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Catherine House Old Harborough Road Brixworth NN6 9BX	Norton Juxta 82326	
Date 15/03/2024 File 82326 Full Network.MDX	Designed by NN Checked by MAS	
Micro Drainage		Network 2020.1.3

Time Area Diagram for Storm

Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.789	4-8	0.408

Total Area Contributing (ha) = 1.197

Total Pipe Volume (m³) = 24.712

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Existing Network Details for Storm

- Indicates pipe length does not match coordinates

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
S9.000	11.397	0.114	100.0	0.002	4.00	0.0	0.600	o	150	Pipe/Conduit
S9.001	9.676	0.097	99.8	0.009	0.00	0.0	0.600	o	150	Pipe/Conduit
S9.002	8.836	0.089	99.3	0.003	0.00	0.0	0.600	o	150	Pipe/Conduit
S9.003	4.858	0.049	99.1	0.001	0.00	0.0	0.600	o	150	Pipe/Conduit
S9.004	5.546	0.056	99.0	0.020	0.00	0.0	0.600	o	150	Pipe/Conduit
S10.000	5.206	0.418	12.5	0.004	4.00	0.0	0.600	o	150	Pipe/Conduit
S9.005	19.039	0.296	64.3	0.007	0.00	0.0	0.600	o	150	Pipe/Conduit
S11.000	15.806	0.650	24.3	0.001	4.00	0.0	0.600	o	100	Pipe/Conduit
S11.001	30.521	0.306	99.7	0.008	0.00	0.0	0.600	o	150	Pipe/Conduit
S11.002	10.906	0.114	95.7	0.009	0.00	0.0	0.600	o	150	Pipe/Conduit
S11.003	5.735	0.505	11.4	0.008	0.00	0.0	0.600	o	150	Pipe/Conduit
S11.004	6.068	0.284	21.4	0.007	0.00	0.0	0.600	o	150	Pipe/Conduit
S12.000	16.751	0.881	19.0	0.003	5.00	0.0	0.600	o	150	Pipe/Conduit
S12.001	19.110	0.192	99.5	0.009	0.00	0.0	0.600	o	150	Pipe/Conduit
S11.005	7.216	0.491	14.7	0.017	0.00	0.0	0.600	o	150	Pipe/Conduit
S13.000	5.639	0.038	148.4	0.006	5.00	0.0	0.600	o	150	Pipe/Conduit

Network Results Table

PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
S9.000	109.851	0.002	0.0	1.00	17.8
S9.001	109.737	0.011	0.0	1.01	17.8
S9.002	109.640	0.015	0.0	1.01	17.8
S9.003	109.551	0.016	0.0	1.01	17.8
S9.004	109.502	0.131	0.0	1.01	17.8
S10.000	109.864	0.004	0.0	2.87	50.7
S9.005	109.446	0.142	0.0	1.26	22.2
S11.000	111.750	0.001	0.0	1.57	12.3
S11.001	111.100	0.009	0.0	1.01	17.8
S11.002	110.794	0.018	0.0	1.03	18.2
S11.003	110.680	0.026	0.0	3.01	53.1
S11.004	110.175	0.033	0.0	2.19	38.7
S12.000	110.964	0.003	0.0	2.32	41.0
S12.001	110.083	0.011	0.0	1.01	17.8
S11.005	109.891	0.061	0.0	2.64	46.7
S13.000	110.770	0.006	0.0	0.82	14.5

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Existing Network Details 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
S13.001	2.479#	0.182	13.6	0.003	0.00	0.0	0.600	o	150	Pipe/Conduit
S13.002	27.520#	1.150	23.9	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit
S11.006	8.007	0.250	32.0	0.014	0.00	0.0	0.600	o	150	Pipe/Conduit
S9.006	17.129	0.200	85.6	0.008	0.00	0.0	0.600	o	300	Pipe/Conduit
S9.007	12.213	0.413	29.6	0.007	0.00	0.0	0.600	o	300	Pipe/Conduit
S14.000	23.248	0.233	99.8	0.002	4.00	0.0	0.600	o	150	Pipe/Conduit
S14.001	17.687	0.177	99.9	0.006	0.00	0.0	0.600	o	150	Pipe/Conduit
S14.002	16.625	0.167	99.6	0.006	0.00	0.0	0.600	o	150	Pipe/Conduit
S14.003	10.476	0.275	38.1	0.008	0.00	0.0	0.600	o	150	Pipe/Conduit
S14.004	12.823	0.291	44.1	0.004	0.00	0.0	0.600	o	150	Pipe/Conduit
S15.000	9.258	0.100	92.6	0.002	4.00	0.0	0.600	o	150	Pipe/Conduit
S15.001	5.218	0.280	18.6	0.005	0.00	0.0	0.600	o	150	Pipe/Conduit
S16.000	9.919	0.100	99.2	0.005	4.00	0.0	0.600	o	150	Pipe/Conduit
S15.002	12.502	0.127	98.4	0.009	0.00	0.0	0.600	o	150	Pipe/Conduit
S15.003	24.327	0.446	54.5	0.006	0.00	0.0	0.600	o	150	Pipe/Conduit
S14.005	9.077	0.367	24.7	0.008	0.00	0.0	0.600	o	150	Pipe/Conduit

Network Results Table

PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
S13.001	110.732	0.010	0.0	2.74	48.5
S13.002	110.550	0.010	0.0	2.69	106.8
S11.006	109.400	0.085	0.0	1.79	31.5
S9.006	109.150	0.235	0.0	2.01	142.3
S9.007	108.750	0.241	0.0	2.90	205.1
S14.000	112.000	0.002	0.0	1.01	17.8
S14.001	111.767	0.008	0.0	1.01	17.8
S14.002	111.590	0.015	0.0	1.01	17.8
S14.003	111.423	0.022	0.0	1.64	28.9
S14.004	111.148	0.026	0.0	1.52	26.9
S15.000	111.810	0.002	0.0	1.04	18.5
S15.001	111.710	0.006	0.0	2.34	41.4
S16.000	111.530	0.005	0.0	1.01	17.8
S15.002	111.430	0.020	0.0	1.01	17.9
S15.003	111.303	0.027	0.0	1.36	24.1
S14.005	110.857	0.061	0.0	2.03	35.9

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Existing Network Details 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
S17.000	6.098	0.190	32.1	0.012	4.00	0.0	0.600	o	100	Pipe/Conduit
S17.001	5.676	0.310	18.3	0.006	0.00	0.0	0.600	o	100	Pipe/Conduit
S18.000	34.838#	0.697	50.0	0.000	5.00	0.0	0.600	o	225	Pipe/Conduit
S14.006	14.219	0.563	25.3	0.022	0.00	0.0	0.600	o	225	Pipe/Conduit
S14.007	1.829	0.563	3.3	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit
S14.008	4.294#	0.500	8.6	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit
S14.009	21.148	0.528	40.1	0.009	0.00	0.0	0.600	o	225	Pipe/Conduit
S19.000	9.802	0.109	89.9	0.002	4.00	0.0	0.600	o	150	Pipe/Conduit
S19.001	14.239	0.143	99.6	0.002	0.00	0.0	0.600	o	150	Pipe/Conduit
S19.002	12.772	0.128	99.8	0.003	0.00	0.0	0.600	o	150	Pipe/Conduit
S19.003	7.778	1.270	6.1	0.004	0.00	0.0	0.600	o	150	Pipe/Conduit
S20.000	12.649	0.264	47.9	0.004	4.00	0.0	0.600	o	100	Pipe/Conduit
S21.000	11.544	0.116	99.5	0.002	4.00	0.0	0.600	o	150	Pipe/Conduit
S21.001	4.356	0.044	99.0	0.012	0.00	0.0	0.600	o	150	Pipe/Conduit
S20.001	18.794	1.286	14.6	0.004	0.00	0.0	0.600	o	150	Pipe/Conduit
S19.004	2.976	0.315	9.4	0.002	0.00	0.0	0.600	o	150	Pipe/Conduit
S19.005	17.619	1.050	16.8	0.008	0.00	0.0	0.600	o	225	Pipe/Conduit

Network Results Table

PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
S17.000	110.990	0.012	0.0	1.37	10.7
S17.001	110.800	0.018	0.0	1.81	14.2
S18.000	111.187	0.000	0.0	1.85	73.7
S14.006	110.490	0.101	0.0	2.61	103.9
S14.007	109.928	0.101	0.0	7.31	290.6
S14.008	109.365	0.101	0.0	4.49	178.6
S14.009	108.865	0.110	0.0	2.07	82.4
S19.000	109.150	0.002	0.0	1.06	18.7
S19.001	109.041	0.004	0.0	1.01	17.8
S19.002	108.898	0.007	0.0	1.01	17.8
S19.003	108.770	0.011	0.0	4.10	72.4
S20.000	109.050	0.004	0.0	1.12	8.8
S21.000	108.946	0.002	0.0	1.01	17.8
S21.001	108.830	0.013	0.0	1.01	17.8
S20.001	108.786	0.022	0.0	2.65	46.8
S19.004	107.500	0.035	0.0	3.30	58.3
S19.005	107.185	0.043	0.0	3.21	127.6

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Existing Network Details 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
S22.000	11.202	0.135	83.0	0.001	4.00	0.0	0.600	o	150	Pipe/Conduit
S22.001	8.373	0.084	99.7	0.004	0.00	0.0	0.600	o	150	Pipe/Conduit
S22.002	0.937	0.010	93.7	0.012	0.00	0.0	0.600	o	150	Pipe/Conduit
S22.003	9.388	0.094	99.9	0.020	0.00	0.0	0.600	o	150	Pipe/Conduit
S22.004	9.590	0.296	32.4	0.002	0.00	0.0	0.600	o	150	Pipe/Conduit
S23.000	11.198	0.525	21.3	0.001	4.00	0.0	0.600	o	100	Pipe/Conduit
S22.005	5.207	1.031	5.1	0.009	0.00	0.0	0.600	o	150	Pipe/Conduit
S22.006	6.019	1.050	5.7	0.009	0.00	0.0	0.600	o	225	Pipe/Conduit
S24.000	8.006	0.081	98.8	0.001	4.00	0.0	0.600	o	150	Pipe/Conduit
S24.001	7.155	0.072	99.4	0.001	0.00	0.0	0.600	o	150	Pipe/Conduit
S24.002	1.647	0.017	96.9	0.015	0.00	0.0	0.600	o	150	Pipe/Conduit
S24.003	16.209	0.676	24.0	0.020	0.00	0.0	0.600	o	150	Pipe/Conduit
S25.000	7.063	0.500	14.1	0.004	4.00	0.0	0.600	o	100	Pipe/Conduit
S25.001	19.580	0.196	99.9	0.002	0.00	0.0	0.600	o	150	Pipe/Conduit
S24.004	6.238	0.469	13.3	0.010	0.00	0.0	0.600	o	150	Pipe/Conduit
S24.005	3.211	0.100	32.1	0.005	0.00	0.0	0.600	o	225	Pipe/Conduit
S19.006	28.927	0.171	169.2	0.020	0.00	0.0	0.600	o	225	Pipe/Conduit

Network Results Table

PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
S22.000	108.835	0.001	0.0	1.10	19.5
S22.001	108.700	0.005	0.0	1.01	17.8
S22.002	108.616	0.017	0.0	1.04	18.4
S22.003	108.606	0.132	0.0	1.01	17.8
S22.004	108.512	0.133	0.0	1.77	31.4
S23.000	108.741	0.001	0.0	1.68	13.2
S22.005	108.216	0.143	0.0	4.52	79.8
S22.006	107.185	0.152	0.0	5.50	218.7
S24.000	107.550	0.001	0.0	1.01	17.9
S24.001	107.469	0.002	0.0	1.01	17.8
S24.002	107.397	0.016	0.0	1.02	18.0
S24.003	107.380	0.131	0.0	2.07	36.5
S25.000	107.400	0.004	0.0	2.07	16.2
S25.001	106.900	0.006	0.0	1.01	17.8
S24.004	106.704	0.147	0.0	2.78	49.1
S24.005	106.235	0.152	0.0	2.32	92.1
S19.006	106.135	0.462	0.0	1.00	39.9

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Existing Network Details 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
S26.000	21.955	1.124	19.5	0.012	4.00	0.0	0.600	o	225	Pipe/Conduit
S26.001	19.120	1.200	15.9	0.007	0.00	0.0	0.600	o	225	Pipe/Conduit
S26.002	5.131	0.051	100.6	0.009	0.00	0.0	0.600	o	225	Pipe/Conduit
S26.003	29.501	0.295	100.0	0.011	0.00	0.0	0.600	o	225	Pipe/Conduit
S19.007	2.173	0.013	167.2	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit
S19.008	50.535	-2.400	-21.1	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit
S19.009	5.131#	0.306	16.8	0.020	0.00	0.0	0.600	o	300	Pipe/Conduit
S19.010	11.377	0.007	1625.3	0.020	0.00	0.0	0.600	o	225	Pipe/Conduit
S9.008	4.280#	0.026	164.6	0.020	0.00	0.0	0.600	o	300	Pipe/Conduit
S9.009	7.450	-1.889	-3.9	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit

Network Results Table

PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
S26.000	108.634	0.012	0.0	2.97	118.3
S26.001	107.510	0.019	0.0	3.29	131.0
S26.002	106.310	0.028	0.0	1.30	51.8
S26.003	106.259	0.039	0.0	1.31	52.0
S19.007	105.964	0.501	0.0	1.01	40.1
S19.008	105.951	0.501	0.0	0.00	0.0
S19.009	108.650	0.616	0.0	3.86	272.7
S19.010	108.344	0.731	0.0	0.32	12.6
S9.008	108.337	1.197	0.0	1.22	86.4
S9.009	108.311	1.197	0.0	0.00	0.0

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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)	Pipe Out Diameter (mm)	PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
SRE4	110.451	0.600	Open Manhole	300	S9.000	109.851	150				
S27	110.630	0.893	Open Manhole	450	S9.001	109.737	150	S9.000	109.737	150	
S28	110.510	0.870	Open Manhole	450	S9.002	109.640	150	S9.001	109.640	150	
S29	110.450	0.899	Open Manhole	450	S9.003	109.551	150	S9.002	109.551	150	
S30	110.265	0.763	Open Manhole	450	S9.004	109.502	150	S9.003	109.502	150	
S18	110.464	0.600	Open Manhole	300	S10.000	109.864	150				
S31	110.203	0.757	Open Manhole	450	S9.005	109.446	150	S9.004	109.446	150	
								S10.000	109.446	150	
SRE2	112.350	0.600	Open Manhole	300	S11.000	111.750	100				
S19	111.800	0.700	Open Manhole	450	S11.001	111.100	150	S11.000	111.100	100	
S22	112.200	1.406	Open Manhole	600	S11.002	110.794	150	S11.001	110.794	150	
S23	111.350	0.670	Open Manhole	450	S11.003	110.680	150	S11.002	110.680	150	
S24	110.975	0.800	Open Manhole	450	S11.004	110.175	150	S11.003	110.175	150	
S9	111.714	0.750	Open Manhole	450	S12.000	110.964	150				
S17	111.900	1.817	Open Manhole	600	S12.001	110.083	150	S12.000	110.083	150	
S20	110.975	1.084	Open Manhole	450	S11.005	109.891	150	S11.004	109.891	150	
								S12.001	109.891	150	
S15	111.520	0.750	Open Manhole	450	S13.000	110.770	150				
S16	111.610	0.878	Open Manhole	450	S13.001	110.732	150	S13.000	110.732	150	
S39	111.550	1.000	Open Manhole	600	S13.002	110.550	225	S13.001	110.550	150	
S21	110.738	1.338	Open Manhole	1200	S11.006	109.400	150	S11.005	109.400	150	
								S13.002	109.400	225	
S26	110.335	1.185	Open Manhole	1200	S9.006	109.150	300	S9.005	109.150	150	
								S11.006	109.150	150	
SD4	109.965	1.215	Sealed Manhole	1200	S9.007	108.750	300	S9.006	108.950	300	200
SRE1	112.600	0.600	Open Manhole	300	S14.000	112.000	150				
S10	112.850	1.083	Open Manhole	450	S14.001	111.767	150	S14.000	111.767	150	
S11	112.450	0.860	Open Manhole	450	S14.002	111.590	150	S14.001	111.590	150	
S12	112.125	0.702	Open Manhole	450	S14.003	111.423	150	S14.002	111.423	150	
S13	112.000	0.852	Open Manhole	450	S14.004	111.148	150	S14.003	111.148	150	
S1	112.567	0.757	Open Manhole	450	S15.000	111.810	150				
S2	112.564	0.854	Open Manhole	450	S15.001	111.710	150	S15.000	111.710	150	
S4	112.285	0.755	Open Manhole	450	S16.000	111.530	150				
S3	112.596	1.166	Open Manhole	450	S15.002	111.430	150	S15.001	111.430	150	
								S16.000	111.430	150	
S5	112.150	0.847	Open Manhole	450	S15.003	111.303	150	S15.002	111.303	150	
S6	111.807	0.950	Open Manhole	450	S14.005	110.857	150	S14.004	110.857	150	
								S15.003	110.857	150	
S7	111.690	0.700	Open Manhole	450	S17.000	110.990	100				
S8	111.555	0.755	Open Manhole	450	S17.001	110.800	100	S17.000	110.800	100	

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Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
S25	112.187	1.000	Open Manhole	600	S18.000	111.187	225				
S14	111.445	0.955	Open Manhole	1200	S14.006	110.490	225	S14.005	110.490	150	
								S17.001	110.490	100	
								S18.000	110.490	225	
S37	110.705	0.778	Open Manhole	1200	S14.007	109.928	225	S14.006	109.928	225	
S66	109.965	0.600	Open Manhole	1200	S14.008	109.365	225	S14.007	109.365	225	
SD5	109.965	1.100	Sealed Manhole	1200	S14.009	108.865	225	S14.008	108.865	225	
SRE5	109.750	0.600	Open Manhole	300	S19.000	109.150	150				
S40	109.750	0.709	Open Manhole	450	S19.001	109.041	150	S19.000	109.041	150	
S43	109.550	0.652	Open Manhole	450	S19.002	108.898	150	S19.001	108.898	150	
S44	109.539	0.769	Open Manhole	450	S19.003	108.770	150	S19.002	108.770	150	
SRE6	109.650	0.600	Open Manhole	300	S20.000	109.050	100				
S38	109.696	0.750	Open Manhole	450	S21.000	108.946	150				
S41	109.700	0.870	Open Manhole	450	S21.001	108.830	150	S21.000	108.830	150	
S42	109.550	0.764	Open Manhole	450	S20.001	108.786	150	S20.000	108.786	100	
								S21.001	108.786	150	
S46	108.100	0.600	Open Manhole	450	S19.004	107.500	150	S19.003	107.500	150	
								S20.001	107.500	150	
SD1	107.835	0.650	Sealed Manhole	1200	S19.005	107.185	225	S19.004	107.185	150	
SRE7	109.435	0.600	Open Manhole	300	S22.000	108.835	150				
S51	109.451	0.751	Open Manhole	450	S22.001	108.700	150	S22.000	108.700	150	
S52	109.451	0.835	Open Manhole	450	S22.002	108.616	150	S22.001	108.616	150	
S53	109.451	0.845	Open Manhole	450	S22.003	108.606	150	S22.002	108.606	150	
S50	109.390	0.878	Open Manhole	450	S22.004	108.512	150	S22.003	108.512	150	
SRE8	109.341	0.600	Open Manhole	300	S23.000	108.741	100				
S48	109.302	1.086	Open Manhole	450	S22.005	108.216	150	S22.004	108.216	150	
								S23.000	108.216	100	
SD2	107.835	0.650	Sealed Manhole	1200	S22.006	107.185	225	S22.005	107.185	150	
SRE9	108.150	0.600	Open Manhole	300	S24.000	107.550	150				
S58	108.280	0.811	Open Manhole	450	S24.001	107.469	150	S24.000	107.469	150	
S56	108.150	0.753	Open Manhole	450	S24.002	107.397	150	S24.001	107.397	150	
S55	108.250	0.870	Open Manhole	450	S24.003	107.380	150	S24.002	107.380	150	
S60	108.000	0.600	Open Manhole	300	S25.000	107.400	100				
S59	107.500	0.600	Open Manhole	450	S25.001	106.900	150	S25.000	106.900	100	
S54	107.850	1.146	Open Manhole	450	S24.004	106.704	150	S24.003	106.704	150	
								S25.001	106.704	150	
SD3	107.835	1.600	Sealed Manhole	1200	S24.005	106.235	225	S24.004	106.235	150	
STank	107.835	1.700	Open Manhole	1200	S19.006	106.135	225	S19.005	106.135	225	
								S22.006	106.135	225	
								S24.005	106.135	225	

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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)	Backdrop (mm)
S32	109.984	1.350	Open Manhole	1200	S26.000	108.634	225				
S33	108.860	1.350	Open Manhole	1200	S26.001	107.510	225	S26.000	107.510	225	
S36	107.522	1.212	Open Manhole	1200	S26.002	106.310	225	S26.001	106.310	225	
S37	107.565	1.306	Open Manhole	1200	S26.003	106.259	225	S26.002	106.259	225	
S61	107.340	1.376	Open Manhole	1200	S19.007	105.964	225	S19.006	105.964	225	
								S26.003	105.964	225	
S62 Pump	107.240	1.289	Open Manhole	1200	S19.008	105.951	225	S19.007	105.951	225	
S34	109.965	1.614	Open Manhole	1200	S19.009	108.650	300	S19.008	108.351	225	
SD6	109.965	1.621	Sealed Manhole	1200	S19.010	108.344	225	S19.009	108.344	300	
SPond	109.965	1.628	Open Manhole	1200	S9.008	108.337	300	S9.007	108.337	300	
								S14.009	108.337	225	
								S19.010	108.337	225	
S35 Pump	109.900	1.589	Open Manhole	1200	S9.009	108.311	300	S9.008	108.311	300	
SDitch	111.000	0.800	Open Manhole	0		OUTFALL		S9.009	110.200	300	

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SRE4	1330.543	1934.712	1330.543	1934.712	Required	
S27	1325.464	1944.915	1325.464	1944.915	Required	
S28	1325.494	1954.591	1325.494	1954.591	Required	
S29	1333.456	1958.424	1333.456	1958.424	Required	
S30	1338.200	1959.470	1338.200	1959.470	Required	
S18	1336.990	1952.655	1336.990	1952.655	Required	
S31	1341.595	1955.085	1341.595	1955.085	Required	
SRE2	1354.924	1892.525	1354.924	1892.525	Required	
S19	1344.599	1904.493	1344.599	1904.493	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)
S22	1333.370	1932.874	1333.370	1932.874	Required	
S23	1343.087	1937.825	1343.087	1937.825	Required	
S24	1348.585	1939.455	1348.585	1939.455	Required	
S9	1368.778	1903.455	1368.778	1903.455	Required	
S17	1357.781	1916.092	1357.781	1916.092	Required	
S20	1351.530	1934.150	1351.530	1934.150	Required	
S15	1372.395	1906.130	1372.395	1906.130	Required	
S16	1367.950	1909.600	1367.950	1909.600	Required	
S39	1368.489	1911.538	1368.489	1911.538	Required	
S21	1358.054	1937.234	1358.054	1937.234	Required	
S26	1357.891	1945.239	1357.891	1945.239	Required	
SD4	1374.573	1949.126			No Entry	
SRE1	1412.066	1867.592	1412.066	1867.592	Required	
S10	1390.645	1858.556	1390.645	1858.556	Required	
S11	1382.229	1874.112	1382.229	1874.112	Required	
S12	1369.698	1885.038	1369.698	1885.038	Required	
S13	1363.236	1893.285	1363.236	1893.285	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)
S1	1407.653	1877.533	1407.653	1877.533	Required	
S2	1399.708	1872.781	1399.708	1872.781	Required	
S4	1405.002	1882.026	1405.002	1882.026	Required	
S3	1396.508	1876.903	1396.508	1876.903	Required	
S5	1390.193	1887.693	1390.193	1887.693	Required	
S6	1371.416	1903.160	1371.416	1903.160	Required	
S7	1379.533	1901.620	1379.533	1901.620	Required	
S8	1374.475	1905.025	1374.475	1905.025	Required	
S25	1402.649	1883.405	1402.649	1883.405	Required	
S14	1377.752	1909.660	1377.752	1909.660	Required	
S37	1387.427	1920.080	1387.427	1920.080	Required	
S66	1388.590	1921.492	1388.590	1921.492	Required	
SD5	1392.341	1925.339			No Entry	
SRE5	1321.408	1958.689	1321.408	1958.689	Required	
S40	1319.026	1968.197	1319.026	1968.197	Required	
S43	1319.440	1982.430	1319.440	1982.430	Required	
S44	1331.790	1985.685	1331.790	1985.685	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)
SRE6	1327.919	1971.102	1327.919	1971.102	Required	
S38	1331.008	1961.327	1331.008	1961.327	Required	
S41	1337.249	1971.038	1337.249	1971.038	Required	
S42	1340.164	1974.275	1340.164	1974.275	Required	
S46	1335.551	1992.494	1335.551	1992.494	Required	
SD1	1338.441	1993.204			No Entry	
SRE7	1343.849	1973.547	1343.849	1973.547	Required	
S51	1354.718	1976.257	1354.718	1976.257	Required	
S52	1362.842	1978.283	1362.842	1978.283	Required	
S53	1363.751	1978.510	1363.751	1978.510	Required	
S50	1361.656	1987.661	1361.656	1987.661	Required	
SRE8	1341.387	1986.875	1341.387	1986.875	Required	
S48	1352.256	1989.566	1352.256	1989.566	Required	
SD2	1351.069	1994.636			No Entry	
SRE9	1382.049	1982.153	1382.049	1982.153	Required	
S58	1374.263	1980.291	1374.263	1980.291	Required	
S56	1367.347	1982.126	1367.347	1982.126	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)
S55	1365.737	1981.778	1365.737	1981.778	Required	
S60	1382.518	1994.867	1382.518	1994.867	Required	
S59	1380.928	2001.749	1380.928	2001.749	Required	
S54	1361.814	1997.504	1361.814	1997.504	Required	
SD3	1355.747	1996.055			No Entry	
STank	1355.015	1999.181	1355.015	1999.181	Required	
S32	1353.123	1956.462	1353.123	1956.462	Required	
S33	1372.560	1966.671	1372.560	1966.671	Required	
S36	1390.869	1972.180	1390.869	1972.180	Required	
S37	1390.234	1977.272	1390.234	1977.272	Required	
S61	1383.149	2005.909	1383.149	2005.909	Required	
S62 Pump	1385.260	2006.427	1385.260	2006.427	Required	
S34	1375.739	1956.797	1375.739	1956.797	Required	
SD6	1377.412	1952.741			No Entry	
SPond	1386.265	1945.595	1386.265	1945.595	Required	
S35 Pump	1391.267	1948.240	1391.267	1948.240	Required	
SDitch	1395.875	1954.093			No Entry	

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PIPELINE SCHEDULES for Storm

Upstream Manhole

- Indicates pipe length does not match coordinates

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S9.000	o	150	SRE4	110.451	109.851	0.450	Open Manhole	300
S9.001	o	150	S27	110.630	109.737	0.743	Open Manhole	450
S9.002	o	150	S28	110.510	109.640	0.720	Open Manhole	450
S9.003	o	150	S29	110.450	109.551	0.749	Open Manhole	450
S9.004	o	150	S30	110.265	109.502	0.613	Open Manhole	450
S10.000	o	150	S18	110.464	109.864	0.450	Open Manhole	300
S9.005	o	150	S31	110.203	109.446	0.607	Open Manhole	450
S11.000	o	100	SRE2	112.350	111.750	0.500	Open Manhole	300
S11.001	o	150	S19	111.800	111.100	0.550	Open Manhole	450
S11.002	o	150	S22	112.200	110.794	1.256	Open Manhole	600
S11.003	o	150	S23	111.350	110.680	0.520	Open Manhole	450
S11.004	o	150	S24	110.975	110.175	0.650	Open Manhole	450
S12.000	o	150	S9	111.714	110.964	0.600	Open Manhole	450
S12.001	o	150	S17	111.900	110.083	1.667	Open Manhole	600
S11.005	o	150	S20	110.975	109.891	0.934	Open Manhole	450

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)
S9.000	11.397	100.0	S27	110.630	109.737	0.743	Open Manhole	450
S9.001	9.676	99.8	S28	110.510	109.640	0.720	Open Manhole	450
S9.002	8.836	99.3	S29	110.450	109.551	0.749	Open Manhole	450
S9.003	4.858	99.1	S30	110.265	109.502	0.613	Open Manhole	450
S9.004	5.546	99.0	S31	110.203	109.446	0.607	Open Manhole	450
S10.000	5.206	12.5	S31	110.203	109.446	0.607	Open Manhole	450
S9.005	19.039	64.3	S26	110.335	109.150	1.035	Open Manhole	1200
S11.000	15.806	24.3	S19	111.800	111.100	0.600	Open Manhole	450
S11.001	30.521	99.7	S22	112.200	110.794	1.256	Open Manhole	600
S11.002	10.906	95.7	S23	111.350	110.680	0.520	Open Manhole	450
S11.003	5.735	11.4	S24	110.975	110.175	0.650	Open Manhole	450
S11.004	6.068	21.4	S20	110.975	109.891	0.934	Open Manhole	450
S12.000	16.751	19.0	S17	111.900	110.083	1.667	Open Manhole	600
S12.001	19.110	99.5	S20	110.975	109.891	0.934	Open Manhole	450
S11.005	7.216	14.7	S21	110.738	109.400	1.188	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)
S13.000	o	150	S15	111.520	110.770	0.600	Open Manhole	450
S13.001	o	150	S16	111.610	110.732	0.728	Open Manhole	450
S13.002	o	225	S39	111.550	110.550	0.775	Open Manhole	600
S11.006	o	150	S21	110.738	109.400	1.188	Open Manhole	1200
S9.006	o	300	S26	110.335	109.150	0.885	Open Manhole	1200
S9.007	o	300	SD4	109.965	108.750	0.915	Sealed Manhole	1200
S14.000	o	150	SRE1	112.600	112.000	0.450	Open Manhole	300
S14.001	o	150	S10	112.850	111.767	0.933	Open Manhole	450
S14.002	o	150	S11	112.450	111.590	0.710	Open Manhole	450
S14.003	o	150	S12	112.125	111.423	0.552	Open Manhole	450
S14.004	o	150	S13	112.000	111.148	0.702	Open Manhole	450
S15.000	o	150	S1	112.567	111.810	0.607	Open Manhole	450
S15.001	o	150	S2	112.564	111.710	0.704	Open Manhole	450
S16.000	o	150	S4	112.285	111.530	0.605	Open Manhole	450
S15.002	o	150	S3	112.596	111.430	1.016	Open Manhole	450
S15.003	o	150	S5	112.150	111.303	0.697	Open Manhole	450

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)
S13.000	5.639	148.4	S16	111.610	110.732	0.728	Open Manhole	450
S13.001	2.479#	13.6	S39	111.550	110.550	0.850	Open Manhole	600
S13.002	27.520#	23.9	S21	110.738	109.400	1.113	Open Manhole	1200
S11.006	8.007	32.0	S26	110.335	109.150	1.035	Open Manhole	1200
S9.006	17.129	85.6	SD4	109.965	108.950	0.715	Sealed Manhole	1200
S9.007	12.213	29.6	SPond	109.965	108.337	1.328	Open Manhole	1200
S14.000	23.248	99.8	S10	112.850	111.767	0.933	Open Manhole	450
S14.001	17.687	99.9	S11	112.450	111.590	0.710	Open Manhole	450
S14.002	16.625	99.6	S12	112.125	111.423	0.552	Open Manhole	450
S14.003	10.476	38.1	S13	112.000	111.148	0.702	Open Manhole	450
S14.004	12.823	44.1	S6	111.807	110.857	0.800	Open Manhole	450
S15.000	9.258	92.6	S2	112.564	111.710	0.704	Open Manhole	450
S15.001	5.218	18.6	S3	112.596	111.430	1.016	Open Manhole	450
S16.000	9.919	99.2	S3	112.596	111.430	1.016	Open Manhole	450
S15.002	12.502	98.4	S5	112.150	111.303	0.697	Open Manhole	450
S15.003	24.327	54.5	S6	111.807	110.857	0.800	Open Manhole	450

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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)
S14.005	o	150	S6	111.807	110.857	0.800	Open Manhole	450
S17.000	o	100	S7	111.690	110.990	0.600	Open Manhole	450
S17.001	o	100	S8	111.555	110.800	0.655	Open Manhole	450
S18.000	o	225	S25	112.187	111.187	0.775	Open Manhole	600
S14.006	o	225	S14	111.445	110.490	0.730	Open Manhole	1200
S14.007	o	225	S37	110.705	109.928	0.553	Open Manhole	1200
S14.008	o	225	S66	109.965	109.365	0.375	Open Manhole	1200
S14.009	o	225	SD5	109.965	108.865	0.875	Sealed Manhole	1200
S19.000	o	150	SRE5	109.750	109.150	0.450	Open Manhole	300
S19.001	o	150	S40	109.750	109.041	0.559	Open Manhole	450
S19.002	o	150	S43	109.550	108.898	0.502	Open Manhole	450
S19.003	o	150	S44	109.539	108.770	0.619	Open Manhole	450
S20.000	o	100	SRE6	109.650	109.050	0.500	Open Manhole	300
S21.000	o	150	S38	109.696	108.946	0.600	Open Manhole	450
S21.001	o	150	S41	109.700	108.830	0.720	Open Manhole	450
S20.001	o	150	S42	109.550	108.786	0.614	Open Manhole	450

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)
S14.005	9.077	24.7	S14	111.445	110.490	0.805	Open Manhole	1200
S17.000	6.098	32.1	S8	111.555	110.800	0.655	Open Manhole	450
S17.001	5.676	18.3	S14	111.445	110.490	0.855	Open Manhole	1200
S18.000	34.838#	50.0	S14	111.445	110.490	0.730	Open Manhole	1200
S14.006	14.219	25.3	S37	110.705	109.928	0.553	Open Manhole	1200
S14.007	1.829	3.3	S66	109.965	109.365	0.375	Open Manhole	1200
S14.008	4.294#	8.6	SD5	109.965	108.865	0.875	Sealed Manhole	1200
S14.009	21.148	40.1	SPond	109.965	108.337	1.403	Open Manhole	1200
S19.000	9.802	89.9	S40	109.750	109.041	0.559	Open Manhole	450
S19.001	14.239	99.6	S43	109.550	108.898	0.502	Open Manhole	450
S19.002	12.772	99.8	S44	109.539	108.770	0.619	Open Manhole	450
S19.003	7.778	6.1	S46	108.100	107.500	0.450	Open Manhole	450
S20.000	12.649	47.9	S42	109.550	108.786	0.664	Open Manhole	450
S21.000	11.544	99.5	S41	109.700	108.830	0.720	Open Manhole	450
S21.001	4.356	99.0	S42	109.550	108.786	0.614	Open Manhole	450
S20.001	18.794	14.6	S46	108.100	107.500	0.450	Open Manhole	450

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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)
S19.004	o	150	S46	108.100	107.500	0.450	Open Manhole	450
S19.005	o	225	SD1	107.835	107.185	0.425	Sealed Manhole	1200
S22.000	o	150	SRE7	109.435	108.835	0.450	Open Manhole	300
S22.001	o	150	S51	109.451	108.700	0.601	Open Manhole	450
S22.002	o	150	S52	109.451	108.616	0.685	Open Manhole	450
S22.003	o	150	S53	109.451	108.606	0.695	Open Manhole	450
S22.004	o	150	S50	109.390	108.512	0.728	Open Manhole	450
S23.000	o	100	SRE8	109.341	108.741	0.500	Open Manhole	300
S22.005	o	150	S48	109.302	108.216	0.936	Open Manhole	450
S22.006	o	225	SD2	107.835	107.185	0.425	Sealed Manhole	1200
S24.000	o	150	SRE9	108.150	107.550	0.450	Open Manhole	300
S24.001	o	150	S58	108.280	107.469	0.661	Open Manhole	450
S24.002	o	150	S56	108.150	107.397	0.603	Open Manhole	450
S24.003	o	150	S55	108.250	107.380	0.720	Open Manhole	450
S25.000	o	100	S60	108.000	107.400	0.500	Open Manhole	300
S25.001	o	150	S59	107.500	106.900	0.450	Open Manhole	450

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)
S19.004	2.976	9.4	SD1	107.835	107.185	0.500	Sealed Manhole	1200
S19.005	17.619	16.8	STank	107.835	106.135	1.475	Open Manhole	1200
S22.000	11.202	83.0	S51	109.451	108.700	0.601	Open Manhole	450
S22.001	8.373	99.7	S52	109.451	108.616	0.685	Open Manhole	450
S22.002	0.937	93.7	S53	109.451	108.606	0.695	Open Manhole	450
S22.003	9.388	99.9	S50	109.390	108.512	0.728	Open Manhole	450
S22.004	9.590	32.4	S48	109.302	108.216	0.936	Open Manhole	450
S23.000	11.198	21.3	S48	109.302	108.216	0.986	Open Manhole	450
S22.005	5.207	5.1	SD2	107.835	107.185	0.500	Sealed Manhole	1200
S22.006	6.019	5.7	STank	107.835	106.135	1.475	Open Manhole	1200
S24.000	8.006	98.8	S58	108.280	107.469	0.661	Open Manhole	450
S24.001	7.155	99.4	S56	108.150	107.397	0.603	Open Manhole	450
S24.002	1.647	96.9	S55	108.250	107.380	0.720	Open Manhole	450
S24.003	16.209	24.0	S54	107.850	106.704	0.996	Open Manhole	450
S25.000	7.063	14.1	S59	107.500	106.900	0.500	Open Manhole	450
S25.001	19.580	99.9	S54	107.850	106.704	0.996	Open Manhole	450

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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)
S24.004	o	150	S54	107.850	106.704	0.996	Open Manhole	450
S24.005	o	225	SD3	107.835	106.235	1.375	Sealed Manhole	1200
S19.006	o	225	STank	107.835	106.135	1.475	Open Manhole	1200
S26.000	o	225	S32	109.984	108.634	1.125	Open Manhole	1200
S26.001	o	225	S33	108.860	107.510	1.125	Open Manhole	1200
S26.002	o	225	S36	107.522	106.310	0.987	Open Manhole	1200
S26.003	o	225	S37	107.565	106.259	1.081	Open Manhole	1200
S19.007	o	225	S61	107.340	105.964	1.151	Open Manhole	1200
S19.008	o	225	S62 Pump	107.240	105.951	1.064	Open Manhole	1200
S19.009	o	300	S34	109.965	108.650	1.015	Open Manhole	1200
S19.010	o	225	SD6	109.965	108.344	1.396	Sealed Manhole	1200
S9.008	o	300	SPond	109.965	108.337	1.328	Open Manhole	1200
S9.009	o	300	S35 Pump	109.900	108.311	1.289	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)
S24.004	6.238	13.3	SD3	107.835	106.235	1.450	Sealed Manhole	1200
S24.005	3.211	32.1	STank	107.835	106.135	1.475	Open Manhole	1200
S19.006	28.927	169.2	S61	107.340	105.964	1.151	Open Manhole	1200
S26.000	21.955	19.5	S33	108.860	107.510	1.125	Open Manhole	1200
S26.001	19.120	15.9	S36	107.522	106.310	0.987	Open Manhole	1200
S26.002	5.131	100.6	S37	107.565	106.259	1.081	Open Manhole	1200
S26.003	29.501	100.0	S61	107.340	105.964	1.151	Open Manhole	1200
S19.007	2.173	167.2	S62 Pump	107.240	105.951	1.064	Open Manhole	1200
S19.008	50.535	-21.1	S34	109.965	108.351	1.389	Open Manhole	1200
S19.009	5.131#	16.8	SD6	109.965	108.344	1.321	Sealed Manhole	1200
S19.010	11.377	1625.3	SPond	109.965	108.337	1.403	Open Manhole	1200
S9.008	4.280#	164.6	S35 Pump	109.900	108.311	1.289	Open Manhole	1200
S9.009	7.450	-3.9	SDitch	111.000	110.200	0.500	Open Manhole	0

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Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
9.000	User	-	100	0.002	0.002	0.002
9.001	User	-	100	0.005	0.005	0.005
	User	-	100	0.004	0.004	0.009
9.002	User	-	100	0.003	0.003	0.003
9.003	User	-	100	0.001	0.001	0.001
9.004	-	-	17	0.115	0.020	0.020
10.000	User	-	100	0.004	0.004	0.004
9.005	User	-	100	0.007	0.007	0.007
11.000	User	-	100	0.001	0.001	0.001
11.001	User	-	100	0.008	0.008	0.008
11.002	User	-	100	0.009	0.009	0.009
11.003	User	-	100	0.003	0.003	0.003
	User	-	100	0.005	0.005	0.008
11.004	User	-	100	0.007	0.007	0.007
12.000	User	-	100	0.003	0.003	0.003
12.001	User	-	100	0.009	0.009	0.009
11.005	User	-	100	0.007	0.007	0.007
	User	-	100	0.010	0.010	0.017
13.000	User	-	100	0.006	0.006	0.006
13.001	User	-	100	0.003	0.003	0.003
13.002	-	-	100	0.000	0.000	0.000
11.006	User	-	100	0.014	0.014	0.014
9.006	User	-	100	0.008	0.008	0.008
9.007	User	-	100	0.007	0.007	0.007
14.000	User	-	100	0.002	0.002	0.002
14.001	User	-	100	0.006	0.006	0.006
14.002	User	-	100	0.006	0.006	0.006
14.003	User	-	100	0.008	0.008	0.008
14.004	User	-	100	0.004	0.004	0.004
15.000	User	-	100	0.002	0.002	0.002
15.001	User	-	100	0.005	0.005	0.005
16.000	User	-	100	0.005	0.005	0.005
15.002	User	-	100	0.009	0.009	0.009
15.003	User	-	100	0.005	0.005	0.005
	User	-	100	0.002	0.002	0.006
14.005	User	-	100	0.008	0.008	0.008
17.000	User	-	100	0.012	0.012	0.012
17.001	User	-	100	0.006	0.006	0.006
18.000	-	-	100	0.000	0.000	0.000
14.006	User	-	100	0.022	0.022	0.022
14.007	-	-	100	0.000	0.000	0.000
14.008	-	-	100	0.000	0.000	0.000
14.009	User	-	100	0.009	0.009	0.009
19.000	User	-	100	0.002	0.002	0.002
19.001	User	-	100	0.002	0.002	0.002
19.002	User	-	100	0.003	0.003	0.003
19.003	User	-	100	0.004	0.004	0.004
20.000	User	-	100	0.004	0.004	0.004
21.000	User	-	100	0.002	0.002	0.002
21.001	User	-	100	0.012	0.012	0.012
20.001	User	-	100	0.004	0.004	0.004
19.004	User	-	100	0.002	0.002	0.002
19.005	User	-	100	0.008	0.008	0.008
22.000	User	-	100	0.001	0.001	0.001
22.001	User	-	100	0.004	0.004	0.004

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Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
22.002	User	-	100	0.010	0.010	0.010
	User	-	100	0.002	0.002	0.012
22.003	-	-	17	0.115	0.020	0.020
22.004	User	-	100	0.002	0.002	0.002
23.000	User	-	100	0.001	0.001	0.001
22.005	User	-	100	0.009	0.009	0.009
22.006	User	-	100	0.009	0.009	0.009
24.000	User	-	100	0.001	0.001	0.001
24.001	User	-	100	0.001	0.001	0.001
24.002	User	-	100	0.006	0.006	0.006
	User	-	100	0.009	0.009	0.015
24.003	-	-	17	0.115	0.020	0.020
25.000	User	-	100	0.004	0.004	0.004
25.001	User	-	100	0.002	0.002	0.002
24.004	User	-	100	0.010	0.010	0.010
24.005	User	-	100	0.005	0.005	0.005
19.006	-	-	17	0.115	0.020	0.020
26.000	User	-	100	0.012	0.012	0.012
26.001	User	-	100	0.007	0.007	0.007
26.002	User	-	100	0.009	0.009	0.009
26.003	User	-	100	0.011	0.011	0.011
19.007	-	-	100	0.000	0.000	0.000
19.008	-	-	100	0.000	0.000	0.000
19.009	-	-	17	0.115	0.020	0.020
19.010	-	-	17	0.115	0.020	0.020
9.008	-	-	17	0.115	0.020	0.020
9.009	-	-	100	0.000	0.000	0.000
				Total	Total	Total
				1.197	0.529	0.529

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)
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S9.009	SDitch	111.000	110.200	0.000	0	0
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Simulation Criteria for Storm

Volumetric Runoff Coeff	1.000	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m³/ha Storage	0.000
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 Time/Area Diagrams 0
Number of Online Controls 4 Number of Storage Structures 17 Number of Real Time Controls 0

Synthetic Rainfall Details

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Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	2	Cv (Summer)	1.000
Region	England and Wales	Cv (Winter)	1.000
M5-60 (mm)	20.100	Storm Duration (mins)	30
Ratio R	0.400		

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Online Controls for Storm

Non Return Valve Manhole: S36, DS/PN: S26.002, Volume (m³): 2.1

Non Return Valve Manhole: S61, DS/PN: S19.007, Volume (m³): 3.8

Pump Manhole: S62 Pump, DS/PN: S19.008, Volume (m³): 1.5

Invert Level (m) 105.951

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	7.0000	0.700	7.0000	1.300	7.0000	1.900	7.0000	2.500	7.0000
0.200	7.0000	0.800	7.0000	1.400	7.0000	2.000	7.0000	2.600	7.0000
0.300	7.0000	0.900	7.0000	1.500	7.0000	2.100	7.0000	2.700	7.0000
0.400	7.0000	1.000	7.0000	1.600	7.0000	2.200	7.0000	2.800	7.0000
0.500	7.0000	1.100	7.0000	1.700	7.0000	2.300	7.0000	2.900	7.0000
0.600	7.0000	1.200	7.0000	1.800	7.0000	2.400	7.0000	3.000	7.0000

Pump Manhole: S35 Pump, DS/PN: S9.009, Volume (m³): 2.0

Invert Level (m) 108.311

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	5.1000	0.800	5.1000	2.000	5.1000	4.000	5.1000	7.000	5.1000
0.200	5.1000	1.000	5.1000	2.200	5.1000	4.500	5.1000	7.500	5.1000
0.300	5.1000	1.200	5.1000	2.400	5.1000	5.000	5.1000	8.000	5.1000
0.400	5.1000	1.400	5.1000	2.600	5.1000	5.500	5.1000	8.500	5.1000
0.500	5.1000	1.600	5.1000	3.000	5.1000	6.000	5.1000	9.000	5.1000
0.600	5.1000	1.800	5.1000	3.500	5.1000	6.500	5.1000	9.500	5.1000

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Storage Structures for Storm

Porous Car Park Manhole: S31, DS/PN: S9.005

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	6.7
Membrane Percolation (mm/hr)	1000	Length (m)	10.0
Max Percolation (l/s)	18.6	Slope (1:X)	20.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	109.446	Cap Volume Depth (m)	0.350

Porous Car Park Manhole: S20, DS/PN: S11.005

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	6.6
Membrane Percolation (mm/hr)	1000	Length (m)	10.0
Max Percolation (l/s)	18.3	Slope (1:X)	20.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	109.891	Cap Volume Depth (m)	0.350

Porous Car Park Manhole: S16, DS/PN: S13.001

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	6.6
Membrane Percolation (mm/hr)	1000	Length (m)	10.0
Max Percolation (l/s)	18.3	Slope (1:X)	26.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	110.732	Cap Volume Depth (m)	0.350

Porous Car Park Manhole: S39, DS/PN: S13.002

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.0
Membrane Percolation (mm/hr)	1000	Length (m)	14.0
Max Percolation (l/s)	35.0	Slope (1:X)	20.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	110.550	Cap Volume Depth (m)	0.450

Porous Car Park Manhole: S21, DS/PN: S11.006

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.0
Membrane Percolation (mm/hr)	1000	Length (m)	14.0
Max Percolation (l/s)	35.0	Slope (1:X)	33.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	109.400	Cap Volume Depth (m)	0.450

Porous Car Park Manhole: S26, DS/PN: S9.006

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.0
Membrane Percolation (mm/hr)	1000	Length (m)	14.0
Max Percolation (l/s)	35.0	Slope (1:X)	50.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	109.150	Cap Volume Depth (m)	0.450

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Porous Car Park Manhole: S3, DS/PN: S15.002

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.1
Membrane Percolation (mm/hr)	1000	Length (m)	10.0
Max Percolation (l/s)	25.3	Slope (1:X)	25.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	111.430	Cap Volume Depth (m)	0.350

Porous Car Park Manhole: S8, DS/PN: S17.001

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	6.0
Membrane Percolation (mm/hr)	1000	Length (m)	10.0
Max Percolation (l/s)	16.7	Slope (1:X)	20.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	110.800	Cap Volume Depth (m)	0.350

Porous Car Park Manhole: S25, DS/PN: S18.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.0
Membrane Percolation (mm/hr)	1000	Length (m)	14.0
Max Percolation (l/s)	35.0	Slope (1:X)	46.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	111.187	Cap Volume Depth (m)	0.450

Porous Car Park Manhole: S41, DS/PN: S21.001

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	10.0
Membrane Percolation (mm/hr)	1000	Length (m)	12.3
Max Percolation (l/s)	34.2	Slope (1:X)	33.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	108.830	Cap Volume Depth (m)	0.350

Porous Car Park Manhole: S52, DS/PN: S22.002

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.8
Membrane Percolation (mm/hr)	1000	Length (m)	10.0
Max Percolation (l/s)	27.2	Slope (1:X)	72.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	108.616	Cap Volume Depth (m)	0.350

Porous Car Park Manhole: S56, DS/PN: S24.002

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	8.9
Membrane Percolation (mm/hr)	1000	Length (m)	10.0
Max Percolation (l/s)	24.7	Slope (1:X)	31.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	107.397	Cap Volume Depth (m)	0.350

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Cellular Storage Manhole: STank, DS/PN: S19.006

Invert Level (m) 106.135 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	74.0	0.0	1.200	74.0	0.0	1.201	0.0	0.0

Porous Car Park Manhole: S32, DS/PN: S26.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.0
Membrane Percolation (mm/hr)	1000	Length (m)	14.0
Max Percolation (l/s)	35.0	Slope (1:X)	19.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	108.634	Cap Volume Depth (m)	0.450

Porous Car Park Manhole: S33, DS/PN: S26.001

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.0
Membrane Percolation (mm/hr)	1000	Length (m)	14.0
Max Percolation (l/s)	35.0	Slope (1:X)	16.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	107.510	Cap Volume Depth (m)	0.450

Bio-Retention Area Manhole: S37, DS/PN: S26.003

Invert Level (m) 106.259 Infiltration Coefficient Side (m/hr) 0.00000
Porosity 1.00 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000

Depth (m)	Area (m ²)	Perimeter (m)	Depth (m)	Area (m ²)	Perimeter (m)	Depth (m)	Area (m ²)	Perimeter (m)
0.000	381.0	130.000	0.250	381.0	130.000	0.251	0.0	130.000

Tank or Pond Manhole: SPond, DS/PN: S9.008

Invert Level (m) 108.337

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	304.0	1.628	304.0

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) 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 0.000
 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 4 Number of Storage Structures 17 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 20.100 Cv (Summer) 1.000
 Region England and Wales Ratio R 0.400 Cv (Winter) 1.000

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 1, 2, 30, 100
 Climate Change (%) 0, 0, 0, 0

PN	US/MH		Return Period	Climate Change	First (X) Surchage	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level	Surcharged Depth	Flooded Volume
	Name	Storm							(m)	(m)	(m³)
S9.000	SRE4	15 Summer	1	+0%					109.868	-0.133	0.000
S9.001	S27	15 Summer	1	+0%					109.771	-0.116	0.000
S9.002	S28	15 Summer	1	+0%	100/15 Summer				109.678	-0.112	0.000
S9.003	S29	15 Summer	1	+0%	100/15 Summer				109.594	-0.107	0.000
S9.004	S30	15 Summer	1	+0%	30/15 Summer				109.565	-0.087	0.000
S10.000	S18	15 Summer	1	+0%					109.879	-0.135	0.000
S9.005	S31	30 Summer	1	+0%	100/15 Summer				109.504	-0.092	0.000
S11.000	SRE2	15 Summer	1	+0%					111.759	-0.091	0.000
S11.001	S19	15 Summer	1	+0%					111.129	-0.121	0.000
S11.002	S22	15 Summer	1	+0%					110.836	-0.108	0.000
S11.003	S23	15 Summer	1	+0%					110.710	-0.120	0.000
S11.004	S24	15 Summer	1	+0%					110.215	-0.110	0.000
S12.000	S9	15 Summer	1	+0%					110.973	-0.141	0.000
S12.001	S17	15 Summer	1	+0%					110.116	-0.117	0.000
S11.005	S20	15 Summer	1	+0%					109.940	-0.101	0.000
S13.000	S15	15 Summer	1	+0%					110.801	-0.119	0.000
S13.001	S16	15 Summer	1	+0%					110.752	-0.130	0.000
S13.002	S39	15 Summer	1	+0%					110.562	-0.213	0.000
S11.006	S21	30 Summer	1	+0%	30/15 Summer				109.468	-0.082	0.000
S9.006	S26	30 Summer	1	+0%					109.233	-0.217	0.000
S9.007	SD4	30 Summer	1	+0%					108.817	-0.233	0.000
S14.000	SRE1	15 Summer	1	+0%					112.015	-0.135	0.000
S14.001	S10	15 Summer	1	+0%					111.795	-0.122	0.000
S14.002	S11	15 Summer	1	+0%					111.627	-0.113	0.000
S14.003	S12	15 Summer	1	+0%					111.459	-0.114	0.000
S14.004	S13	15 Summer	1	+0%					111.188	-0.110	0.000

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flow / Cap.	Overflow (l/s)	Half Drain Pipe		Status	Level Exceeded
				Time (mins)	Flow (l/s)		
S9.000	SRE4	0.03			0.5	OK	
S9.001	S27	0.12			1.8	OK	
S9.002	S28	0.15			2.3	OK	
S9.003	S29	0.18			2.5	OK	
S9.004	S30	0.37			5.4	OK	
S10.000	S18	0.02			0.8	OK	
S9.005	S31	0.31		7	6.4	OK	
S11.000	SRE2	0.02			0.2	OK	
S11.001	S19	0.08			1.4	OK	
S11.002	S22	0.17			2.8	OK	
S11.003	S23	0.09			3.9	OK	
S11.004	S24	0.15			5.0	OK	
S12.000	S9	0.01			0.5	OK	
S12.001	S17	0.11			1.8	OK	
S11.005	S20	0.23		7	9.2	OK	
S13.000	S15	0.10			1.1	OK	
S13.001	S16	0.04		5	1.1	OK	
S13.002	S39	0.01		4	1.1	OK	
S11.006	S21	0.42		7	11.5	OK	
S9.006	S26	0.17		7	17.6	OK	
S9.007	SD4	0.11			18.4	OK	
S14.000	SRE1	0.02			0.4	OK	
S14.001	S10	0.08			1.3	OK	
S14.002	S11	0.14			2.2	OK	
S14.003	S12	0.13			3.4	OK	
S14.004	S13	0.16			3.9	OK	

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)
S15.000	S1	15 Summer	1	+0%	100/15 Summer				111.824	-0.136
S15.001	S2	15 Summer	1	+0%					111.727	-0.133
S16.000	S4	15 Summer	1	+0%					111.554	-0.126
S15.002	S3	30 Summer	1	+0%					111.471	-0.109
S15.003	S5	30 Summer	1	+0%					111.342	-0.111
S14.005	S6	15 Summer	1	+0%					110.909	-0.098
S17.000	S7	15 Summer	1	+0%					111.024	-0.066
S17.001	S8	30 Summer	1	+0%					110.832	-0.068
S18.000	S25	15 Summer	1	+0%					111.187	-0.225
S14.006	S14	15 Summer	1	+0%					110.549	-0.166
S14.007	S37	15 Summer	1	+0%					109.981	-0.171
S14.008	S66	15 Summer	1	+0%					109.420	-0.170
S14.009	SD5	15 Summer	1	+0%					108.933	-0.157
S19.000	SRE5	15 Summer	1	+0%					109.166	-0.134
S19.001	S40	15 Summer	1	+0%					109.061	-0.130
S19.002	S43	15 Summer	1	+0%					108.924	-0.124
S19.003	S44	15 Summer	1	+0%					108.787	-0.133
S20.000	SRE6	15 Summer	1	+0%					109.070	-0.080
S21.000	S38	15 Summer	1	+0%					108.961	-0.135
S21.001	S41	30 Summer	1	+0%					108.864	-0.116
S20.001	S42	30 Summer	1	+0%					108.809	-0.127
S19.004	S46	30 Summer	1	+0%					107.534	-0.116
S19.005	SD1	15 Summer	1	+0%					107.215	-0.195
S22.000	SRE7	15 Summer	1	+0%					108.846	-0.139
S22.001	S51	15 Summer	1	+0%					108.723	-0.127
S22.002	S52	30 Summer	1	+0%					108.663	-0.103
S22.003	S53	30 Summer	1	+0%					108.661	-0.095
S22.004	S50	30 Summer	1	+0%					108.553	-0.109
S23.000	SRE8	15 Summer	1	+0%					108.749	-0.092
S22.005	S48	30 Summer	1	+0%					108.247	-0.119
S22.006	SD2	30 Summer	1	+0%					107.217	-0.193
S24.000	SRE9	15 Summer	1	+0%					107.555	-0.145
S24.001	S58	15 Summer	1	+0%					107.483	-0.136
S24.002	S56	30 Summer	1	+0%					107.443	-0.104
S24.003	S55	30 Summer	1	+0%					107.418	-0.112
S25.000	S60	15 Summer	1	+0%					107.415	-0.085
S25.001	S59	15 Summer	1	+0%					106.925	-0.125
S24.004	S54	30 Summer	1	+0%					106.746	-0.108
S24.005	SD3	30 Summer	1	+0%	30/30 Summer				106.299	-0.161
S19.006	STank	60 Summer	1	+0%	30/15 Summer				106.249	-0.111
S26.000	S32	15 Summer	1	+0%					108.654	-0.205
S26.001	S33	30 Summer	1	+0%					107.528	-0.207
S26.002	S36	30 Summer	1	+0%					106.356	-0.179
S26.003	S37	360 Summer	1	+0%					106.269	-0.215
S19.007	S61	60 Summer	1	+0%	1/15 Summer				106.232	0.043
S19.008	S62	Pump 60 Summer	1	+0%	1/15 Summer				106.230	0.054
S19.009	S34	60 Summer	1	+0%	100/180 Summer				108.699	-0.251
S19.010	SD6	180 Summer	1	+0%	2/180 Summer				108.515	-0.054
S9.008	SPond	240 Summer	1	+0%	30/60 Summer				108.510	-0.127
S9.009	S35	Pump 180 Summer	1	+0%	30/60 Summer				108.519	-0.092

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flooded		Half Drain		Pipe Flow (l/s)	Status	Level Exceeded
		Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)			
S15.000	S1	0.000	0.02		0.3	OK		
S15.001	S2	0.000	0.03		1.0	OK		
S16.000	S4	0.000	0.06		1.0	OK		
S15.002	S3	0.000	0.16	6	2.6	OK		
S15.003	S5	0.000	0.15		3.4	OK		
S14.005	S6	0.000	0.26		8.1	OK		
S17.000	S7	0.000	0.26		2.5	OK		
S17.001	S8	0.000	0.21	5	2.6	OK		
S18.000	S25	0.000	0.00		0.0	OK		
S14.006	S14	0.000	0.15		13.6	OK		
S14.007	S37	0.000	0.13		13.7	OK		
S14.008	S66	0.000	0.14		13.7	OK		
S14.009	SD5	0.000	0.20		15.0	OK		
S19.000	SRE5	0.000	0.03		0.4	OK		
S19.001	S40	0.000	0.04		0.7	OK		
S19.002	S43	0.000	0.07		1.2	OK		
S19.003	S44	0.000	0.03		1.7	OK		
S20.000	SRE6	0.000	0.09		0.8	OK		
S21.000	S38	0.000	0.02		0.3	OK		
S21.001	S41	0.000	0.11	6	1.5	OK		
S20.001	S42	0.000	0.05		2.4	OK		
S19.004	S46	0.000	0.11		4.0	OK		
S19.005	SD1	0.000	0.04		4.9	OK		
S22.000	SRE7	0.000	0.02		0.3	OK		
S22.001	S51	0.000	0.05		0.8	OK		
S22.002	S52	0.000	0.20	7	2.1	OK		
S22.003	S53	0.000	0.28		4.5	OK		
S22.004	S50	0.000	0.17		4.7	OK		
S23.000	SRE8	0.000	0.02		0.2	OK		
S22.005	S48	0.000	0.09		5.9	OK		
S22.006	SD2	0.000	0.05		7.0	OK		
S24.000	SRE9	0.000	0.01		0.1	OK		
S24.001	S58	0.000	0.02		0.3	OK		
S24.002	S56	0.000	0.21	7	2.2	OK		
S24.003	S55	0.000	0.14		4.9	OK		
S25.000	S60	0.000	0.05		0.8	OK		
S25.001	S59	0.000	0.06		1.1	OK		
S24.004	S54	0.000	0.17		7.1	OK		
S24.005	SD3	0.000	0.18		7.8	OK		
S19.006	STank	0.000	0.38	24	14.0	OK		
S26.000	S32	0.000	0.01	2	1.5	OK		
S26.001	S33	0.000	0.02	3	1.9	OK		
S26.002	S36	0.000	0.10		3.0	OK		
S26.003	S37	0.000	0.01	167	0.5	OK		
S19.007	S61	0.000	0.29		8.3	SURCHARGED		
S19.008	S62 Pump	0.000	0.45		7.0	SURCHARGED		
S19.009	S34	0.000	0.06		8.8	OK		
S19.010	SD6	0.000	0.71		9.4	OK		
S9.008	SPond	0.000	0.12		6.5	OK		
S9.009	S35 Pump	0.000	0.14		5.1	OK		

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2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) 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 0.000
 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 4 Number of Storage Structures 17 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 20.100 Cv (Summer) 1.000
 Region England and Wales Ratio R 0.400 Cv (Winter) 1.000

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 1, 2, 30, 100
 Climate Change (%) 0, 0, 0, 0

PN	US/MH		Return Period	Climate Change	First (X) Surchage	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level	Surcharged Depth	Flooded Volume
	Name	Storm							(m)	(m)	(m³)
S9.000	SRE4	15 Summer	2	+0%					109.869	-0.132	0.000
S9.001	S27	15 Summer	2	+0%					109.776	-0.111	0.000
S9.002	S28	15 Summer	2	+0%	100/15 Summer				109.684	-0.106	0.000
S9.003	S29	15 Summer	2	+0%	100/15 Summer				109.600	-0.101	0.000
S9.004	S30	15 Summer	2	+0%	30/15 Summer				109.575	-0.077	0.000
S10.000	S18	15 Summer	2	+0%					109.880	-0.134	0.000
S9.005	S31	15 Summer	2	+0%	100/15 Summer				109.515	-0.081	0.000
S11.000	SRE2	15 Summer	2	+0%					111.761	-0.089	0.000
S11.001	S19	15 Summer	2	+0%					111.133	-0.117	0.000
S11.002	S22	15 Summer	2	+0%					110.842	-0.102	0.000
S11.003	S23	15 Summer	2	+0%					110.714	-0.116	0.000
S11.004	S24	15 Summer	2	+0%					110.221	-0.104	0.000
S12.000	S9	15 Summer	2	+0%					110.976	-0.138	0.000
S12.001	S17	15 Summer	2	+0%					110.120	-0.113	0.000
S11.005	S20	15 Summer	2	+0%					109.948	-0.093	0.000
S13.000	S15	15 Summer	2	+0%					110.805	-0.115	0.000
S13.001	S16	15 Summer	2	+0%					110.755	-0.127	0.000
S13.002	S39	15 Summer	2	+0%					110.566	-0.209	0.000
S11.006	S21	15 Summer	2	+0%	30/15 Summer				109.482	-0.068	0.000
S9.006	S26	15 Summer	2	+0%					109.247	-0.203	0.000
S9.007	SD4	15 Summer	2	+0%					108.828	-0.222	0.000
S14.000	SRE1	15 Summer	2	+0%					112.017	-0.133	0.000
S14.001	S10	15 Summer	2	+0%					111.799	-0.118	0.000
S14.002	S11	15 Summer	2	+0%					111.633	-0.107	0.000
S14.003	S12	15 Summer	2	+0%					111.465	-0.108	0.000
S14.004	S13	15 Summer	2	+0%					111.195	-0.103	0.000

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2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flow / Cap.	Overflow (l/s)	Half Drain Pipe		Status	Level Exceeded
				Time (mins)	Flow (l/s)		
S9.000	SRE4	0.04			0.6	OK	
S9.001	S27	0.15			2.4	OK	
S9.002	S28	0.19			3.0	OK	
S9.003	S29	0.23			3.2	OK	
S9.004	S30	0.47			6.9	OK	
S10.000	S18	0.03			1.1	OK	
S9.005	S31	0.41		6	8.5	OK	
S11.000	SRE2	0.03			0.3	OK	
S11.001	S19	0.11			1.8	OK	
S11.002	S22	0.22			3.6	OK	
S11.003	S23	0.12			5.1	OK	
S11.004	S24	0.20			6.4	OK	
S12.000	S9	0.02			0.6	OK	
S12.001	S17	0.14			2.3	OK	
S11.005	S20	0.30		7	11.9	OK	
S13.000	S15	0.12			1.5	OK	
S13.001	S16	0.06		5	1.5	OK	
S13.002	S39	0.01		4	1.5	OK	
S11.006	S21	0.56		6	15.4	OK	
S9.006	S26	0.23		7	23.9	OK	
S9.007	SD4	0.15			24.7	OK	
S14.000	SRE1	0.03			0.5	OK	
S14.001	S10	0.10			1.7	OK	
S14.002	S11	0.17			2.9	OK	
S14.003	S12	0.17			4.4	OK	
S14.004	S13	0.21			5.1	OK	

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2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)
S15.000	S1	15 Summer	2	+0%	100/15 Summer				111.826	-0.134
S15.001	S2	15 Summer	2	+0%					111.729	-0.131
S16.000	S4	15 Summer	2	+0%					111.558	-0.122
S15.002	S3	30 Summer	2	+0%					111.479	-0.101
S15.003	S5	30 Summer	2	+0%					111.350	-0.103
S14.005	S6	30 Summer	2	+0%					110.919	-0.088
S17.000	S7	15 Summer	2	+0%					111.030	-0.060
S17.001	S8	30 Summer	2	+0%					110.838	-0.062
S18.000	S25	15 Summer	2	+0%					111.187	-0.225
S14.006	S14	30 Summer	2	+0%					110.559	-0.156
S14.007	S37	30 Summer	2	+0%					109.991	-0.162
S14.008	S66	30 Summer	2	+0%					109.430	-0.160
S14.009	SD5	30 Summer	2	+0%					108.943	-0.147
S19.000	SRE5	15 Summer	2	+0%					109.168	-0.132
S19.001	S40	15 Summer	2	+0%					109.064	-0.127
S19.002	S43	15 Summer	2	+0%					108.929	-0.119
S19.003	S44	15 Summer	2	+0%					108.788	-0.132
S20.000	SRE6	15 Summer	2	+0%					109.073	-0.077
S21.000	S38	15 Summer	2	+0%					108.962	-0.134
S21.001	S41	30 Summer	2	+0%					108.872	-0.108
S20.001	S42	30 Summer	2	+0%					108.816	-0.120
S19.004	S46	30 Summer	2	+0%					107.542	-0.108
S19.005	SD1	30 Summer	2	+0%					107.222	-0.188
S22.000	SRE7	15 Summer	2	+0%					108.849	-0.136
S22.001	S51	15 Summer	2	+0%					108.726	-0.124
S22.002	S52	30 Summer	2	+0%					108.673	-0.093
S22.003	S53	30 Summer	2	+0%					108.671	-0.085
S22.004	S50	30 Summer	2	+0%					108.560	-0.102
S23.000	SRE8	15 Summer	2	+0%					108.751	-0.090
S22.005	S48	30 Summer	2	+0%					108.251	-0.115
S22.006	SD2	30 Summer	2	+0%					107.223	-0.187
S24.000	SRE9	15 Summer	2	+0%					107.557	-0.143
S24.001	S58	15 Summer	2	+0%					107.485	-0.134
S24.002	S56	15 Summer	2	+0%					107.451	-0.096
S24.003	S55	15 Summer	2	+0%					107.425	-0.105
S25.000	S60	15 Summer	2	+0%					107.417	-0.083
S25.001	S59	15 Summer	2	+0%					106.929	-0.121
S24.004	S54	15 Summer	2	+0%					106.753	-0.101
S24.005	SD3	15 Summer	2	+0%	30/30 Summer				106.309	-0.151
S19.006	STank	60 Summer	2	+0%	30/15 Summer				106.298	-0.062
S26.000	S32	15 Summer	2	+0%					108.660	-0.199
S26.001	S33	30 Summer	2	+0%					107.533	-0.202
S26.002	S36	15 Summer	2	+0%					106.365	-0.170
S26.003	S37	120 Summer	2	+0%					106.272	-0.212
S19.007	S61	60 Summer	2	+0%	1/15 Summer				106.281	0.092
S19.008	S62	Pump 60 Summer	2	+0%	1/15 Summer				106.278	0.102
S19.009	S34	30 Summer	2	+0%	100/180 Summer				108.702	-0.248
S19.010	SD6	240 Summer	2	+0%	2/180 Summer				108.572	0.003
S9.008	SPond	240 Summer	2	+0%	30/60 Summer				108.565	-0.072
S9.009	S35	Pump 240 Summer	2	+0%	30/60 Summer				108.576	-0.035

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2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
		Volume (m³)	Flow / Overflow Cap. (l/s)				
S15.000	S1	0.000	0.03		0.4	OK	
S15.001	S2	0.000	0.04		1.4	OK	
S16.000	S4	0.000	0.08		1.2	OK	
S15.002	S3	0.000	0.23	6	3.8	OK	
S15.003	S5	0.000	0.21		4.9	OK	
S14.005	S6	0.000	0.35		11.1	OK	
S17.000	S7	0.000	0.33		3.2	OK	
S17.001	S8	0.000	0.30	5	3.8	OK	
S18.000	S25	0.000	0.00		0.0	OK	
S14.006	S14	0.000	0.20		18.3	OK	
S14.007	S37	0.000	0.17		18.4	OK	
S14.008	S66	0.000	0.18		18.4	OK	
S14.009	SD5	0.000	0.26		19.8	OK	
S19.000	SRE5	0.000	0.03		0.5	OK	
S19.001	S40	0.000	0.06		0.9	OK	
S19.002	S43	0.000	0.09		1.5	OK	
S19.003	S44	0.000	0.04		2.3	OK	
S20.000	SRE6	0.000	0.12		1.0	OK	
S21.000	S38	0.000	0.03		0.4	OK	
S21.001	S41	0.000	0.17	6	2.3	OK	
S20.001	S42	0.000	0.08		3.7	OK	
S19.004	S46	0.000	0.17		6.0	OK	
S19.005	SD1	0.000	0.06		7.4	OK	
S22.000	SRE7	0.000	0.02		0.3	OK	
S22.001	S51	0.000	0.07		1.1	OK	
S22.002	S52	0.000	0.27	7	2.9	OK	
S22.003	S53	0.000	0.38		6.0	OK	
S22.004	S50	0.000	0.23		6.3	OK	
S23.000	SRE8	0.000	0.02		0.3	OK	
S22.005	S48	0.000	0.12		7.9	OK	
S22.006	SD2	0.000	0.06		9.4	OK	
S24.000	SRE9	0.000	0.01		0.1	OK	
S24.001	S58	0.000	0.03		0.4	OK	
S24.002	S56	0.000	0.27	6	2.9	OK	
S24.003	S55	0.000	0.19		6.5	OK	
S25.000	S60	0.000	0.07		1.0	OK	
S25.001	S59	0.000	0.08		1.4	OK	
S24.004	S54	0.000	0.23		9.6	OK	
S24.005	SD3	0.000	0.24		10.5	OK	
S19.006	STank	0.000	0.45	30	16.6	OK	
S26.000	S32	0.000	0.02	3	2.7	OK	
S26.001	S33	0.000	0.02	6	2.6	OK	
S26.002	S36	0.000	0.13		4.0	OK	
S26.003	S37	0.000	0.01	119	0.6	OK	
S19.007	S61	0.000	0.31		8.7	SURCHARGED	
S19.008	S62 Pump	0.000	0.45		7.0	SURCHARGED	
S19.009	S34	0.000	0.07		9.7	OK	
S19.010	SD6	0.000	0.71		9.5	SURCHARGED*	
S9.008	SPond	0.000	0.12		6.4	OK	
S9.009	S35 Pump	0.000	0.14		5.1	OK	

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) 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 0.000
 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 4 Number of Storage Structures 17 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 20.100 Cv (Summer) 1.000
 Region England and Wales Ratio R 0.400 Cv (Winter) 1.000

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 1, 2, 30, 100
 Climate Change (%) 0, 0, 0, 0

PN	US/MH		Return Period	Climate Change	First (X) Surchage	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water	Surcharged	Flooded
	Name	Storm							Level (m)	Depth (m)	Volume (m³)
S9.000	SRE4	15 Summer	30	+0%					109.877	-0.124	0.000
S9.001	S27	15 Summer	30	+0%					109.799	-0.088	0.000
S9.002	S28	15 Summer	30	+0%	100/15 Summer				109.712	-0.078	0.000
S9.003	S29	15 Summer	30	+0%	100/15 Summer				109.684	-0.017	0.000
S9.004	S30	15 Summer	30	+0%	30/15 Summer				109.669	0.017	0.000
S10.000	S18	15 Summer	30	+0%					109.886	-0.128	0.000
S9.005	S31	15 Summer	30	+0%	100/15 Summer				109.590	-0.006	0.000
S11.000	SRE2	15 Summer	30	+0%					111.764	-0.086	0.000
S11.001	S19	15 Summer	30	+0%					111.152	-0.098	0.000
S11.002	S22	15 Summer	30	+0%					110.874	-0.070	0.000
S11.003	S23	15 Summer	30	+0%					110.735	-0.095	0.000
S11.004	S24	15 Summer	30	+0%					110.251	-0.074	0.000
S12.000	S9	15 Summer	30	+0%					110.981	-0.133	0.000
S12.001	S17	15 Summer	30	+0%					110.141	-0.092	0.000
S11.005	S20	15 Summer	30	+0%					109.988	-0.053	0.000
S13.000	S15	15 Summer	30	+0%					110.819	-0.101	0.000
S13.001	S16	15 Summer	30	+0%					110.774	-0.108	0.000
S13.002	S39	15 Summer	30	+0%					110.581	-0.194	0.000
S11.006	S21	15 Summer	30	+0%	30/15 Summer				109.613	0.063	0.000
S9.006	S26	15 Summer	30	+0%					109.303	-0.147	0.000
S9.007	SD4	15 Summer	30	+0%					108.871	-0.179	0.000
S14.000	SRE1	15 Summer	30	+0%					112.023	-0.127	0.000
S14.001	S10	15 Summer	30	+0%					111.816	-0.101	0.000
S14.002	S11	15 Summer	30	+0%					111.659	-0.081	0.000
S14.003	S12	15 Summer	30	+0%					111.491	-0.082	0.000
S14.004	S13	15 Summer	30	+0%					111.225	-0.073	0.000

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flow / Cap.	Overflow (l/s)	Half Drain Pipe		Status	Level Exceeded
				Time (mins)	Flow (l/s)		
S9.000	SRE4	0.07			1.1	OK	
S9.001	S27	0.36			5.6	OK	
S9.002	S28	0.46			7.1	OK	
S9.003	S29	0.55			7.7	OK	
S9.004	S30	1.17			17.2	SURCHARGED	
S10.000	S18	0.05			2.1	OK	
S9.005	S31	0.99		2	20.5	OK	
S11.000	SRE2	0.05			0.6	OK	
S11.001	S19	0.26			4.4	OK	
S11.002	S22	0.55			9.0	OK	
S11.003	S23	0.29			12.8	OK	
S11.004	S24	0.50			16.2	OK	
S12.000	S9	0.03			1.2	OK	
S12.001	S17	0.32			5.4	OK	
S11.005	S20	0.74		4	29.6	OK	
S13.000	S15	0.23			2.8	OK	
S13.001	S16	0.16		4	4.3	OK	
S13.002	S39	0.04		4	4.4	OK	
S11.006	S21	1.11		4	30.5	SURCHARGED	
S9.006	S26	0.52		5	53.0	OK	
S9.007	SD4	0.34			54.8	OK	
S14.000	SRE1	0.06			0.9	OK	
S14.001	S10	0.24			3.9	OK	
S14.002	S11	0.43			7.1	OK	
S14.003	S12	0.42			10.8	OK	
S14.004	S13	0.51			12.6	OK	

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)
S15.000	S1	15 Summer	30	+0%	100/15 Summer				111.831	-0.129
S15.001	S2	15 Summer	30	+0%					111.741	-0.119
S16.000	S4	15 Summer	30	+0%					111.568	-0.112
S15.002	S3	15 Summer	30	+0%					111.515	-0.065
S15.003	S5	15 Summer	30	+0%					111.384	-0.069
S14.005	S6	15 Summer	30	+0%	100/15 Summer				110.972	-0.035
S17.000	S7	15 Summer	30	+0%					111.048	-0.042
S17.001	S8	15 Summer	30	+0%					110.863	-0.037
S18.000	S25	15 Summer	30	+0%					111.187	-0.225
S14.006	S14	15 Summer	30	+0%					110.608	-0.107
S14.007	S37	15 Summer	30	+0%					110.035	-0.118
S14.008	S66	15 Summer	30	+0%					109.476	-0.114
S14.009	SD5	15 Summer	30	+0%					109.004	-0.086
S19.000	SRE5	15 Summer	30	+0%					109.174	-0.126
S19.001	S40	15 Summer	30	+0%					109.075	-0.116
S19.002	S43	15 Summer	30	+0%					108.945	-0.103
S19.003	S44	15 Summer	30	+0%					108.800	-0.120
S20.000	SRE6	15 Summer	30	+0%					109.082	-0.068
S21.000	S38	15 Summer	30	+0%					108.968	-0.128
S21.001	S41	15 Summer	30	+0%					108.904	-0.076
S20.001	S42	15 Summer	30	+0%					108.835	-0.101
S19.004	S46	15 Summer	30	+0%					107.573	-0.077
S19.005	SD1	15 Summer	30	+0%					107.249	-0.161
S22.000	SRE7	15 Summer	30	+0%					108.854	-0.131
S22.001	S51	15 Summer	30	+0%					108.743	-0.107
S22.002	S52	15 Summer	30	+0%					108.723	-0.043
S22.003	S53	15 Summer	30	+0%					108.718	-0.038
S22.004	S50	15 Summer	30	+0%					108.590	-0.072
S23.000	SRE8	15 Summer	30	+0%					108.754	-0.087
S22.005	S48	15 Summer	30	+0%					108.272	-0.094
S22.006	SD2	15 Summer	30	+0%					107.245	-0.165
S24.000	SRE9	15 Summer	30	+0%					107.563	-0.137
S24.001	S58	15 Summer	30	+0%					107.500	-0.119
S24.002	S56	15 Summer	30	+0%					107.491	-0.056
S24.003	S55	15 Summer	30	+0%					107.456	-0.074
S25.000	S60	15 Summer	30	+0%					107.424	-0.076
S25.001	S59	15 Summer	30	+0%					106.942	-0.108
S24.004	S54	15 Summer	30	+0%					106.788	-0.066
S24.005	SD3	60 Summer	30	+0%	30/30 Summer				106.501	0.041
S19.006	STank	60 Summer	30	+0%	30/15 Summer				106.499	0.139
S26.000	S32	15 Summer	30	+0%					108.667	-0.192
S26.001	S33	15 Summer	30	+0%					107.552	-0.183
S26.002	S36	15 Summer	30	+0%					106.414	-0.121
S26.003	S37	120 Summer	30	+0%					106.322	-0.162
S19.007	S61	60 Summer	30	+0%	1/15 Summer				106.466	0.277
S19.008	S62	Pump 60 Summer	30	+0%	1/15 Summer				106.463	0.287
S19.009	S34	360 Winter	30	+0%	100/180 Summer				108.853	-0.097
S19.010	SD6	360 Winter	30	+0%	2/180 Summer				108.852	0.283
S9.008	SPond	360 Winter	30	+0%	30/60 Summer				108.848	0.211
S9.009	S35	Pump 360 Winter	30	+0%	30/60 Summer				108.869	0.258

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
		Volume (m³)	Flow / Overflow Cap. (l/s)				
S15.000	S1	0.000	0.05		0.8	OK	
S15.001	S2	0.000	0.09		3.1	OK	
S16.000	S4	0.000	0.15		2.4	OK	
S15.002	S3	0.000	0.59	4	9.7	OK	
S15.003	S5	0.000	0.54		12.5	OK	
S14.005	S6	0.000	0.90		28.6	OK	
S17.000	S7	0.000	0.63		6.1	OK	
S17.001	S8	0.000	0.71	4	9.0	OK	
S18.000	S25	0.000	0.00		0.0	OK	
S14.006	S14	0.000	0.52		47.5	OK	
S14.007	S37	0.000	0.45		47.3	OK	
S14.008	S66	0.000	0.48		47.9	OK	
S14.009	SD5	0.000	0.69		51.8	OK	
S19.000	SRE5	0.000	0.06		1.0	OK	
S19.001	S40	0.000	0.12		1.9	OK	
S19.002	S43	0.000	0.21		3.4	OK	
S19.003	S44	0.000	0.09		5.4	OK	
S20.000	SRE6	0.000	0.23		1.9	OK	
S21.000	S38	0.000	0.05		0.8	OK	
S21.001	S41	0.000	0.47	4	6.1	OK	
S20.001	S42	0.000	0.22		9.8	OK	
S19.004	S46	0.000	0.45		16.0	OK	
S19.005	SD1	0.000	0.17		19.5	OK	
S22.000	SRE7	0.000	0.04		0.7	OK	
S22.001	S51	0.000	0.16		2.5	OK	
S22.002	S52	0.000	0.72	4	7.9	OK	
S22.003	S53	0.000	0.88		13.9	OK	
S22.004	S50	0.000	0.52		14.5	OK	
S23.000	SRE8	0.000	0.04		0.5	OK	
S22.005	S48	0.000	0.29		18.5	OK	
S22.006	SD2	0.000	0.15		22.2	OK	
S24.000	SRE9	0.000	0.02		0.3	OK	
S24.001	S58	0.000	0.06		0.9	OK	
S24.002	S56	0.000	0.69	4	7.5	OK	
S24.003	S55	0.000	0.49		16.7	OK	
S25.000	S60	0.000	0.13		1.9	OK	
S25.001	S59	0.000	0.17		2.9	OK	
S24.004	S54	0.000	0.59		24.2	OK	
S24.005	SD3	0.000	0.36		16.2	SURCHARGED*	
S19.006	STank	0.000	0.47	38	17.5	SURCHARGED	
S26.000	S32	0.000	0.05	4	5.8	OK	
S26.001	S33	0.000	0.08	5	9.1	OK	
S26.002	S36	0.000	0.41		13.0	OK	
S26.003	S37	0.000	0.09	63	4.3	OK	
S19.007	S61	0.000	0.31		9.0	SURCHARGED	
S19.008	S62 Pump	0.000	0.45		7.0	SURCHARGED	
S19.009	S34	0.000	0.06		8.1	OK	
S19.010	SD6	0.000	0.69		9.1	SURCHARGED*	
S9.008	SPond	0.000	0.12		6.6	SURCHARGED	
S9.009	S35 Pump	0.000	0.14		5.1	SURCHARGED	

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Micro Drainage	Network 2020.1.3	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) 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 0.000
 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 4 Number of Storage Structures 17 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 20.100 Cv (Summer) 1.000
 Region England and Wales Ratio R 0.400 Cv (Winter) 1.000

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 1, 2, 30, 100
 Climate Change (%) 0, 0, 0, 0

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow Overflow	Overflow Act.	Water	Surcharged	Flooded
									Level (m)	Depth (m)	Volume (m³)
S9.000	SRE4	15 Summer	100	+0%					109.881	-0.120	0.000
S9.001	S27	15 Summer	100	+0%					109.838	-0.049	0.000
S9.002	S28	15 Summer	100	+0%	100/15 Summer				109.815	0.025	0.000
S9.003	S29	15 Summer	100	+0%	100/15 Summer				109.788	0.087	0.000
S9.004	S30	15 Summer	100	+0%	30/15 Summer				109.770	0.118	0.000
S10.000	S18	15 Summer	100	+0%					109.889	-0.125	0.000
S9.005	S31	15 Summer	100	+0%	100/15 Summer				109.675	0.079	0.000
S11.000	SRE2	15 Summer	100	+0%					111.766	-0.084	0.000
S11.001	S19	15 Summer	100	+0%					111.160	-0.090	0.000
S11.002	S22	15 Summer	100	+0%					110.889	-0.055	0.000
S11.003	S23	15 Summer	100	+0%					110.744	-0.086	0.000
S11.004	S24	15 Summer	100	+0%					110.264	-0.061	0.000
S12.000	S9	15 Summer	100	+0%					110.983	-0.131	0.000
S12.001	S17	15 Summer	100	+0%					110.151	-0.082	0.000
S11.005	S20	15 Summer	100	+0%					110.032	-0.009	0.000
S13.000	S15	15 Summer	100	+0%					110.827	-0.093	0.000
S13.001	S16	15 Summer	100	+0%					110.780	-0.102	0.000
S13.002	S39	15 Summer	100	+0%					110.585	-0.190	0.000
S11.006	S21	15 Summer	100	+0%	30/15 Summer				109.702	0.152	0.000
S9.006	S26	15 Summer	100	+0%					109.313	-0.137	0.000
S9.007	SD4	480 Winter	100	+0%					109.050	0.000	0.000
S14.000	SRE1	15 Summer	100	+0%					112.027	-0.123	0.000
S14.001	S10	15 Summer	100	+0%					111.824	-0.093	0.000
S14.002	S11	15 Summer	100	+0%					111.670	-0.070	0.000
S14.003	S12	15 Summer	100	+0%					111.502	-0.071	0.000
S14.004	S13	15 Summer	100	+0%					111.254	-0.044	0.000

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flow / Cap.	Overflow (l/s)	Half Drain Pipe		Status	Level Exceeded
				Time (mins)	Flow (l/s)		
S9.000	SRE4	0.09			1.4	OK	
S9.001	S27	0.44			7.0	OK	
S9.002	S28	0.53			8.2	SURCHARGED	
S9.003	S29	0.65			9.0	SURCHARGED	
S9.004	S30	1.41			20.8	SURCHARGED	
S10.000	S18	0.07			2.7	OK	
S9.005	S31	1.10		3	22.9	SURCHARGED	
S11.000	SRE2	0.06			0.7	OK	
S11.001	S19	0.33			5.7	OK	
S11.002	S22	0.72			11.7	OK	
S11.003	S23	0.38			16.6	OK	
S11.004	S24	0.65			21.0	OK	
S12.000	S9	0.04			1.6	OK	
S12.001	S17	0.42			6.9	OK	
S11.005	S20	0.90		2	36.0	OK	
S13.000	S15	0.30			3.7	OK	
S13.001	S16	0.22		5	5.8	OK	
S13.002	S39	0.06		4	5.7	OK	
S11.006	S21	1.24		4	34.0	SURCHARGED	
S9.006	S26	0.57		6	58.7	OK	
S9.007	SD4	0.05			8.5	OK	
S14.000	SRE1	0.07			1.2	OK	
S14.001	S10	0.31			5.1	OK	
S14.002	S11	0.55			9.2	OK	
S14.003	S12	0.54			14.0	OK	
S14.004	S13	0.66			16.2	OK	

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)
S15.000	S1	15 Summer	100	+0%					111.835	-0.125
S15.001	S2	15 Summer	100	+0%					111.745	-0.115
S16.000	S4	15 Summer	100	+0%					111.574	-0.106
S15.002	S3	15 Summer	100	+0%					111.531	-0.049
S15.003	S5	15 Summer	100	+0%					111.399	-0.054
S14.005	S6	15 Summer	100	+0%	100/15 Summer				111.133	0.126
S17.000	S7	15 Summer	100	+0%					111.059	-0.031
S17.001	S8	15 Summer	100	+0%					110.882	-0.018
S18.000	S25	15 Summer	100	+0%					111.187	-0.225
S14.006	S14	15 Summer	100	+0%					110.626	-0.089
S14.007	S37	15 Summer	100	+0%					110.050	-0.102
S14.008	S66	15 Summer	100	+0%					109.491	-0.099
S14.009	SD5	480 Winter	100	+0%					109.050	-0.040
S19.000	SRE5	15 Summer	100	+0%					109.178	-0.122
S19.001	S40	15 Summer	100	+0%					109.080	-0.111
S19.002	S43	15 Summer	100	+0%					108.952	-0.096
S19.003	S44	15 Summer	100	+0%					108.803	-0.117
S20.000	SRE6	15 Summer	100	+0%					109.087	-0.063
S21.000	S38	15 Summer	100	+0%					108.971	-0.125
S21.001	S41	15 Summer	100	+0%					108.916	-0.064
S20.001	S42	15 Summer	100	+0%					108.843	-0.093
S19.004	S46	15 Summer	100	+0%					107.585	-0.065
S19.005	SD1	15 Summer	100	+0%					107.258	-0.152
S22.000	SRE7	15 Summer	100	+0%					108.856	-0.129
S22.001	S51	15 Summer	100	+0%					108.761	-0.089
S22.002	S52	15 Summer	100	+0%					108.753	-0.013
S22.003	S53	15 Summer	100	+0%					108.749	-0.007
S22.004	S50	15 Summer	100	+0%					108.596	-0.066
S23.000	SRE8	15 Summer	100	+0%					108.756	-0.085
S22.005	S48	15 Summer	100	+0%					108.278	-0.088
S22.006	SD2	15 Summer	100	+0%					107.253	-0.157
S24.000	SRE9	15 Summer	100	+0%					107.565	-0.135
S24.001	S58	15 Summer	100	+0%					107.512	-0.107
S24.002	S56	15 Summer	100	+0%					107.508	-0.039
S24.003	S55	15 Summer	100	+0%					107.468	-0.062
S25.000	S60	15 Summer	100	+0%					107.427	-0.073
S25.001	S59	15 Summer	100	+0%					106.948	-0.102
S24.004	S54	15 Summer	100	+0%					106.804	-0.050
S24.005	SD3	60 Summer	100	+0%	30/30 Summer				106.612	0.152
S19.006	STank	60 Summer	100	+0%	30/15 Summer				106.608	0.248
S26.000	S32	15 Summer	100	+0%					108.673	-0.186
S26.001	S33	15 Summer	100	+0%					107.558	-0.177
S26.002	S36	15 Summer	100	+0%					106.433	-0.102
S26.003	S37	120 Summer	100	+0%					106.368	-0.116
S19.007	S61	30 Winter	100	+0%	1/15 Summer				106.566	0.377
S19.008	S62	Pump 30 Winter	100	+0%	1/15 Summer				106.566	0.390
S19.009	S34	360 Winter	100	+0%	100/180 Summer				109.056	0.106
S19.010	SD6	360 Winter	100	+0%	2/180 Summer				109.053	0.484
S9.008	SPond	480 Winter	100	+0%	30/60 Summer				109.048	0.411
S9.009	S35	Pump 480 Winter	100	+0%	30/60 Summer				109.069	0.458

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
		Volume (m³)	Flow / Overflow Cap. (l/s)				
S15.000	S1	0.000	0.06		1.1	OK	
S15.001	S2	0.000	0.12		4.1	OK	
S16.000	S4	0.000	0.19		3.1	OK	
S15.002	S3	0.000	0.76	4	12.4	OK	
S15.003	S5	0.000	0.70		16.1	OK	
S14.005	S6	0.000	1.16		36.7	SURCHARGED	
S17.000	S7	0.000	0.82		7.9	OK	
S17.001	S8	0.000	0.91	3	11.5	OK	
S18.000	S25	0.000	0.00		0.0	OK	
S14.006	S14	0.000	0.66		59.6	OK	
S14.007	S37	0.000	0.57		59.9	OK	
S14.008	S66	0.000	0.60		60.0	OK	
S14.009	SD5	0.000	0.09		6.4	OK	
S19.000	SRE5	0.000	0.08		1.3	OK	
S19.001	S40	0.000	0.15		2.5	OK	
S19.002	S43	0.000	0.28		4.5	OK	
S19.003	S44	0.000	0.11		7.0	OK	
S20.000	SRE6	0.000	0.30		2.5	OK	
S21.000	S38	0.000	0.07		1.1	OK	
S21.001	S41	0.000	0.61	4	8.0	OK	
S20.001	S42	0.000	0.29		12.9	OK	
S19.004	S46	0.000	0.60		21.0	OK	
S19.005	SD1	0.000	0.23		25.8	OK	
S22.000	SRE7	0.000	0.05		0.9	OK	
S22.001	S51	0.000	0.21		3.2	OK	
S22.002	S52	0.000	0.96	5	10.4	OK	
S22.003	S53	0.000	0.99		15.5	OK	
S22.004	S50	0.000	0.59		16.3	OK	
S23.000	SRE8	0.000	0.06		0.7	OK	
S22.005	S48	0.000	0.35		22.2	OK	
S22.006	SD2	0.000	0.19		27.5	OK	
S24.000	SRE9	0.000	0.02		0.4	OK	
S24.001	S58	0.000	0.07		1.1	OK	
S24.002	S56	0.000	0.88	4	9.6	OK	
S24.003	S55	0.000	0.63		21.5	OK	
S25.000	S60	0.000	0.17		2.5	OK	
S25.001	S59	0.000	0.22		3.7	OK	
S24.004	S54	0.000	0.76		31.1	OK	
S24.005	SD3	0.000	0.46		20.7	SURCHARGED*	
S19.006	STank	0.000	0.68	38	25.1	SURCHARGED	
S26.000	S32	0.000	0.07	5	7.5	OK	
S26.001	S33	0.000	0.10	5	12.1	OK	
S26.002	S36	0.000	0.57		18.0	OK	
S26.003	S37	0.000	0.12	69	5.8	OK	
S19.007	S61	0.000	0.35		10.0	SURCHARGED	
S19.008	S62 Pump	0.000	0.45		7.0	SURCHARGED	
S19.009	S34	0.000	0.06		8.4	SURCHARGED	
S19.010	SD6	0.000	0.73		9.7	SURCHARGED*	
S9.008	SPond	0.000	0.12		6.7	SURCHARGED	
S9.009	S35 Pump	0.000	0.14		5.1	SURCHARGED	