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11 The Covert York YO24 1JN	Hermitage Park Lepton SW Design	
Date 06/06/2025 File 250424 SW Design.MDX	Designed by JOH Checked by RD	
XP Solutions	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for 250424 SW OUT OF PDS.SWS

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales			
Return Period (years)	1	PIMP (%)	100
M5-60 (mm)	19.000	Add Flow / Climate Change (%)	0
Ratio R	0.347	Minimum Backdrop Height (m)	0.900
Maximum Rainfall (mm/hr)	50	Maximum Backdrop Height (m)	3.000
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	1.200
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	0.75
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	500

Designed with Level Soffits

Network Design Table for 250424 SW OUT OF PDS.SWS

« - Indicates pipe capacity < flow

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
1.000	19.326	0.945	20.5	0.020	5.00	0.0	0.600	o	150	Pipe/Conduit	
1.001	23.278	1.150	20.2	0.071	0.00	0.0	0.600	o	150	Pipe/Conduit	
1.002	29.049	1.160	25.0	0.127	0.00	0.0	0.600	o	225	Pipe/Conduit	
2.000	43.973	0.220	199.9	0.049	5.00	0.0	0.600	o	300	Pipe/Conduit	
1.003	15.900	0.065	244.6	0.052	0.00	0.0	0.600	o	375	Pipe/Conduit	
1.004	7.232	0.030	241.1	0.044	0.00	0.0	0.600	o	375	Pipe/Conduit	
1.005	11.102	0.045	246.7	0.018	0.00	0.0	0.600	o	375	Pipe/Conduit	
1.006	36.181	0.145	249.5	0.024	0.00	0.0	0.600	o	375	Pipe/Conduit	
1.007	7.764	0.035	221.8	0.015	0.00	0.0	0.600	o	375	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)
1.000	47.87	5.14	136.770	0.020	0.0	0.0	0.0	2.24	39.5	2.6
1.001	47.21	5.32	135.825	0.091	0.0	0.0	0.0	2.25	39.7	11.6
1.002	46.52	5.50	134.600	0.218	0.0	0.0	0.0	2.63	104.4	27.5
2.000	45.95	5.66	131.450	0.049	0.0	0.0	0.0	1.11	78.4	6.1
1.003	45.15	5.89	131.155	0.319	0.0	0.0	0.0	1.15	127.5	39.0
1.004	44.80	5.99	131.090	0.363	0.0	0.0	0.0	1.16	128.4	44.0
1.005	44.27	6.16	131.060	0.381	0.0	0.0	0.0	1.15	126.9	45.7
1.006	42.63	6.68	131.015	0.405	0.0	0.0	0.0	1.14	126.2	46.8
1.007	42.31	6.79	130.870	0.420	0.0	0.0	0.0	1.21	133.9	48.1

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Network Design Table for 250424 SW OUT OF PDS.SWS

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
3.000	11.404	0.115	99.2	0.063	5.00	0.0	0.600	o	225	Pipe/Conduit	
1.008	21.891	0.090	243.2	0.032	0.00	0.0	0.600	o	375	Pipe/Conduit	
4.000	12.000	0.605	19.8	0.059	5.00	0.0	0.600	o	150	Pipe/Conduit	
4.001	40.618	0.270	150.4	0.029	0.00	0.0	0.600	o	225	Pipe/Conduit	
4.002	23.600	0.160	147.5	0.104	0.00	0.0	0.600	o	300	Pipe/Conduit	
4.003	36.000	0.180	200.0	0.075	0.00	0.0	0.600	o	300	Pipe/Conduit	
4.004	18.990	0.095	199.9	0.065	0.00	0.0	0.600	o	300	Pipe/Conduit	
4.005	31.872	0.455	70.0	0.034	0.00	0.0	0.600	o	300	Pipe/Conduit	
5.000	56.000	1.250	44.8	0.155	5.00	0.0	0.600	o	225	Pipe/Conduit	
5.001	25.643	1.000	25.6	0.020	0.00	0.0	0.600	o	225	Pipe/Conduit	
5.002	32.908	1.360	24.2	0.101	0.00	0.0	0.600	o	300	Pipe/Conduit	
5.003	20.739	0.105	197.5	0.057	0.00	0.0	0.600	o	375	Pipe/Conduit	
5.004	8.820	0.045	196.0	0.026	0.00	0.0	0.600	o	375	Pipe/Conduit	
4.006	18.715	0.095	197.0	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
4.007	26.557	0.055	482.9	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
4.008	5.700	0.025	228.0	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
4.009	27.947	2.235	12.5	0.000	0.00	0.0	0.600	o	150	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)
3.000	47.87	5.14	131.100	0.063	0.0	0.0	0.0	1.31	52.2	8.2
1.008	41.41	7.11	130.835	0.515	0.0	0.0	0.0	1.16	127.8	57.8
4.000	48.09	5.09	136.250	0.059	0.0	0.0	0.0	2.27	40.1	7.7
4.001	45.72	5.72	135.570	0.088	0.0	0.0	0.0	1.06	42.3	10.9
4.002	44.68	6.03	135.225	0.192	0.0	0.0	0.0	1.29	91.4	23.2
4.003	42.97	6.57	135.065	0.267	0.0	0.0	0.0	1.11	78.3	31.1
4.004	42.12	6.86	134.885	0.332	0.0	0.0	0.0	1.11	78.3	37.9
4.005	41.32	7.14	134.790	0.366	0.0	0.0	0.0	1.88	133.0	41.0
5.000	46.61	5.48	138.170	0.155	0.0	0.0	0.0	1.96	77.9	19.6
5.001	46.02	5.64	136.920	0.175	0.0	0.0	0.0	2.59	103.2	21.8
5.002	45.42	5.81	135.845	0.276	0.0	0.0	0.0	3.21	226.9	33.9
5.003	44.51	6.08	134.410	0.333	0.0	0.0	0.0	1.29	142.0	40.1
5.004	44.14	6.19	134.305	0.359	0.0	0.0	0.0	1.29	142.5	42.9
4.006	40.67	7.38	134.260	0.725	0.0	0.0	0.0	1.29	142.2	79.8
4.007	39.28	7.92	134.165	0.725	0.0	0.0	0.0	0.82	90.3	79.8
4.008	39.09	8.00	134.110	0.725	0.0	0.0	0.0	1.20	132.1	79.8
4.009	38.70	8.16	134.035	0.725	0.0	0.0	0.0	2.86	50.6«	79.8

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Network Design Table for 250424 SW OUT OF PDS.SWS

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
1.009	44.932	3.425	13.1	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.010	44.591	0.095	469.4	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.011	33.503	0.075	446.7	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
1.012	40.459	0.090	449.5	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
6.000	30.125	1.380	21.8	0.079	5.00	0.0	0.600	o	150	Pipe/Conduit	
6.001	59.790	0.705	84.8	0.126	0.00	0.0	0.600	o	300	Pipe/Conduit	
7.000	46.907	0.235	199.6	0.080	5.00	0.0	0.600	o	300	Pipe/Conduit	
8.000	16.514	1.360	12.1	0.180	5.00	0.0	0.600	o	225	Pipe/Conduit	
6.002	51.362	2.490	20.6	0.093	0.00	0.0	0.600	o	375	Pipe/Conduit	
1.013	12.212	0.030	407.1	0.008	0.00	0.0	0.600	o	600	Pipe/Conduit	
1.014	26.304	0.805	32.7	0.015	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.015	36.845	3.300	11.2	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.016	28.477	2.840	10.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.017	35.626	3.500	10.2	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.018	53.092	5.300	10.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.019	17.704	0.285	62.1	0.000	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)
1.009	38.39	8.30	130.670	1.240	0.0	0.0	0.0	5.64	896.4	128.9
1.010	36.63	9.09	127.245	1.240	0.0	0.0	0.0	0.93	148.2	128.9
1.011	35.65	9.58	127.150	1.240	0.0	0.0	0.0	1.15	323.9	128.9
1.012	34.54	10.17	127.075	1.240	0.0	0.0	0.0	1.14	322.9	128.9
6.000	47.53	5.23	133.800	0.079	0.0	0.0	0.0	2.17	38.3	10.2
6.001	45.41	5.82	132.270	0.205	0.0	0.0	0.0	1.71	120.8	25.2
7.000	45.79	5.70	131.800	0.080	0.0	0.0	0.0	1.11	78.4	9.9
8.000	48.15	5.07	133.000	0.180	0.0	0.0	0.0	3.78	150.1	23.5
6.002	44.68	6.03	131.490	0.558	0.0	0.0	0.0	4.01	442.3	67.5
1.013	34.23	10.34	126.985	1.806	0.0	0.0	0.0	1.20	339.5	167.4
1.014	33.90	10.53	126.905	1.821	0.0	0.0	0.0	2.30	91.3<<	167.4
1.015	33.63	10.69	126.100	1.821	0.0	0.0	0.0	3.94	156.6<<	167.4
1.016	33.44	10.80	120.500	1.821	0.0	0.0	0.0	4.16	165.3<<	167.4
1.017	33.20	10.95	115.100	1.821	0.0	0.0	0.0	4.13	164.0<<	167.4
1.018	32.85	11.16	109.230	1.821	0.0	0.0	0.0	4.16	165.3<<	167.4
1.019	32.58	11.34	103.930	1.821	0.0	0.0	0.0	1.66	66.1<<	167.4

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Network Design Table for 250424 SW OUT OF PDS.SWS

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
1.020	71.868	4.140	17.4	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.021	61.577	3.745	16.4	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.022	7.180	0.075	95.7	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.023	7.387	0.075	98.5	0.000	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)
1.020	32.03	11.72	103.645	1.821	0.0	0.0	0.0	3.16	125.5<	167.4
1.021	31.58	12.03	99.505	1.821	0.0	0.0	0.0	3.24	128.9<	167.4
1.022	31.46	12.12	95.760	1.821	0.0	0.0	0.0	1.34	53.1<	167.4
1.023	31.33	12.22	95.685	1.821	0.0	0.0	0.0	1.32	52.4<	167.4

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PIPELINE SCHEDULES for 250424 SW OUT OF PDS.SWS

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)
1.000	o	150	1	138.271	136.770	1.351	Open Manhole	1500
1.001	o	150	2	137.330	135.825	1.355	Open Manhole	1500
1.002	o	225	3	136.174	134.600	1.349	Open Manhole	1500
2.000	o	300	4	133.241	131.450	1.491	Open Manhole	1500
1.003	o	375	5	134.937	131.155	3.407	Open Manhole	1800
1.004	o	375	6	135.285	131.090	3.820	Open Manhole	1500
1.005	o	375	7	135.543	131.060	4.108	Open Manhole	1500
1.006	o	375	8	135.133	131.015	3.743	Open Manhole	1500
1.007	o	375	9	133.561	130.870	2.316	Open Manhole	1500
3.000	o	225	10	133.050	131.100	1.725	Open Manhole	1200
1.008	o	375	11	133.536	130.835	2.326	Open Manhole	1800
4.000	o	150	12	137.741	136.250	1.341	Open Manhole	1500
4.001	o	225	13	137.141	135.570	1.346	Open Manhole	1500
4.002	o	300	14	137.231	135.225	1.706	Open Manhole	1500
4.003	o	300	15	136.738	135.065	1.373	Open Manhole	1500
4.004	o	300	16	137.712	134.885	2.527	Open Manhole	1500

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)
1.000	19.326	20.5	2	137.330	135.825	1.355	Open Manhole	1500
1.001	23.278	20.2	3	136.174	134.675	1.349	Open Manhole	1500
1.002	29.049	25.0	5	134.937	133.440	1.272	Open Manhole	1800
2.000	43.973	199.9	5	134.937	131.230	3.407	Open Manhole	1800
1.003	15.900	244.6	6	135.285	131.090	3.820	Open Manhole	1500
1.004	7.232	241.1	7	135.543	131.060	4.108	Open Manhole	1500
1.005	11.102	246.7	8	135.133	131.015	3.743	Open Manhole	1500
1.006	36.181	249.5	9	133.561	130.870	2.316	Open Manhole	1500
1.007	7.764	221.8	11	133.536	130.835	2.326	Open Manhole	1800
3.000	11.404	99.2	11	133.536	130.985	2.326	Open Manhole	1800
1.008	21.891	243.2	27	133.300	130.745	2.180	Open Manhole	1800
4.000	12.000	19.8	13	137.141	135.645	1.346	Open Manhole	1500
4.001	40.618	150.4	14	137.231	135.300	1.706	Open Manhole	1500
4.002	23.600	147.5	15	136.738	135.065	1.373	Open Manhole	1500
4.003	36.000	200.0	16	137.712	134.885	2.527	Open Manhole	1500
4.004	18.990	199.9	17	137.715	134.790	2.625	Open Manhole	1500

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PIPELINE SCHEDULES for 250424 SW OUT OF PDS.SWS

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)
4.005	o	300	17	137.715	134.790	2.625	Open Manhole	1500
5.000	o	225	18	139.669	138.170	1.274	Open Manhole	1500
5.001	o	225	19	138.420	136.920	1.275	Open Manhole	1500
5.002	o	300	20	137.417	135.845	1.272	Open Manhole	1500
5.003	o	375	21	136.058	134.410	1.273	Open Manhole	1500
5.004	o	375	22	136.699	134.305	2.019	Open Manhole	1500
4.006	o	375	23	137.044	134.260	2.409	Open Manhole	1800
4.007	o	375	24	135.500	134.165	0.960	Open Manhole	1500
4.008	o	375	25	135.500	134.110	1.015	Open Manhole	1500
4.009	o	150	26	135.500	134.035	1.315	Open Manhole	2400
1.009	o	450	27	133.300	130.670	2.180	Open Manhole	1800
1.010	o	450	28	128.550	127.245	0.855	Open Manhole	1500
1.011	o	600	29	128.550	127.150	0.800	Open Manhole	1500
1.012	o	600	30	131.375	127.075	3.700	Open Manhole	1800
6.000	o	150	31	135.300	133.800	1.350	Open Manhole	1500
6.001	o	300	32	133.908	132.270	1.338	Open Manhole	1500

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)
4.005	31.872	70.0	23	137.044	134.335	2.409	Open Manhole	1800
5.000	56.000	44.8	19	138.420	136.920	1.275	Open Manhole	1500
5.001	25.643	25.6	20	137.417	135.920	1.272	Open Manhole	1500
5.002	32.908	24.2	21	136.058	134.485	1.273	Open Manhole	1500
5.003	20.739	197.5	22	136.699	134.305	2.019	Open Manhole	1500
5.004	8.820	196.0	23	137.044	134.260	2.409	Open Manhole	1800
4.006	18.715	197.0	24	135.500	134.165	0.960	Open Manhole	1500
4.007	26.557	482.9	25	135.500	134.110	1.015	Open Manhole	1500
4.008	5.700	228.0	26	135.500	134.085	1.040	Open Manhole	2400
4.009	27.947	12.5	27	133.300	131.800	1.350	Open Manhole	1800
1.009	44.932	13.1	28	128.550	127.245	0.855	Open Manhole	1500
1.010	44.591	469.4	29	128.550	127.150	0.950	Open Manhole	1500
1.011	33.503	446.7	30	131.375	127.075	3.700	Open Manhole	1800
1.012	40.459	449.5	36	130.803	126.985	3.218	Open Manhole	2100
6.000	30.125	21.8	32	133.908	132.420	1.338	Open Manhole	1500
6.001	59.790	84.8	35	133.980	131.565	2.115	Open Manhole	1800

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PIPELINE SCHEDULES for 250424 SW OUT OF PDS.SWS

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)
7.000	o	300	33	133.900	131.800	1.800	Open Manhole	1500
8.000	o	225	34	134.555	133.000	1.330	Open Manhole	1500
6.002	o	375	35	133.980	131.490	2.115	Open Manhole	1800
1.013	o	600	36	130.803	126.985	3.218	Open Manhole	2100
1.014	o	225	37	130.599	126.905	3.469	Open Manhole	1500
1.015	o	225	38	127.506	126.100	1.181	Open Manhole	2700
1.016	o	225	39	124.210	120.500	3.485	Open Manhole	1200
1.017	o	225	40	119.000	115.100	3.675	Open Manhole	1200
1.018	o	225	41	113.003	109.230	3.548	Open Manhole	1200
1.019	o	225	42	105.330	103.930	1.175	Open Manhole	1350
1.020	o	225	43	105.145	103.645	1.275	Open Manhole	1350
1.021	o	225	44	100.905	99.505	1.175	Open Manhole	1350
1.022	o	225	45	96.850	95.760	0.865	Open Manhole	1200
1.023	o	225	46	96.750	95.685	0.840	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)
7.000	46.907	199.6	35	133.980	131.565	2.115	Open Manhole	1800
8.000	16.514	12.1	35	133.980	131.640	2.115	Open Manhole	1800
6.002	51.362	20.6	36	130.803	129.000	1.428	Open Manhole	2100
1.013	12.212	407.1	37	130.599	126.955	3.044	Open Manhole	1500
1.014	26.304	32.7	38	127.506	126.100	1.181	Open Manhole	2700
1.015	36.845	11.2	39	124.210	122.800	1.185	Open Manhole	1200
1.016	28.477	10.0	40	119.000	117.660	1.115	Open Manhole	1200
1.017	35.626	10.2	41	113.003	111.600	1.178	Open Manhole	1200
1.018	53.092	10.0	42	105.330	103.930	1.175	Open Manhole	1350
1.019	17.704	62.1	43	105.145	103.645	1.275	Open Manhole	1350
1.020	71.868	17.4	44	100.905	99.505	1.175	Open Manhole	1350
1.021	61.577	16.4	45	96.850	95.760	0.865	Open Manhole	1200
1.022	7.180	95.7	46	96.750	95.685	0.840	Open Manhole	1200
1.023	7.387	98.5	47	96.500	95.610	0.665	Open Manhole	0

Free Flowing Outfall Details for 250424 SW OUT OF PDS.SWS

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
1.023	47	96.500	95.610	0.000	0	0

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Simulation Criteria for 250424 SW OUT OF PDS.SWS

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	2	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	1	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Storm Duration (mins)	30
Ratio R	0.347		

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Online Controls for 250424 SW OUT OF PDS.SWS

Depth/Flow Relationship Manhole: 26, DS/PN: 4.009, Volume (m³): 7.0

Invert Level (m) 134.035

Depth (m)	Flow (l/s)						
0.040	0.8900	0.370	3.4700	0.700	2.9800	1.030	3.5500
0.080	2.2700	0.410	3.4200	0.740	3.0600	1.070	3.6100
0.120	2.8200	0.450	3.3500	0.780	3.1400	1.110	3.6700
0.170	3.1800	0.500	3.2300	0.830	3.2100	1.160	3.7300
0.210	3.4000	0.540	3.0700	0.870	3.2800	1.200	3.7900
0.250	3.4900	0.580	2.8500	0.910	3.3500		
0.290	3.5000	0.620	2.8100	0.950	3.4200		
0.330	3.4900	0.660	2.9000	0.990	3.4900		

Depth/Flow Relationship Manhole: 37, DS/PN: 1.014, Volume (m³): 9.5

Invert Level (m) 126.905

Depth (m)	Flow (l/s)						
0.060	2.2500	0.500	13.2600	0.950	11.4500	1.400	13.4900
0.110	7.7000	0.560	13.2000	1.010	11.7400	1.450	13.7100
0.170	10.0100	0.610	13.0800	1.060	12.0100	1.510	13.9200
0.220	11.4900	0.670	12.8700	1.120	12.2800	1.560	14.1300
0.280	12.4900	0.730	12.5600	1.170	12.5400	1.620	14.3300
0.340	13.0600	0.780	12.1200	1.230	12.7900		
0.390	13.2800	0.840	11.5300	1.280	13.0300		
0.450	13.2800	0.890	11.1500	1.340	13.2600		

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Storage Structures for 250424 SW OUT OF PDS.SWS

Tank or Pond Manhole: 25, DS/PN: 4.008

Invert Level (m) 134.110

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	465.0	1.000	465.0

Tank or Pond Manhole: 29, DS/PN: 1.011

Invert Level (m) 127.150

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	565.0	1.000	565.0

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1)
for 250424 SW OUT OF PDS.SWS

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 Storage Structures 2
Number of Online Controls 2 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.347
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 19.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
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, 2160, 2880, 4320, 5760,
7200, 8640, 10080
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 30

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surchage	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
1.000	1 15	Winter	1	+0%					136.796
1.001	2 15	Winter	1	+0%	100/15	Summer			135.878
1.002	3 15	Winter	1	+0%	100/15	Summer			134.675
2.000	4 15	Winter	1	+0%	100/15	Summer			131.509
1.003	5 15	Winter	1	+0%	30/15	Summer			131.312
1.004	6 15	Winter	1	+0%	30/15	Summer			131.267
1.005	7 15	Winter	1	+0%	30/15	Summer			131.233
1.006	8 15	Winter	1	+0%	30/15	Summer			131.176
1.007	9 15	Winter	1	+0%	30/15	Summer			131.053
3.000	10 15	Winter	1	+0%	100/15	Summer			131.164
1.008	11 15	Winter	1	+0%	30/15	Summer			131.020
4.000	12 15	Winter	1	+0%	100/15	Summer			136.296
4.001	13 15	Winter	1	+0%	100/15	Summer			135.648
4.002	14 15	Winter	1	+0%	30/15	Winter			135.329
4.003	15 15	Winter	1	+0%	30/15	Summer			135.197
4.004	16 15	Winter	1	+0%	30/15	Summer			135.038
4.005	17 15	Winter	1	+0%	30/15	Summer			134.905

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1)
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PN	US/MH Name	Surcharged Flooded		Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
		Depth (m)	Volume (m ³)						
1.000	1	-0.124	0.000	0.07			2.5	OK	
1.001	2	-0.097	0.000	0.27			10.0	OK	
1.002	3	-0.150	0.000	0.24			23.5	OK	
2.000	4	-0.241	0.000	0.08			6.0	OK	
1.003	5	-0.218	0.000	0.34			35.1	OK	
1.004	6	-0.198	0.000	0.45			39.5	OK	
1.005	7	-0.202	0.000	0.43			41.1	OK	
1.006	8	-0.214	0.000	0.38			43.1	OK	
1.007	9	-0.192	0.000	0.48			44.4	OK	
3.000	10	-0.161	0.000	0.18			7.9	OK	
1.008	11	-0.190	0.000	0.49			52.9	OK	
4.000	12	-0.104	0.000	0.20			7.4	OK	
4.001	13	-0.147	0.000	0.26			10.4	OK	
4.002	14	-0.196	0.000	0.26			21.3	OK	
4.003	15	-0.168	0.000	0.40			28.6	OK	
4.004	16	-0.147	0.000	0.51			34.7	OK	
4.005	17	-0.185	0.000	0.31			37.5	OK	

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1)
for 250424 SW OUT OF PDS.SWS

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
5.000	18	15	Winter	1	+0%	100/15	Winter		138.248
5.001	19	15	Winter	1	+0%				136.992
5.002	20	15	Winter	1	+0%	100/15	Summer		135.924
5.003	21	15	Winter	1	+0%	30/15	Summer		134.560
5.004	22	15	Winter	1	+0%	30/15	Summer		134.511
4.006	23	15	Winter	1	+0%	30/15	Summer		134.497
4.007	24	15	Winter	1	+0%	30/15	Summer		134.450
4.008	25	360	Winter	1	+0%	30/120	Winter		134.292
4.009	26	360	Winter	1	+0%	1/15	Winter		134.291
1.009	27	15	Winter	1	+0%				130.745
1.010	28	15	Winter	1	+0%	100/15	Summer		127.443
1.011	29	240	Winter	1	+0%	100/60	Winter		127.288
1.012	30	15	Winter	1	+0%	30/15	Summer		127.372
6.000	31	15	Winter	1	+0%	100/15	Summer		133.853
6.001	32	15	Winter	1	+0%				132.362
7.000	33	15	Winter	1	+0%				131.874
8.000	34	15	Winter	1	+0%				133.062
6.002	35	15	Winter	1	+0%				131.591
1.013	36	15	Winter	1	+0%	30/15	Summer		127.428
1.014	37	15	Winter	1	+0%	1/15	Summer		127.424
1.015	38	15	Summer	1	+0%				126.145
1.016	39	30	Winter	1	+0%				120.544
1.017	40	30	Summer	1	+0%				115.144
1.018	41	15	Summer	1	+0%				109.273
1.019	42	30	Winter	1	+0%				104.002
1.020	43	15	Summer	1	+0%				103.694
1.021	44	15	Summer	1	+0%				99.554
1.022	45	15	Summer	1	+0%				95.851
1.023	46	30	Summer	1	+0%				95.776

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
5.000	18	-0.147	0.000	0.26			19.2	OK	
5.001	19	-0.153	0.000	0.22			21.4	OK	
5.002	20	-0.221	0.000	0.15			32.1	OK	
5.003	21	-0.225	0.000	0.32			37.8	OK	
5.004	22	-0.169	0.000	0.37			38.0	OK	
4.006	23	-0.138	0.000	0.62			73.7	OK	
4.007	24	-0.090	0.000	0.93			73.1	OK	
4.008	25	-0.193	0.000	0.04			3.5	OK	
4.009	26	0.106	0.000	0.07			3.5	SURCHARGED	
1.009	27	-0.375	0.000	0.07			53.5	OK	
1.010	28	-0.252	0.000	0.40			53.5	OK	
1.011	29	-0.462	0.000	0.04			11.3	OK	
1.012	30	-0.303	0.000	0.03			8.5	OK	

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1)
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PN	US/MH Name	Surcharged Flooded		Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
		Depth (m)	Volume (m ³)						
6.000	31	-0.097	0.000	0.27			9.9	OK	
6.001	32	-0.208	0.000	0.20			23.5	OK	
7.000	33	-0.226	0.000	0.14			10.1	OK	
8.000	34	-0.163	0.000	0.17			22.6	OK	
6.002	35	-0.274	0.000	0.16			65.7	OK	
1.013	36	-0.157	0.000	0.10			20.0	OK	
1.014	37	0.294	0.000	0.16			13.3	SURCHARGED	
1.015	38	-0.180	0.000	0.09			13.3	OK	
1.016	39	-0.181	0.000	0.09			13.3	OK	
1.017	40	-0.181	0.000	0.09			13.3	OK	
1.018	41	-0.182	0.000	0.08			13.3	OK	
1.019	42	-0.153	0.000	0.22			13.3	OK	
1.020	43	-0.176	0.000	0.11			13.3	OK	
1.021	44	-0.176	0.000	0.11			13.3	OK	
1.022	45	-0.134	0.000	0.34			13.3	OK	
1.023	46	-0.134	0.000	0.34			13.3	OK	

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1)
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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 Storage Structures 2
Number of Online Controls 2 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.347
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 19.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
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, 2160, 2880, 4320, 5760,
7200, 8640, 10080
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 30

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surchage	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
1.000	1 15	Winter	30	+0%					136.811
1.001	2 15	Winter	30	+0%	100/15	Summer			135.926
1.002	3 15	Winter	30	+0%	100/15	Summer			134.744
2.000	4 15	Winter	30	+0%	100/15	Summer			131.634
1.003	5 15	Winter	30	+0%	30/15	Summer			131.615
1.004	6 15	Winter	30	+0%	30/15	Summer			131.540
1.005	7 15	Winter	30	+0%	30/15	Summer			131.508
1.006	8 15	Winter	30	+0%	30/15	Summer			131.441
1.007	9 15	Winter	30	+0%	30/15	Summer			131.307
3.000	10 15	Winter	30	+0%	100/15	Summer			131.253
1.008	11 15	Winter	30	+0%	30/15	Summer			131.228
4.000	12 15	Winter	30	+0%	100/15	Summer			136.326
4.001	13 15	Winter	30	+0%	100/15	Summer			135.709
4.002	14 15	Winter	30	+0%	30/15	Winter			135.552
4.003	15 15	Winter	30	+0%	30/15	Summer			135.456
4.004	16 15	Winter	30	+0%	30/15	Summer			135.323
4.005	17 15	Winter	30	+0%	30/15	Summer			135.188

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1)
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PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
1.000	1	-0.109	0.000	0.17		6.1	OK	
1.001	2	-0.049	0.000	0.78		29.5	OK	
1.002	3	-0.081	0.000	0.73		71.4	OK	
2.000	4	-0.116	0.000	0.18		13.0	OK	
1.003	5	0.085	0.000	0.88		91.1	SURCHARGED	
1.004	6	0.075	0.000	1.17		102.0	SURCHARGED	
1.005	7	0.073	0.000	1.05		100.3	SURCHARGED	
1.006	8	0.051	0.000	0.91		103.3	SURCHARGED	
1.007	9	0.062	0.000	1.13		104.8	SURCHARGED	
3.000	10	-0.072	0.000	0.43		19.2	OK	
1.008	11	0.018	0.000	1.15		124.7	SURCHARGED	
4.000	12	-0.074	0.000	0.50		18.1	OK	
4.001	13	-0.086	0.000	0.67		26.9	OK	
4.002	14	0.027	0.000	0.65		53.0	SURCHARGED	
4.003	15	0.091	0.000	0.97		70.1	SURCHARGED	
4.004	16	0.138	0.000	1.20		81.4	SURCHARGED	
4.005	17	0.098	0.000	0.70		85.5	SURCHARGED	

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1)
for 250424 SW OUT OF PDS.SWS

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
5.000	18	15 Winter	30	+0%	100/15 Winter				138.302
5.001	19	15 Winter	30	+0%					137.042
5.002	20	15 Winter	30	+0%	100/15 Summer				135.981
5.003	21	15 Winter	30	+0%	30/15 Summer				135.149
5.004	22	15 Winter	30	+0%	30/15 Summer				135.044
4.006	23	15 Winter	30	+0%	30/15 Summer				134.957
4.007	24	15 Winter	30	+0%	30/15 Summer				134.747
4.008	25	600 Winter	30	+0%	30/120 Winter				134.608
4.009	26	600 Winter	30	+0%	1/15 Winter				134.609
1.009	27	15 Winter	30	+0%					130.790
1.010	28	240 Winter	30	+0%	100/15 Summer				127.601
1.011	29	240 Winter	30	+0%	100/60 Winter				127.591
1.012	30	15 Summer	30	+0%	30/15 Summer				127.832
6.000	31	15 Winter	30	+0%	100/15 Summer				133.890
6.001	32	15 Winter	30	+0%					132.434
7.000	33	15 Winter	30	+0%					131.920
8.000	34	15 Winter	30	+0%					133.102
6.002	35	15 Winter	30	+0%					131.661
1.013	36	15 Summer	30	+0%	30/15 Summer				127.984
1.014	37	15 Summer	30	+0%	1/15 Summer				127.989
1.015	38	960 Summer	30	+0%					126.145
1.016	39	720 Summer	30	+0%					120.544
1.017	40	15 Winter	30	+0%					115.144
1.018	41	1440 Winter	30	+0%					109.273
1.019	42	1440 Summer	30	+0%					104.002
1.020	43	960 Summer	30	+0%					103.694
1.021	44	1440 Winter	30	+0%					99.554
1.022	45	1440 Winter	30	+0%					95.851
1.023	46	1440 Summer	30	+0%					95.776

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
5.000	18	-0.093	0.000	0.62			46.9	OK	
5.001	19	-0.103	0.000	0.56			53.1	OK	
5.002	20	-0.164	0.000	0.41			84.5	OK	
5.003	21	0.364	0.000	0.79			94.5	SURCHARGED	
5.004	22	0.364	0.000	0.98			99.5	SURCHARGED	
4.006	23	0.322	0.000	1.51			178.1	SURCHARGED	
4.007	24	0.207	0.000	2.24			176.1	SURCHARGED	
4.008	25	0.123	0.000	0.05			3.9	SURCHARGED	
4.009	26	0.424	0.000	0.07			3.5	SURCHARGED	
1.009	27	-0.330	0.000	0.16			129.0	OK	
1.010	28	-0.094	0.000	0.27			36.6	OK	
1.011	29	-0.159	0.000	0.05			12.5	OK	
1.012	30	0.157	0.000	0.06			17.5	SURCHARGED	

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1)
for 250424 SW OUT OF PDS.SWS

PN	US/MH Name	Surcharged Flooded		Half Drain		Pipe Flow (l/s)	Status	Level Exceeded
		Depth (m)	Volume (m ³)	Flow / Cap. (l/s)	Overflow (l/s)			
6.000	31	-0.060	0.000	0.66		24.3	OK	
6.001	32	-0.136	0.000	0.55		63.5	OK	
7.000	33	-0.180	0.000	0.33		24.0	OK	
8.000	34	-0.123	0.000	0.42		55.5	OK	
6.002	35	-0.204	0.000	0.42		170.7	OK	
1.013	36	0.399	0.000	0.15		28.9	SURCHARGED	
1.014	37	0.859	0.000	0.16		13.2	SURCHARGED	
1.015	38	-0.180	0.000	0.09		13.3	OK	
1.016	39	-0.181	0.000	0.09		13.3	OK	
1.017	40	-0.181	0.000	0.09		13.3	OK	
1.018	41	-0.182	0.000	0.08		13.3	OK	
1.019	42	-0.153	0.000	0.22		13.3	OK	
1.020	43	-0.176	0.000	0.11		13.3	OK	
1.021	44	-0.176	0.000	0.11		13.3	OK	
1.022	45	-0.134	0.000	0.34		13.3	OK	
1.023	46	-0.134	0.000	0.34		13.3	OK	

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for 250424 SW OUT OF PDS.SWS

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 Storage Structures 2
Number of Online Controls 2 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.347
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 19.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
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, 2160, 2880, 4320, 5760,
7200, 8640, 10080
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 30

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surchage	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
1.000	1 15	Winter	100	+30%					136.824
1.001	2 15	Winter	100	+30%	100/15	Summer			136.428
1.002	3 15	Winter	100	+30%	100/15	Summer			135.038
2.000	4 15	Winter	100	+30%	100/15	Summer			132.452
1.003	5 15	Winter	100	+30%	30/15	Summer			132.424
1.004	6 15	Winter	100	+30%	30/15	Summer			132.292
1.005	7 15	Winter	100	+30%	30/15	Summer			132.131
1.006	8 15	Winter	100	+30%	30/15	Summer			131.963
1.007	9 15	Winter	100	+30%	30/15	Summer			131.638
3.000	10 15	Winter	100	+30%	100/15	Summer			131.538
1.008	11 15	Winter	100	+30%	30/15	Summer			131.438
4.000	12 15	Winter	100	+30%	100/15	Summer			136.966
4.001	13 15	Winter	100	+30%	100/15	Summer			136.763
4.002	14 15	Winter	100	+30%	30/15	Winter			136.625
4.003	15 15	Winter	100	+30%	30/15	Summer			136.518
4.004	16 15	Winter	100	+30%	30/15	Summer			136.268
4.005	17 15	Winter	100	+30%	30/15	Summer			136.029

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for 250424 SW OUT OF PDS.SWS

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
1.000	1	-0.096	0.000	0.28		10.3	OK	
1.001	2	0.453	0.000	1.13		42.4	SURCHARGED	
1.002	3	0.213	0.000	1.08		105.3	SURCHARGED	
2.000	4	0.702	0.000	0.30		22.0	SURCHARGED	
1.003	5	0.894	0.000	1.36		140.3	SURCHARGED	
1.004	6	0.827	0.000	1.79		156.2	SURCHARGED	
1.005	7	0.696	0.000	1.70		162.4	SURCHARGED	
1.006	8	0.573	0.000	1.48		168.4	SURCHARGED	
1.007	9	0.393	0.000	1.88		173.8	SURCHARGED	
3.000	10	0.213	0.000	0.68		30.0	SURCHARGED	
1.008	11	0.228	0.000	1.92		208.3	SURCHARGED	
4.000	12	0.566	0.000	0.76		27.7	SURCHARGED	
4.001	13	0.968	0.000	0.83		33.3	SURCHARGED	
4.002	14	1.100	0.000	0.76		62.0	SURCHARGED	
4.003	15	1.153	0.000	1.20		86.6	FLOOD RISK	
4.004	16	1.083	0.000	1.61		109.0	SURCHARGED	
4.005	17	0.939	0.000	0.98		119.4	SURCHARGED	

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for 250424 SW OUT OF PDS.SWS

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
5.000	18	15 Winter	100	+30%	100/15 Winter				138.444
5.001	19	15 Winter	100	+30%					137.096
5.002	20	15 Winter	100	+30%	100/15 Summer				136.332
5.003	21	15 Winter	100	+30%	30/15 Summer				135.870
5.004	22	15 Winter	100	+30%	30/15 Summer				135.730
4.006	23	15 Winter	100	+30%	30/15 Summer				135.587
4.007	24	15 Winter	100	+30%	30/15 Summer				135.099
4.008	25	720 Winter	100	+30%	30/120 Winter				135.054
4.009	26	720 Winter	100	+30%	1/15 Winter				135.054
1.009	27	15 Winter	100	+30%					130.826
1.010	28	480 Winter	100	+30%	100/15 Summer				128.107
1.011	29	480 Winter	100	+30%	100/60 Winter				128.102
1.012	30	480 Winter	100	+30%	30/15 Summer				128.162
6.000	31	15 Winter	100	+30%	100/15 Summer				134.066
6.001	32	15 Winter	100	+30%					132.499
7.000	33	15 Winter	100	+30%					131.962
8.000	34	15 Winter	100	+30%					133.140
6.002	35	15 Winter	100	+30%					131.725
1.013	36	15 Summer	100	+30%	30/15 Summer				128.464
1.014	37	15 Summer	100	+30%	1/15 Summer				128.478
1.015	38	15 Summer	100	+30%					126.146
1.016	39	15 Winter	100	+30%					120.545
1.017	40	15 Winter	100	+30%					115.145
1.018	41	15 Summer	100	+30%					109.274
1.019	42	15 Summer	100	+30%					104.004
1.020	43	15 Summer	100	+30%					103.695
1.021	44	15 Winter	100	+30%					99.554
1.022	45	15 Summer	100	+30%					95.852
1.023	46	15 Summer	100	+30%					95.777

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
5.000	18	0.049	0.000	1.02			76.4	SURCHARGED	
5.001	19	-0.049	0.000	0.90			85.7	OK	
5.002	20	0.187	0.000	0.63			130.4	SURCHARGED	
5.003	21	1.085	0.000	1.19			142.4	FLOOD RISK	
5.004	22	1.050	0.000	1.48			150.3	SURCHARGED	
4.006	23	0.952	0.000	2.25			265.9	SURCHARGED	
4.007	24	0.559	0.000	3.37			265.2	SURCHARGED	
4.008	25	0.569	0.000	0.05			4.2	SURCHARGED	
4.009	26	0.869	0.000	0.07			3.5	SURCHARGED	
1.009	27	-0.294	0.000	0.26			211.6	OK	
1.010	28	0.412	0.000	0.27			36.5	SURCHARGED	
1.011	29	0.352	0.000	0.16			41.8	SURCHARGED	
1.012	30	0.487	0.000	0.10			28.2	SURCHARGED	

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for 250424 SW OUT OF PDS.SWS

PN	US/MH Name	Surcharged Flooded		Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
		Depth (m)	Volume (m ³)						
6.000	31	0.116	0.000	1.04			38.1	SURCHARGED	
6.001	32	-0.071	0.000	0.91			104.3	OK	
7.000	33	-0.138	0.000	0.55			40.4	OK	
8.000	34	-0.085	0.000	0.70			93.2	OK	
6.002	35	-0.140	0.000	0.69			283.8	OK	
1.013	36	0.879	0.000	0.18			34.8	SURCHARGED	
1.014	37	1.348	0.000	0.16			13.2	SURCHARGED	
1.015	38	-0.179	0.000	0.09			13.6	OK	
1.016	39	-0.180	0.000	0.09			13.2	OK	
1.017	40	-0.180	0.000	0.09			13.2	OK	
1.018	41	-0.181	0.000	0.08			13.3	OK	
1.019	42	-0.151	0.000	0.23			13.3	OK	
1.020	43	-0.175	0.000	0.11			13.5	OK	
1.021	44	-0.176	0.000	0.11			13.2	OK	
1.022	45	-0.133	0.000	0.34			13.2	OK	
1.023	46	-0.133	0.000	0.35			13.3	OK	