute winter	9	1.010	10	167.4	1.723	0.244	2.2883	
15 minute winter	21	4.000	21A	18.3	1.724	0.165	0.3135	
15 minute winter	21A	4.001	22	30.7	1.930	0.271	0.5214	
15 minute winter	22	4.002	23	75.4	1.586	0.591	1.3035	
15 minute winter	23	4.003	24	88.1	2.235	0.257	2.1592	
15 minute winter	24	4.004	27	93.4	1.788	0.336	0.9213	
15 minute winter	26	5.000	26A	14.1	1.598	0.153	0.2014	
15 minute winter	26A	5.000A	27	23.8	1.296	0.171	0.5800	
15 minute winter	27	5.001	25	120.0	2.197	0.458	1.0947	
15 minute winter	25	4.005	25A	125.9	2.867	0.338	1.5049	

Results for 1 year Critical Storm Duration. Lowest mass balance: 94.61%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	25A	11	106.560	0.159	130.7	0.3248	0.0000	OK
15 minute winter	10	12	105.824	0.391	300.4	0.7345	0.0000	OK
15 minute winter	11	12	105.332	0.332	299.9	0.5858	0.0000	OK
15 minute winter	28A	10	109.830	0.055	8.7	0.1009	0.0000	OK
15 minute winter	28	10	109.578	0.078	24.8	0.1859	0.0000	OK
15 minute winter	29	10	109.101	0.101	28.3	0.1370	0.0000	OK
15 minute winter	30	11	108.484	0.084	37.4	0.1566	0.0000	OK
15 minute winter	12	12	104.846	0.346	335.7	0.6111	0.0000	OK
15 minute winter	13	12	104.497	0.397	335.2	0.7019	0.0000	OK
15 minute winter	14	12	104.304	0.304	333.2	0.5373	0.0000	OK
180 minute winter	15	180	104.157	0.357	87.5	245.3261	0.0000	OK
180 minute winter	16	176	103.155	0.055	13.4	0.0979	0.0000	OK
180 minute winter	17	176	103.051	0.051	13.4	0.0000	0.0000	OK
15 minute winter	31	10	111.384	0.109	34.1	0.4307	0.0000	OK
15 minute winter	32	11	110.551	0.151	42.0	0.2534	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	25A	4.005A	10	130.6	2.524	0.366	1.5332	
15 minute winter	10	1.011	11	299.9	2.199	0.982	6.5833	
15 minute winter	11	1.012	12	301.9	2.051	0.663	8.3306	
15 minute winter	28A	6.000A	28	8.6	0.887	0.130	0.1654	
15 minute winter	28	6.000	29	24.6	1.681	0.249	0.2044	
15 minute winter	29	6.001	30	28.0	1.830	0.371	0.4391	
15 minute winter	30	6.002	12	37.1	2.764	0.293	0.8206	
15 minute winter	12	1.013	13	335.2	2.052	0.632	5.4506	
15 minute winter	13	1.014	14	333.2	1.950	0.772	4.3142	
15 minute winter	14	1.015	15	331.9	2.674	0.354	1.3772	
180 minute winter	15	Hydro-Brake®	16	13.4				
180 minute winter	16	1.017	17	13.4	1.101	0.015	0.0755	314.4
15 minute winter	31	7.000	32	33.5	1.419	0.482	1.1594	
15 minute winter	32	7.001	22	41.4	1.522	0.723	0.6305	

Results for 30 year Critical Storm Duration. Lowest mass balance: 94.61%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	13	117.650	1.150	36.3	2.8952	0.0000	SURCHARGED
15 minute winter	1A	13	117.600	1.506	49.5	2.4015	0.0000	SURCHARGED
15 minute winter	18	13	117.550	0.963	38.4	2.2728	0.0000	SURCHARGED
15 minute winter	2	13	117.478	1.836	92.3	3.4768	0.0000	SURCHARGED
15 minute winter	2A	12	116.633	1.636	107.7	3.3129	0.0000	SURCHARGED
15 minute winter	19	10	116.202	0.082	24.2	0.1565	0.0000	OK
15 minute winter	20	12	115.671	0.159	53.1	0.3103	0.0000	OK
15 minute winter	3	12	115.540	1.040	153.6	1.3411	0.0000	SURCHARGED
15 minute winter	4	12	115.038	1.038	161.4	1.4829	0.0000	SURCHARGED
15 minute winter	5A	12	113.860	0.679	182.1	1.1693	0.0000	SURCHARGED
15 minute winter	5	12	114.577	0.777	164.2	0.9540	0.0000	SURCHARGED
15 minute winter	6	11	112.777	0.177	202.4	0.4413	0.0000	OK
15 minute winter	6A	11	111.409	0.202	235.9	0.5965	0.0000	OK
15 minute winter	7	10	110.192	0.192	256.2	0.4686	0.0000	OK
15 minute winter	8	13	108.317	0.367	303.3	1.1932	0.0000	OK
15 minute winter	9	13	108.100	1.600	320.0	4.2568	0.0000	SURCHARGED
15 minute winter	21	10	112.899	0.099	45.3	0.2222	0.0000	OK
15 minute winter	21A	10	111.598	0.133	76.1	0.2718	0.0000	OK
15 minute winter	22	11	110.410	0.366	166.9	0.7139	0.0000	OK
15 minute winter	23	12	110.145	0.213	196.6	0.5072	0.0000	OK
15 minute winter	24	13	109.381	1.042	209.5	2.0722	0.0000	SURCHARGED
15 minute winter	26	10	110.600	0.100	34.9	0.1857	0.0000	OK
15 minute winter	26A	10	109.891	0.101	58.8	0.1712	0.0000	OK
15 minute winter	27	13	109.182	1.182	268.3	2.3168	0.0000	SURCHARGED
15 minute winter	25	13	108.844	1.261	263.4	2.5680	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	1A	33.2	1.391	0.484	0.9343	
15 minute winter	1A	1.000A	2	39.6	1.132	0.577	1.0385	
15 minute winter	18	2.000	2	34.5	1.062	0.368	1.1609	
15 minute winter	2	1.001	2A	80.0	2.012	1.126	1.3794	
15 minute winter	2A	1.002	3	104.1	2.617	1.466	0.9044	
15 minute winter	19	3.000	20	24.0	1.517	0.286	0.4813	
15 minute winter	20	3.001	3	49.2	1.476	0.412	0.6745	
15 minute winter	3	1.003	4	150.3	2.134	0.858	1.4242	
15 minute winter	4	1.004	5	161.0	2.287	1.251	1.0514	
15 minute winter	5A	1.006	6	182.3	2.589	1.228	1.6918	
15 minute winter	5	1.005	5A	164.2	2.332	0.944	1.7875	
15 minute winter	6	1.007	6A	202.0	3.226	0.309	2.1680	
15 minute winter	6A	1.007A	7	234.8	3.589	0.359	1.9468	
15 minute winter	7	1.008	8	256.1	3.657	0.372	4.4721	
15 minute winter	8	1.009	9	285.8	3.538	0.409	4.6320	
15 minute winter	9	1.010	10	290.7	1.835	0.424	3.7841	
15 minute winter	21	4.000	21A	45.0	2.178	0.404	0.6068	
15 minute winter	21A	4.001	22	75.4	2.102	0.666	0.9189	
15 minute winter	22	4.002	23	166.4	1.867	1.303	2.3294	
15 minute winter	23	4.003	24	196.8	2.516	0.574	4.7770	
15 minute winter	24	4.004	27	199.8	1.887	0.719	1.9452	
15 minute winter	26	5.000	26A	34.7	2.023	0.377	0.3918	
15 minute winter	26A	5.000A	27	58.5	1.768	0.421	0.7245	
15 minute winter	27	5.001	25	247.5	2.443	0.945	2.2096	
15 minute winter	25	4.005	25A	235.1	3.033	0.631	3.7793	

Results for 30 year Critical Storm Duration. Lowest mass balance: 94.61%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	25A	13	108.295	1.894	246.8	3.8712	0.0000	SURCHARGED
15 minute winter	10	13	107.827	2.394	520.9	4.4964	0.0000	SURCHARGED
15 minute winter	11	13	106.269	1.269	521.1	2.2417	0.0000	SURCHARGED
15 minute winter	28A	10	109.864	0.089	21.4	0.1651	0.0000	OK
15 minute winter	28	10	109.637	0.137	61.0	0.3277	0.0000	OK
15 minute winter	29	10	109.189	0.189	69.4	0.2568	0.0000	OK
15 minute winter	30	10	108.540	0.140	91.6	0.2591	0.0000	OK
15 minute winter	12	12	105.474	0.974	591.2	1.7210	0.0000	SURCHARGED
15 minute winter	13	12	104.787	0.687	589.7	1.2145	0.0000	SURCHARGED
360 minute winter	14	352	104.447	0.447	130.9	0.7902	0.0000	OK
360 minute winter	15	352	104.447	0.647	140.8	738.5174	0.0000	SURCHARGED
60 minute winter	16	38	103.156	0.056	13.5	0.0982	0.0000	OK
60 minute winter	17	38	103.051	0.051	13.5	0.0000	0.0000	OK
15 minute winter	31	12	112.198	0.923	83.7	3.6320	0.0000	SURCHARGED
15 minute winter	32	12	111.196	0.796	87.5	1.3333	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	25A	4.005A	10	232.1	2.438	0.650	2.8510	
15 minute winter	10	1.011	11	521.1	3.289	1.707	7.6851	
15 minute winter	11	1.012	12	523.3	2.423	1.149	12.2218	
15 minute winter	28A	6.000A	28	21.2	1.065	0.320	0.3381	
15 minute winter	28	6.000	29	60.4	1.966	0.611	0.4244	
15 minute winter	29	6.001	30	68.5	2.218	0.908	0.8816	
15 minute winter	30	6.002	12	90.7	3.110	0.715	2.0050	
15 minute winter	12	1.013	13	589.7	2.730	1.111	7.2205	
15 minute winter	13	1.014	14	589.1	2.177	1.365	6.3721	
360 minute winter	14	1.015	15	140.8	0.953	0.150	2.7350	
360 minute winter	15	Hydro-Brake®	16	13.5				
60 minute winter	16	1.017	17	13.5	1.103	0.015	0.0759	233.8
15 minute winter	31	7.000	32	69.6	1.750	1.002	1.9570	
15 minute winter	32	7.001	22	87.3	2.195	1.524	0.9216	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 94.61%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	17	118.014	1.514	82.5	3.8123	28.1244	FLOOD
30 minute summer	1A	18	118.144	2.050	44.4	3.2701	0.0000	FLOOD RISK
15 minute winter	18	10	118.394	1.807	69.8	4.2645	3.2794	FLOOD
15 minute winter	2	10	118.131	2.489	104.7	4.7142	8.9432	FLOOD
15 minute winter	2A	10	117.750	2.753	139.4	5.5748	4.0364	FLOOD
15 minute winter	19	12	117.545	1.425	44.0	2.7227	0.0000	SURCHARGED
15 minute winter	20	12	117.420	1.908	80.6	3.7334	0.0000	FLOOD RISK
15 minute winter	3	12	116.906	2.406	180.4	3.1016	0.0000	SURCHARGED
15 minute winter	4	12	116.214	2.214	198.4	3.1644	0.0000	SURCHARGED
15 minute winter	5A	12	114.429	1.248	237.9	2.1490	0.0000	SURCHARGED
15 minute winter	5	12	115.527	1.727	202.6	2.1203	0.0000	SURCHARGED
15 minute winter	6	11	112.815	0.215	277.7	0.5353	0.0000	OK
15 minute winter	6A	10	111.449	0.242	338.8	0.7166	0.0000	OK
15 minute winter	7	11	110.359	0.359	378.1	0.8776	0.0000	OK
15 minute winter	8	11	109.697	1.747	459.1	5.6832	0.0000	FLOOD RISK
15 minute winter	9	10	108.850	2.350	517.7	6.2534	40.1387	FLOOD
15 minute winter	21	12	113.937	1.137	82.2	2.5509	0.0000	SURCHARGED
15 minute winter	21A	12	113.450	1.985	126.7	4.0454	0.4305	FLOOD
15 minute winter	22	12	112.247	2.203	217.9	4.2929	0.0000	SURCHARGED
15 minute winter	23	12	111.996	2.064	264.6	4.9217	0.0000	SURCHARGED
15 minute winter	24	12	111.289	2.950	250.9	5.8670	0.0000	SURCHARGED
15 minute winter	26	12	111.855	1.355	63.5	2.5286	0.0000	SURCHARGED
15 minute winter	26A	12	111.633	1.843	100.7	3.1135	0.0000	SURCHARGED
15 minute winter	27	12	110.950	2.950	317.7	5.7817	0.0000	FLOOD RISK
15 minute winter	25	12	110.231	2.648	337.8	5.3908	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)
30 minute winter	1	1.000	1A	-31.7	1.346	-0.462	0.9343	
30 minute summer	1A	1.000A	2	37.5	1.135	0.547	1.0385	
15 minute winter	18	2.000	2	45.1	1.134	0.480	1.1609	
15 minute winter	2	1.001	2A	80.3	2.020	1.130	1.3794	
15 minute winter	2A	1.002	3	109.7	2.759	1.546	0.9044	
15 minute winter	19	3.000	20	34.0	1.543	0.404	0.9316	
15 minute winter	20	3.001	3	75.0	1.885	0.627	0.7700	
15 minute winter	3	1.003	4	177.4	2.520	1.013	1.4242	
15 minute winter	4	1.004	5	196.7	2.794	1.528	1.0514	
15 minute winter	5A	1.006	6	237.0	3.366	1.597	1.6918	
15 minute winter	5	1.005	5A	203.0	2.884	1.167	1.7875	
15 minute winter	6	1.007	6A	277.4	3.495	0.424	2.7463	
15 minute winter	6A	1.007A	7	339.0	3.747	0.519	3.2902	
15 minute winter	7	1.008	8	373.4	3.651	0.543	6.6970	
15 minute winter	8	1.009	9	455.7	3.412	0.652	4.9460	
15 minute winter	9	1.010	10	325.1	2.052	0.474	3.7841	
15 minute winter	21	4.000	21A	73.4	2.229	0.659	1.1682	
15 minute winter	21A	4.001	22	101.3	2.548	0.894	1.1373	
15 minute winter	22	4.002	23	209.6	1.932	1.642	3.0124	
15 minute winter	23	4.003	24	227.8	2.512	0.665	6.0298	
15 minute winter	24	4.004	27	226.4	2.053	0.815	1.9452	
15 minute winter	26	5.000	26A	59.3	2.169	0.645	0.9093	
15 minute winter	26A	5.000A	27	83.5	2.267	0.601	1.0091	
15 minute winter	27	5.001	25	315.3	2.859	1.204	2.2096	
15 minute winter	25	4.005	25A	336.2	3.049	0.902	3.7793	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 94.61%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	25A	10	109.000	2.599	353.9	5.3124	32.6757	FLOOD
15 minute winter	10	10	108.500	3.067	575.4	5.7598	4.6823	FLOOD
15 minute winter	11	13	106.725	1.725	559.9	3.0481	0.0000	SURCHARGED
15 minute winter	28A	12	111.059	1.284	39.0	2.3760	0.0000	SURCHARGED
15 minute winter	28	12	110.998	1.498	97.3	3.5879	0.0000	SURCHARGED
15 minute winter	29	12	110.553	1.553	95.7	2.1152	0.0000	SURCHARGED
15 minute winter	30	12	109.518	1.118	127.3	2.0738	0.0000	SURCHARGED
15 minute winter	12	12	105.811	1.311	677.5	2.3159	0.0000	SURCHARGED
60 minute winter	13	41	104.952	0.852	643.5	1.5049	0.0000	SURCHARGED
600 minute winter	14	600	104.897	0.897	154.1	1.5852	0.0000	SURCHARGED
600 minute winter	15	600	104.897	1.097	273.5	1606.7860	0.0000	SURCHARGED
15 minute winter	16	16	103.156	0.056	13.5	0.0982	0.0000	OK
30 minute summer	17	22	103.051	0.051	13.5	0.0000	0.0000	OK
15 minute winter	31	9	113.000	1.725	152.0	6.7913	22.8894	FLOOD
15 minute winter	32	11	112.600	2.200	113.9	3.6872	1.6889	FLOOD

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	25A	4.005A	10	268.5	2.516	0.752	2.8510	
15 minute winter	10	1.011	11	559.9	3.534	1.834	7.6851	
15 minute winter	11	1.012	12	562.2	2.602	1.234	12.2218	
15 minute winter	28A	6.000A	28	30.2	1.059	0.456	0.6738	
15 minute winter	28	6.000	29	79.6	2.002	0.806	0.5551	
15 minute winter	29	6.001	30	91.1	2.291	1.209	1.1415	
15 minute winter	30	6.002	12	121.0	3.298	0.953	2.4289	
15 minute winter	12	1.013	13	677.4	3.136	1.276	7.2205	
60 minute winter	13	1.014	14	642.9	2.283	1.489	7.1214	
600 minute winter	14	1.015	15	273.5	1.148	0.291	3.0393	
600 minute winter	15	Hydro-Brake®	16	13.5				
15 minute winter	16	1.017	17	13.5	1.103	0.015	0.0759	201.3
15 minute winter	31	7.000	32	78.4	1.972	1.129	1.9570	
15 minute winter	32	7.001	22	101.2	2.545	1.767	0.9216	