

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	99.00
Return Period (years)	1	Maximum Rainfall (mm/hr)	0.0
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)	1.000
Ratio-R	0.400	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	x
Time of Entry (mins)	5.00	Enforce best practice design rules	x

Adoptable Manhole Type

Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)
374	1200	499	1350	749	1500	900	1800

>900 Link+900 mm

Max Depth (m)	Diameter (mm)	Max Depth (m)	Diameter (mm)
1.500	1050	99.999	1200

Circular Link Type

Template	Freeform Carrier	Barrels	1	Follow Ground	x
Shape	Circular	Auto Increment (mm)	75		

Available Diameters (mm)

100 | 150

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
S1	0.018	5.00	91.894	1350	450928.749	305356.698	1.859
S2	0.064	5.00	91.150	1350	450946.993	305364.548	1.500
S3	0.126	5.00	90.652	1350	451010.554	305422.616	1.612
S4	0.069	5.00	89.667	1350	451011.895	305394.182	1.817
S5	0.085	5.00	88.888	1350	451013.324	305372.349	1.550
S6	0.062	5.00	88.438	2100	451023.312	305368.388	1.673
S7	0.107	5.00	87.626	1350	451024.927	305344.290	1.811
S10	0.088	5.00	86.700	1350	451015.126	305309.874	1.930
S11	0.070	5.00	86.038	1350	451008.003	305287.592	1.868
S12	0.127	5.00	84.566	1350	450992.540	305235.329	2.156
S13	0.048	5.00	94.212	1350	450885.597	305389.463	1.502
S14	0.095	5.00	92.946	1350	450902.001	305362.489	1.571
S15	0.069	5.00	92.000	1500	450907.515	305346.432	1.310
S16	0.058	5.00	89.070	1350	450927.371	305294.787	1.500
S17	0.025	5.00	88.000	1350	450931.558	305276.097	1.740
S18	0.108	5.00	86.100	1350	450945.349	305242.882	1.540
S19	0.026	5.00	85.297	1350	450958.222	305231.130	1.417
S20			84.400	1500	450977.158	305224.764	1.133
S21	0.016	5.00	84.363	1350	450983.126	305222.876	1.363
S22	0.017	5.00	83.890	1800	450995.680	305218.130	2.115
S23	0.028	5.00	83.448	1500	451006.900	305206.405	2.163
S27	0.092	5.00	85.717	1350	451040.479	305302.873	1.447
S28	0.086	5.00	84.561	1350	451068.958	305294.106	1.666
S77			83.992	1350	451059.137	305258.649	1.716
S78	0.075	5.00	83.818	1350	451049.623	305243.026	1.797
S24	0.083	5.00	82.689	1500	451036.959	305197.780	1.984
S25			79.150	1500	451046.119	305170.170	1.800
S26			78.350	1500	451050.281	305159.824	1.295
S29	0.134	5.00	83.251	1350	451099.480	305285.005	1.581
S30	0.114	5.00	81.251	1350	451158.093	305267.460	2.356
S31	0.086	5.00	80.512	1800	451169.295	305257.088	2.988
S32	0.061	5.00	79.726	1800	451208.330	305258.808	2.175

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
S33	0.028	5.00	79.581	1800	451197.956	305245.573	2.064
S34	0.107	5.00	79.554	1800	451180.049	305235.189	2.078
S35	0.099	5.00	82.262	1500	451057.961	305202.450	2.427
S36	0.105	5.00	81.475	1500	451087.567	305207.620	2.242
S37	0.171	5.00	80.206	1800	451144.770	305217.725	2.809
S79			79.552	1800	451149.716	305190.006	2.188
S38	0.263	5.00	79.196	1800	451154.394	305165.614	1.905
S39	0.203	5.00	79.428	2100	451111.741	305157.005	2.248
S40			78.350	1500	451111.638	305141.811	1.295
S41		5.00	78.350	1500	451059.176	305117.934	1.350
S42			78.350	3000	451061.564	305107.932	1.371
S81			78.860	1200	451084.181	305111.241	2.012
S44			77.761	1200	451136.543	305127.088	1.225
S45			76.950	1200	451201.546	305153.919	0.948
S46			76.681	1500	451213.767	305154.012	0.781

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	S1	S2	19.861	0.600	90.035	89.650	0.385	51.6	225	5.18	0.0
1.001	S2	S6	76.415	0.600	89.650	86.915	2.735	27.9	225	5.69	0.0
2.000	S3	S4	28.466	0.600	89.040	87.850	1.190	23.9	225	5.18	0.0
2.001	S4	S5	21.879	0.600	87.850	87.413	0.437	50.1	225	5.37	0.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
1.000	1.825	72.6	0.0	1.634	1.275	0.018	0.0
1.001	2.484	98.8	0.0	1.275	1.298	0.082	0.0
2.000	2.686	106.8	0.0	1.387	1.592	0.126	0.0
2.001	1.853	73.7	0.0	1.592	1.250	0.194	0.0

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)
2.002	S5	S6	10.745	0.600	87.338	86.840	0.498	21.6	300	5.43	0.0
1.002	S6	S7	24.152	0.600	86.765	85.815	0.950	25.4	375	5.81	0.0
1.003	S7	S10	35.785	0.600	85.815	84.845	0.970	36.9	375	6.01	0.0
1.004	S10	S11	23.393	0.600	84.770	84.170	0.600	39.0	450	6.12	0.0
1.005	S11	S12	54.503	0.600	84.170	82.410	1.760	31.0	450	6.37	0.0
1.006	S12	S22	17.483	0.600	82.410	81.850	0.560	31.2	450	6.45	0.0
3.000	S13	S14	31.571	0.600	92.710	91.375	1.335	23.6	225	5.19	0.0
3.001	S14	S15	16.977	0.600	91.375	90.765	0.610	27.8	225	5.31	0.0
3.002	S15	S16	55.330	0.600	90.690	87.570	3.120	17.7	300	5.55	0.0
3.003	S16	S17	19.154	0.600	87.570	86.260	1.310	14.6	300	5.63	0.0
3.004	S17	S18	35.964	0.600	86.260	84.560	1.700	21.2	300	5.81	0.0
3.005	S18	S19	17.431	0.600	84.560	83.880	0.680	25.6	300	5.90	0.0
3.006	S19	S20	19.977	0.600	83.880	83.267	0.613	32.6	300	6.02	0.0
3.007	S20	S21	6.259	0.600	83.267	83.075	0.192	32.6	300	6.06	0.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
2.002	3.399	240.3	0.0	1.250	1.298	0.279	0.0
1.002	3.606	398.2	0.0	1.298	1.436	0.423	0.0
1.003	2.991	330.3	0.0	1.436	1.480	0.530	0.0
1.004	3.263	519.0	0.0	1.480	1.418	0.618	0.0
1.005	3.663	582.6	0.0	1.418	1.706	0.688	0.0
1.006	3.648	580.2	0.0	1.706	1.590	0.815	0.0
3.000	2.701	107.4	0.0	1.277	1.346	0.048	0.0
3.001	2.489	99.0	0.0	1.346	1.010	0.143	0.0
3.002	3.751	265.1	0.0	1.010	1.200	0.211	0.0
3.003	4.132	292.1	0.0	1.200	1.440	0.269	0.0
3.004	3.433	242.7	0.0	1.440	1.240	0.295	0.0
3.005	3.117	220.4	0.0	1.240	1.117	0.402	0.0
3.006	2.763	195.3	0.0	1.117	0.833	0.429	0.0
3.007	2.763	195.3	0.0	0.833	0.988	0.429	0.0

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)
3.008	S21	S22	13.422	0.600	83.000	81.925	1.075	12.5	375	6.10	0.0
1.007	S22	S23	16.228	0.600	81.775	81.285	0.490	33.1	525	6.52	0.0
1.008	S23	S24	31.272	0.600	81.285	80.705	0.580	53.9	525	6.69	0.0
4.000	S27	S28	29.798	0.600	84.270	82.895	1.375	21.7	150	5.23	0.0
4.001	S28	S77	36.792	0.600	82.895	82.276	0.619	59.4	300	5.53	0.0
4.002	S77	S78	18.291	0.600	82.276	82.096	0.180	101.6	300	5.72	0.0
4.003	S78	S24	46.985	0.600	82.021	80.855	1.166	40.3	375	6.00	0.0
1.009	S24	S25	29.090	0.600	80.705	77.425	3.280	8.9	525	6.76	0.0
1.010	S25	S26	11.152	0.600	77.350	77.300	0.050	223.0	600	6.87	0.0
5.000	S29	S30	61.182	0.600	81.670	79.045	2.625	23.3	300	5.31	0.0
5.001	S30	S31	15.267	0.600	78.895	77.824	1.071	14.3	450	5.36	0.0
5.002	S31	S34	24.397	0.600	77.524	77.476	0.048	508.3	750	5.69	0.0
6.000	S32	S33	16.817	0.600	77.551	77.517	0.034	494.6	750	5.22	0.0
6.001	S33	S34	20.700	0.600	77.517	77.476	0.041	504.9	750	5.50	0.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
3.008	5.151	568.9	0.0	0.988	1.590	0.444	0.0
1.007	3.901	844.5	0.0	1.590	1.638	1.276	0.0
1.008	3.055	661.3	0.0	1.638	1.459	1.305	0.0
4.000	2.173	38.4	0.0	1.297	1.516	0.092	0.0
4.001	2.043	144.4	0.0	1.366	1.416	0.177	0.0
4.002	1.559	110.2	0.0	1.416	1.422	0.177	0.0
4.003	2.861	316.0	0.0	1.422	1.459	0.253	0.0
1.009	7.551	1634.6	0.0	1.459	1.200	1.640	0.0
1.010	1.626	459.8	0.0	1.200	0.450	1.640	0.0
5.000	3.270	231.1	0.0	1.281	1.906	0.134	0.0
5.001	5.405	859.7	0.0	1.906	2.238	0.248	0.0
5.002	1.234	545.2	0.0	2.238	1.328	0.333	0.0
6.000	1.251	552.8	0.0	1.425	1.314	0.061	0.0
6.001	1.238	547.1	0.0	1.314	1.328	0.088	0.0

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)
5.003	S34	S37	39.364	0.600	77.476	77.397	0.079	498.3	750	6.21	0.0
7.000	S35	S36	30.054	0.600	79.835	79.233	0.602	49.9	525	5.16	0.0
7.001	S36	S37	58.089	0.600	79.233	77.622	1.611	36.1	525	5.42	0.0
5.004	S37	S79	28.157	0.600	77.397	77.364	0.033	853.2	750	6.71	0.0
5.005	S79	S38	24.837	0.600	77.364	77.341	0.023	1079.9	750	7.20	0.0
5.006	S38	S39	43.513	0.600	77.291	77.180	0.111	392.0	750	7.72	0.0
5.007	S39	S40	15.194	0.600	77.180	77.150	0.030	506.5	750	7.92	0.0
1.012	S41	S42	10.283	0.600	77.000	76.979	0.021	489.7	750	5.14	0.0
1.013	S42	S81	22.857	0.600	76.979	76.848	0.131	174.5	225	5.52	0.0
1.014	S81	S44	54.708	0.600	76.848	76.536	0.312	175.3	225	6.45	0.0
1.015	S44	S45	70.322	0.600	76.536	76.002	0.534	131.7	225	7.48	0.0
1.016	S45	S46	12.221	0.600	76.002	75.900	0.102	119.8	225	7.65	0.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
5.003	1.247	550.7	0.0	1.328	2.059	0.528	0.0
7.000	3.175	687.3	0.0	1.902	1.717	0.099	0.0
7.001	3.738	809.3	0.0	1.717	2.059	0.204	0.0
5.004	0.950	419.6	0.0	2.059	1.438	0.904	0.0
5.005	0.843	372.4	0.0	1.438	1.105	0.904	0.0
5.006	1.407	621.6	0.0	1.155	1.498	1.167	0.0
5.007	1.236	546.2	0.0	1.498	0.450	1.370	0.0
1.012	1.258	555.6	0.0	0.600	0.621	0.000	0.0
1.013	0.987	39.2	0.0	1.146	1.787	0.000	0.0
1.014	0.984	39.1	0.0	1.787	1.000	0.000	0.0
1.015	1.137	45.2	0.0	1.000	0.723	0.000	0.0
1.016	1.193	47.4	0.0	0.723	0.556	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	19.861	51.6	225	Circular	91.894	90.035	1.634	91.150	89.650	1.275
1.001	76.415	27.9	225	Circular	91.150	89.650	1.275	88.438	86.915	1.298
2.000	28.466	23.9	225	Circular	90.652	89.040	1.387	89.667	87.850	1.592
2.001	21.879	50.1	225	Circular	89.667	87.850	1.592	88.888	87.413	1.250
2.002	10.745	21.6	300	Circular	88.888	87.338	1.250	88.438	86.840	1.298
1.002	24.152	25.4	375	Circular	88.438	86.765	1.298	87.626	85.815	1.436
1.003	35.785	36.9	375	Circular	87.626	85.815	1.436	86.700	84.845	1.480
1.004	23.393	39.0	450	Circular	86.700	84.770	1.480	86.038	84.170	1.418
1.005	54.503	31.0	450	Circular	86.038	84.170	1.418	84.566	82.410	1.706
1.006	17.483	31.2	450	Circular	84.566	82.410	1.706	83.890	81.850	1.590
3.000	31.571	23.6	225	Circular	94.212	92.710	1.277	92.946	91.375	1.346
3.001	16.977	27.8	225	Circular	92.946	91.375	1.346	92.000	90.765	1.010
3.002	55.330	17.7	300	Circular	92.000	90.690	1.010	89.070	87.570	1.200
3.003	19.154	14.6	300	Circular	89.070	87.570	1.200	88.000	86.260	1.440
3.004	35.964	21.2	300	Circular	88.000	86.260	1.440	86.100	84.560	1.240

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	S1	1350	Manhole	Adoptable	S2	1350	Manhole	Adoptable
1.001	S2	1350	Manhole	Adoptable	S6	2100	Manhole	Adoptable
2.000	S3	1350	Manhole	Adoptable	S4	1350	Manhole	Adoptable
2.001	S4	1350	Manhole	Adoptable	S5	1350	Manhole	Adoptable
2.002	S5	1350	Manhole	Adoptable	S6	2100	Manhole	Adoptable
1.002	S6	2100	Manhole	Adoptable	S7	1350	Manhole	Adoptable
1.003	S7	1350	Manhole	Adoptable	S10	1350	Manhole	Adoptable
1.004	S10	1350	Manhole	Adoptable	S11	1350	Manhole	Adoptable
1.005	S11	1350	Manhole	Adoptable	S12	1350	Manhole	Adoptable
1.006	S12	1350	Manhole	Adoptable	S22	1800	Manhole	Adoptable
3.000	S13	1350	Manhole	Adoptable	S14	1350	Manhole	Adoptable
3.001	S14	1350	Manhole	Adoptable	S15	1500	Manhole	Adoptable
3.002	S15	1500	Manhole	Adoptable	S16	1350	Manhole	Adoptable
3.003	S16	1350	Manhole	Adoptable	S17	1350	Manhole	Adoptable
3.004	S17	1350	Manhole	Adoptable	S18	1350	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)
3.005	17.431	25.6	300	Circular	86.100	84.560	1.240	85.297	83.880	1.117
3.006	19.977	32.6	300	Circular	85.297	83.880	1.117	84.400	83.267	0.833
3.007	6.259	32.6	300	Circular	84.400	83.267	0.833	84.363	83.075	0.988
3.008	13.422	12.5	375	Circular	84.363	83.000	0.988	83.890	81.925	1.590
1.007	16.228	33.1	525	Circular	83.890	81.775	1.590	83.448	81.285	1.638
1.008	31.272	53.9	525	Circular	83.448	81.285	1.638	82.689	80.705	1.459
4.000	29.798	21.7	150	Circular	85.717	84.270	1.297	84.561	82.895	1.516
4.001	36.792	59.4	300	Circular	84.561	82.895	1.366	83.992	82.276	1.416
4.002	18.291	101.6	300	Circular	83.992	82.276	1.416	83.818	82.096	1.422
4.003	46.985	40.3	375	Circular	83.818	82.021	1.422	82.689	80.855	1.459
1.009	29.090	8.9	525	Circular	82.689	80.705	1.459	79.150	77.425	1.200
1.010	11.152	223.0	600	Circular	79.150	77.350	1.200	78.350	77.300	0.450
5.000	61.182	23.3	300	Circular	83.251	81.670	1.281	81.251	79.045	1.906
5.001	15.267	14.3	450	Circular	81.251	78.895	1.906	80.512	77.824	2.238
5.002	24.397	508.3	750	Circular	80.512	77.524	2.238	79.554	77.476	1.328

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
3.005	S18	1350	Manhole	Adoptable	S19	1350	Manhole	Adoptable
3.006	S19	1350	Manhole	Adoptable	S20	1500	Manhole	Adoptable
3.007	S20	1500	Manhole	Adoptable	S21	1350	Manhole	Adoptable
3.008	S21	1350	Manhole	Adoptable	S22	1800	Manhole	Adoptable
1.007	S22	1800	Manhole	Adoptable	S23	1500	Manhole	Adoptable
1.008	S23	1500	Manhole	Adoptable	S24	1500	Manhole	Adoptable
4.000	S27	1350	Manhole	Adoptable	S28	1350	Manhole	Adoptable
4.001	S28	1350	Manhole	Adoptable	S77	1350	Manhole	Adoptable
4.002	S77	1350	Manhole	Adoptable	S78	1350	Manhole	Adoptable
4.003	S78	1350	Manhole	Adoptable	S24	1500	Manhole	Adoptable
1.009	S24	1500	Manhole	Adoptable	S25	1500	Manhole	Adoptable
1.010	S25	1500	Manhole	Adoptable	S26	1500	Manhole	Adoptable
5.000	S29	1350	Manhole	Adoptable	S30	1350	Manhole	Adoptable
5.001	S30	1350	Manhole	Adoptable	S31	1800	Manhole	Adoptable
5.002	S31	1800	Manhole	Adoptable	S34	1800	Manhole	Adoptable

Pipeline Schedule

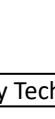
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
6.000	16.817	494.6	750	Circular	79.726	77.551	1.425	79.581	77.517	1.314
6.001	20.700	504.9	750	Circular	79.581	77.517	1.314	79.554	77.476	1.328
5.003	39.364	498.3	750	Circular	79.554	77.476	1.328	80.206	77.397	2.059
7.000	30.054	49.9	525	Circular	82.262	79.835	1.902	81.475	79.233	1.717
7.001	58.089	36.1	525	Circular	81.475	79.233	1.717	80.206	77.622	2.059
5.004	28.157	853.2	750	Circular	80.206	77.397	2.059	79.552	77.364	1.438
5.005	24.837	1079.9	750	Circular	79.552	77.364	1.438	79.196	77.341	1.105
5.006	43.513	392.0	750	Circular	79.196	77.291	1.155	79.428	77.180	1.498
5.007	15.194	506.5	750	Circular	79.428	77.180	1.498	78.350	77.150	0.450
1.012	10.283	489.7	750	Circular	78.350	77.000	0.600	78.350	76.979	0.621
1.013	22.857	174.5	225	Circular	78.350	76.979	1.146	78.860	76.848	1.787
1.014	54.708	175.3	225	Circular	78.860	76.848	1.787	77.761	76.536	1.000
1.015	70.322	131.7	225	Circular	77.761	76.536	1.000	76.950	76.002	0.723
1.016	12.221	119.8	225	Circular	76.950	76.002	0.723	76.681	75.900	0.556

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
6.000	S32	1800	Manhole	Adoptable	S33	1800	Manhole	Adoptable
6.001	S33	1800	Manhole	Adoptable	S34	1800	Manhole	Adoptable
5.003	S34	1800	Manhole	Adoptable	S37	1800	Manhole	Adoptable
7.000	S35	1500	Manhole	Adoptable	S36	1500	Manhole	Adoptable
7.001	S36	1500	Manhole	Adoptable	S37	1800	Manhole	Adoptable
5.004	S37	1800	Manhole	Adoptable	S79	1800	Manhole	Adoptable
5.005	S79	1800	Manhole	Adoptable	S38	1800	Manhole	Adoptable
5.006	S38	1800	Manhole	Adoptable	S39	2100	Manhole	Adoptable
5.007	S39	2100	Manhole	Adoptable	S40	1500	Manhole	Adoptable
1.012	S41	1500	Manhole	Adoptable	S42	3000	Manhole	Adoptable
1.013	S42	3000	Manhole	Adoptable	S81	1200	Manhole	Adoptable
1.014	S81	1200	Manhole	Adoptable	S44	1200	Manhole	Adoptable
1.015	S44	1200	Manhole	Adoptable	S45	1200	Manhole	Adoptable
1.016	S45	1200	Manhole	Adoptable	S46	1500	Manhole	Adoptable

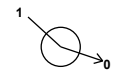
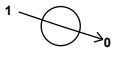
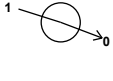
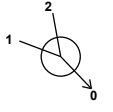
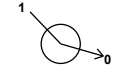
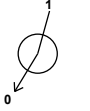
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S1	450928.749	305356.698	91.894	1.859	1350		0	1.000	90.035	225
S2	450946.993	305364.548	91.150	1.500	1350		1	1.000	89.650	225
							0	1.001	89.650	225
S3	451010.554	305422.616	90.652	1.612	1350		0	2.000	89.040	225
S4	451011.895	305394.182	89.667	1.817	1350		1	2.000	87.850	225
							0	2.001	87.850	225
S5	451013.324	305372.349	88.888	1.550	1350		1	2.001	87.413	225
							0	2.002	87.338	300
S6	451023.312	305368.388	88.438	1.673	2100		1	2.002	86.840	300
							2	1.001	86.915	225
							0	1.002	86.765	375
S7	451024.927	305344.290	87.626	1.811	1350		1	1.002	85.815	375
							0	1.003	85.815	375
S10	451015.126	305309.874	86.700	1.930	1350		1	1.003	84.845	375
							0	1.004	84.770	450

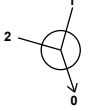
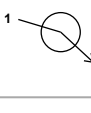
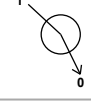
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S11	451008.003	305287.592	86.038	1.868	1350	 1	1.004	84.170	450
S12	450992.540	305235.329	84.566	2.156	1350	 1	1.005	84.170	450
S13	450885.597	305389.463	94.212	1.502	1350	 0	1.006	82.410	450
S14	450902.001	305362.489	92.946	1.571	1350	 1	3.000	92.710	225
S15	450907.515	305346.432	92.000	1.310	1500	 1	3.001	91.375	225
S16	450927.371	305294.787	89.070	1.500	1350	 1	3.002	90.765	225
S17	450931.558	305276.097	88.000	1.740	1350	 1	3.002	90.690	300
S18	450945.349	305242.882	86.100	1.540	1350	 1	3.003	87.570	300
						 0	3.004	86.260	300
						 0	3.005	84.560	300

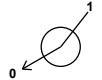
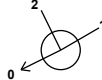
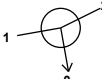
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S19	450958.222	305231.130	85.297	1.417	1350		1	3.005	83.880	300
							0	3.006	83.880	300
S20	450977.158	305224.764	84.400	1.133	1500		1	3.006	83.267	300
							0	3.007	83.267	300
S21	450983.126	305222.876	84.363	1.363	1350		1	3.007	83.075	300
							0	3.008	83.000	375
S22	450995.680	305218.130	83.890	2.115	1800		1	3.008	81.925	375
							2	1.006	81.850	450
S23	451006.900	305206.405	83.448	2.163	1500		0	1.007	81.775	525
							1	1.007	81.285	525
S27	451040.479	305302.873	85.717	1.447	1350		0	4.000	84.270	150
							1	4.000	82.895	150
S28	451068.958	305294.106	84.561	1.666	1350		0	4.001	82.895	300
							1	4.001	82.276	300
S77	451059.137	305258.649	83.992	1.716	1350		0	4.002	82.276	300

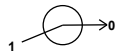
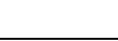
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S78	451049.623	305243.026	83.818	1.797	1350	 1	4.002	82.096	300
S24	451036.959	305197.780	82.689	1.984	1500	 1	4.003	82.021	375
						2	1.008	80.705	525
						0	1.009	80.705	525
S25	451046.119	305170.170	79.150	1.800	1500	 1	1.009	77.425	525
S26	451050.281	305159.824	78.350	1.295	1500	 1	1.010	77.350	600
						0	1.010	77.300	600
S29	451099.480	305285.005	83.251	1.581	1350				
S30	451158.093	305267.460	81.251	2.356	1350	0	5.000	81.670	300
						 1	5.000	79.045	300
S31	451169.295	305257.088	80.512	2.988	1800	0	5.001	78.895	450
						 1	5.001	77.824	450
S32	451208.330	305258.808	79.726	2.175	1800	0	5.002	77.524	750
						 0	6.000	77.551	750

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S33	451197.956	305245.573	79.581	2.064	1800		1	6.000	77.517	750
							0	6.001	77.517	750
S34	451180.049	305235.189	79.554	2.078	1800		1	6.001	77.476	750
							2	5.002	77.476	750
							0	5.003	77.476	750
S35	451057.961	305202.450	82.262	2.427	1500					
							0	7.000	79.835	525
S36	451087.567	305207.620	81.475	2.242	1500		1	7.000	79.233	525
							0	7.001	79.233	525
S37	451144.770	305217.725	80.206	2.809	1800		1	7.001	77.622	525
							2	5.003	77.397	750
							0	5.004	77.397	750
S79	451149.716	305190.006	79.552	2.188	1800		1	5.004	77.364	750
							0	5.005	77.364	750
S38	451154.394	305165.614	79.196	1.905	1800		1	5.005	77.341	750
							0	5.006	77.291	750
S39	451111.741	305157.005	79.428	2.248	2100		1	5.006	77.180	750
							0	5.007	77.180	750

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S40	451111.638	305141.811	78.350	1.295	1500	 1	5.007	77.150	750
S41	451059.176	305117.934	78.350	1.350	1500	 0	1.012	77.000	750
S42	451061.564	305107.932	78.350	1.371	3000	 1	1.012	76.979	750
S81	451084.181	305111.241	78.860	2.012	1200	 0	1.013	76.979	225
S44	451136.543	305127.088	77.761	1.225	1200	 1	1.014	76.848	225
S45	451201.546	305153.919	76.950	0.948	1200	 0	1.015	76.848	225
S46	451213.767	305154.012	76.681	0.781	1500	 1	1.015	76.979	225
						 0	1.016	76.536	225
						 1	1.016	76.002	225
						 1	1.016	75.900	225

Simulation Settings

Rainfall Methodology	FSR	Summer CV	0.750	Additional Storage (m ³ /ha)	25.0
Rainfall Events	Singular	Winter CV	0.840	Starting Level (m)	
FSR Region	England and Wales	Analysis Speed	Normal	Check Discharge Rate(s)	x
M5-60 (mm)	20.000	Skip Steady State	x	Check Discharge Volume	x
Ratio-R	0.400	Drain Down Time (mins)	10080		

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

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

Node S42 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	76.979	Product Number	CTL-SHE-0182-1630-0950-1630
Design Depth (m)	0.950	Min Outlet Diameter (m)	0.225
Design Flow (l/s)	16.3	Min Node Diameter (mm)	1500

Node S41 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	55.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	77.000	Main Channel Slope (1:X)	1000.0
Safety Factor	2.0	Time to half empty (mins)	975	Main Channel n	0.040

Inlets

S40 | S26

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)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	1813.0	0.0	0.300	2054.6	0.0	0.600	2305.9	0.0	0.900	2565.3	0.0	1.200	2833.0	0.0
0.100	1891.6	0.0	0.400	2137.4	0.0	0.700	2391.5	0.0	1.000	2653.6	0.0	1.300	3241.5	0.0
0.200	1972.6	0.0	0.500	2221.2	0.0	0.800	2477.9	0.0	1.100	2742.8	0.0	1.350	3621.8	0.0

Node S20 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	83.267
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)	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)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	0.0	0.0	0.100	2.1	0.0	0.200	6.4	0.0	0.300	12.9	0.0	0.400	21.4	0.0	0.486	30.4	0.0

Other (defaults)

Entry Loss (manhole)	0.250	Entry Loss (junction)	0.000	Apply Recommended Losses	x
Exit Loss (manhole)	0.250	Exit Loss (junction)	0.000	Flood Risk (m)	0.300

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S1	10	90.063	0.028	2.5	0.0470	0.0000	OK
15 minute winter	S2	11	89.701	0.051	11.5	0.1283	0.0000	OK
15 minute winter	S3	10	89.101	0.061	17.7	0.2074	0.0000	OK
15 minute winter	S4	10	87.948	0.098	27.2	0.2331	0.0000	OK
15 minute winter	S5	10	87.426	0.088	38.4	0.2461	0.0000	OK
15 minute winter	S6	11	86.861	0.096	57.5	0.4203	0.0000	OK
15 minute winter	S7	11	85.939	0.124	72.0	0.3588	0.0000	OK
15 minute winter	S10	11	84.900	0.130	84.2	0.3335	0.0000	OK
15 minute winter	S11	11	84.290	0.120	93.8	0.2857	0.0000	OK
15 minute winter	S12	11	82.556	0.146	110.8	0.4227	0.0000	OK
15 minute winter	S13	10	92.748	0.038	6.7	0.0840	0.0000	OK
15 minute winter	S14	10	91.446	0.071	20.0	0.2091	0.0000	OK
15 minute winter	S15	10	90.756	0.066	29.2	0.2043	0.0000	OK
15 minute winter	S16	11	87.643	0.073	37.0	0.1745	0.0000	OK
15 minute winter	S17	11	86.342	0.082	40.2	0.1472	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	S1	1.000	S2	2.4	0.526	0.034	0.0950	
15 minute winter	S2	1.001	S6	11.1	1.652	0.113	0.5148	
15 minute winter	S3	2.000	S4	17.5	1.391	0.164	0.3608	
15 minute winter	S4	2.001	S5	26.6	1.663	0.360	0.3502	
15 minute winter	S5	2.002	S6	38.1	2.364	0.158	0.1735	
15 minute winter	S6	1.002	S7	57.8	2.159	0.145	0.6486	
15 minute winter	S7	1.003	S10	72.6	2.371	0.220	1.0961	
15 minute winter	S10	1.004	S11	84.5	2.350	0.163	0.8412	
15 minute winter	S11	1.005	S12	93.9	2.401	0.161	2.1365	
15 minute winter	S12	1.006	S22	110.7	2.679	0.191	0.7234	
15 minute winter	S13	3.000	S14	6.6	0.895	0.061	0.2382	
15 minute winter	S14	3.001	S15	19.6	1.889	0.198	0.1759	
15 minute winter	S15	3.002	S16	28.9	2.337	0.109	0.6833	
15 minute winter	S16	3.003	S17	36.9	2.562	0.126	0.2757	
15 minute winter	S17	3.004	S18	40.4	2.129	0.166	0.6843	

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S18	11	84.667	0.107	54.7	0.3394	0.0000	OK
15 minute winter	S19	11	83.997	0.117	58.6	0.2213	0.0000	OK
15 minute winter	S20	11	83.402	0.135	58.8	0.4437	0.0000	OK
15 minute winter	S21	11	83.089	0.089	60.9	0.1525	0.0000	OK
15 minute winter	S22	11	81.952	0.177	173.9	0.4867	0.0000	OK
15 minute winter	S23	11	81.493	0.208	177.7	0.4358	0.0000	OK
15 minute winter	S27	10	84.330	0.060	12.9	0.1794	0.0000	OK
15 minute winter	S28	10	82.978	0.083	24.8	0.2252	0.0000	OK
15 minute winter	S77	11	82.377	0.101	24.4	0.1443	0.0000	OK
15 minute winter	S78	11	82.106	0.085	34.5	0.2101	0.0000	OK
15 minute winter	S24	11	80.833	0.128	222.7	0.3610	0.0000	OK
15 minute winter	S25	11	77.677	0.327	222.2	0.5772	0.0000	OK
15 minute winter	S26	12	77.420	0.365	220.9	0.6453	0.0000	OK
15 minute winter	S29	10	81.727	0.057	18.8	0.2030	0.0000	OK
15 minute winter	S30	10	78.958	0.063	34.2	0.1678	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	S18	3.005	S19	55.1	2.304	0.250	0.4167	
15 minute winter	S19	3.006	S20	58.8	2.095	0.301	0.5611	
15 minute winter	S20	3.007	S21	58.8	2.151	0.301	0.1713	
15 minute winter	S21	3.008	S22	60.9	3.236	0.107	0.2526	
15 minute winter	S22	1.007	S23	173.8	2.426	0.206	1.1639	
15 minute winter	S23	1.008	S24	177.1	2.973	0.268	1.8827	
15 minute winter	S27	4.000	S28	12.7	1.546	0.331	0.2455	
15 minute winter	S28	4.001	S77	24.4	1.355	0.169	0.6702	
15 minute winter	S77	4.002	S78	24.5	1.225	0.222	0.3653	
15 minute winter	S78	4.003	S24	34.6	1.886	0.109	0.8611	
15 minute winter	S24	1.009	S25	222.2	3.341	0.136	2.0810	
15 minute winter	S25	1.010	S26	220.9	1.533	0.480	1.6102	
15 minute winter	S26	Flow through Pond	S41	345.5	0.153	0.013	186.5065	
15 minute winter	S29	5.000	S30	18.2	1.962	0.079	0.5674	
15 minute winter	S30	5.001	S31	34.0	2.594	0.040	0.2000	

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S31	12	77.691	0.167	46.1	0.5434	0.0000	OK
15 minute winter	S32	12	77.683	0.132	8.6	0.4275	0.0000	OK
15 minute winter	S33	12	77.683	0.166	9.7	0.4783	0.0000	OK
15 minute winter	S34	12	77.680	0.204	65.9	0.7826	0.0000	OK
15 minute winter	S35	10	79.886	0.051	14.0	0.1422	0.0000	OK
15 minute winter	S36	11	79.300	0.067	28.6	0.1957	0.0000	OK
15 minute winter	S37	12	77.664	0.267	108.9	1.0871	0.0000	OK
15 minute winter	S79	12	77.616	0.252	107.1	0.6416	0.0000	OK
15 minute winter	S38	12	77.544	0.253	135.6	1.5133	0.0000	OK
15 minute winter	S39	12	77.457	0.277	156.7	1.5868	0.0000	OK
15 minute winter	S40	13	77.356	0.301	154.9	0.5311	0.0000	OK
600 minute winter	S41	450	77.244	0.244	26.8	0.4305	0.0000	OK
600 minute winter	S42	450	77.243	0.264	13.8	1.8683	0.0000	SURCHARGED
600 minute winter	S81	450	76.942	0.094	13.8	0.1064	0.0000	OK
600 minute winter	S44	450	76.621	0.085	13.8	0.0965	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	S31	5.002	S34	44.4	0.626	0.081	2.0698	
15 minute winter	S32	6.000	S33	6.7	0.329	0.012	1.0444	
15 minute winter	S33	6.001	S34	12.1	0.223	0.022	1.7532	
15 minute winter	S34	5.003	S37	61.8	0.532	0.112	4.6757	
15 minute winter	S35	7.000	S36	13.8	1.055	0.020	0.3965	
15 minute winter	S36	7.001	S37	27.9	1.776	0.034	0.9123	
15 minute winter	S37	5.004	S79	107.1	0.793	0.255	3.8063	
15 minute winter	S79	5.005	S38	106.6	0.964	0.286	2.8015	
15 minute winter	S38	5.006	S39	134.2	0.971	0.216	6.0481	
15 minute winter	S39	5.007	S40	154.9	1.163	0.284	2.0289	
15 minute winter	S40	Flow through Pond	S41	345.5	0.153	0.013	186.5065	
600 minute winter	S41	1.012	S42	13.8	0.146	0.025	1.3489	
600 minute winter	S42	1.013	S81	13.8	0.871	0.352	0.3623	
600 minute winter	S81	1.014	S44	13.8	0.936	0.353	0.8069	
600 minute winter	S44	1.015	S45	13.8	0.979	0.305	0.9914	

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	S45	450	76.090	0.088	13.8	0.0997	0.0000	OK
600 minute winter	S46	450	75.982	0.082	13.8	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)
600 minute winter	S45	1.016	S46	13.8	1.001	0.291	0.1686	634.0

Results for 30 year Critical Storm Duration. Lowest mass balance: 98.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S1	10	90.079	0.044	6.1	0.0728	0.0000	OK
15 minute winter	S2	11	89.732	0.082	28.3	0.2047	0.0000	OK
15 minute winter	S3	10	89.139	0.099	43.4	0.3339	0.0000	OK
15 minute winter	S4	10	88.033	0.183	66.8	0.4340	0.0000	OK
15 minute winter	S5	10	87.489	0.151	94.3	0.4215	0.0000	OK
15 minute winter	S6	10	86.924	0.159	142.1	0.6987	0.0000	OK
15 minute winter	S7	11	86.025	0.210	178.0	0.6091	0.0000	OK
15 minute winter	S10	11	84.989	0.219	206.9	0.5621	0.0000	OK
15 minute winter	S11	11	84.366	0.196	230.5	0.4638	0.0000	OK
15 minute winter	S12	11	82.661	0.251	273.1	0.7286	0.0000	OK
15 minute winter	S13	10	92.769	0.059	16.5	0.1314	0.0000	OK
15 minute winter	S14	10	91.495	0.120	49.2	0.3546	0.0000	OK
15 minute winter	S15	10	90.796	0.106	72.0	0.3249	0.0000	OK
15 minute winter	S16	10	87.690	0.120	91.5	0.2880	0.0000	OK
15 minute winter	S17	11	86.392	0.132	99.2	0.2367	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	S1	1.000	S2	6.0	0.669	0.083	0.1818	
15 minute winter	S2	1.001	S6	27.4	2.128	0.278	0.9849	
15 minute winter	S3	2.000	S4	43.0	1.668	0.403	0.7301	
15 minute winter	S4	2.001	S5	65.2	2.000	0.885	0.7134	
15 minute winter	S5	2.002	S6	93.6	2.918	0.390	0.3456	
15 minute winter	S6	1.002	S7	141.7	2.636	0.356	1.2990	
15 minute winter	S7	1.003	S10	178.4	2.957	0.540	2.1583	
15 minute winter	S10	1.004	S11	207.6	2.912	0.400	1.6679	
15 minute winter	S11	1.005	S12	231.8	2.955	0.398	4.2759	
15 minute winter	S12	1.006	S22	274.3	3.042	0.473	1.5806	
15 minute winter	S13	3.000	S14	16.3	1.106	0.152	0.4719	
15 minute winter	S14	3.001	S15	48.4	2.362	0.489	0.3476	
15 minute winter	S15	3.002	S16	71.4	2.948	0.269	1.3409	
15 minute winter	S16	3.003	S17	90.5	3.227	0.310	0.5373	
15 minute winter	S17	3.004	S18	98.9	2.600	0.408	1.3669	

Results for 30 year Critical Storm Duration. Lowest mass balance: 98.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S18	11	84.747	0.187	135.6	0.5948	0.0000	OK
15 minute winter	S19	11	84.093	0.213	143.8	0.4040	0.0000	OK
15 minute winter	S20	11	83.524	0.257	144.7	1.4591	0.0000	OK
15 minute winter	S21	11	83.140	0.140	149.4	0.2408	0.0000	OK
15 minute winter	S22	11	82.099	0.324	429.4	0.8912	0.0000	OK
15 minute winter	S23	11	81.652	0.367	438.7	0.7694	0.0000	OK
15 minute winter	S27	10	84.373	0.103	31.7	0.3102	0.0000	OK
15 minute winter	S28	10	83.032	0.137	60.9	0.3713	0.0000	OK
15 minute winter	S77	11	82.448	0.172	60.2	0.2454	0.0000	OK
15 minute winter	S78	11	82.158	0.137	84.8	0.3391	0.0000	OK
15 minute winter	S24	11	80.911	0.206	550.9	0.5777	0.0000	OK
15 minute winter	S25	11	77.990	0.640	550.5	1.1302	0.0000	SURCHARGED
15 minute winter	S26	11	77.728	0.673	549.3	1.1898	0.0000	OK
15 minute winter	S29	10	81.761	0.091	46.1	0.3230	0.0000	OK
15 minute winter	S30	10	78.997	0.102	84.7	0.2702	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	S18	3.005	S19	135.3	2.709	0.614	0.8693	
15 minute winter	S19	3.006	S20	144.7	2.464	0.741	1.1782	
15 minute winter	S20	3.007	S21	144.3	2.563	0.739	0.3482	
15 minute winter	S21	3.008	S22	149.3	3.776	0.262	0.5874	
15 minute winter	S22	1.007	S23	429.5	2.850	0.509	2.4436	
15 minute winter	S23	1.008	S24	438.4	3.647	0.663	3.7473	
15 minute winter	S27	4.000	S28	31.3	2.075	0.815	0.4428	
15 minute winter	S28	4.001	S77	60.2	1.664	0.417	1.3315	
15 minute winter	S77	4.002	S78	60.2	1.530	0.546	0.7199	
15 minute winter	S78	4.003	S24	85.4	2.415	0.270	1.6625	
15 minute winter	S24	1.009	S25	550.5	3.498	0.337	4.2814	
15 minute winter	S25	1.010	S26	549.3	2.003	1.195	2.9284	
15 minute winter	S26	Flow through Pond	S41	888.1	0.222	0.032	458.3527	
15 minute winter	S29	5.000	S30	45.1	2.535	0.195	1.0888	
15 minute winter	S30	5.001	S31	84.2	3.313	0.098	0.3882	

Results for 30 year Critical Storm Duration. Lowest mass balance: 98.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S31	12	77.875	0.351	113.7	1.1441	0.0000	OK
15 minute winter	S32	12	77.874	0.323	21.0	1.0492	0.0000	OK
15 minute winter	S33	12	77.871	0.354	24.4	1.0196	0.0000	OK
15 minute winter	S34	12	77.872	0.395	160.5	1.5140	0.0000	OK
15 minute winter	S35	10	79.913	0.078	34.4	0.2183	0.0000	OK
15 minute winter	S36	10	79.335	0.102	70.3	0.2997	0.0000	OK
15 minute winter	S37	12	77.857	0.460	269.6	1.8707	0.0000	OK
15 minute winter	S79	12	77.810	0.446	255.1	1.1344	0.0000	OK
15 minute winter	S38	12	77.750	0.459	326.5	2.7505	0.0000	OK
15 minute winter	S39	12	77.680	0.500	381.3	2.8606	0.0000	OK
15 minute winter	S40	12	77.600	0.545	379.4	0.9630	0.0000	OK
480 minute winter	S41	456	77.513	0.513	65.1	0.9063	0.0000	OK
480 minute winter	S42	456	77.513	0.534	16.7	3.7738	0.0000	SURCHARGED
1440 minute summer	S81	840	76.951	0.103	16.3	0.1168	0.0000	OK
480 minute winter	S44	736	76.629	0.093	16.3	0.1057	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	S31	5.002	S34	104.5	0.690	0.192	5.3363	
15 minute winter	S32	6.000	S33	16.6	0.362	0.030	3.2478	
15 minute winter	S33	6.001	S34	30.5	0.257	0.056	4.5542	
15 minute winter	S34	5.003	S37	148.6	0.582	0.270	10.2005	
15 minute winter	S35	7.000	S36	34.0	1.384	0.050	0.7432	
15 minute winter	S36	7.001	S37	69.2	2.040	0.085	3.4773	
15 minute winter	S37	5.004	S79	255.1	0.934	0.608	7.8209	
15 minute winter	S79	5.005	S38	255.2	1.020	0.685	6.4344	
15 minute winter	S38	5.006	S39	326.2	1.098	0.525	12.9260	
15 minute winter	S39	5.007	S40	379.4	1.307	0.695	4.4636	
15 minute winter	S40	Flow through Pond	S41	888.1	0.222	0.032	458.3527	
480 minute winter	S41	1.012	S42	16.7	0.209	0.030	3.3737	
480 minute winter	S42	1.013	S81	16.3	0.907	0.415	0.4105	
1440 minute summer	S81	1.014	S44	16.3	0.977	0.416	0.9122	
480 minute winter	S44	1.015	S45	16.3	1.020	0.360	1.1228	

Results for 30 year Critical Storm Duration. Lowest mass balance: 98.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	S45	736	76.099	0.097	16.3	0.1097	0.0000	OK
480 minute winter	S46	736	75.990	0.090	16.3	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)
480 minute winter	S45	1.016	S46	16.3	1.044	0.343	0.1907	1309.1

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 98.78%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S1	10	90.094	0.059	11.1	0.0982	0.0000	OK
15 minute winter	S2	10	89.765	0.115	51.4	0.2877	0.0000	OK
15 minute winter	S3	11	89.404	0.364	78.8	1.2311	0.0000	SURCHARGED
15 minute winter	S4	11	88.783	0.933	112.4	2.2176	0.0000	SURCHARGED
15 minute winter	S5	11	87.558	0.220	159.4	0.6156	0.0000	OK
15 minute winter	S6	10	86.994	0.229	246.5	1.0046	0.0000	OK
15 minute winter	S7	11	86.151	0.336	311.3	0.9749	0.0000	OK
15 minute winter	S10	11	85.094	0.324	364.1	0.8306	0.0000	OK
15 minute winter	S11	11	84.460	0.290	406.6	0.6868	0.0000	OK
15 minute winter	S12	12	83.176	0.766	476.9	2.2237	0.0000	SURCHARGED
15 minute winter	S13	10	92.791	0.081	30.0	0.1792	0.0000	OK
15 minute winter	S14	10	91.566	0.191	89.5	0.5631	0.0000	OK
15 minute winter	S15	10	90.838	0.148	130.5	0.4555	0.0000	OK
15 minute winter	S16	10	87.740	0.170	165.7	0.4076	0.0000	OK
15 minute winter	S17	12	86.846	0.586	181.4	1.0492	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	S1	1.000	S2	11.0	0.777	0.151	0.2842	
15 minute winter	S2	1.001	S6	49.9	2.485	0.505	1.5352	
15 minute winter	S3	2.000	S4	69.9	1.850	0.655	1.1321	
15 minute winter	S4	2.001	S5	108.9	2.740	1.479	0.8614	
15 minute winter	S5	2.002	S6	159.2	3.223	0.663	0.5291	
15 minute winter	S6	1.002	S7	246.5	2.807	0.619	2.1038	
15 minute winter	S7	1.003	S10	312.2	3.234	0.945	3.4624	
15 minute winter	S10	1.004	S11	365.0	3.198	0.703	2.6885	
15 minute winter	S11	1.005	S12	401.7	3.084	0.690	7.2551	
15 minute winter	S12	1.006	S22	454.7	3.051	0.784	2.7701	
15 minute winter	S13	3.000	S14	29.7	1.206	0.277	0.7691	
15 minute winter	S14	3.001	S15	87.4	2.622	0.883	0.5664	
15 minute winter	S15	3.002	S16	129.3	3.436	0.488	2.0971	
15 minute winter	S16	3.003	S17	165.7	3.587	0.567	1.0621	
15 minute winter	S17	3.004	S18	171.6	2.661	0.707	2.5326	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 98.78%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S18	12	85.904	1.344	239.3	4.2767	0.0000	FLOOD RISK
15 minute winter	S19	12	84.965	1.085	231.3	2.0545	0.0000	SURCHARGED
15 minute winter	S20	13	83.835	0.568	229.8	8.9401	0.0000	SURCHARGED
15 minute winter	S21	12	83.194	0.194	218.2	0.3328	0.0000	OK
15 minute winter	S22	12	82.621	0.846	674.1	2.3262	0.0000	SURCHARGED
15 minute winter	S23	12	82.059	0.774	687.8	1.6220	0.0000	SURCHARGED
15 minute winter	S27	12	85.339	1.069	57.5	3.2231	0.0000	SURCHARGED
15 minute winter	S28	10	83.078	0.183	95.5	0.4977	0.0000	OK
15 minute winter	S77	11	82.518	0.242	95.3	0.3460	0.0000	OK
15 minute winter	S78	11	82.204	0.183	140.0	0.4526	0.0000	OK
15 minute winter	S24	12	81.000	0.295	860.6	0.8300	0.0000	OK
15 minute winter	S25	12	78.551	1.201	862.0	2.1224	0.0000	SURCHARGED
15 minute winter	S26	12	78.138	1.083	862.8	1.9143	0.0000	OK
15 minute winter	S29	10	81.797	0.127	83.8	0.4484	0.0000	OK
15 minute winter	S30	9	79.031	0.136	154.1	0.3590	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	S18	3.005	S19	217.5	3.089	0.987	1.2275	
15 minute winter	S19	3.006	S20	229.8	3.264	1.177	1.4068	
15 minute winter	S20	3.007	S21	212.6	3.019	1.088	0.4407	
15 minute winter	S21	3.008	S22	219.6	4.212	0.386	1.1255	
15 minute winter	S22	1.007	S23	673.8	3.119	0.798	3.5058	
15 minute winter	S23	1.008	S24	687.0	3.738	1.039	5.3337	
15 minute winter	S27	4.000	S28	45.5	2.584	1.185	0.5246	
15 minute winter	S28	4.001	S77	95.3	1.800	0.660	1.9477	
15 minute winter	S77	4.002	S78	95.5	1.669	0.866	1.0438	
15 minute winter	S78	4.003	S24	140.5	2.735	0.445	2.4141	
15 minute winter	S24	1.009	S25	862.0	4.490	0.527	4.9615	
15 minute winter	S25	1.010	S26	862.8	3.063	1.876	3.1413	
15 minute winter	S26	Flow through Pond	S41	1247.7	0.262	0.046	836.4182	
15 minute winter	S29	5.000	S30	82.2	2.976	0.356	1.6913	
15 minute winter	S30	5.001	S31	154.3	3.628	0.180	1.4351	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 98.78%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S31	12	78.254	0.730	208.1	2.3797	0.0000	OK
15 minute winter	S32	12	78.259	0.708	38.2	2.2980	0.0000	OK
15 minute winter	S33	12	78.259	0.742	44.0	2.1369	0.0000	OK
15 minute winter	S34	12	78.243	0.767	271.2	2.9356	0.0000	SURCHARGED
15 minute winter	S35	10	79.940	0.105	62.4	0.2943	0.0000	OK
15 minute winter	S36	10	79.371	0.138	127.8	0.4043	0.0000	OK
15 minute winter	S37	12	78.205	0.808	449.5	3.2868	0.0000	SURCHARGED
15 minute winter	S79	12	78.140	0.776	434.2	1.9751	0.0000	SURCHARGED
15 minute winter	S38	12	78.083	0.792	544.4	4.7435	0.0000	SURCHARGED
15 minute winter	S39	12	77.964	0.784	642.0	4.4855	0.0000	SURCHARGED
960 minute winter	S40	870	77.922	0.867	80.9	1.5327	0.0000	OK
720 minute winter	S41	705	77.919	0.919	80.2	1.6236	0.0000	SURCHARGED
720 minute winter	S42	705	77.919	0.940	16.9	6.6434	0.0000	SURCHARGED
30 minute summer	S81	293	76.951	0.103	16.3	0.1168	0.0000	OK
15 minute winter	S44	16	76.630	0.094	16.3	0.1060	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	S31	5.002	S34	190.2	0.717	0.349	10.6983	
15 minute winter	S32	6.000	S33	34.0	0.392	0.062	7.3174	
15 minute winter	S33	6.001	S34	66.3	0.282	0.121	9.1039	
15 minute winter	S34	5.003	S37	271.6	0.618	0.493	17.3249	
15 minute winter	S35	7.000	S36	61.9	1.640	0.090	1.1401	
15 minute winter	S36	7.001	S37	126.1	2.093	0.156	7.4934	
15 minute winter	S37	5.004	S79	434.2	0.994	1.035	12.3925	
15 minute winter	S79	5.005	S38	440.7	1.050	1.184	10.9213	
15 minute winter	S38	5.006	S39	551.0	1.252	0.886	19.1510	
15 minute winter	S39	5.007	S40	645.3	1.467	1.182	6.6453	
960 minute winter	S40	Flow through Pond	S41	66.8	0.042	0.002	1931.1667	
720 minute winter	S41	1.012	S42	16.9	0.235	0.030	4.5258	
720 minute winter	S42	1.013	S81	16.3	0.907	0.415	0.4105	
30 minute summer	S81	1.014	S44	16.3	0.982	0.416	0.9122	
15 minute winter	S44	1.015	S45	16.3	1.070	0.361	1.1231	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 98.78%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S45	18	76.099	0.097	16.3	0.1097	0.0000	OK
15 minute winter	S46	18	75.990	0.090	16.3	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	S45	1.016	S46	16.3	1.044	0.344	0.1908	880.5