



Project					
Aldi Store, Victoria Avenue East, Moston					
Made By	Date	Checked By	Date	Rev	Contract No./Sheet number
PSS	Jun-23				9104 1

1.0 INTRODUCTION

The existing site is heavily developed and CCTV investigations have revealed the existing network of drains on the site discharge to the sewer network under Victoria Avenue East. There is an existing attenuation tank, in the form of twin large diameter pipes, close to the existing site entrance and flows are currently restricted by virtue of the outgoing pipe size.

An FRA has been prepared by Integra Consulting and this has indicated that the surface water discharge should be reduced by 50% of the existing off-site flow. A climate change allowance of 20% is also to be applied to any calculations.

The existing site has been demonstrated to discharge at 45l/s and therefore the new system has been designed to discharge at 22.5l/s.

The ground conditions on the site do not allow a infiltration system to work and the site is split by the presence of the Thirlmere Aqueduct running through the site. Drainage will need to be taken over the aqueduct and discussions with United Utilities have been undertaken to understand the limitations of working above and around the aqueduct.

Given the complexities of the site, it has been necessary to split drainage into several runs to reduce the depths of the installations and collect them together once the crossing of the aqueduct has been completed. The drainage will then pass through an oil separator before entering the re-used attenuation tank.

The whole site will have the flow restricted to 22.5l/s for all storm event up to and including the 100 year event. This is to be achieved by the introduction of a Hydrobrake flow control at the penultimate manhole which is to be re-constructed as part of the work.

Additional attenuation will be required on the project due to the significant reduction in flow and this will be in the form of geo-cellular storage tank which are sited alongside the existing twin pipe solution under the car park area. The new tank will connect to the flow control manhole with pipes at the high and low level to ensure the tank can be filled during flood conditions.

The full network is to be found in Appendix A with the full network design found within Appendix B.

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STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Storm

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

Return Period (years)	2	PIMP (%)	100
M5-60 (mm)	18.000	Add Flow / Climate Change (%)	0
Ratio R	0.357	Minimum Backdrop Height (m)	1.500
Maximum Rainfall (mm/hr)	50	Maximum Backdrop Height (m)	2.000
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	0.500
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	1.00
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	300

Designed with Level Inverts

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.000	20.101	0.073	275.4	0.028	3.00	0.0	0.600	o	150	Pipe/Conduit	
S1.001	38.172	0.360	106.0	0.023	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.002	27.543	0.130	211.9	0.037	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.003	15.667	0.080	195.8	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S2.000	14.167	0.040	354.2	0.060	3.00	0.0	0.600	o	225	Pipe/Conduit	
S2.001	19.966	0.070	285.2	0.066	0.00	0.0	0.600	o	225	Pipe/Conduit	
S2.002	27.568	0.090	306.3	0.029	0.00	0.0	0.600	o	225	Pipe/Conduit	
S2.003	14.167	0.060	236.1	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S2.004	1.500	0.010	150.0	0.026	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.004	1.500	0.010	150.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S3.000	31.961	0.390	82.0	0.084	3.00	0.0	0.600	o	225	Pipe/Conduit	
S3.001	15.575	0.050	311.5	0.017	0.00	0.0	0.600	o	225	Pipe/Conduit	
S3.002	17.167	0.050	343.3	0.023	0.00	0.0	0.600	o	225	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.000	50.00	3.56	105.073	0.028	0.0	0.0	0.0	0.60	10.6	3.8
S1.001	50.00	4.06	105.000	0.051	0.0	0.0	0.0	1.27	50.5	6.9
S1.002	50.00	4.57	104.640	0.088	0.0	0.0	0.0	0.89	35.6	11.9
S1.003	50.00	4.85	104.510	0.088	0.0	0.0	0.0	0.93	37.0	11.9
S2.000	50.00	3.34	104.700	0.060	0.0	0.0	0.0	0.69	27.4	8.1
S2.001	50.00	3.78	104.660	0.126	0.0	0.0	0.0	0.77	30.6	17.1
S2.002	50.00	4.39	104.590	0.155	0.0	0.0	0.0	0.74	29.5	21.0
S2.003	50.00	4.67	104.500	0.155	0.0	0.0	0.0	0.85	33.7	21.0
S2.004	50.00	4.70	104.440	0.181	0.0	0.0	0.0	1.07	42.4	24.5
S1.004	50.00	4.87	104.430	0.269	0.0	0.0	0.0	1.28	90.6	36.4
S3.000	50.00	3.37	104.910	0.084	0.0	0.0	0.0	1.45	57.5	11.3
S3.001	50.00	3.72	104.520	0.101	0.0	0.0	0.0	0.74	29.2	13.7
S3.002	50.00	4.13	104.470	0.124	0.0	0.0	0.0	0.70	27.8	16.7

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Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.005	1.625	0.160	10.2	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
S4.000	14.167	0.050	283.3	0.095	3.00	0.0	0.600	o	225	Pipe/Conduit	
S4.001	21.477	0.070	306.8	0.014	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.006	3.055	0.240	12.7	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
S1.007	3.203	0.060	53.4	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
S1.008	3.896	2.090	1.9	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
S1.009	5.981	0.270	22.2	0.000	0.00	0.0	0.600	oo	-2	Pipe/Conduit	
S5.000	11.317	0.080	141.5	0.005	3.00	0.0	0.600	o	150	Pipe/Conduit	
S5.001	4.168	0.811	5.1	0.045	0.00	0.0	0.600	o	150	Pipe/Conduit	
S6.000	25.176	0.351	71.7	0.196	3.00	0.0	0.600	o	300	Pipe/Conduit	
S5.002	15.212	0.090	169.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S5.003	10.891	1.659	6.6	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S1.010	8.117	0.200	40.6	0.000	0.00	0.0	0.600	oo	-2	Pipe/Conduit	
S1.011	2.839	0.049	57.9	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.005	50.00	4.88	104.420	0.393	0.0	0.0	0.0	5.71	631.0	53.2
S4.000	50.00	3.31	104.380	0.095	0.0	0.0	0.0	0.77	30.7	12.9
S4.001	50.00	3.79	104.330	0.109	0.0	0.0	0.0	0.74	29.5	14.8
S1.006	50.00	4.89	104.260	0.502	0.0	0.0	0.0	5.10	563.5	68.0
S1.007	50.00	4.91	104.020	0.502	0.0	0.0	0.0	2.48	274.4	68.0
S1.008	50.00	4.91	103.960	0.502	0.0	0.0	0.0	13.35	1474.8	68.0
S1.009	50.00	4.92	101.870	0.502	0.0	0.0	0.0	10.19	51876.7	68.0
S5.000	50.00	3.22	104.240	0.005	0.0	0.0	0.0	0.84	14.9	0.6
S5.001	50.00	3.24	104.160	0.050	0.0	0.0	0.0	4.47	79.1	6.7
S6.000	50.00	3.23	103.700	0.196	0.0	0.0	0.0	1.86	131.4	26.5
S5.002	50.00	3.45	103.349	0.245	0.0	0.0	0.0	1.21	85.3	33.2
S5.003	50.00	3.48	103.259	0.245	0.0	0.0	0.0	6.17	436.4	33.2
S1.010	50.00	4.94	101.600	0.747	0.0	0.0	0.0	7.53	38308.5	101.2
S1.011	50.00	4.96	101.400	0.747	0.0	0.0	0.0	2.07	146.3	101.2

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Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Back (mm)
S1	105.653	0.580	Open Manhole	1200	S1.000	105.073	150				
S2	105.812	0.812	Open Manhole	1200	S1.001	105.000	225	S1.000	105.000	150	
S3	105.230	0.590	Open Manhole	1200	S1.002	104.640	225	S1.001	104.640	225	
S4	105.090	0.580	Open Manhole	1200	S1.003	104.510	225	S1.002	104.510	225	
S5	105.286	0.586	Open Manhole	1350	S2.000	104.700	225				
S6	105.419	0.759	Open Manhole	1200	S2.001	104.660	225	S2.000	104.660	225	
S7	105.213	0.623	Open Manhole	1200	S2.002	104.590	225	S2.001	104.590	225	
S8	105.120	0.620	Open Manhole	1200	S2.003	104.500	225	S2.002	104.500	225	
S9	105.019	0.579	Open Manhole	1200	S2.004	104.440	225	S2.003	104.440	225	
S10	105.028	0.598	Open Manhole	1200	S1.004	104.430	300	S1.003	104.430	225	
								S2.004	104.430	225	
S11	105.490	0.580	Open Manhole	1200	S3.000	104.910	225				
S12	105.313	0.793	Open Manhole	1200	S3.001	104.520	225	S3.000	104.520	225	
S13	105.061	0.591	Open Manhole	1200	S3.002	104.470	225	S3.001	104.470	225	
S14	105.036	0.616	Open Manhole	1350	S1.005	104.420	375	S1.004	104.420	300	
								S3.002	104.420	225	
S15	104.963	0.583	Open Manhole	1200	S4.000	104.380	225				
S16	104.995	0.665	Open Manhole	1200	S4.001	104.330	225	S4.000	104.330	225	
S17	105.047	0.787	Open Manhole	1350	S1.006	104.260	375	S1.005	104.260	375	
								S4.001	104.260	225	
S18	105.016	0.996	Open Manhole	1350	S1.007	104.020	375	S1.006	104.020	375	
S19	105.028	1.068	Open Manhole	1350	S1.008	103.960	375	S1.007	103.960	375	
S20	105.023	3.153	Open Manhole	1200	S1.009	101.870	-2	S1.008	101.870	375	
S21	104.990	0.750	Open Manhole	1200	S5.000	104.240	150				
S22	105.030	0.870	Open Manhole	1200	S5.001	104.160	150	S5.000	104.160	150	
SSyphonic RWP	105.050	1.350	Sealed Manhole	1200	S6.000	103.700	300				
S23	105.021	1.672	Open Manhole	1200	S5.002	103.349	300	S5.001	103.349	150	
								S6.000	103.349	300	
S24	104.936	1.677	Open Manhole	1200	S5.003	103.259	300	S5.002	103.259	300	
STank	104.949	3.349	Open Manhole	1200	S1.010	101.600	-2	S1.009	101.600	-2	
								S5.003	101.600	300	
S25	104.936	3.536	Open Manhole	1200	S1.011	101.400	300	S1.010	101.400	-2	
S	104.710	3.359	Open Manhole	0		OUTFALL		S1.011	101.351	300	

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
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S1	388183.340	403416.791	388183.340	403416.791	Required	
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S2	388203.132	403413.286	388203.132	403413.286	Required	
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Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
S3	388222.643	403380.476	388222.643	403380.476	Required	
S4	388236.734	403356.810	388236.734	403356.810	Required	
S5	388198.200	403390.905	388198.200	403390.905	Required	
S6	388210.373	403398.153	388210.373	403398.153	Required	
S7	388220.587	403380.998	388220.587	403380.998	Required	
S8	388234.690	403357.311	388234.690	403357.311	Required	
S9	388222.518	403350.063	388222.518	403350.063	Required	
S10	388223.285	403348.774	388223.285	403348.774	Required	
S11	388242.916	403402.484	388242.916	403402.484	Required	
S12	388244.969	403370.589	388244.969	403370.589	Required	
S13	388238.787	403356.293	388238.787	403356.293	Required	
S14	388224.052	403347.485	388224.052	403347.485	Required	
S15	388248.038	403334.893	388248.038	403334.893	Required	
S16	388235.865	403327.645	388235.865	403327.645	Required	
S17	388225.040	403346.194	388225.040	403346.194	Required	
S18	388222.616	403344.334	388222.616	403344.334	Required	
S19	388223.761	403341.342	388223.761	403341.342	Required	
S20	388225.310	403337.767	388225.310	403337.767	Required	

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Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
S21	388213.854	403364.763	388213.854	403364.763	Required	
S22	388219.701	403355.074	388219.701	403355.074	Required	
SSyphonic RWP	388201.840	403368.115			No Entry	
S23	388220.250	403350.941	388220.250	403350.941	Required	
S24	388213.081	403337.525	388213.081	403337.525	Required	
STank	388222.687	403332.392	388222.687	403332.392	Required	
S25	388219.128	403325.097	388219.128	403325.097	Required	
S	388217.904	403322.535			No Entry	

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PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.000	o	150	S1	105.653	105.073	0.430	Open Manhole	1200
S1.001	o	225	S2	105.812	105.000	0.587	Open Manhole	1200
S1.002	o	225	S3	105.230	104.640	0.365	Open Manhole	1200
S1.003	o	225	S4	105.090	104.510	0.355	Open Manhole	1200
S2.000	o	225	S5	105.286	104.700	0.361	Open Manhole	1350
S2.001	o	225	S6	105.419	104.660	0.534	Open Manhole	1200
S2.002	o	225	S7	105.213	104.590	0.398	Open Manhole	1200
S2.003	o	225	S8	105.120	104.500	0.395	Open Manhole	1200
S2.004	o	225	S9	105.019	104.440	0.354	Open Manhole	1200
S1.004	o	300	S10	105.028	104.430	0.298	Open Manhole	1200
S3.000	o	225	S11	105.490	104.910	0.355	Open Manhole	1200
S3.001	o	225	S12	105.313	104.520	0.568	Open Manhole	1200
S3.002	o	225	S13	105.061	104.470	0.366	Open Manhole	1200
S1.005	o	375	S14	105.036	104.420	0.241	Open Manhole	1350
S4.000	o	225	S15	104.963	104.380	0.358	Open Manhole	1200
S4.001	o	225	S16	104.995	104.330	0.440	Open Manhole	1200
S1.006	o	375	S17	105.047	104.260	0.412	Open Manhole	1350
S1.007	o	375	S18	105.016	104.020	0.621	Open Manhole	1350
S1.008	o	375	S19	105.028	103.960	0.693	Open Manhole	1350

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.000	20.101	275.4	S2	105.812	105.000	0.662	Open Manhole	1200
S1.001	38.172	106.0	S3	105.230	104.640	0.365	Open Manhole	1200
S1.002	27.543	211.9	S4	105.090	104.510	0.355	Open Manhole	1200
S1.003	15.667	195.8	S10	105.028	104.430	0.373	Open Manhole	1200
S2.000	14.167	354.2	S6	105.419	104.660	0.534	Open Manhole	1200
S2.001	19.966	285.2	S7	105.213	104.590	0.398	Open Manhole	1200
S2.002	27.568	306.3	S8	105.120	104.500	0.395	Open Manhole	1200
S2.003	14.167	236.1	S9	105.019	104.440	0.354	Open Manhole	1200
S2.004	1.500	150.0	S10	105.028	104.430	0.373	Open Manhole	1200
S1.004	1.500	150.0	S14	105.036	104.420	0.316	Open Manhole	1350
S3.000	31.961	82.0	S12	105.313	104.520	0.568	Open Manhole	1200
S3.001	15.575	311.5	S13	105.061	104.470	0.366	Open Manhole	1200
S3.002	17.167	343.3	S14	105.036	104.420	0.391	Open Manhole	1350
S1.005	1.625	10.2	S17	105.047	104.260	0.412	Open Manhole	1350
S4.000	14.167	283.3	S16	104.995	104.330	0.440	Open Manhole	1200
S4.001	21.477	306.8	S17	105.047	104.260	0.562	Open Manhole	1350
S1.006	3.055	12.7	S18	105.016	104.020	0.621	Open Manhole	1350
S1.007	3.203	53.4	S19	105.028	103.960	0.693	Open Manhole	1350
S1.008	3.896	1.9	S20	105.023	101.870	2.778	Open Manhole	1200

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PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.009	oo	-2	S20	105.023	101.870	1.353	Open Manhole	1200
S5.000	o	150	S21	104.990	104.240	0.600	Open Manhole	1200
S5.001	o	150	S22	105.030	104.160	0.720	Open Manhole	1200
S6.000	o	300	SSyphonic RWP	105.050	103.700	1.050	Sealed Manhole	1200
S5.002	o	300	S23	105.021	103.349	1.372	Open Manhole	1200
S5.003	o	300	S24	104.936	103.259	1.377	Open Manhole	1200
S1.010	oo	-2	STank	104.949	101.600	1.549	Open Manhole	1200
S1.011	o	300	S25	104.936	101.400	3.236	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.009	5.981	22.2	STank	104.949	101.600	1.549	Open Manhole	1200
S5.000	11.317	141.5	S22	105.030	104.160	0.720	Open Manhole	1200
S5.001	4.168	5.1	S23	105.021	103.349	1.521	Open Manhole	1200
S6.000	25.176	71.7	S23	105.021	103.349	1.372	Open Manhole	1200
S5.002	15.212	169.0	S24	104.936	103.259	1.377	Open Manhole	1200
S5.003	10.891	6.6	STank	104.949	101.600	3.049	Open Manhole	1200
S1.010	8.117	40.6	S25	104.936	101.400	1.736	Open Manhole	1200
S1.011	2.839	57.9	S	104.710	101.351	3.059	Open Manhole	0

Free Flowing Outfall Details for Storm

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
S1.011	S	104.710	101.351	0.000	0	0

Simulation Criteria for Storm

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m³/ha Storage	2.000
Hot Start (mins)	0	Inlet Coefficient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1
Number of Input Hydrographs	0	Number of Offline Controls	0
Number of Online Controls	1	Number of Time/Area Diagrams	0
		Number of Storage Structures	1
		Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model FSR Return Period (years) 2

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Synthetic Rainfall Details

Region England and Wales	Cv (Summer) 0.750
M5-60 (mm) 18.000	Cv (Winter) 0.840
Ratio R 0.357	Storm Duration (mins) 30
Profile Type Summer	

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Online Controls for Storm

Hydro-Brake® Optimum Manhole: S25, DS/PN: S1.011, Volume (m³): 39.2

Unit Reference MD-SHE-0194-2250-2000-2250
Design Head (m) 2.000
Design Flow (l/s) 22.5
Flush-Flo™ Calculated
Objective Minimise upstream storage
Application Surface
Sump Available Yes
Diameter (mm) 194
Invert Level (m) 101.400
Minimum Outlet Pipe Diameter (mm) 225
Suggested Manhole Diameter (mm) 1800

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	2.000	22.5	Kick-Flo®	1.241	17.9
Flush-Flo™	0.580	22.5	Mean Flow over Head Range	-	19.6

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	6.7	0.800	22.1	2.000	22.5	4.000	31.3	7.000	41.0
0.200	18.1	1.000	21.1	2.200	23.5	4.500	33.2	7.500	42.4
0.300	20.9	1.200	18.7	2.400	24.5	5.000	34.9	8.000	43.8
0.400	22.0	1.400	19.0	2.600	25.5	5.500	36.5	8.500	45.1
0.500	22.4	1.600	20.2	3.000	27.3	6.000	38.1	9.000	46.3
0.600	22.5	1.800	21.4	3.500	29.4	6.500	39.6	9.500	47.6

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Storage Structures for Storm

Cellular Storage Manhole: S25, DS/PN: S1.011

Invert Level (m) 101.400 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

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	55.0	55.0	2.000	55.0	117.0	2.001	0.0	117.0

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Summary Wizard of 15 minute 2 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Half Drain	Pipe	Status	
			Level (m)	Depth (m)	Volume (m³)		Overflow (l/s)	Time (mins)		Flow (l/s)
S1.000	S1	13	105.151	-0.072	0.000	0.51		5.1	OK	
S1.001	S2	15	105.061	-0.164	0.000	0.16		7.6	OK	
S1.002	S3	16	104.736	-0.129	0.000	0.37		12.1	OK	
S1.003	S4	18	104.620	-0.115	0.000	0.35		11.4	OK	
S2.000	S5	15	104.824	-0.101	0.000	0.46		10.3	OK	
S2.001	S6	16	104.795	-0.090	0.000	0.65		17.9	OK	
S2.002	S7	16	104.739	-0.076	0.000	0.75		20.6	OK	
S2.003	S8	17	104.646	-0.079	0.000	0.67		19.8	OK	
S2.004	S9	18	104.609	-0.056	0.000	0.75		22.3	OK	
S1.004	S10	18	104.598	-0.132	0.000	0.59		33.2	OK	
S3.000	S11	13	104.994	-0.141	0.000	0.28		15.1	OK	
S3.001	S12	14	104.659	-0.086	0.000	0.65		16.9	OK	
S3.002	S13	15	104.621	-0.074	0.000	0.77		19.2	OK	
S1.005	S14	18	104.563	-0.232	0.000	0.31		49.0	OK	
S4.000	S15	14	104.516	-0.089	0.000	0.63		17.0	OK	
S4.001	S16	14	104.467	-0.088	0.000	0.67		17.9	OK	
S1.006	S17	17	104.409	-0.226	0.000	0.33		63.2	OK	
S1.007	S18	18	104.229	-0.166	0.000	0.59		63.5	OK	
S1.008	S19	18	104.043	-0.292	0.000	0.11		63.4	OK	
S1.009	S20	36	101.889	-1.781	0.000	0.01		63.1	OK	
S5.000	S21	14	104.266	-0.124	0.000	0.06		0.9	OK	
S5.001	S22	16	104.194	-0.116	0.000	0.12		6.5	OK	
S6.000	SSyphonic	RWP	15	103.817	-0.183	0.000	0.31		36.6	OK
S5.002		S23	15	103.522	-0.127	0.000	0.59		42.6	OK
S5.003		S24	15	103.333	-0.226	0.000	0.13		43.3	OK
S1.010	STank	36	101.887	-1.513	0.000	0.01		89.6	OK	
S1.011	S25	36	101.887	0.187	0.000	0.36	18	22.4	SURCHARGE	

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Summary Wizard of 30 minute 2 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	17	105.141	-0.082	0.000	0.42		4.2	OK
S1.001		S2	17	105.057	-0.168	0.000	0.14		6.8	OK
S1.002		S3	18	104.730	-0.135	0.000	0.33		11.0	OK
S1.003		S4	19	104.614	-0.121	0.000	0.33		10.6	OK
S2.000		S5	17	104.813	-0.112	0.000	0.39		8.7	OK
S2.001		S6	17	104.784	-0.101	0.000	0.58		16.2	OK
S2.002		S7	19	104.731	-0.084	0.000	0.70		19.0	OK
S2.003		S8	19	104.638	-0.087	0.000	0.63		18.6	OK
S2.004		S9	19	104.601	-0.064	0.000	0.70		20.9	OK
S1.004		S10	19	104.592	-0.138	0.000	0.56		31.2	OK
S3.000		S11	17	104.984	-0.151	0.000	0.24		12.8	OK
S3.001		S12	17	104.645	-0.100	0.000	0.55		14.3	OK
S3.002		S13	18	104.606	-0.089	0.000	0.66		16.5	OK
S1.005		S14	19	104.558	-0.237	0.000	0.29		45.8	OK
S4.000		S15	17	104.499	-0.106	0.000	0.53		14.3	OK
S4.001		S16	17	104.455	-0.100	0.000	0.58		15.6	OK
S1.006		S17	19	104.402	-0.233	0.000	0.30		58.5	OK
S1.007		S18	20	104.219	-0.176	0.000	0.55		58.7	OK
S1.008		S19	20	104.041	-0.294	0.000	0.10		58.9	OK
S1.009		S20	32	101.958	-1.712	0.000	0.01		59.0	OK
S5.000		S21	17	104.262	-0.128	0.000	0.05		0.7	OK
S5.001		S22	19	104.192	-0.118	0.000	0.11		6.0	OK
S6.000	SSyphonic	RWP	18	103.803	-0.197	0.000	0.26		30.1	OK
S5.002		S23	18	103.500	-0.149	0.000	0.50		35.9	OK
S5.003		S24	19	103.325	-0.234	0.000	0.11		35.7	OK
S1.010	STank	32	101.958	-1.442	0.000	0.01			82.3	OK
S1.011		S25	32	101.958	0.258	0.000	0.37	22	22.4	SURCHARGE

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Summary Wizard of 60 minute 2 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Half Drain		Pipe	Status	
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)		Flow (l/s)
S1.000	SSyphonic	S1	21	105.129	-0.094	0.000	0.29		2.9	OK
S1.001		S2	21	105.049	-0.176	0.000	0.10		5.0	OK
S1.002		S3	22	104.717	-0.148	0.000	0.26		8.5	OK
S1.003		S4	23	104.599	-0.136	0.000	0.25		8.3	OK
S2.000		S5	21	104.793	-0.132	0.000	0.27		6.1	OK
S2.001		S6	22	104.765	-0.120	0.000	0.44		12.1	OK
S2.002		S7	23	104.708	-0.107	0.000	0.54		14.8	OK
S2.003		S8	23	104.617	-0.108	0.000	0.49		14.5	OK
S2.004		S9	24	104.577	-0.088	0.000	0.56		16.8	OK
S1.004		S10	24	104.571	-0.159	0.000	0.45		25.0	OK
S3.000		S11	21	104.971	-0.164	0.000	0.16		8.7	OK
S3.001		S12	21	104.623	-0.122	0.000	0.39		10.0	OK
S3.002		S13	24	104.583	-0.112	0.000	0.49		12.1	OK
S1.005		S14	24	104.542	-0.253	0.000	0.23		36.0	OK
S4.000		S15	21	104.476	-0.129	0.000	0.37		9.8	OK
S4.001		S16	21	104.432	-0.123	0.000	0.40		10.8	OK
S1.006		S17	24	104.385	-0.250	0.000	0.24		45.9	OK
S1.007		S18	24	104.192	-0.203	0.000	0.43		45.9	OK
S1.008		S19	24	104.032	-0.303	0.000	0.08		46.1	OK
S1.009		S20	31	101.968	-1.702	0.000	0.00		46.3	OK
S5.000		S21	21	104.259	-0.131	0.000	0.04		0.5	OK
S5.001		S22	23	104.189	-0.121	0.000	0.08		4.6	OK
S6.000		S23	22	103.785	-0.215	0.000	0.18		20.6	OK
S5.002		S24	22	103.473	-0.176	0.000	0.35		24.7	OK
S5.003		S25	22	103.315	-0.244	0.000	0.08		24.5	OK
S1.010	STank	31	101.968	-1.432	0.000	0.01		65.4	OK	
S1.011		S25	31	101.967	0.267	0.000	0.37	30	22.4	SURCHARGE

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Summary Wizard of 120 minute 2 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Half Drain			Pipe	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)	
S1.000	SSyphonic	S1	29	105.116	-0.107	0.000	0.19		1.9	OK
S1.001		S2	29	105.039	-0.186	0.000	0.07		3.4	OK
S1.002		S3	29	104.703	-0.162	0.000	0.17		5.8	OK
S1.003		S4	29	104.580	-0.155	0.000	0.17		5.7	OK
S2.000		S5	29	104.772	-0.153	0.000	0.18		3.9	OK
S2.001		S6	29	104.744	-0.141	0.000	0.30		8.3	OK
S2.002		S7	29	104.685	-0.130	0.000	0.37		10.1	OK
S2.003		S8	29	104.593	-0.132	0.000	0.34		10.0	OK
S2.004		S9	29	104.550	-0.115	0.000	0.39		11.6	OK
S1.004		S10	29	104.546	-0.184	0.000	0.31		17.2	OK
S3.000		S11	29	104.958	-0.177	0.000	0.10		5.6	OK
S3.001		S12	29	104.601	-0.144	0.000	0.26		6.7	OK
S3.002		S13	29	104.562	-0.133	0.000	0.33		8.1	OK
S1.005		S14	29	104.522	-0.273	0.000	0.16		25.1	OK
S4.000		S15	29	104.454	-0.151	0.000	0.24		6.3	OK
S4.001		S16	29	104.410	-0.145	0.000	0.27		7.2	OK
S1.006		S17	29	104.364	-0.271	0.000	0.17		32.0	OK
S1.007		S18	29	104.162	-0.233	0.000	0.30		31.9	OK
S1.008		S19	29	104.018	-0.317	0.000	0.06		31.7	OK
S1.009		S20	34	101.902	-1.768	0.000	0.00		31.7	OK
S5.000		S21	29	104.256	-0.134	0.000	0.02		0.3	OK
S5.001		S22	29	104.183	-0.127	0.000	0.06		3.3	OK
S6.000		RWP	29	103.766	-0.234	0.000	0.11		13.0	OK
S5.002		S23	29	103.446	-0.203	0.000	0.23		16.3	OK
S5.003		S24	29	103.302	-0.257	0.000	0.05		16.3	OK
S1.010	STank	34	101.902	-1.498	0.000	0.00		46.0	OK	
S1.011	S25	34	101.901	0.201	0.000	0.36		32	22.4 SURCHARGE	

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Summary Wizard of 240 minute 2 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	37 105.108	-0.115	0.000	0.12			1.2	OK
S1.001		S2	37 105.031	-0.194	0.000	0.05			2.2	OK
S1.002		S3	37 104.691	-0.174	0.000	0.12			3.8	OK
S1.003		S4	37 104.563	-0.172	0.000	0.12			3.8	OK
S2.000		S5	37 104.757	-0.168	0.000	0.12			2.6	OK
S2.001		S6	37 104.728	-0.157	0.000	0.20			5.5	OK
S2.002		S7	37 104.666	-0.149	0.000	0.25			6.7	OK
S2.003		S8	37 104.573	-0.152	0.000	0.23			6.7	OK
S2.004		S9	37 104.527	-0.138	0.000	0.26			7.8	OK
S1.004		S10	37 104.523	-0.207	0.000	0.21			11.6	OK
S3.000		S11	37 104.948	-0.187	0.000	0.07			3.7	OK
S3.001		S12	37 104.584	-0.161	0.000	0.17			4.4	OK
S3.002		S13	37 104.543	-0.152	0.000	0.22			5.4	OK
S1.005		S14	37 104.502	-0.293	0.000	0.11			16.9	OK
S4.000		S15	37 104.439	-0.166	0.000	0.16			4.2	OK
S4.001		S16	37 104.394	-0.161	0.000	0.18			4.8	OK
S1.006		S17	37 104.344	-0.291	0.000	0.11			21.6	OK
S1.007		S18	37 104.135	-0.260	0.000	0.20			21.6	OK
S1.008		S19	37 104.007	-0.328	0.000	0.04			21.5	OK
S1.009		S20	37 101.876	-1.794	0.000	0.00			21.5	OK
S5.000		S21	37 104.251	-0.139	0.000	0.02			0.2	OK
S5.001		S22	37 104.179	-0.131	0.000	0.04			2.2	OK
S6.000	SSyphonic	RWP	37 103.753	-0.247	0.000	0.07			8.6	OK
S5.002		S23	37 103.426	-0.223	0.000	0.15			10.8	OK
S5.003		S24	37 103.294	-0.265	0.000	0.03			10.8	OK
S1.010	STank	39	101.760	-1.640	0.000	0.00			31.6	OK
S1.011		S25	39 101.759	0.059	0.000	0.35		32	21.6	SURCHARGE

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Summary Wizard of 360 minute 2 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)					
S1.000		S1	39 105.104	-0.119	0.000	0.09			0.9	OK
S1.001		S2	39 105.027	-0.198	0.000	0.04			1.7	OK
S1.002		S3	39 104.685	-0.180	0.000	0.09			2.9	OK
S1.003		S4	39 104.555	-0.180	0.000	0.09			2.9	OK
S2.000		S5	39 104.749	-0.176	0.000	0.09			2.0	OK
S2.001		S6	39 104.718	-0.167	0.000	0.15			4.2	OK
S2.002		S7	39 104.655	-0.160	0.000	0.19			5.1	OK
S2.003		S8	39 104.563	-0.162	0.000	0.17			5.1	OK
S2.004		S9	39 104.513	-0.152	0.000	0.20			5.9	OK
S1.004		S10	39 104.510	-0.220	0.000	0.16			8.8	OK
S3.000		S11	39 104.943	-0.192	0.000	0.05			2.8	OK
S3.001		S12	39 104.575	-0.170	0.000	0.13			3.3	OK
S3.002		S13	39 104.533	-0.162	0.000	0.16			4.1	OK
S1.005		S14	39 104.492	-0.303	0.000	0.08			12.9	OK
S4.000		S15	39 104.431	-0.174	0.000	0.12			3.1	OK
S4.001		S16	39 104.385	-0.170	0.000	0.13			3.6	OK
S1.006		S17	39 104.334	-0.301	0.000	0.09			16.5	OK
S1.007		S18	39 104.118	-0.277	0.000	0.15			16.4	OK
S1.008		S19	39 104.002	-0.333	0.000	0.03			16.4	OK
S1.009		S20	40 101.874	-1.796	0.000	0.00			16.3	OK
S5.000		S21	39 104.248	-0.142	0.000	0.01			0.2	OK
S5.001		S22	39 104.177	-0.133	0.000	0.03			1.6	OK
S6.000	SSyphonic	RWP	39 103.745	-0.255	0.000	0.06			6.5	OK
S5.002		S23	39 103.416	-0.233	0.000	0.11			8.1	OK
S5.003		S24	39 103.291	-0.268	0.000	0.03			8.1	OK
S1.010	STank	42	101.661	-1.739	0.000	0.00			24.3	OK
S1.011		S25	42 101.661	-0.039	0.000	0.33		42	20.3	OK

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Summary Wizard of 480 minute 2 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)					
S1.000		S1	44 105.100	-0.123	0.000	0.08			0.8	OK
S1.001		S2	44 105.025	-0.200	0.000	0.03			1.4	OK
S1.002		S3	44 104.679	-0.186	0.000	0.07			2.4	OK
S1.003		S4	44 104.550	-0.185	0.000	0.07			2.4	OK
S2.000		S5	44 104.744	-0.181	0.000	0.07			1.6	OK
S2.001		S6	44 104.712	-0.173	0.000	0.12			3.4	OK
S2.002		S7	44 104.648	-0.167	0.000	0.15			4.2	OK
S2.003		S8	44 104.556	-0.169	0.000	0.14			4.2	OK
S2.004		S9	44 104.505	-0.160	0.000	0.16			4.9	OK
S1.004		S10	44 104.501	-0.229	0.000	0.13			7.2	OK
S3.000		S11	44 104.939	-0.196	0.000	0.04			2.3	OK
S3.001		S12	44 104.569	-0.176	0.000	0.11			2.7	OK
S3.002		S13	44 104.526	-0.169	0.000	0.13			3.3	OK
S1.005		S14	44 104.483	-0.312	0.000	0.07			10.6	OK
S4.000		S15	44 104.426	-0.179	0.000	0.10			2.6	OK
S4.001		S16	44 104.379	-0.176	0.000	0.11			2.9	OK
S1.006		S17	44 104.325	-0.310	0.000	0.07			13.5	OK
S1.007		S18	44 104.108	-0.287	0.000	0.13			13.5	OK
S1.008		S19	44 103.999	-0.336	0.000	0.02			13.4	OK
S1.009		S20	44 101.874	-1.796	0.000	0.00			13.4	OK
S5.000		S21	44 104.247	-0.143	0.000	0.01			0.1	OK
S5.001		S22	44 104.176	-0.134	0.000	0.02			1.3	OK
S6.000	SSyphonic	RWP	44 103.741	-0.259	0.000	0.04			5.3	OK
S5.002		S23	44 103.410	-0.239	0.000	0.09			6.6	OK
S5.003		S24	44 103.288	-0.271	0.000	0.02			6.6	OK
S1.010	STank	44	101.614	-1.786	0.000	0.00			19.9	OK
S1.011		S25	44 101.609	-0.091	0.000	0.31		64	18.7	OK

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Summary Wizard of 15 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Half Drain	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)		Time (mins)	Flow (l/s)	
S1.000	S1	5	105.196	-0.027	0.000	0.96		9.6	OK
S1.001	S2	5	105.092	-0.133	0.000	0.34		16.3	OK
S1.002	S3	8	104.811	-0.054	0.000	0.80		26.4	OK
S1.003	S4	9	104.771	0.036	0.000	0.63		20.7	SURCHARGED
S2.000	S5	8	105.068	0.143	0.000	0.69		15.4	FLOOD RISK
S2.001	S6	8	105.050	0.165	0.000	1.11		30.7	SURCHARGED
S2.002	S7	8	104.989	0.174	0.000	1.27		34.7	FLOOD RISK
S2.003	S8	8	104.865	0.140	0.000	1.12		33.0	FLOOD RISK
S2.004	S9	9	104.794	0.129	0.000	1.23		36.8	FLOOD RISK
S1.004	S10	9	104.722	-0.008	0.000	1.00		55.8	OK
S3.000	S11	5	105.032	-0.103	0.000	0.53		28.5	OK
S3.001	S12	6	104.824	0.079	0.000	1.17		30.1	SURCHARGED
S3.002	S13	7	104.750	0.055	0.000	1.49		37.0	SURCHARGED
S1.005	S14	8	104.627	-0.168	0.000	0.57		90.0	OK
S4.000	S15	8	104.650	0.045	0.000	1.10		29.5	SURCHARGED
S4.001	S16	8	104.586	0.031	0.000	1.19		31.9	SURCHARGED
S1.006	S17	9	104.506	-0.129	0.000	0.61		117.3	OK
S1.007	S18	9	104.411	0.016	0.000	1.10		118.2	SURCHARGED
S1.008	S19	10	104.076	-0.259	0.000	0.21		118.1	OK
S1.009	S20	24	102.323	-1.347	0.000	0.01		115.5	OK
S5.000	S21	7	104.276	-0.114	0.000	0.12		1.7	OK
S5.001	S22	8	104.214	-0.096	0.000	0.28		15.8	OK
S6.000	SSyphonic RWP	8	103.870	-0.130	0.000	0.59		69.3	OK
S5.002	S23	10	103.682	0.033	0.000	1.18		84.7	SURCHARGED
S5.003	S24	10	103.364	-0.195	0.000	0.26		85.4	OK
S1.010	STank	24	102.322	-1.078	0.000	0.02		162.9	OK
S1.011	S25	24	102.322	0.622	0.000	0.37	32	22.5	SURCHARGED

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Summary Wizard of 30 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water		Surcharged	Flooded	Flow / Cap.	Half Drain	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)	Overflow (l/s)		Time (mins)	Flow (l/s)	
S1.000	SSyphonic	S1	8	105.176	-0.047	0.000	0.80		8.0	OK
S1.001		S2	8	105.085	-0.140	0.000	0.30		14.1	OK
S1.002		S3	9	104.783	-0.082	0.000	0.71		23.4	OK
S1.003		S4	10	104.731	-0.004	0.000	0.63		20.5	OK
S2.000		S5	9	105.022	0.097	0.000	0.62		13.9	FLOOD RISK
S2.001		S6	9	105.001	0.116	0.000	0.96		26.7	SURCHARGED
S2.002		S7	9	104.942	0.127	0.000	1.16		31.8	FLOOD RISK
S2.003		S8	9	104.827	0.102	0.000	1.06		31.1	FLOOD RISK
S2.004		S9	10	104.757	0.092	0.000	1.19		35.6	FLOOD RISK
S1.004		S10	10	104.685	-0.045	0.000	1.00		55.8	OK
S3.000		S11	8	105.016	-0.119	0.000	0.45		24.3	OK
S3.001		S12	8	104.779	0.034	0.000	1.04		26.8	SURCHARGED
S3.002		S13	9	104.720	0.025	0.000	1.28		31.7	SURCHARGED
S1.005		S14	10	104.619	-0.176	0.000	0.55		85.8	OK
S4.000		S15	10	104.608	0.003	0.000	0.93		24.9	SURCHARGED
S4.001		S16	10	104.555	0.000	0.000	1.01		27.1	OK
S1.006		S17	10	104.482	-0.153	0.000	0.58		110.4	OK
S1.007		S18	10	104.399	0.004	0.000	1.03		110.7	SURCHARGED
S1.008		S19	11	104.073	-0.262	0.000	0.20		110.9	OK
S1.009		S20	20	102.516	-1.154	0.000	0.01		108.7	OK
S5.000		S21	10	104.272	-0.118	0.000	0.10		1.4	OK
S5.001		S22	10	104.210	-0.100	0.000	0.24		13.7	OK
S6.000		S23	11	103.848	-0.152	0.000	0.49		57.3	OK
S5.002		S24	12	103.588	-0.061	0.000	0.99		70.8	OK
S5.003		S25	12	103.354	-0.205	0.000	0.22		70.4	OK
S1.010	STank	20	102.516	-0.884	0.000	0.01		142.4	OK	
S1.011	S26	20	102.515	0.815	0.000	0.37	41	22.5	SURCHARGED	

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Summary Wizard of 60 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	11	105.154	-0.069	0.000	0.55		5.5	OK
S1.001		S2	11	105.071	-0.154	0.000	0.20		9.7	OK
S1.002		S3	12	104.757	-0.108	0.000	0.51		17.0	OK
S1.003		S4	13	104.663	-0.072	0.000	0.49		16.1	OK
S2.000		S5	12	104.915	-0.010	0.000	0.48		10.8	OK
S2.001		S6	12	104.898	0.013	0.000	0.80		22.1	SURCHARGED
S2.002		S7	12	104.852	0.037	0.000	0.93		25.4	SURCHARGED
S2.003		S8	13	104.778	0.053	0.000	0.82		24.1	SURCHARGED
S2.004		S9	13	104.717	0.052	0.000	0.93		27.7	SURCHARGED
S1.004		S10	13	104.633	-0.097	0.000	0.78		43.5	OK
S3.000		S11	11	104.996	-0.139	0.000	0.31		16.6	OK
S3.001		S12	13	104.686	-0.059	0.000	0.74		19.2	OK
S3.002		S13	13	104.648	-0.047	0.000	0.96		23.8	OK
S1.005		S14	13	104.591	-0.204	0.000	0.42		65.4	OK
S4.000		S15	13	104.527	-0.078	0.000	0.69		18.6	OK
S4.001		S16	13	104.485	-0.070	0.000	0.76		20.5	OK
S1.006		S17	13	104.436	-0.199	0.000	0.45		85.5	OK
S1.007		S18	13	104.276	-0.119	0.000	0.79		85.0	OK
S1.008		S19	14	104.057	-0.278	0.000	0.15		84.6	OK
S1.009		S20	18	102.594	-1.076	0.000	0.01		83.6	OK
S5.000		S21	12	104.266	-0.124	0.000	0.07		0.9	OK
S5.001		S22	12	104.202	-0.108	0.000	0.18		9.9	OK
S6.000	SSyphonic	RWP	13	103.820	-0.180	0.000	0.34		39.3	OK
S5.002		S23	14	103.534	-0.115	0.000	0.68		48.5	OK
S5.003		S24	14	103.337	-0.222	0.000	0.15		48.0	OK
S1.010	STank	18	102.593	-0.807	0.000	0.01			111.3	OK
S1.011		S25	18	102.593	0.893	0.000	0.37	54	22.5	SURCHARGED

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Summary Wizard of 120 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Overflow (l/s)	Half Drain	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)	
S1.000	S1	20	105.134	-0.089	0.000	0.35			3.5	OK
S1.001	S2	19	105.055	-0.170	0.000	0.13			6.4	OK
S1.002	S3	19	104.730	-0.135	0.000	0.34			11.1	OK
S1.003	S4	17	104.621	-0.114	0.000	0.34			11.0	OK
S2.000	S5	19	104.807	-0.118	0.000	0.34			7.5	OK
S2.001	S6	19	104.782	-0.103	0.000	0.57			15.9	OK
S2.002	S7	18	104.731	-0.084	0.000	0.71			19.5	OK
S2.003	S8	18	104.646	-0.079	0.000	0.66			19.3	OK
S2.004	S9	17	104.610	-0.055	0.000	0.75			22.4	OK
S1.004	S10	17	104.599	-0.131	0.000	0.60			33.3	OK
S3.000	S11	20	104.977	-0.158	0.000	0.20			10.5	OK
S3.001	S12	19	104.640	-0.105	0.000	0.49			12.7	OK
S3.002	S13	19	104.605	-0.090	0.000	0.62			15.5	OK
S1.005	S14	17	104.564	-0.231	0.000	0.31			48.5	OK
S4.000	S15	19	104.489	-0.116	0.000	0.45			11.9	OK
S4.001	S16	19	104.449	-0.106	0.000	0.51			13.7	OK
S1.006	S17	18	104.407	-0.228	0.000	0.32			61.7	OK
S1.007	S18	19	104.227	-0.168	0.000	0.57			61.6	OK
S1.008	S19	19	104.043	-0.292	0.000	0.11			61.3	OK
S1.009	S20	19	102.550	-1.120	0.000	0.01			60.0	OK
S5.000	S21	20	104.260	-0.130	0.000	0.04			0.6	OK
S5.001	S22	18	104.193	-0.117	0.000	0.11			6.2	OK
S6.000	SSyphonic RWP	21	103.793	-0.207	0.000	0.21			24.7	OK
S5.002	S23	20	103.486	-0.163	0.000	0.43			30.9	OK
S5.003	S24	20	103.321	-0.238	0.000	0.10			30.9	OK
S1.010	STank	19	102.550	-0.850	0.000	0.01			80.0	OK
S1.011	S25	19	102.550	0.850	0.000	0.37		64	22.4	SURCHARGED

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Summary Wizard of 240 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	26	105.121	-0.102	0.000	0.23		2.3	OK
S1.001		S2	26	105.045	-0.180	0.000	0.09		4.2	OK
S1.002		S3	25	104.711	-0.154	0.000	0.22		7.2	OK
S1.003		S4	25	104.590	-0.145	0.000	0.22		7.2	OK
S2.000		S5	26	104.782	-0.143	0.000	0.22		4.9	OK
S2.001		S6	25	104.755	-0.130	0.000	0.37		10.3	OK
S2.002		S7	25	104.697	-0.118	0.000	0.46		12.7	OK
S2.003		S8	25	104.606	-0.119	0.000	0.43		12.6	OK
S2.004		S9	25	104.565	-0.100	0.000	0.49		14.7	OK
S1.004		S10	25	104.560	-0.170	0.000	0.39		21.8	OK
S3.000		S11	26	104.963	-0.172	0.000	0.13		6.8	OK
S3.001		S12	25	104.612	-0.133	0.000	0.32		8.2	OK
S3.002		S13	25	104.574	-0.121	0.000	0.41		10.1	OK
S1.005		S14	25	104.535	-0.260	0.000	0.20		31.9	OK
S4.000		S15	26	104.464	-0.141	0.000	0.29		7.8	OK
S4.001		S16	25	104.421	-0.134	0.000	0.33		8.9	OK
S1.006		S17	25	104.377	-0.258	0.000	0.21		40.6	OK
S1.007		S18	25	104.180	-0.215	0.000	0.38		40.6	OK
S1.008		S19	25	104.026	-0.309	0.000	0.07		40.5	OK
S1.009		S20	23	102.363	-1.307	0.000	0.00		39.9	OK
S5.000		S21	26	104.257	-0.133	0.000	0.03		0.4	OK
S5.001		S22	25	104.186	-0.124	0.000	0.07		4.0	OK
S6.000	SSyphonic	RWP	26	103.773	-0.227	0.000	0.14		16.0	OK
S5.002		S23	26	103.457	-0.192	0.000	0.28		20.0	OK
S5.003		S24	26	103.307	-0.252	0.000	0.06		20.0	OK
S1.010	STank	23	102.363	-1.037	0.000	0.01			54.4	OK
S1.011		S25	23	102.362	0.662	0.000	0.37	64	22.4	SURCHARGE

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Summary Wizard of 360 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Overflow (l/s)	Half Drain	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)	
S1.000	S1	31	105.114	-0.109	0.000	0.17			1.7	OK
S1.001	S2	31	105.037	-0.188	0.000	0.06			3.1	OK
S1.002	S3	31	104.700	-0.165	0.000	0.16			5.3	OK
S1.003	S4	31	104.575	-0.160	0.000	0.16			5.3	OK
S2.000	S5	31	104.769	-0.156	0.000	0.16			3.6	OK
S2.001	S6	31	104.740	-0.145	0.000	0.27			7.6	OK
S2.002	S7	31	104.680	-0.135	0.000	0.34			9.3	OK
S2.003	S8	31	104.588	-0.137	0.000	0.32			9.3	OK
S2.004	S9	31	104.544	-0.121	0.000	0.36			10.9	OK
S1.004	S10	31	104.540	-0.190	0.000	0.29			16.2	OK
S3.000	S11	31	104.956	-0.179	0.000	0.09			5.0	OK
S3.001	S12	31	104.597	-0.148	0.000	0.24			6.1	OK
S3.002	S13	31	104.557	-0.138	0.000	0.30			7.5	OK
S1.005	S14	31	104.517	-0.278	0.000	0.15			23.7	OK
S4.000	S15	31	104.451	-0.154	0.000	0.21			5.7	OK
S4.001	S16	31	104.406	-0.149	0.000	0.25			6.6	OK
S1.006	S17	31	104.359	-0.276	0.000	0.16			30.2	OK
S1.007	S18	31	104.155	-0.240	0.000	0.28			30.2	OK
S1.008	S19	31	104.016	-0.319	0.000	0.05			30.2	OK
S1.009	S20	25	102.171	-1.499	0.000	0.00			29.9	OK
S5.000	S21	31	104.255	-0.135	0.000	0.02			0.3	OK
S5.001	S22	31	104.182	-0.128	0.000	0.05			3.0	OK
S6.000	SSyphonic RWP	31	103.763	-0.237	0.000	0.10			11.8	OK
S5.002	S23	31	103.441	-0.208	0.000	0.21			14.8	OK
S5.003	S24	31	103.300	-0.259	0.000	0.05			14.8	OK
S1.010	STank	25	102.171	-1.229	0.000	0.00			42.0	OK
S1.011	S25	25	102.170	0.470	0.000	0.37		60	22.4	SURCHARGED

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Summary Wizard of 480 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Overflow (l/s)	Half Drain	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)	
S1.000	S1	34	105.110	-0.113	0.000	0.14			1.4	OK
S1.001	S2	34	105.033	-0.192	0.000	0.05			2.5	OK
S1.002	S3	34	104.694	-0.171	0.000	0.13			4.3	OK
S1.003	S4	34	104.566	-0.169	0.000	0.13			4.3	OK
S2.000	S5	34	104.760	-0.165	0.000	0.13			2.9	OK
S2.001	S6	34	104.731	-0.154	0.000	0.22			6.1	OK
S2.002	S7	34	104.670	-0.145	0.000	0.28			7.5	OK
S2.003	S8	34	104.577	-0.148	0.000	0.26			7.5	OK
S2.004	S9	34	104.532	-0.133	0.000	0.29			8.8	OK
S1.004	S10	34	104.528	-0.202	0.000	0.23			13.1	OK
S3.000	S11	34	104.951	-0.184	0.000	0.08			4.1	OK
S3.001	S12	34	104.588	-0.157	0.000	0.19			4.9	OK
S3.002	S13	34	104.547	-0.148	0.000	0.24			6.0	OK
S1.005	S14	34	104.507	-0.288	0.000	0.12			19.1	OK
S4.000	S15	34	104.443	-0.162	0.000	0.17			4.6	OK
S4.001	S16	34	104.398	-0.157	0.000	0.20			5.3	OK
S1.006	S17	34	104.348	-0.287	0.000	0.13			24.4	OK
S1.007	S18	34	104.141	-0.254	0.000	0.23			24.4	OK
S1.008	S19	34	104.010	-0.325	0.000	0.04			24.4	OK
S1.009	S20	30	102.009	-1.661	0.000	0.00			24.4	OK
S5.000	S21	34	104.252	-0.138	0.000	0.02			0.2	OK
S5.001	S22	34	104.180	-0.130	0.000	0.04			2.4	OK
S6.000	SSyphonic	RWP	34	103.757	-0.243	0.000	0.08		9.5	OK
S5.002	S23	34	103.431	-0.218	0.000	0.17			11.9	OK
S5.003	S24	34	103.296	-0.263	0.000	0.04			11.9	OK
S1.010	STank	30	102.009	-1.391	0.000	0.00			35.0	OK
S1.011	S25	30	102.008	0.308	0.000	0.37		64	22.4	SURCHARGED

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Summary Wizard of 960 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)					
S1.000		S1	43 105.101	-0.122	0.000	0.08			0.8	OK
S1.001		S2	43 105.026	-0.199	0.000	0.03			1.5	OK
S1.002		S3	43 104.681	-0.184	0.000	0.08			2.5	OK
S1.003		S4	43 104.551	-0.184	0.000	0.08			2.5	OK
S2.000		S5	43 104.746	-0.179	0.000	0.08			1.7	OK
S2.001		S6	43 104.714	-0.171	0.000	0.13			3.6	OK
S2.002		S7	43 104.651	-0.164	0.000	0.16			4.5	OK
S2.003		S8	43 104.558	-0.167	0.000	0.15			4.5	OK
S2.004		S9	43 104.508	-0.157	0.000	0.17			5.2	OK
S1.004		S10	43 104.504	-0.226	0.000	0.14			7.8	OK
S3.000		S11	43 104.940	-0.195	0.000	0.04			2.4	OK
S3.001		S12	43 104.571	-0.174	0.000	0.11			2.9	OK
S3.002		S13	43 104.528	-0.167	0.000	0.14			3.6	OK
S1.005		S14	43 104.486	-0.309	0.000	0.07			11.3	OK
S4.000		S15	43 104.428	-0.177	0.000	0.10			2.7	OK
S4.001		S16	43 104.381	-0.174	0.000	0.12			3.2	OK
S1.006		S17	43 104.328	-0.307	0.000	0.08			14.5	OK
S1.007		S18	43 104.111	-0.284	0.000	0.14			14.5	OK
S1.008		S19	43 104.000	-0.335	0.000	0.03			14.5	OK
S1.009		S20	43 101.874	-1.796	0.000	0.00			14.5	OK
S5.000		S21	43 104.247	-0.143	0.000	0.01			0.1	OK
S5.001		S22	43 104.176	-0.134	0.000	0.03			1.4	OK
S6.000	SSyphonic	RWP	43 103.742	-0.258	0.000	0.05			5.7	OK
S5.002		S23	43 103.412	-0.237	0.000	0.10			7.1	OK
S5.003		S24	43 103.289	-0.270	0.000	0.02			7.1	OK
S1.010	STank	43	101.650	-1.750	0.000	0.00			21.5	OK
S1.011		S25	43 101.649	-0.051	0.000	0.33		112	20.1	OK

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Summary Wizard of 15 minute 100 year Summer I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	1	105.304	0.081	0.000	1.43		14.3	SURCHARGED
S1.001	S2	2	105.117	-0.108	0.000	0.51		24.3	OK
S1.002	S3	2	105.061	0.196	0.000	0.94		31.0	FLOOD RISK
S1.003	S4	2	104.948	0.213	0.000	0.95		31.2	FLOOD RISK
S2.000	S5	2	105.287	0.362	0.908	1.16		25.8	FLOOD
S2.001	S6	1	105.294	0.409	0.000	1.34		37.0	FLOOD RISK
S2.002	S7	2	105.211	0.396	0.000	1.54		42.2	FLOOD RISK
S2.003	S8	2	105.069	0.344	0.000	1.33		39.1	FLOOD RISK
S2.004	S9	2	104.978	0.313	0.000	1.61		48.0	FLOOD RISK
S1.004	S10	2	104.870	0.140	0.000	1.37		76.4	FLOOD RISK
S3.000	S11	1	105.200	0.065	0.000	0.73		39.6	FLOOD RISK
S3.001	S12	2	105.047	0.302	0.000	1.59		41.2	FLOOD RISK
S3.002	S13	2	104.955	0.260	0.000	1.95		48.4	FLOOD RISK
S1.005	S14	3	104.780	-0.015	0.000	0.78		122.5	FLOOD RISK
S4.000	S15	2	104.924	0.319	0.000	1.53		40.9	FLOOD RISK
S4.001	S16	2	104.811	0.256	0.000	1.66		44.6	FLOOD RISK
S1.006	S17	4	104.656	0.021	0.000	0.83		159.6	SURCHARGED
S1.007	S18	3	104.488	0.093	0.000	1.50		160.6	SURCHARGED
S1.008	S19	4	104.097	-0.238	0.000	0.28		160.9	OK
S1.009	S20	14	102.806	-0.864	0.000	0.01		157.5	OK
S5.000	S21	3	104.286	-0.104	0.000	0.19		2.6	OK
S5.001	S22	3	104.229	-0.081	0.000	0.43		24.4	OK
S6.000	SSyphonic RWP	4	104.105	0.105	0.000	0.86		100.8	SURCHARGED*
S5.002	S23	4	103.822	0.173	0.000	1.76		125.8	SURCHARGED
S5.003	S24	7	103.388	-0.171	0.000	0.39		124.7	OK
S1.010	STank	14	102.805	-0.595	0.000	0.02		227.2	OK
S1.011	S25	14	102.804	1.104	0.000	0.37	55	22.5	SURCHARGED

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Summary Wizard of 30 minute 100 year Summer I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	3	105.258	0.035	0.000	1.21			12.1	SURCHARGED
S1.001	S2	3	105.108	-0.117	0.000	0.46			21.8	OK
S1.002	S3	3	105.020	0.155	0.000	0.91			30.0	FLOOD RISK
S1.003	S4	3	104.908	0.173	0.000	0.92			30.2	FLOOD RISK
S2.000	S5	3	105.287	0.362	0.561	1.07			23.9	FLOOD
S2.001	S6	2	105.293	0.408	0.000	1.24			34.4	FLOOD RISK
S2.002	S7	3	105.210	0.395	0.000	1.46			40.0	FLOOD RISK
S2.003	S8	3	105.040	0.315	0.000	1.32			38.8	FLOOD RISK
S2.004	S9	3	104.939	0.274	0.000	1.58			47.4	FLOOD RISK
S1.004	S10	3	104.828	0.098	0.000	1.37			76.5	FLOOD RISK
S3.000	S11	3	105.102	-0.033	0.000	0.66			35.3	OK
S3.001	S12	3	104.979	0.234	0.000	1.49			38.5	SURCHARGED
S3.002	S13	3	104.883	0.188	0.000	1.86			46.3	FLOOD RISK
S1.005	S14	4	104.734	-0.061	0.000	0.76			119.3	OK
S4.000	S15	3	104.845	0.240	0.000	1.35			36.2	FLOOD RISK
S4.001	S16	3	104.772	0.217	0.000	1.48			39.7	FLOOD RISK
S1.006	S17	5	104.640	0.005	0.000	0.81			154.6	SURCHARGED
S1.007	S18	5	104.473	0.078	0.000	1.44			154.0	SURCHARGED
S1.008	S19	6	104.093	-0.242	0.000	0.27			154.5	OK
S1.009	S20	9	103.195	-0.475	0.000	0.01			152.0	OK
S5.000	S21	5	104.280	-0.110	0.000	0.16			2.2	OK
S5.001	S22	5	104.224	-0.086	0.000	0.38			21.4	OK
S6.000	SSyphonic RWP	6	103.956	-0.044	0.000	0.75			87.5	OK
S5.002	S23	7	103.756	0.107	0.000	1.50			107.7	SURCHARGED
S5.003	S24	9	103.379	-0.180	0.000	0.34			108.6	OK
S1.010	STank	9	103.194	-0.206	0.000	0.02			206.1	OK
S1.011	S25	9	103.190	1.490	0.000	0.37			72 22.4	SURCHARGED

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Summary Wizard of 60 minute 100 year Summer I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	7	105.184	-0.039	0.000	0.87		8.7	OK
S1.001		S2	7	105.090	-0.135	0.000	0.32		15.4	OK
S1.002		S3	5	104.919	0.054	0.000	0.73		24.0	SURCHARGED
S1.003		S4	5	104.849	0.114	0.000	0.70		22.9	FLOOD RISK
S2.000		S5	5	105.263	0.338	0.000	0.62		13.8	FLOOD RISK
S2.001		S6	5	105.238	0.353	0.000	1.07		29.8	FLOOD RISK
S2.002		S7	5	105.149	0.334	0.000	1.35		37.0	FLOOD RISK
S2.003		S8	5	104.975	0.250	0.000	1.26		37.2	FLOOD RISK
S2.004		S9	5	104.880	0.215	0.000	1.44		42.9	FLOOD RISK
S1.004		S10	8	104.783	0.053	0.000	1.18		66.1	FLOOD RISK
S3.000		S11	7	105.022	-0.113	0.000	0.49		26.1	OK
S3.001		S12	5	104.826	0.081	0.000	1.15		29.8	SURCHARGED
S3.002		S13	6	104.752	0.057	0.000	1.48		36.9	SURCHARGED
S1.005		S14	7	104.640	-0.155	0.000	0.63		98.8	OK
S4.000		S15	7	104.670	0.065	0.000	1.01		27.1	FLOOD RISK
S4.001		S16	7	104.613	0.058	0.000	1.12		30.2	SURCHARGED
S1.006		S17	7	104.535	-0.100	0.000	0.66		126.9	OK
S1.007		S18	7	104.426	0.031	0.000	1.19		127.7	SURCHARGED
S1.008		S19	8	104.081	-0.254	0.000	0.23		128.2	OK
S1.009		S20	5	103.680	0.010	0.000	0.01		126.3	SURCHARGED
S5.000		S21	9	104.273	-0.117	0.000	0.11		1.5	OK
S5.001		S22	7	104.214	-0.096	0.000	0.28		15.6	OK
S6.000	SSyphonic	RWP	10	103.856	-0.144	0.000	0.53		62.0	OK
S5.002		S23	9	103.692	0.043	0.000	1.04		74.2	SURCHARGED
S5.003		S24	5	103.685	0.126	0.000	0.23		73.6	SURCHARGED
S1.010	STank	5	103.680	0.280	0.000	0.01			162.2	SURCHARGED
S1.011		S25	5	103.680	1.980	0.000	0.39	86	23.9	SURCHARGED

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Summary Wizard of 120 minute 100 year Summer I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Half Drain			Pipe	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1	12	105.153	-0.070	0.000	0.56			5.6	OK
S1.001	S2	12	105.070	-0.155	0.000	0.21			10.1	OK
S1.002	S3	13	104.757	-0.108	0.000	0.53			17.5	OK
S1.003	S4	12	104.687	-0.048	0.000	0.52			16.9	OK
S2.000	S5	11	104.983	0.058	0.000	0.49			10.9	SURCHARGED
S2.001	S6	11	104.963	0.078	0.000	0.83			22.9	SURCHARGED
S2.002	S7	11	104.905	0.090	0.000	1.00			27.5	SURCHARGED
S2.003	S8	11	104.800	0.075	0.000	0.94			27.6	SURCHARGED
S2.004	S9	12	104.728	0.063	0.000	1.07			32.0	FLOOD RISK
S1.004	S10	12	104.655	-0.075	0.000	0.87			48.3	OK
S3.000	S11	12	104.995	-0.140	0.000	0.31			16.6	OK
S3.001	S12	12	104.688	-0.057	0.000	0.77			20.0	OK
S3.002	S13	12	104.651	-0.044	0.000	0.99			24.5	OK
S1.005	S14	12	104.603	-0.192	0.000	0.46			72.2	OK
S4.000	S15	12	104.531	-0.074	0.000	0.70			18.8	OK
S4.001	S16	12	104.494	-0.061	0.000	0.80			21.4	OK
S1.006	S17	12	104.448	-0.187	0.000	0.48			92.5	OK
S1.007	S18	12	104.296	-0.099	0.000	0.86			92.3	OK
S1.008	S19	13	104.063	-0.272	0.000	0.16			91.7	OK
S1.009	S20	4	103.786	0.116	0.000	0.01			90.1	SURCHARGED
S5.000	S21	13	104.266	-0.124	0.000	0.07			0.9	OK
S5.001	S22	13	104.202	-0.108	0.000	0.17			9.8	OK
S6.000	SSyphonic RWP	14	103.819	-0.181	0.000	0.33			38.9	OK
S5.002		S23	6	103.800	0.151	0.000	0.68		48.8	SURCHARGED
S5.003	S24	4	103.792	0.233	0.000	0.15			48.8	SURCHARGED
S1.010	STank	4	103.787	0.387	0.000	0.01			115.4	SURCHARGED
S1.011	S25	4	103.787	2.087	0.000	0.40		112	24.5	SURCHARGED

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Summary Wizard of 240 minute 100 year Summer I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Half Drain		Pipe	Status	
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)		Flow (l/s)
S1.000	S1	19	105.135	-0.088	0.000	0.36		3.6	OK	
S1.001	S2	18	105.055	-0.170	0.000	0.14		6.5	OK	
S1.002	S3	17	104.731	-0.134	0.000	0.34		11.3	OK	
S1.003	S4	16	104.623	-0.112	0.000	0.34		11.2	OK	
S2.000	S5	18	104.808	-0.117	0.000	0.34		7.6	OK	
S2.001	S6	18	104.784	-0.101	0.000	0.58		16.2	OK	
S2.002	S7	17	104.733	-0.082	0.000	0.73		19.9	OK	
S2.003	S8	16	104.648	-0.077	0.000	0.67		19.8	OK	
S2.004	S9	16	104.613	-0.052	0.000	0.77		23.0	OK	
S1.004	S10	16	104.601	-0.129	0.000	0.61		34.2	OK	
S3.000	S11	19	104.978	-0.157	0.000	0.20		10.7	OK	
S3.001	S12	18	104.642	-0.103	0.000	0.50		12.9	OK	
S3.002	S13	17	104.606	-0.089	0.000	0.64		15.8	OK	
S1.005	S14	16	104.566	-0.229	0.000	0.32		49.8	OK	
S4.000	S15	18	104.491	-0.114	0.000	0.45		12.2	OK	
S4.001	S16	18	104.450	-0.105	0.000	0.52		13.9	OK	
S1.006	S17	16	104.409	-0.226	0.000	0.33		63.5	OK	
S1.007	S18	17	104.229	-0.166	0.000	0.59		63.5	OK	
S1.008	S19	17	104.044	-0.291	0.000	0.11		63.3	OK	
S1.009	S20	7	103.324	-0.346	0.000	0.01		62.1	OK	
S5.000	S21	19	104.260	-0.130	0.000	0.05		0.6	OK	
S5.001	S22	17	104.193	-0.117	0.000	0.11		6.4	OK	
S6.000	SSyphonic	RWP	20	103.794	-0.206	0.000	0.21		25.1	OK
S5.002		S23	19	103.488	-0.161	0.000	0.44		31.5	OK
S5.003		S24	17	103.329	-0.230	0.000	0.10		31.5	OK
S1.010	STank	7	103.323	-0.077	0.000	0.01		79.9	OK	
S1.011	S25	7	103.314	1.614	0.000	0.37		124	22.4	SURCHARGE

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Summary Wizard of 360 minute 100 year Summer I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Half Drain	Pipe	Status	
			Level (m)	Depth (m)	Volume (m³)		Overflow (l/s)	Time (mins)		Flow (l/s)
S1.000	S1	24	105.125	-0.098	0.000	0.26		2.6	OK	
S1.001	S2	24	105.047	-0.178	0.000	0.10		4.8	OK	
S1.002	S3	24	104.716	-0.149	0.000	0.25		8.3	OK	
S1.003	S4	24	104.599	-0.136	0.000	0.25		8.3	OK	
S2.000	S5	24	104.789	-0.136	0.000	0.25		5.6	OK	
S2.001	S6	24	104.762	-0.123	0.000	0.43		11.9	OK	
S2.002	S7	24	104.707	-0.108	0.000	0.53		14.6	OK	
S2.003	S8	24	104.617	-0.108	0.000	0.50		14.6	OK	
S2.004	S9	23	104.578	-0.087	0.000	0.57		17.0	OK	
S1.004	S10	23	104.571	-0.159	0.000	0.45		25.3	OK	
S3.000	S11	24	104.967	-0.168	0.000	0.15		7.9	OK	
S3.001	S12	24	104.620	-0.125	0.000	0.37		9.5	OK	
S3.002	S13	23	104.583	-0.112	0.000	0.47		11.6	OK	
S1.005	S14	23	104.543	-0.252	0.000	0.24		36.9	OK	
S4.000	S15	24	104.471	-0.134	0.000	0.33		8.9	OK	
S4.001	S16	24	104.429	-0.126	0.000	0.38		10.3	OK	
S1.006	S17	23	104.386	-0.249	0.000	0.25		47.2	OK	
S1.007	S18	23	104.194	-0.201	0.000	0.44		47.1	OK	
S1.008	S19	23	104.032	-0.303	0.000	0.08		47.1	OK	
S1.009	S20	10	103.099	-0.571	0.000	0.00		46.4	OK	
S5.000	S21	24	104.258	-0.132	0.000	0.03		0.4	OK	
S5.001	S22	24	104.189	-0.121	0.000	0.08		4.7	OK	
S6.000	SSyphonic	RWP	24	103.779	-0.221	0.000	0.16		18.4	OK
S5.002		S23	24	103.466	-0.183	0.000	0.32		23.1	OK
S5.003		S24	24	103.311	-0.248	0.000	0.07		23.1	OK
S1.010	STank	10	103.099	-0.301	0.000	0.01		60.8	OK	
S1.011	S25	10	103.097	1.397	0.000	0.37	132	22.4	SURCHARGE	

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Summary Wizard of 480 minute 100 year Summer I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	27	105.120	-0.103	0.000	0.21		2.1	OK
S1.001		S2	27	105.042	-0.183	0.000	0.08		3.9	OK
S1.002		S3	27	104.708	-0.157	0.000	0.20		6.7	OK
S1.003		S4	27	104.586	-0.149	0.000	0.20		6.7	OK
S2.000		S5	27	104.778	-0.147	0.000	0.20		4.5	OK
S2.001		S6	27	104.751	-0.134	0.000	0.34		9.5	OK
S2.002		S7	27	104.692	-0.123	0.000	0.43		11.7	OK
S2.003		S8	27	104.601	-0.124	0.000	0.40		11.7	OK
S2.004		S9	27	104.559	-0.106	0.000	0.46		13.7	OK
S1.004		S10	27	104.555	-0.175	0.000	0.36		20.3	OK
S3.000		S11	27	104.961	-0.174	0.000	0.12		6.3	OK
S3.001		S12	27	104.608	-0.137	0.000	0.29		7.6	OK
S3.002		S13	27	104.570	-0.125	0.000	0.38		9.3	OK
S1.005		S14	27	104.530	-0.265	0.000	0.19		29.7	OK
S4.000		S15	27	104.460	-0.145	0.000	0.27		7.2	OK
S4.001		S16	27	104.417	-0.138	0.000	0.31		8.3	OK
S1.006		S17	27	104.373	-0.262	0.000	0.20		37.9	OK
S1.007		S18	27	104.174	-0.221	0.000	0.35		37.9	OK
S1.008		S19	27	104.023	-0.312	0.000	0.07		37.9	OK
S1.009		S20	13	102.902	-0.768	0.000	0.00		37.4	OK
S5.000		S21	27	104.256	-0.134	0.000	0.03		0.4	OK
S5.001		S22	27	104.185	-0.125	0.000	0.07		3.7	OK
S6.000	SSyphonic	RWP	27	103.770	-0.230	0.000	0.13		14.8	OK
S5.002		S23	27	103.452	-0.197	0.000	0.26		18.5	OK
S5.003		S24	27	103.305	-0.254	0.000	0.06		18.5	OK
S1.010	STank	13	102.902	-0.498	0.000	0.00			50.0	OK
S1.011		S25	13	102.901	1.201	0.000	0.37	120	22.4	SURCHARGE

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Summary Wizard of 960 minute 100 year Summer I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Half Drain	Pipe	Status	
			Level (m)	Depth (m)	Volume (m³)		Overflow (l/s)	Time (mins)		Flow (l/s)
S1.000	S1	36	105.108	-0.115	0.000	0.12		1.2	OK	
S1.001	S2	36	105.031	-0.194	0.000	0.05		2.3	OK	
S1.002	S3	36	104.691	-0.174	0.000	0.12		3.9	OK	
S1.003	S4	36	104.563	-0.172	0.000	0.12		3.9	OK	
S2.000	S5	36	104.757	-0.168	0.000	0.12		2.6	OK	
S2.001	S6	36	104.728	-0.157	0.000	0.20		5.6	OK	
S2.002	S7	36	104.666	-0.149	0.000	0.25		6.9	OK	
S2.003	S8	36	104.573	-0.152	0.000	0.23		6.9	OK	
S2.004	S9	36	104.527	-0.138	0.000	0.27		8.0	OK	
S1.004	S10	36	104.524	-0.206	0.000	0.21		11.9	OK	
S3.000	S11	36	104.948	-0.187	0.000	0.07		3.7	OK	
S3.001	S12	36	104.585	-0.160	0.000	0.17		4.5	OK	
S3.002	S13	36	104.544	-0.151	0.000	0.22		5.5	OK	
S1.005	S14	36	104.503	-0.292	0.000	0.11		17.4	OK	
S4.000	S15	36	104.439	-0.166	0.000	0.16		4.2	OK	
S4.001	S16	36	104.394	-0.161	0.000	0.18		4.8	OK	
S1.006	S17	36	104.345	-0.290	0.000	0.12		22.3	OK	
S1.007	S18	36	104.135	-0.260	0.000	0.21		22.3	OK	
S1.008	S19	36	104.008	-0.327	0.000	0.04		22.3	OK	
S1.009	S20	26	102.131	-1.539	0.000	0.00		22.1	OK	
S5.000	S21	36	104.251	-0.139	0.000	0.02		0.2	OK	
S5.001	S22	36	104.179	-0.131	0.000	0.04		2.2	OK	
S6.000	SSyphonic	RWP	36	103.754	-0.246	0.000	0.07		8.7	OK
S5.002		S23	36	103.427	-0.222	0.000	0.15		10.9	OK
S5.003		S24	36	103.295	-0.264	0.000	0.03		10.9	OK
S1.010	STank	26	102.131	-1.269	0.000	0.00		31.6	OK	
S1.011	S25	26	102.130	0.430	0.000	0.37	96	22.4	SURCHARGE	

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Summary Wizard of 1440 minute 100 year Summer I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	42 105.103	-0.120	0.000	0.09			0.9	OK
S1.001		S2	42 105.027	-0.198	0.000	0.03			1.6	OK
S1.002		S3	42 104.684	-0.181	0.000	0.09			2.9	OK
S1.003		S4	42 104.555	-0.180	0.000	0.09			2.9	OK
S2.000		S5	42 104.748	-0.177	0.000	0.09			1.9	OK
S2.001		S6	42 104.717	-0.168	0.000	0.15			4.1	OK
S2.002		S7	42 104.655	-0.160	0.000	0.18			5.0	OK
S2.003		S8	42 104.562	-0.163	0.000	0.17			5.0	OK
S2.004		S9	42 104.512	-0.153	0.000	0.20			5.9	OK
S1.004		S10	42 104.509	-0.221	0.000	0.16			8.7	OK
S3.000		S11	42 104.942	-0.193	0.000	0.05			2.7	OK
S3.001		S12	42 104.574	-0.171	0.000	0.13			3.3	OK
S3.002		S13	42 104.532	-0.163	0.000	0.16			4.0	OK
S1.005		S14	42 104.491	-0.304	0.000	0.08			12.7	OK
S4.000		S15	42 104.430	-0.175	0.000	0.11			3.1	OK
S4.001		S16	42 104.384	-0.171	0.000	0.13			3.5	OK
S1.006		S17	42 104.333	-0.302	0.000	0.08			16.2	OK
S1.007		S18	42 104.117	-0.278	0.000	0.15			16.2	OK
S1.008		S19	42 104.002	-0.333	0.000	0.03			16.2	OK
S1.009		S20	42 101.874	-1.796	0.000	0.00			16.2	OK
S5.000		S21	42 104.248	-0.142	0.000	0.01			0.2	OK
S5.001		S22	42 104.177	-0.133	0.000	0.03			1.6	OK
S6.000	SSyphonic	RWP	42 103.745	-0.255	0.000	0.05			6.3	OK
S5.002		S23	42 103.415	-0.234	0.000	0.11			7.9	OK
S5.003		S24	42 103.291	-0.268	0.000	0.02			7.9	OK
S1.010	STank	40	101.759	-1.641	0.000	0.00			24.0	OK
S1.011		S25	40 101.759	0.059	0.000	0.35		96	21.7	SURCHARGE

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Summary Wizard of 15 minute 2 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	14	105.148	-0.075	0.000	0.48		4.8	OK
S1.001		S2	16	105.061	-0.164	0.000	0.16		7.7	OK
S1.002		S3	15	104.737	-0.128	0.000	0.38		12.4	OK
S1.003		S4	15	104.624	-0.111	0.000	0.36		11.8	OK
S2.000		S5	16	104.822	-0.103	0.000	0.45		10.0	OK
S2.001		S6	15	104.795	-0.090	0.000	0.66		18.3	OK
S2.002		S7	15	104.743	-0.072	0.000	0.78		21.4	OK
S2.003		S8	15	104.652	-0.073	0.000	0.70		20.5	OK
S2.004		S9	15	104.615	-0.050	0.000	0.78		23.4	OK
S1.004		S10	15	104.602	-0.128	0.000	0.63		34.9	OK
S3.000		S11	14	104.991	-0.144	0.000	0.27		14.5	OK
S3.001		S12	16	104.658	-0.087	0.000	0.63		16.3	OK
S3.002		S13	16	104.619	-0.076	0.000	0.77		19.0	OK
S1.005		S14	15	104.567	-0.228	0.000	0.33		50.9	OK
S4.000		S15	15	104.511	-0.094	0.000	0.61		16.3	OK
S4.001		S16	16	104.465	-0.090	0.000	0.65		17.6	OK
S1.006		S17	15	104.412	-0.223	0.000	0.34		65.9	OK
S1.007		S18	16	104.233	-0.162	0.000	0.61		65.8	OK
S1.008		S19	16	104.045	-0.290	0.000	0.12		65.5	OK
S1.009		S20	33	101.946	-1.724	0.000	0.01		65.1	OK
S5.000		S21	15	104.265	-0.125	0.000	0.06		0.8	OK
S5.001		S22	15	104.194	-0.116	0.000	0.12		6.7	OK
S6.000	SSyphonic	RWP	16	103.813	-0.187	0.000	0.30		34.6	OK
S5.002		S23	16	103.516	-0.133	0.000	0.57		41.0	OK
S5.003		S24	16	103.331	-0.228	0.000	0.13		41.4	OK
S1.010	STank	33	101.945	-1.455	0.000	0.01			92.8	OK
S1.011		S25	33	101.945	0.245	0.000	0.37	19	22.4	SURCHARGE

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Summary Wizard of 30 minute 2 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Half Drain			Pipe	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)	
S1.000	SSyphonic	S1	18	105.135	-0.088	0.000	0.36		3.5	OK
S1.001		S2	20	105.053	-0.172	0.000	0.13		6.1	OK
S1.002		S3	20	104.726	-0.139	0.000	0.31		10.2	OK
S1.003		S4	20	104.611	-0.124	0.000	0.31		10.0	OK
S2.000		S5	20	104.804	-0.121	0.000	0.33		7.4	OK
S2.001		S6	20	104.777	-0.108	0.000	0.53		14.7	OK
S2.002		S7	20	104.723	-0.092	0.000	0.65		17.8	OK
S2.003		S8	20	104.634	-0.091	0.000	0.60		17.5	OK
S2.004		S9	20	104.596	-0.069	0.000	0.67		20.2	OK
S1.004		S10	20	104.587	-0.143	0.000	0.54		30.1	OK
S3.000		S11	18	104.978	-0.157	0.000	0.20		10.7	OK
S3.001		S12	20	104.635	-0.110	0.000	0.48		12.4	OK
S3.002		S13	20	104.596	-0.099	0.000	0.59		14.7	OK
S1.005		S14	20	104.554	-0.241	0.000	0.28		43.7	OK
S4.000		S15	20	104.487	-0.118	0.000	0.45		12.0	OK
S4.001		S16	20	104.443	-0.112	0.000	0.50		13.5	OK
S1.006		S17	20	104.398	-0.237	0.000	0.29		55.8	OK
S1.007		S18	21	104.212	-0.183	0.000	0.52		55.8	OK
S1.008		S19	21	104.038	-0.297	0.000	0.10		55.8	OK
S1.009		S20	28	102.022	-1.648	0.000	0.01		55.7	OK
S5.000		S21	18	104.260	-0.130	0.000	0.05		0.6	OK
S5.001		S22	20	104.192	-0.118	0.000	0.10		5.7	OK
S6.000		S23	19	103.794	-0.206	0.000	0.21		25.2	OK
S5.002		S24	21	103.486	-0.163	0.000	0.43		30.6	OK
S5.003		S25	21	103.321	-0.238	0.000	0.09		30.5	OK
S1.010	STank	28	102.022	-1.378	0.000	0.01		78.4	OK	
S1.011		S25	28	102.022	0.322	0.000	0.37	23	22.5	SURCHARGE

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Summary Wizard of 60 minute 2 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Half Drain	Pipe	Status	
			Level (m)	Depth (m)	Volume (m³)		Overflow (l/s)	Time (mins)		Flow (l/s)
S1.000	SSyphonic	S1	25	105.122	-0.101	0.000	0.23		2.3	OK
S1.001		S2	25	105.045	-0.180	0.000	0.09		4.2	OK
S1.002		S3	26	104.710	-0.155	0.000	0.22		7.1	OK
S1.003		S4	26	104.589	-0.146	0.000	0.22		7.1	OK
S2.000		S5	25	104.782	-0.143	0.000	0.22		4.9	OK
S2.001		S6	26	104.755	-0.130	0.000	0.37		10.2	OK
S2.002		S7	26	104.696	-0.119	0.000	0.46		12.5	OK
S2.003		S8	26	104.605	-0.120	0.000	0.42		12.4	OK
S2.004		S9	26	104.564	-0.101	0.000	0.48		14.5	OK
S1.004		S10	26	104.559	-0.171	0.000	0.39		21.6	OK
S3.000		S11	25	104.964	-0.171	0.000	0.13		7.0	OK
S3.001		S12	26	104.612	-0.133	0.000	0.32		8.2	OK
S3.002		S13	26	104.573	-0.122	0.000	0.41		10.1	OK
S1.005		S14	26	104.534	-0.261	0.000	0.20		31.3	OK
S4.000		S15	25	104.464	-0.141	0.000	0.29		7.9	OK
S4.001		S16	26	104.420	-0.135	0.000	0.33		8.9	OK
S1.006		S17	26	104.376	-0.259	0.000	0.21		39.9	OK
S1.007		S18	26	104.178	-0.217	0.000	0.37		40.0	OK
S1.008		S19	26	104.025	-0.310	0.000	0.07		40.0	OK
S1.009		S20	29	102.015	-1.655	0.000	0.00		40.0	OK
S5.000		S21	25	104.257	-0.133	0.000	0.03		0.4	OK
S5.001		S22	26	104.186	-0.124	0.000	0.07		4.0	OK
S6.000		RWP	25	103.774	-0.226	0.000	0.14		16.4	OK
S5.002		S23	25	103.458	-0.191	0.000	0.28		20.2	OK
S5.003		S24	25	103.308	-0.251	0.000	0.06		20.1	OK
S1.010	STank	29	102.015	-1.385	0.000	0.01		56.3	OK	
S1.011	S25	29	102.014	0.314	0.000	0.37		30	22.4 SURCHARGE	

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Summary Wizard of 120 minute 2 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	33	105.111	-0.112	0.000	0.15		1.5	OK
S1.001		S2	33	105.034	-0.191	0.000	0.06		2.7	OK
S1.002		S3	33	104.696	-0.169	0.000	0.14		4.6	OK
S1.003		S4	33	104.569	-0.166	0.000	0.14		4.6	OK
S2.000		S5	33	104.763	-0.162	0.000	0.14		3.1	OK
S2.001		S6	33	104.734	-0.151	0.000	0.24		6.6	OK
S2.002		S7	33	104.673	-0.142	0.000	0.29		8.1	OK
S2.003		S8	33	104.580	-0.145	0.000	0.27		8.0	OK
S2.004		S9	33	104.535	-0.130	0.000	0.31		9.4	OK
S1.004		S10	33	104.532	-0.198	0.000	0.25		13.9	OK
S3.000		S11	33	104.953	-0.182	0.000	0.08		4.4	OK
S3.001		S12	33	104.591	-0.154	0.000	0.20		5.3	OK
S3.002		S13	33	104.550	-0.145	0.000	0.26		6.4	OK
S1.005		S14	33	104.510	-0.285	0.000	0.13		20.3	OK
S4.000		S15	33	104.445	-0.160	0.000	0.19		5.0	OK
S4.001		S16	33	104.400	-0.155	0.000	0.21		5.7	OK
S1.006		S17	33	104.352	-0.283	0.000	0.14		25.9	OK
S1.007		S18	33	104.145	-0.250	0.000	0.24		25.9	OK
S1.008		S19	33	104.011	-0.324	0.000	0.05		25.8	OK
S1.009		S20	35	101.899	-1.771	0.000	0.00		25.9	OK
S5.000		S21	33	104.253	-0.137	0.000	0.02		0.2	OK
S5.001		S22	33	104.181	-0.129	0.000	0.05		2.6	OK
S6.000	SSyphonic	RWP	33	103.759	-0.241	0.000	0.09		10.2	OK
S5.002		S23	33	103.434	-0.215	0.000	0.18		12.8	OK
S5.003		S24	33	103.297	-0.262	0.000	0.04		12.8	OK
S1.010		STank	35	101.899	-1.501	0.000	0.00		37.5	OK
S1.011		S25	35	101.898	0.198	0.000	0.36	36	22.4	SURCHARGE

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Summary Wizard of 240 minute 2 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)					
S1.000		S1	41 105.103	-0.120	0.000	0.09			0.9	OK
S1.001		S2	41 105.027	-0.198	0.000	0.03			1.7	OK
S1.002		S3	41 104.685	-0.180	0.000	0.09			2.9	OK
S1.003		S4	41 104.555	-0.180	0.000	0.09			2.9	OK
S2.000		S5	41 104.749	-0.176	0.000	0.09			1.9	OK
S2.001		S6	41 104.718	-0.167	0.000	0.15			4.1	OK
S2.002		S7	41 104.655	-0.160	0.000	0.18			5.1	OK
S2.003		S8	41 104.562	-0.163	0.000	0.17			5.0	OK
S2.004		S9	41 104.513	-0.152	0.000	0.20			5.9	OK
S1.004		S10	41 104.509	-0.221	0.000	0.16			8.8	OK
S3.000		S11	41 104.942	-0.193	0.000	0.05			2.7	OK
S3.001		S12	41 104.574	-0.171	0.000	0.13			3.3	OK
S3.002		S13	41 104.533	-0.162	0.000	0.16			4.0	OK
S1.005		S14	41 104.491	-0.304	0.000	0.08			12.8	OK
S4.000		S15	41 104.431	-0.174	0.000	0.12			3.1	OK
S4.001		S16	41 104.384	-0.171	0.000	0.13			3.6	OK
S1.006		S17	41 104.333	-0.302	0.000	0.09			16.3	OK
S1.007		S18	41 104.117	-0.278	0.000	0.15			16.3	OK
S1.008		S19	41 104.002	-0.333	0.000	0.03			16.4	OK
S1.009		S20	41 101.874	-1.796	0.000	0.00			16.4	OK
S5.000		S21	41 104.248	-0.142	0.000	0.01			0.2	OK
S5.001		S22	41 104.177	-0.133	0.000	0.03			1.6	OK
S6.000	SSyphonic	RWP	41 103.745	-0.255	0.000	0.05			6.4	OK
S5.002		S23	41 103.416	-0.233	0.000	0.11			8.0	OK
S5.003		S24	41 103.291	-0.268	0.000	0.02			8.0	OK
S1.010	STank	41	101.689	-1.711	0.000	0.00			24.1	OK
S1.011		S25	41 101.689	-0.011	0.000	0.34		40	20.7	OK

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Summary Wizard of 360 minute 2 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)					
S1.000		S1	45 105.099	-0.124	0.000	0.07			0.7	OK
S1.001		S2	45 105.024	-0.201	0.000	0.03			1.3	OK
S1.002		S3	45 104.677	-0.188	0.000	0.07			2.2	OK
S1.003		S4	45 104.548	-0.187	0.000	0.07			2.2	OK
S2.000		S5	45 104.742	-0.183	0.000	0.07			1.5	OK
S2.001		S6	45 104.710	-0.175	0.000	0.11			3.1	OK
S2.002		S7	45 104.646	-0.169	0.000	0.14			3.8	OK
S2.003		S8	45 104.554	-0.171	0.000	0.13			3.8	OK
S2.004		S9	45 104.502	-0.163	0.000	0.15			4.4	OK
S1.004		S10	45 104.498	-0.232	0.000	0.12			6.6	OK
S3.000		S11	45 104.938	-0.197	0.000	0.04			2.1	OK
S3.001		S12	45 104.567	-0.178	0.000	0.10			2.5	OK
S3.002		S13	45 104.523	-0.172	0.000	0.12			3.0	OK
S1.005		S14	45 104.480	-0.315	0.000	0.06			9.6	OK
S4.000		S15	45 104.425	-0.180	0.000	0.09			2.3	OK
S4.001		S16	45 104.377	-0.178	0.000	0.10			2.7	OK
S1.006		S17	45 104.322	-0.313	0.000	0.06			12.3	OK
S1.007		S18	45 104.104	-0.291	0.000	0.11			12.3	OK
S1.008		S19	45 103.998	-0.337	0.000	0.02			12.3	OK
S1.009		S20	45 101.873	-1.797	0.000	0.00			12.3	OK
S5.000		S21	45 104.246	-0.144	0.000	0.01			0.1	OK
S5.001		S22	45 104.175	-0.135	0.000	0.02			1.2	OK
S6.000	SSyphonic	RWP	45 103.739	-0.261	0.000	0.04			4.8	OK
S5.002		S23	45 103.407	-0.242	0.000	0.08			6.0	OK
S5.003		S24	45 103.286	-0.273	0.000	0.02			6.0	OK
S1.010	STank	46	101.609	-1.791	0.000	0.00			18.3	OK
S1.011		S25	46 101.597	-0.103	0.000	0.29		78	17.8	OK

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Summary Wizard of 480 minute 2 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)					
S1.000		S1	49 105.096	-0.127	0.000	0.06			0.6	OK
S1.001		S2	49 105.023	-0.202	0.000	0.02			1.0	OK
S1.002		S3	49 104.673	-0.192	0.000	0.05			1.8	OK
S1.003		S4	49 104.543	-0.192	0.000	0.05			1.8	OK
S2.000		S5	49 104.737	-0.188	0.000	0.05			1.2	OK
S2.001		S6	49 104.706	-0.179	0.000	0.09			2.5	OK
S2.002		S7	49 104.640	-0.175	0.000	0.11			3.1	OK
S2.003		S8	49 104.549	-0.176	0.000	0.11			3.1	OK
S2.004		S9	49 104.496	-0.169	0.000	0.12			3.6	OK
S1.004		S10	49 104.492	-0.238	0.000	0.10			5.4	OK
S3.000		S11	49 104.936	-0.199	0.000	0.03			1.7	OK
S3.001		S12	49 104.562	-0.183	0.000	0.08			2.0	OK
S3.002		S13	49 104.518	-0.177	0.000	0.10			2.5	OK
S1.005		S14	49 104.474	-0.321	0.000	0.05			7.9	OK
S4.000		S15	49 104.419	-0.186	0.000	0.07			1.9	OK
S4.001		S16	49 104.373	-0.182	0.000	0.08			2.2	OK
S1.006		S17	49 104.315	-0.320	0.000	0.05			10.0	OK
S1.007		S18	49 104.097	-0.298	0.000	0.09			10.0	OK
S1.008		S19	49 103.991	-0.344	0.000	0.02			10.1	OK
S1.009		S20	49 101.873	-1.797	0.000	0.00			10.1	OK
S5.000		S21	49 104.245	-0.145	0.000	0.01			0.1	OK
S5.001		S22	49 104.172	-0.138	0.000	0.02			1.0	OK
S6.000	SSyphonic	RWP	49 103.735	-0.265	0.000	0.03			3.9	OK
S5.002		S23	49 103.400	-0.249	0.000	0.07			4.9	OK
S5.003		S24	49 103.281	-0.278	0.000	0.02			4.9	OK
S1.010	STank		49 101.605	-1.795	0.000	0.00			14.9	OK
S1.011		S25	49 101.566	-0.134	0.000	0.24		112	14.7	OK

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Summary Wizard of 15 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	6 105.189	-0.034	0.000	0.92			9.2	OK
S1.001		S2	6 105.091	-0.134	0.000	0.34			16.1	OK
S1.002		S3	7 104.861	-0.004	0.000	0.77			25.3	OK
S1.003		S4	7 104.818	0.083	0.000	0.62			20.3	FLOOD RISK
S2.000		S5	7 105.106	0.181	0.000	0.64			14.3	FLOOD RISK
S2.001		S6	7 105.086	0.201	0.000	1.06			29.5	SURCHARGED
S2.002		S7	7 105.031	0.216	0.000	1.27			34.7	FLOOD RISK
S2.003		S8	6 104.930	0.205	0.000	1.12			33.0	FLOOD RISK
S2.004		S9	6 104.859	0.194	0.000	1.26			37.6	FLOOD RISK
S1.004		S10	7 104.785	0.055	0.000	0.99			55.0	FLOOD RISK
S3.000		S11	6 105.027	-0.108	0.000	0.51			27.3	OK
S3.001		S12	7 104.819	0.074	0.000	1.16			30.0	SURCHARGED
S3.002		S13	8 104.747	0.052	0.000	1.48			36.7	SURCHARGED
S1.005		S14	9 104.627	-0.168	0.000	0.58			90.3	OK
S4.000		S15	9 104.644	0.039	0.000	1.07			28.6	SURCHARGED
S4.001		S16	9 104.581	0.026	0.000	1.17			31.4	SURCHARGED
S1.006		S17	8 104.510	-0.125	0.000	0.62			118.3	OK
S1.007		S18	8 104.414	0.019	0.000	1.12			119.9	SURCHARGED
S1.008		S19	9 104.078	-0.257	0.000	0.21			120.4	OK
S1.009		S20	21 102.409	-1.261	0.000	0.01			118.1	OK
S5.000		S21	8 104.275	-0.115	0.000	0.12			1.6	OK
S5.001		S22	9 104.214	-0.096	0.000	0.28			15.7	OK
S6.000	SSyphonic	RWP	9 103.863	-0.137	0.000	0.56			65.6	OK
S5.002		S23	11 103.667	0.018	0.000	1.13			80.8	SURCHARGED
S5.003		S24	11 103.361	-0.198	0.000	0.25			81.1	OK
S1.010	STank	21	102.409	-0.991	0.000	0.01			161.7	OK
S1.011		S25	21 102.409	0.709	0.000	0.37		36	22.5	SURCHARGED

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Summary Wizard of 30 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)					
S1.000	S1	10	105.164	-0.059	0.000	0.68				6.8		OK
S1.001	S2	10	105.077	-0.148	0.000	0.26				12.2		OK
S1.002	S3	10	104.770	-0.095	0.000	0.63				20.7		OK
S1.003	S4	11	104.701	-0.034	0.000	0.60				19.6		OK
S2.000	S5	10	105.000	0.075	0.000	0.55				12.3		FLOOD RISK
S2.001	S6	10	104.979	0.094	0.000	0.89				24.7		SURCHARGED
S2.002	S7	10	104.921	0.106	0.000	1.10				30.2		FLOOD RISK
S2.003	S8	10	104.809	0.084	0.000	1.02				30.0		SURCHARGED
S2.004	S9	11	104.738	0.073	0.000	1.16				34.8		FLOOD RISK
S1.004	S10	11	104.665	-0.065	0.000	0.97				54.2		OK
S3.000	S11	10	105.006	-0.129	0.000	0.38				20.4		OK
S3.001	S12	11	104.751	0.006	0.000	0.89				23.1		SURCHARGED
S3.002	S13	11	104.700	0.005	0.000	1.14				28.2		SURCHARGED
S1.005	S14	11	104.612	-0.183	0.000	0.52				81.0		OK
S4.000	S15	11	104.551	-0.054	0.000	0.85				22.8		OK
S4.001	S16	11	104.513	-0.042	0.000	0.94				25.3		OK
S1.006	S17	11	104.458	-0.177	0.000	0.54				104.2		OK
S1.007	S18	11	104.315	-0.080	0.000	0.97				104.5		OK
S1.008	S19	12	104.068	-0.267	0.000	0.18				104.5		OK
S1.009	S20	17	102.668	-1.002	0.000	0.01				102.5		OK
S5.000	S21	11	104.270	-0.120	0.000	0.09				1.2		OK
S5.001	S22	11	104.207	-0.103	0.000	0.21				11.9		OK
S6.000	SSyphonic RWP	12	103.833	-0.167	0.000	0.41				47.9		OK
S5.002	S23	13	103.559	-0.090	0.000	0.83				59.7		OK
S5.003	S24	13	103.346	-0.213	0.000	0.18				59.5		OK
S1.010	STank	17	102.668	-0.732	0.000	0.01				132.2		OK
S1.011	S25	17	102.667	0.967	0.000	0.37				49	22.5	SURCHARGED

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Summary Wizard of 60 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe		
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow		
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status	
S1.000		S1	15	105.143	-0.080	0.000	0.44		4.4	OK	
S1.001		S2	13	105.062	-0.163	0.000	0.17		8.0	OK	
S1.002		S3	14	104.742	-0.123	0.000	0.42		13.8	OK	
S1.003		S4	14	104.634	-0.101	0.000	0.42		13.9	OK	
S2.000		S5	14	104.857	-0.068	0.000	0.42		9.4	OK	
S2.001		S6	14	104.843	-0.042	0.000	0.71		19.6	OK	
S2.002		S7	14	104.808	-0.007	0.000	0.85		23.3	OK	
S2.003		S8	14	104.756	0.031	0.000	0.71		20.8	SURCHARGED	
S2.004		S9	14	104.706	0.041	0.000	0.79		23.7	SURCHARGED	
S1.004		S10	14	104.608	-0.122	0.000	0.66		37.0	OK	
S3.000		S11	15	104.986	-0.149	0.000	0.25		13.3	OK	
S3.001		S12	15	104.659	-0.086	0.000	0.61		15.8	OK	
S3.002		S13	14	104.622	-0.073	0.000	0.78		19.4	OK	
S1.005		S14	14	104.575	-0.220	0.000	0.36		55.7	OK	
S4.000		S15	16	104.506	-0.099	0.000	0.56		15.0	OK	
S4.001		S16	15	104.465	-0.090	0.000	0.64		17.1	OK	
S1.006		S17	14	104.421	-0.214	0.000	0.38		72.9	OK	
S1.007		S18	14	104.248	-0.147	0.000	0.68		73.0	OK	
S1.008		S19	15	104.049	-0.286	0.000	0.13		73.1	OK	
S1.009		S20	15	102.772	-0.898	0.000	0.01		71.9	OK	
S5.000		S21	16	104.263	-0.127	0.000	0.06		0.8	OK	
S5.001		S22	14	104.197	-0.113	0.000	0.14		7.9	OK	
S6.000	SSyphonic	RWP	17	103.805	-0.195	0.000	0.27		31.2	OK	
S5.002		S23	17	103.507	-0.142	0.000	0.54		38.9	OK	
S5.003		S24	18	103.328	-0.231	0.000	0.12		38.8	OK	
S1.010	STank	S15	15	102.772	-0.628	0.000	0.01		95.3	OK	
S1.011		S25	15	102.771	1.071	0.000	0.37	56	22.5	SURCHARGED	

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Summary Wizard of 120 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Half Drain		Pipe	Status	
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)		Flow (l/s)
S1.000	S1	22	105.126	-0.097	0.000	0.28		2.8	OK	
S1.001	S2	22	105.049	-0.176	0.000	0.11		5.0	OK	
S1.002	S3	21	104.718	-0.147	0.000	0.26		8.7	OK	
S1.003	S4	21	104.602	-0.133	0.000	0.27		8.7	OK	
S2.000	S5	22	104.792	-0.133	0.000	0.26		5.9	OK	
S2.001	S6	21	104.766	-0.119	0.000	0.45		12.5	OK	
S2.002	S7	21	104.710	-0.105	0.000	0.56		15.3	OK	
S2.003	S8	21	104.622	-0.103	0.000	0.52		15.3	OK	
S2.004	S9	21	104.583	-0.082	0.000	0.60		17.8	OK	
S1.004	S10	21	104.576	-0.154	0.000	0.47		26.5	OK	
S3.000	S11	22	104.969	-0.166	0.000	0.15		8.3	OK	
S3.001	S12	22	104.623	-0.122	0.000	0.39		10.0	OK	
S3.002	S13	21	104.586	-0.109	0.000	0.49		12.2	OK	
S1.005	S14	21	104.546	-0.249	0.000	0.25		38.7	OK	
S4.000	S15	22	104.474	-0.131	0.000	0.35		9.4	OK	
S4.001	S16	22	104.432	-0.123	0.000	0.40		10.8	OK	
S1.006	S17	21	104.389	-0.246	0.000	0.26		49.3	OK	
S1.007	S18	22	104.199	-0.196	0.000	0.46		49.3	OK	
S1.008	S19	22	104.035	-0.300	0.000	0.09		49.2	OK	
S1.009	S20	16	102.703	-0.967	0.000	0.00		48.4	OK	
S5.000	S21	22	104.258	-0.132	0.000	0.03		0.5	OK	
S5.001	S22	21	104.190	-0.120	0.000	0.09		4.9	OK	
S6.000	SSyphonic	RWP	23	103.781	-0.219	0.000	0.17		19.4	OK
S5.002		S23	23	103.469	-0.180	0.000	0.34		24.3	OK
S5.003		S24	23	103.313	-0.246	0.000	0.08		24.3	OK
S1.010	STank	16	102.703	-0.697	0.000	0.01		64.3	OK	
S1.011	S25	16	102.702	1.002	0.000	0.37		72	22.4	SURCHARGE

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Summary Wizard of 240 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	30	105.114	-0.109	0.000	0.17		1.7	OK
S1.001		S2	30	105.037	-0.188	0.000	0.06		3.1	OK
S1.002		S3	30	104.700	-0.165	0.000	0.16		5.4	OK
S1.003		S4	30	104.576	-0.159	0.000	0.16		5.4	OK
S2.000		S5	30	104.769	-0.156	0.000	0.16		3.6	OK
S2.001		S6	30	104.740	-0.145	0.000	0.28		7.7	OK
S2.002		S7	30	104.681	-0.134	0.000	0.34		9.4	OK
S2.003		S8	30	104.588	-0.137	0.000	0.32		9.4	OK
S2.004		S9	30	104.544	-0.121	0.000	0.37		11.0	OK
S1.004		S10	30	104.540	-0.190	0.000	0.29		16.3	OK
S3.000		S11	30	104.956	-0.179	0.000	0.09		5.1	OK
S3.001		S12	30	104.597	-0.148	0.000	0.24		6.1	OK
S3.002		S13	30	104.558	-0.137	0.000	0.30		7.5	OK
S1.005		S14	30	104.517	-0.278	0.000	0.15		23.8	OK
S4.000		S15	30	104.451	-0.154	0.000	0.22		5.8	OK
S4.001		S16	30	104.406	-0.149	0.000	0.25		6.6	OK
S1.006		S17	30	104.359	-0.276	0.000	0.16		30.5	OK
S1.007		S18	30	104.156	-0.239	0.000	0.28		30.5	OK
S1.008		S19	30	104.016	-0.319	0.000	0.05		30.4	OK
S1.009		S20	22	102.382	-1.288	0.000	0.00		30.1	OK
S5.000		S21	30	104.255	-0.135	0.000	0.02		0.3	OK
S5.001		S22	30	104.182	-0.128	0.000	0.05		3.0	OK
S6.000	SSyphonic	RWP	30	103.764	-0.236	0.000	0.10		11.9	OK
S5.002		S23	30	103.441	-0.208	0.000	0.21		14.9	OK
S5.003		S24	30	103.300	-0.259	0.000	0.05		14.9	OK
S1.010	STank	22	102.382	-1.018	0.000	0.00			41.7	OK
S1.011		S25	22	102.381	0.681	0.000	0.37	68	22.5	SURCHARGE

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Summary Wizard of 360 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	35	105.108	-0.115	0.000	0.13		1.3	OK
S1.001		S2	35	105.031	-0.194	0.000	0.05		2.3	OK
S1.002		S3	35	104.691	-0.174	0.000	0.12		4.0	OK
S1.003		S4	35	104.564	-0.171	0.000	0.12		4.0	OK
S2.000		S5	35	104.758	-0.167	0.000	0.12		2.7	OK
S2.001		S6	35	104.729	-0.156	0.000	0.20		5.7	OK
S2.002		S7	35	104.667	-0.148	0.000	0.25		7.0	OK
S2.003		S8	35	104.574	-0.151	0.000	0.24		7.0	OK
S2.004		S9	35	104.528	-0.137	0.000	0.27		8.1	OK
S1.004		S10	35	104.524	-0.206	0.000	0.22		12.1	OK
S3.000		S11	35	104.949	-0.186	0.000	0.07		3.8	OK
S3.001		S12	35	104.585	-0.160	0.000	0.18		4.5	OK
S3.002		S13	35	104.544	-0.151	0.000	0.22		5.6	OK
S1.005		S14	35	104.503	-0.292	0.000	0.11		17.6	OK
S4.000		S15	35	104.440	-0.165	0.000	0.16		4.3	OK
S4.001		S16	35	104.394	-0.161	0.000	0.18		4.9	OK
S1.006		S17	35	104.345	-0.290	0.000	0.12		22.5	OK
S1.007		S18	35	104.136	-0.259	0.000	0.21		22.5	OK
S1.008		S19	35	104.008	-0.327	0.000	0.04		22.5	OK
S1.009		S20	27	102.081	-1.589	0.000	0.00		22.4	OK
S5.000		S21	35	104.251	-0.139	0.000	0.02		0.2	OK
S5.001		S22	35	104.179	-0.131	0.000	0.04		2.2	OK
S6.000	SSyphonic	RWP	35	103.754	-0.246	0.000	0.07		8.8	OK
S5.002		S23	35	103.427	-0.222	0.000	0.15		11.0	OK
S5.003		S24	35	103.295	-0.264	0.000	0.03		11.0	OK
S1.010	STank	27	102.081	-1.319	0.000	0.00			32.3	OK
S1.011		S25	27	102.081	0.381	0.000	0.37	60	22.5	SURCHARGE

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Summary Wizard of 480 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	
S1.000	S1	38	105.105	-0.118	0.000	0.10		1.0	OK
S1.001	S2	38	105.028	-0.197	0.000	0.04		1.8	OK
S1.002	S3	38	104.687	-0.178	0.000	0.10		3.2	OK
S1.003	S4	38	104.557	-0.178	0.000	0.10		3.2	OK
S2.000	S5	38	104.751	-0.174	0.000	0.10		2.2	OK
S2.001	S6	38	104.721	-0.164	0.000	0.16		4.6	OK
S2.002	S7	38	104.659	-0.156	0.000	0.20		5.6	OK
S2.003	S8	38	104.566	-0.159	0.000	0.19		5.6	OK
S2.004	S9	38	104.517	-0.148	0.000	0.22		6.6	OK
S1.004	S10	38	104.514	-0.216	0.000	0.17		9.7	OK
S3.000	S11	38	104.944	-0.191	0.000	0.06		3.0	OK
S3.001	S12	38	104.578	-0.167	0.000	0.14		3.7	OK
S3.002	S13	38	104.537	-0.158	0.000	0.18		4.5	OK
S1.005	S14	38	104.496	-0.299	0.000	0.09		14.2	OK
S4.000	S15	38	104.433	-0.172	0.000	0.13		3.4	OK
S4.001	S16	38	104.387	-0.168	0.000	0.15		4.0	OK
S1.006	S17	38	104.337	-0.298	0.000	0.09		18.2	OK
S1.007	S18	38	104.123	-0.272	0.000	0.17		18.2	OK
S1.008	S19	38	104.004	-0.331	0.000	0.03		18.2	OK
S1.009	S20	38	101.875	-1.795	0.000	0.00		18.2	OK
S5.000	S21	38	104.249	-0.141	0.000	0.01		0.2	OK
S5.001	S22	38	104.177	-0.133	0.000	0.03		1.8	OK
S6.000	SSyphonic RWP	38	103.747	-0.253	0.000	0.06		7.1	OK
S5.002		38	103.419	-0.230	0.000	0.12		8.9	OK
S5.003		38	103.292	-0.267	0.000	0.03		8.9	OK
S1.010	STank	37	101.857	-1.543	0.000	0.00		26.7	OK
S1.011	S25	37	101.856	0.156	0.000	0.36		56	22.3 SURCHARGE

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Summary Wizard of 960 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Flow / Cap.	Overflow (l/s)	Half Drain Pipe		Status
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)	
S1.000		S1	47 105.097	-0.126	0.000	0.06			0.6	OK
S1.001		S2	47 105.023	-0.202	0.000	0.02			1.1	OK
S1.002		S3	47 104.675	-0.190	0.000	0.06			1.9	OK
S1.003		S4	47 104.545	-0.190	0.000	0.06			1.9	OK
S2.000		S5	47 104.739	-0.186	0.000	0.06			1.3	OK
S2.001		S6	47 104.707	-0.178	0.000	0.10			2.7	OK
S2.002		S7	47 104.642	-0.173	0.000	0.12			3.3	OK
S2.003		S8	47 104.550	-0.175	0.000	0.11			3.3	OK
S2.004		S9	47 104.498	-0.167	0.000	0.13			3.9	OK
S1.004		S10	47 104.494	-0.236	0.000	0.10			5.8	OK
S3.000		S11	47 104.937	-0.198	0.000	0.03			1.8	OK
S3.001		S12	47 104.564	-0.181	0.000	0.08			2.2	OK
S3.002		S13	47 104.520	-0.175	0.000	0.11			2.7	OK
S1.005		S14	47 104.476	-0.319	0.000	0.05			8.4	OK
S4.000		S15	47 104.421	-0.184	0.000	0.08			2.0	OK
S4.001		S16	47 104.375	-0.180	0.000	0.09			2.3	OK
S1.006		S17	47 104.317	-0.318	0.000	0.06			10.8	OK
S1.007		S18	47 104.099	-0.296	0.000	0.10			10.7	OK
S1.008		S19	47 103.994	-0.341	0.000	0.02			10.8	OK
S1.009		S20	47 101.873	-1.797	0.000	0.00			10.8	OK
S5.000		S21	47 104.245	-0.145	0.000	0.01			0.1	OK
S5.001		S22	47 104.173	-0.137	0.000	0.02			1.1	OK
S6.000	SSyphonic	RWP	47 103.737	-0.263	0.000	0.04			4.2	OK
S5.002		S23	47 103.402	-0.247	0.000	0.07			5.3	OK
S5.003		S24	47 103.282	-0.277	0.000	0.02			5.3	OK
S1.010	STank		47 101.605	-1.795	0.000	0.00			16.0	OK
S1.011		S25	47 101.577	-0.123	0.000	0.26		224	15.9	OK

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Summary Wizard of 15 minute 100 year Winter I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	2	105.290	0.067	0.000	1.38		13.8		SURCHARGED
S1.001	S2	1	105.146	-0.079	0.000	0.50		24.1		OK
S1.002	S3	1	105.092	0.227	0.000	0.97		31.9		FLOOD RISK
S1.003	S4	1	104.969	0.234	0.000	1.00		32.8		FLOOD RISK
S2.000	S5	1	105.290	0.365	3.951	1.28		28.6		FLOOD
S2.001	S6	3	105.292	0.407	0.000	1.28		35.6		FLOOD RISK
S2.002	S7	1	105.211	0.396	0.000	1.50		41.0		FLOOD RISK
S2.003	S8	1	105.082	0.357	0.000	1.34		39.3		FLOOD RISK
S2.004	S9	1	104.996	0.331	0.000	1.58		47.2		FLOOD RISK
S1.004	S10	1	104.890	0.160	0.000	1.39		77.6		FLOOD RISK
S3.000	S11	2	105.199	0.064	0.000	0.70		37.6		FLOOD RISK
S3.001	S12	1	105.081	0.336	0.000	1.57		40.6		FLOOD RISK
S3.002	S13	1	104.979	0.284	0.000	1.95		48.4		FLOOD RISK
S1.005	S14	1	104.799	0.004	0.000	0.78		122.7		FLOOD RISK
S4.000	S15	1	104.931	0.326	0.000	1.46		39.2		FLOOD RISK
S4.001	S16	1	104.828	0.273	0.000	1.61		43.3		FLOOD RISK
S1.006	S17	3	104.660	0.025	0.000	0.85		162.1		SURCHARGED
S1.007	S18	4	104.487	0.092	0.000	1.51		162.4		SURCHARGED
S1.008	S19	5	104.096	-0.239	0.000	0.29		162.5		OK
S1.009	S20	11	102.969	-0.701	0.000	0.01		159.1		OK
S5.000	S21	4	104.284	-0.106	0.000	0.18		2.4		OK
S5.001	S22	4	104.229	-0.081	0.000	0.43		24.3		OK
S6.000	SSyphonic RWP	5	104.060	0.060	0.000	0.83		97.2		SURCHARGED*
S5.002	S23	5	103.804	0.155	0.000	1.70		121.7		SURCHARGED
S5.003	S24	8	103.386	-0.173	0.000	0.37		121.0		OK
S1.010	STank	11	102.968	-0.432	0.000	0.02		228.2		OK
S1.011	S25	11	102.966	1.266	0.000	0.37		63	22.5	SURCHARGED

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Summary Wizard of 30 minute 100 year Winter I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	4	105.224	0.001	0.000	1.01			10.1	SURCHARGED
S1.001	S2	4	105.098	-0.127	0.000	0.39			18.6	OK
S1.002	S3	4	104.986	0.121	0.000	0.88			29.0	FLOOD RISK
S1.003	S4	4	104.884	0.149	0.000	0.88			28.9	FLOOD RISK
S2.000	S5	4	105.286	0.361	0.209	1.06			23.6	FLOOD
S2.001	S6	4	105.285	0.400	0.000	1.17			32.5	FLOOD RISK
S2.002	S7	4	105.202	0.387	0.000	1.44			39.6	FLOOD RISK
S2.003	S8	4	105.020	0.295	0.000	1.33			39.3	FLOOD RISK
S2.004	S9	4	104.917	0.252	0.000	1.60			47.8	FLOOD RISK
S1.004	S10	4	104.804	0.074	0.000	1.36			75.7	FLOOD RISK
S3.000	S11	4	105.035	-0.100	0.000	0.59			31.9	OK
S3.001	S12	4	104.925	0.180	0.000	1.38			35.6	SURCHARGED
S3.002	S13	4	104.843	0.148	0.000	1.72			42.8	FLOOD RISK
S1.005	S14	5	104.705	-0.090	0.000	0.75			117.0	OK
S4.000	S15	4	104.793	0.188	0.000	1.18			31.6	FLOOD RISK
S4.001	S16	5	104.729	0.174	0.000	1.33			35.6	FLOOD RISK
S1.006	S17	6	104.615	-0.020	0.000	0.79			150.9	OK
S1.007	S18	6	104.466	0.071	0.000	1.41			151.1	SURCHARGED
S1.008	S19	7	104.091	-0.244	0.000	0.27			151.1	OK
S1.009	S20	6	103.594	-0.076	0.000	0.01			148.2	OK
S5.000	S21	6	104.276	-0.114	0.000	0.14			1.8	OK
S5.001	S22	6	104.219	-0.091	0.000	0.33			18.6	OK
S6.000	SSyphonic RWP	7	103.874	-0.126	0.000	0.64			74.9	OK
S5.002	S23	8	103.698	0.049	0.000	1.30			93.2	SURCHARGED
S5.003	S24	6	103.579	0.020	0.000	0.29			92.8	SURCHARGED
S1.010	STank	6	103.583	0.183	0.000	0.02			192.2	SURCHARGED
S1.011	S25	6	103.583	1.883	0.000	0.38			81 23.4	SURCHARGED

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Summary Wizard of 60 minute 100 year Winter I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Flow / Cap.	Overflow (l/s)	Half Drain Pipe		Status
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)	
S1.000	S1	9	105.166	-0.057	0.000	0.70		7.0		OK
S1.001	S2	9	105.079	-0.146	0.000	0.26		12.6		OK
S1.002	S3	6	104.879	0.014	0.000	0.64		21.1		SURCHARGED
S1.003	S4	6	104.829	0.094	0.000	0.58		19.1		FLOOD RISK
S2.000	S5	6	105.145	0.220	0.000	0.57		12.7		FLOOD RISK
S2.001	S6	6	105.123	0.238	0.000	0.99		27.6		FLOOD RISK
S2.002	S7	6	105.058	0.243	0.000	1.23		33.7		FLOOD RISK
S2.003	S8	7	104.929	0.204	0.000	1.12		33.0		FLOOD RISK
S2.004	S9	7	104.856	0.191	0.000	1.27		38.0		FLOOD RISK
S1.004	S10	6	104.785	0.055	0.000	1.00		55.7		FLOOD RISK
S3.000	S11	9	105.007	-0.128	0.000	0.39		20.9		OK
S3.001	S12	9	104.767	0.022	0.000	0.96		24.8		SURCHARGED
S3.002	S13	10	104.710	0.015	0.000	1.23		30.5		SURCHARGED
S1.005	S14	6	104.694	-0.101	0.000	0.55		85.7		OK
S4.000	S15	6	104.709	0.104	0.000	0.85		22.9		FLOOD RISK
S4.001	S16	6	104.701	0.146	0.000	0.96		25.7		FLOOD RISK
S1.006	S17	2	104.692	0.057	0.000	0.58		111.8		SURCHARGED
S1.007	S18	2	104.689	0.294	0.000	1.04		111.7		SURCHARGED
S1.008	S19	2	104.685	0.350	0.000	0.20		111.4		SURCHARGED
S1.009	S20	2	104.681	1.011	0.000	0.01		109.0		SURCHARGED
S5.000	S21	2	104.700	0.310	0.000	0.09		1.2		FLOOD RISK
S5.001	S22	2	104.699	0.389	0.000	0.22		12.4		SURCHARGED
S6.000	SSyphonic RWP	2	104.704	0.704	0.000	0.42		49.1		SURCHARGED*
S5.002	S23	2	104.696	1.047	0.000	0.85		61.2		SURCHARGED
S5.003	S24	2	104.688	1.129	0.000	0.19		61.0		FLOOD RISK
S1.010	STank	2	104.682	1.282	0.000	0.01		140.1		FLOOD RISK
S1.011	S25	2	104.682	2.982	0.000	0.46		100	28.5	FLOOD RISK

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Summary Wizard of 120 minute 100 year Winter I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain		Pipe Flow	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)					
S1.000		S1	16 105.142	-0.081	0.000	0.44					4.4		OK
S1.001		S2	14 105.061	-0.164	0.000	0.17					8.0		OK
S1.002		S3	11 104.760	-0.105	0.000	0.42					13.8		OK
S1.003		S4	8 104.777	0.042	0.000	0.41					13.5		SURCHARGED
S2.000		S5	13 104.888	-0.037	0.000	0.39					8.8		OK
S2.001		S6	13 104.872	-0.013	0.000	0.66					18.4		OK
S2.002		S7	13 104.833	0.018	0.000	0.83					22.7		SURCHARGED
S2.003		S8	12 104.783	0.058	0.000	0.77					22.7		SURCHARGED
S2.004		S9	8 104.796	0.131	0.000	0.88					26.4		FLOOD RISK
S1.004		S10	5 104.795	0.065	0.000	0.71					39.7		FLOOD RISK
S3.000		S11	16 104.985	-0.150	0.000	0.24					13.1		OK
S3.001		S12	10 104.755	0.010	0.000	0.61					15.7		SURCHARGED
S3.002		S13	5 104.782	0.087	0.000	0.78					19.3		FLOOD RISK
S1.005		S14	2 104.795	0.000	0.000	0.37					58.1		FLOOD RISK
S4.000		S15	5 104.754	0.149	0.000	0.55					14.8		FLOOD RISK
S4.001		S16	4 104.770	0.215	0.000	0.63					17.0		FLOOD RISK
S1.006		S17	1 104.791	0.156	0.000	0.39					74.5		FLOOD RISK
S1.007		S18	1 104.788	0.393	0.000	0.70					74.6		FLOOD RISK
S1.008		S19	1 104.772	0.437	0.000	0.13					74.7		FLOOD RISK
S1.009		S20	1 104.771	1.101	0.000	0.01					73.6		FLOOD RISK
S5.000		S21	1 104.719	0.329	0.000	0.06					0.8		FLOOD RISK
S5.001		S22	1 104.720	0.410	0.000	0.14					7.7		SURCHARGED
S6.000	SSyphonic	RWP	1 104.745	0.745	0.000	0.26					30.6		SURCHARGED*
S5.002		S23	1 104.742	1.093	0.000	0.54					38.3		FLOOD RISK
S5.003		S24	1 104.778	1.219	0.000	0.12					38.3		FLOOD RISK
S1.010	STank	1 104.772	1.372	0.000	0.01						92.4		FLOOD RISK
S1.011		S25	1 104.772	3.072	0.000	0.46				120	28.4		FLOOD RISK

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Summary Wizard of 240 minute 100 year Winter I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain		Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)					
S1.000		S1	23 105.125	-0.098	0.000	0.27					2.7		OK
S1.001		S2	23 105.048	-0.177	0.000	0.10					4.9		OK
S1.002		S3	23 104.717	-0.148	0.000	0.25					8.4		OK
S1.003		S4	22 104.600	-0.135	0.000	0.26					8.4		OK
S2.000		S5	23 104.790	-0.135	0.000	0.25					5.7		OK
S2.001		S6	23 104.763	-0.122	0.000	0.43					12.0		OK
S2.002		S7	22 104.708	-0.107	0.000	0.54					14.8		OK
S2.003		S8	22 104.618	-0.107	0.000	0.50					14.8		OK
S2.004		S9	22 104.579	-0.086	0.000	0.58					17.3		OK
S1.004		S10	22 104.573	-0.157	0.000	0.46					25.7		OK
S3.000		S11	23 104.967	-0.168	0.000	0.15					8.0		OK
S3.001		S12	23 104.621	-0.124	0.000	0.37					9.6		OK
S3.002		S13	22 104.584	-0.111	0.000	0.48					11.8		OK
S1.005		S14	22 104.544	-0.251	0.000	0.24					37.4		OK
S4.000		S15	23 104.472	-0.133	0.000	0.34					9.1		OK
S4.001		S16	23 104.430	-0.125	0.000	0.39					10.4		OK
S1.006		S17	22 104.387	-0.248	0.000	0.25					47.8		OK
S1.007		S18	15 104.247	-0.148	0.000	0.45					47.8		OK
S1.008		S19	3 104.268	-0.067	0.000	0.08					47.8		OK
S1.009		S20	3 104.301	0.631	0.000	0.00					47.1	SURCHARGED	
S5.000		S21	23 104.258	-0.132	0.000	0.03					0.5		OK
S5.001		S22	22 104.189	-0.121	0.000	0.08					4.7		OK
S6.000	SSyphonic	RWP	3 104.212	0.212	0.000	0.16					18.7	SURCHARGED*	
S5.002		S23	3 104.271	0.622	0.000	0.33					23.4	SURCHARGED	
S5.003		S24	3 104.306	0.747	0.000	0.07					23.4	SURCHARGED	
S1.010	STank	3	104.301	0.901	0.000	0.01					60.7	SURCHARGED	
S1.011		S25	3 104.301	2.601	0.000	0.43				128	26.1	SURCHARGED	

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Summary Wizard of 360 minute 100 year Winter I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	28	105.118	-0.105	0.000	0.20		2.0	OK
S1.001		S2	28	105.040	-0.185	0.000	0.07		3.6	OK
S1.002		S3	28	104.705	-0.160	0.000	0.19		6.2	OK
S1.003		S4	28	104.582	-0.153	0.000	0.19		6.2	OK
S2.000		S5	28	104.775	-0.150	0.000	0.19		4.2	OK
S2.001		S6	28	104.747	-0.138	0.000	0.32		8.8	OK
S2.002		S7	28	104.688	-0.127	0.000	0.40		10.9	OK
S2.003		S8	28	104.597	-0.128	0.000	0.37		10.9	OK
S2.004		S9	28	104.554	-0.111	0.000	0.42		12.7	OK
S1.004		S10	28	104.550	-0.180	0.000	0.34		18.8	OK
S3.000		S11	28	104.959	-0.176	0.000	0.11		5.9	OK
S3.001		S12	28	104.604	-0.141	0.000	0.27		7.1	OK
S3.002		S13	28	104.565	-0.130	0.000	0.35		8.7	OK
S1.005		S14	28	104.525	-0.270	0.000	0.18		27.5	OK
S4.000		S15	28	104.457	-0.148	0.000	0.25		6.7	OK
S4.001		S16	28	104.413	-0.142	0.000	0.28		7.6	OK
S1.006		S17	28	104.368	-0.267	0.000	0.18		35.2	OK
S1.007		S18	28	104.167	-0.228	0.000	0.33		35.2	OK
S1.008		S19	28	104.020	-0.315	0.000	0.06		35.1	OK
S1.009		S20	8	103.225	-0.445	0.000	0.00		34.7	OK
S5.000		S21	28	104.256	-0.134	0.000	0.02		0.3	OK
S5.001		S22	28	104.184	-0.126	0.000	0.06		3.5	OK
S6.000	SSyphonic	RWP	28	103.768	-0.232	0.000	0.12		13.7	OK
S5.002		S23	28	103.448	-0.201	0.000	0.24		17.2	OK
S5.003		S24	28	103.303	-0.256	0.000	0.05		17.2	OK
S1.010	STank	8	103.225	-0.175	0.000	0.00			46.2	OK
S1.011		S25	8	103.220	1.520	0.000	0.37	138	22.4	SURCHARGE

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Summary Wizard of 480 minute 100 year Winter I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	32	105.112	-0.111	0.000	0.16		1.6	OK
S1.001		S2	32	105.035	-0.190	0.000	0.06		2.9	OK
S1.002		S3	32	104.698	-0.167	0.000	0.15		5.0	OK
S1.003		S4	32	104.572	-0.163	0.000	0.15		5.0	OK
S2.000		S5	32	104.766	-0.159	0.000	0.15		3.4	OK
S2.001		S6	32	104.737	-0.148	0.000	0.26		7.1	OK
S2.002		S7	32	104.677	-0.138	0.000	0.32		8.7	OK
S2.003		S8	32	104.584	-0.141	0.000	0.30		8.7	OK
S2.004		S9	32	104.539	-0.126	0.000	0.34		10.2	OK
S1.004		S10	32	104.536	-0.194	0.000	0.27		15.1	OK
S3.000		S11	32	104.955	-0.180	0.000	0.09		4.7	OK
S3.001		S12	32	104.594	-0.151	0.000	0.22		5.7	OK
S3.002		S13	32	104.554	-0.141	0.000	0.28		7.0	OK
S1.005		S14	32	104.513	-0.282	0.000	0.14		22.1	OK
S4.000		S15	32	104.448	-0.157	0.000	0.20		5.3	OK
S4.001		S16	32	104.403	-0.152	0.000	0.23		6.1	OK
S1.006		S17	32	104.355	-0.280	0.000	0.15		28.2	OK
S1.007		S18	32	104.150	-0.245	0.000	0.26		28.2	OK
S1.008		S19	32	104.014	-0.321	0.000	0.05		28.2	OK
S1.009		S20	12	102.912	-0.758	0.000	0.00		28.0	OK
S5.000		S21	32	104.254	-0.136	0.000	0.02		0.3	OK
S5.001		S22	32	104.181	-0.129	0.000	0.05		2.8	OK
S6.000	SSyphonic	RWP	32	103.761	-0.239	0.000	0.09		11.0	OK
S5.002		S23	32	103.438	-0.211	0.000	0.19		13.8	OK
S5.003		S24	32	103.299	-0.260	0.000	0.04		13.8	OK
S1.010	STank	12	102.912	-0.488	0.000	0.00			38.3	OK
S1.011		S25	12	102.910	1.210	0.000	0.37	128	22.4	SURCHARGE

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Innovyze	Network 2020.1	

Summary Wizard of 960 minute 100 year Winter I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
S1.000		S1	40	105.104	-0.119	0.000	0.09		0.9	OK
S1.001		S2	40	105.027	-0.198	0.000	0.04		1.7	OK
S1.002		S3	40	104.685	-0.180	0.000	0.09		2.9	OK
S1.003		S4	40	104.555	-0.180	0.000	0.09		2.9	OK
S2.000		S5	40	104.749	-0.176	0.000	0.09		2.0	OK
S2.001		S6	40	104.718	-0.167	0.000	0.15		4.2	OK
S2.002		S7	40	104.655	-0.160	0.000	0.19		5.1	OK
S2.003		S8	40	104.563	-0.162	0.000	0.17		5.1	OK
S2.004		S9	40	104.513	-0.152	0.000	0.20		6.0	OK
S1.004		S10	40	104.510	-0.220	0.000	0.16		8.9	OK
S3.000		S11	40	104.943	-0.192	0.000	0.05		2.8	OK
S3.001		S12	40	104.575	-0.170	0.000	0.13		3.3	OK
S3.002		S13	40	104.533	-0.162	0.000	0.16		4.1	OK
S1.005		S14	40	104.492	-0.303	0.000	0.08		13.0	OK
S4.000		S15	40	104.431	-0.174	0.000	0.12		3.1	OK
S4.001		S16	40	104.384	-0.171	0.000	0.13		3.6	OK
S1.006		S17	40	104.334	-0.301	0.000	0.09		16.6	OK
S1.007		S18	40	104.118	-0.277	0.000	0.15		16.6	OK
S1.008		S19	40	104.002	-0.333	0.000	0.03		16.6	OK
S1.009		S20	39	101.874	-1.796	0.000	0.00		16.6	OK
S5.000		S21	40	104.248	-0.142	0.000	0.01		0.2	OK
S5.001		S22	40	104.177	-0.133	0.000	0.03		1.6	OK
S6.000	SSyphonic	RWP	40	103.745	-0.255	0.000	0.06		6.5	OK
S5.002		S23	40	103.416	-0.233	0.000	0.11		8.1	OK
S5.003		S24	40	103.291	-0.268	0.000	0.03		8.1	OK
S1.010		STank	38	101.840	-1.560	0.000	0.00		24.5	OK
S1.011		S25	38	101.840	0.140	0.000	0.36	96	22.2	SURCHARGE

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Summary Wizard of 1440 minute 100 year Winter I+20% for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 18.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.357 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)					
S1.000		S1	46 105.098	-0.125	0.000	0.07			0.7	OK
S1.001		S2	46 105.024	-0.201	0.000	0.03			1.2	OK
S1.002		S3	46 104.677	-0.188	0.000	0.06			2.1	OK
S1.003		S4	46 104.547	-0.188	0.000	0.06			2.1	OK
S2.000		S5	46 104.741	-0.184	0.000	0.06			1.4	OK
S2.001		S6	46 104.709	-0.176	0.000	0.11			3.0	OK
S2.002		S7	46 104.645	-0.170	0.000	0.14			3.7	OK
S2.003		S8	46 104.553	-0.172	0.000	0.13			3.7	OK
S2.004		S9	46 104.501	-0.164	0.000	0.15			4.4	OK
S1.004		S10	46 104.498	-0.232	0.000	0.12			6.5	OK
S3.000		S11	46 104.938	-0.197	0.000	0.04			2.0	OK
S3.001		S12	46 104.567	-0.178	0.000	0.09			2.4	OK
S3.002		S13	46 104.522	-0.173	0.000	0.12			3.0	OK
S1.005		S14	46 104.479	-0.316	0.000	0.06			9.5	OK
S4.000		S15	46 104.424	-0.181	0.000	0.09			2.3	OK
S4.001		S16	46 104.377	-0.178	0.000	0.10			2.6	OK
S1.006		S17	46 104.321	-0.314	0.000	0.06			12.1	OK
S1.007		S18	46 104.103	-0.292	0.000	0.11			12.1	OK
S1.008		S19	46 103.998	-0.337	0.000	0.02			12.1	OK
S1.009		S20	46 101.873	-1.797	0.000	0.00			12.1	OK
S5.000		S21	46 104.246	-0.144	0.000	0.01			0.1	OK
S5.001		S22	46 104.175	-0.135	0.000	0.02			1.2	OK
S6.000	SSyphonic	RWP	46 103.738	-0.262	0.000	0.04			4.7	OK
S5.002		S23	46 103.406	-0.243	0.000	0.08			5.9	OK
S5.003		S24	46 103.285	-0.274	0.000	0.02			5.9	OK
S1.010	STank	45	101.609	-1.791	0.000	0.00			18.0	OK
S1.011		S25	45 101.599	-0.101	0.000	0.29		312	18.0	OK

Technical Specification

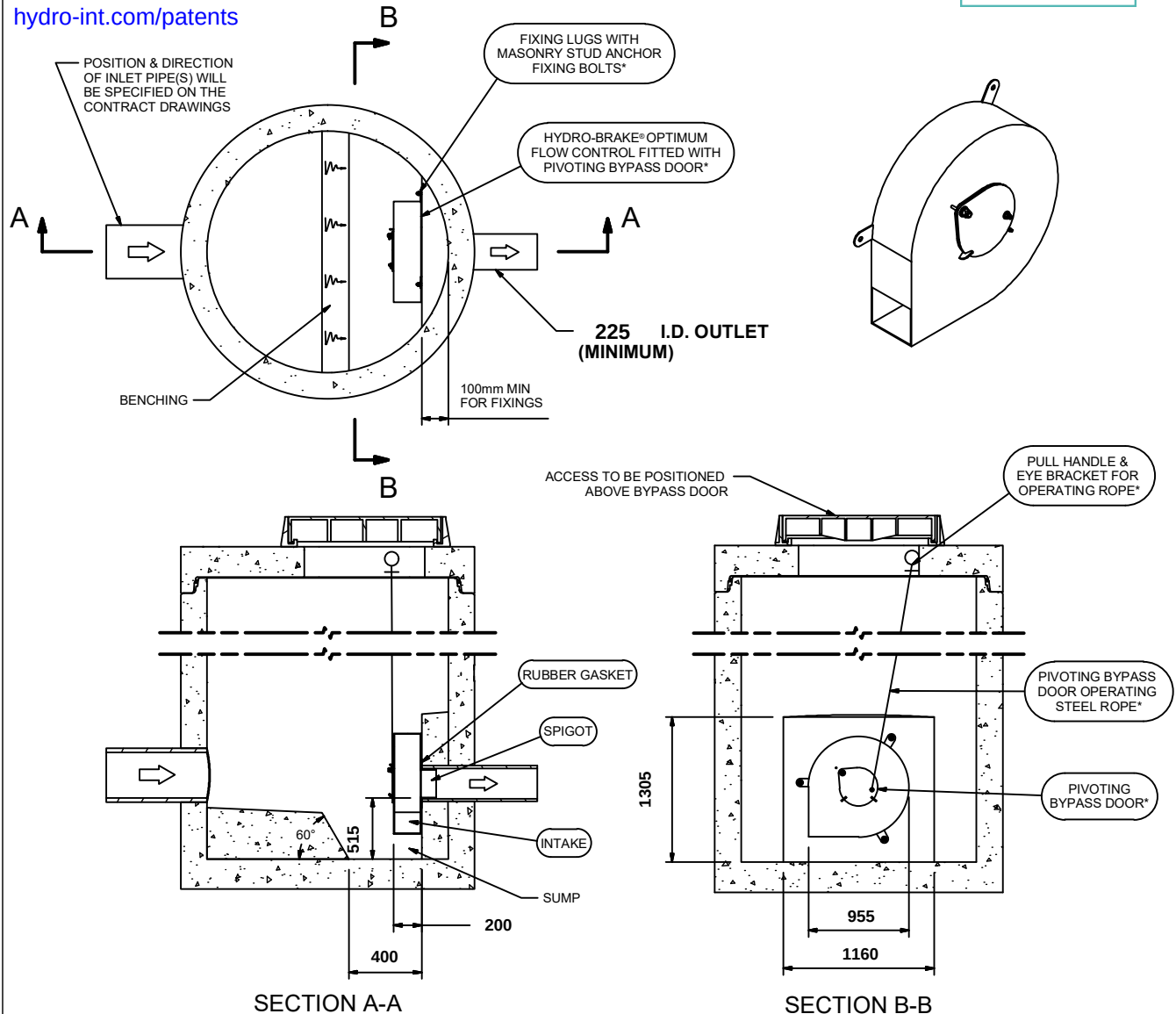
Control Point	Head (m)	Flow (l/s)
Primary Design	2.000	22.500
Flush-Flo™	0.580	22.497
Kick-Flo®	1.241	17.910
Mean Flow		19.564

Hydro-Brake® Optimum Flow Control including:

- 5 mm grade 304L stainless steel
- Integral stainless steel pivoting by-pass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Beed blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet
- Indicative Weight: 80 kg



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IMPORTANT: ○ LIMIT OF HYDRO INTERNATIONAL SUPPLY
 THE DEVICE WILL BE HANDED TO SUIT SITE CONDITIONS
 FOR SITE SPECIFIC DETAILS AND MINIMUM CHAMBER SIZE REFER TO HYDRO INTERNATIONAL
 ALL CIVIL AND INSTALLATION WORK BY OTHERS
 * WHERE SUPPLIED
 HYDRO-BRAKE® FLOW CONTROL & HYDRO-BRAKE® OPTIMUM FLOW CONTROL ARE REGISTERED TRADEMARKS FOR FLOW
 CONTROLS DESIGNED AND MANUFACTURED EXCLUSIVELY BY HYDRO INTERNATIONAL

THIS DESIGN LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

DESIGN ADVICE



The head/flow characteristics of this SHE-0194-2250-2000-2250 Hydro-Brake® Optimum Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve.
The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

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SITE Moston

DESIGNER Phil Sarbutts

REF 9104

SHE-0194-2250-2000-2250

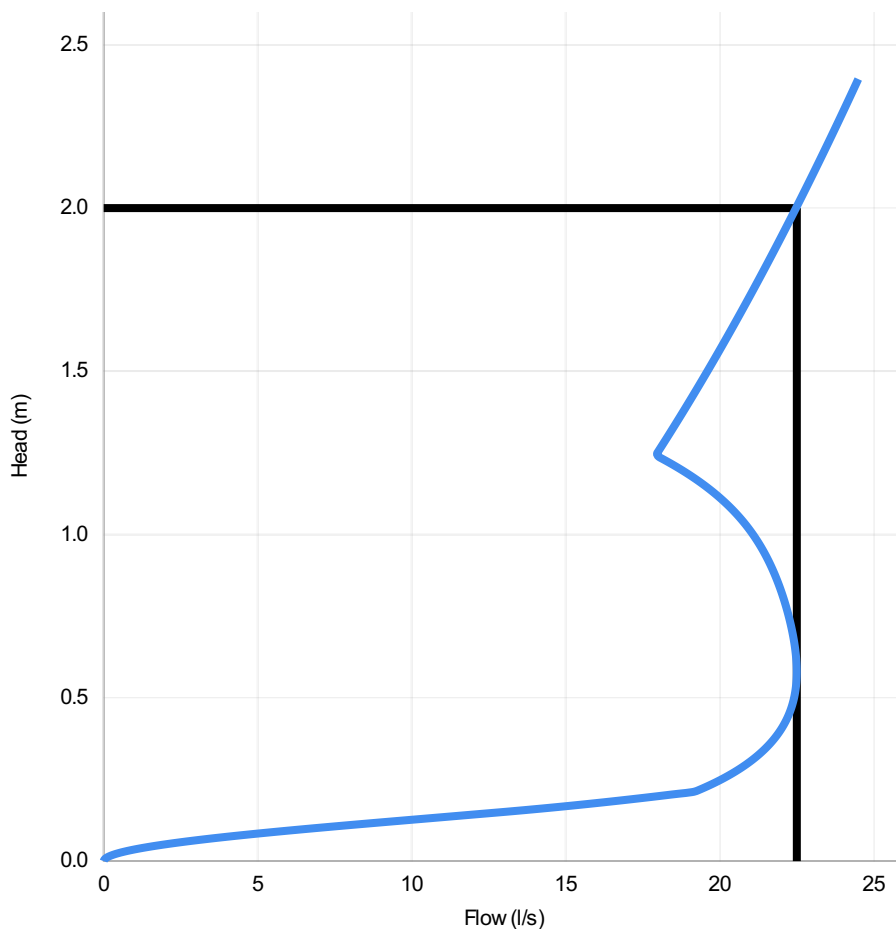
Hydro-Brake® Optimum

Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	2.000	22.500
Flush-Flo	0.580	22.497
Kick-Flo®	1.241	17.910
Mean Flow		19.564



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Head (m)	Flow (l/s)
0.000	0.000
0.069	3.461
0.138	11.412
0.207	18.691
0.276	20.530
0.345	21.479
0.414	22.054
0.483	22.365
0.552	22.488
0.621	22.479
0.690	22.379
0.759	22.212
0.828	21.988
0.897	21.697
0.966	21.316
1.034	20.805
1.103	20.113
1.172	19.181
1.241	17.982
1.310	18.376
1.379	18.829
1.448	19.270
1.517	19.701
1.586	20.122
1.655	20.534
1.724	20.937
1.793	21.332
1.862	21.720
1.931	22.100
2.000	22.473

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Hydro-Brake Optimum®