

PFA Consulting		Page 1
Stratton Park House Wanborough Road Swindon SN3 4HG	M380: Boorley Gardens SW Drainage - Planning Catchments C + D (FEH 15 & 30)	
Date 08/05/2024	Designed by PS	
File M380-Catch C&D-V5.11 with weirs (RM Ph3).MDX	Checked by BF	
Causeway	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Catch C+D

Pipe Sizes STANDARD Manhole Sizes STANDARD

Return Period (years)	FEH Rainfall Model	5	Volumetric Runoff Coeff.	0.750
FEH Rainfall Version	2013		PIMP (%)	100
Site Location	GB 450306 114752		Add Flow / Climate Change (%)	0
Data Type	Point		Minimum Backdrop Height (m)	20.000
Maximum Rainfall (mm/hr)	550		Maximum Backdrop Height (m)	20.000
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)	1.00
			Min Slope for Optimisation (1:X)	500

Designed with Level Soffits

Network Design Table for Catch C+D

- Indicates pipe length does not match coordinates
 « - Indicates pipe capacity < flow

PN	Length (m)	Fall (m)	Slope (1:X)	I. Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	n	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.000	35.949	0.512	70.2	0.096	5.00	0.0	0.600		o	225	Pipe/Conduit	⚠
S1.001	37.616	0.156	241.1	0.066	0.00	0.0	0.600		o	300	Pipe/Conduit	⚠
S1.002	60.836	0.190	320.2	0.126	0.00	0.0	0.600		o	375	Pipe/Conduit	⚠
S1.003	15.123	0.048	315.1	0.009	0.00	0.0	0.600		o	375	Pipe/Conduit	⚠
S2.000	19.287	0.115	167.7	0.105	5.00	0.0	0.600		o	225	Pipe/Conduit	⚠
S2.001	33.215	1.103	30.1	0.060	0.00	0.0	0.600		o	225	Pipe/Conduit	⚠
S2.002	15.620	0.797	19.6	0.024	0.00	0.0	0.600		o	225	Pipe/Conduit	⚠
S2.003	21.369	1.015	21.1	0.039	0.00	0.0	0.600		o	225	Pipe/Conduit	⚠
S2.004	36.334	1.246	29.2	0.043	0.00	0.0	0.600		o	225	Pipe/Conduit	⚠
S2.005	13.620	0.436	31.2	0.018	0.00	0.0	0.600		o	225	Pipe/Conduit	⚠
S2.006	14.675	2.323	6.3	0.009	0.00	0.0	0.600		o	225	Pipe/Conduit	⚠
S1.004	14.479	0.029	499.3	0.022	0.00	0.0	0.600		o	525	Pipe/Conduit	⚠
S1.005	45.757	0.093	492.0	0.138	0.00	0.0	0.600		o	525	Pipe/Conduit	⚠
S1.006	10.237	0.843	12.1	0.017	0.00	0.0	0.600		o	525	Pipe/Conduit	⚠
S3.000	53.557	0.659	81.3	0.147	5.00	0.0	0.600		o	225	Pipe/Conduit	⚠
S3.001	41.576	0.211	197.0	0.082	0.00	0.0	0.600		o	375	Pipe/Conduit	⚠
S3.002	14.948	0.047	318.0	0.047	0.00	0.0	0.600		o	375	Pipe/Conduit	⚠
S3.003	36.706	0.114	322.0	0.070	0.00	0.0	0.600		o	375	Pipe/Conduit	⚠
S3.004	12.697	0.041	309.7	0.009	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)
S1.000	80.71	5.38	26.053	0.096	0.0	0.0	0.0	1.56	62.1	20.9
S1.001	77.08	6.01	25.466	0.161	0.0	0.0	0.0	1.01	71.3	33.7
S1.002	71.96	7.01	25.235	0.287	0.0	0.0	0.0	1.01	111.2	56.0
S1.003	70.81	7.26	25.045	0.296	0.0	0.0	0.0	1.02	112.1	56.8
S2.000	81.11	5.32	32.182	0.105	0.0	0.0	0.0	1.01	40.0	23.1
S2.001	79.69	5.55	32.067	0.165	0.0	0.0	0.0	2.39	95.1	35.6
S2.002	79.17	5.64	30.964	0.189	0.0	0.0	0.0	2.97	118.1	40.5
S2.003	78.45	5.76	30.167	0.228	0.0	0.0	0.0	2.86	113.9	48.4
S2.004	77.05	6.01	29.152	0.271	0.0	0.0	0.0	2.43	96.7	56.5
S2.005	76.52	6.11	27.906	0.289	0.0	0.0	0.0	2.35	93.4	59.8
S2.006	76.27	6.15	27.470	0.298	0.0	0.0	0.0	5.24	208.4	61.5
S1.004	69.73	7.50	24.847	0.616	0.0	0.0	0.0	1.00	215.5	116.3
S1.005	66.58	8.26	24.818	0.754	0.0	0.0	0.0	1.00	217.1	136.0
S1.006	66.48	8.29	24.725	0.771	0.0	0.0	0.0	6.45	1396.8	138.8
S3.000	79.31	5.61	25.255	0.147	0.0	0.0	0.0	1.45	57.7	31.5
S3.001	76.28	6.15	24.446	0.229	0.0	0.0	0.0	1.29	142.2	47.3
S3.002	74.97	6.40	24.235	0.275	0.0	0.0	0.0	1.01	111.6	55.9
S3.003	71.97	7.01	24.188	0.345	0.0	0.0	0.0	1.00	110.9	67.3
S3.004	71.01	7.22	24.074	0.354	0.0	0.0	0.0	1.02	113.1	68.1

Network Design Table for Catch C+D

PN	Length (m)	Fall (m)	Slope (1:X)	I. Area (ha)	T. E. (mins)	Base Flow (l/s)	k (mm)	n	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.007	59.337	0.144	412.1	0.163	0.00	0.0	0.600		o	675	Pipe/Conduit	⚡
S4.000	48.639	0.300	162.1	0.168	5.00	0.0	0.600		o	225	Pipe/Conduit	⚡
S4.001	9.863	0.040	246.6	0.072	0.00	0.0	0.600		o	300	Pipe/Conduit	⚡
S4.002	31.323	0.096	326.3	0.072	0.00	0.0	0.600		o	375	Pipe/Conduit	⚡
S4.003	38.232	0.118	324.0	0.065	0.00	0.0	0.600		o	375	Pipe/Conduit	⚡
S1.008	12.810	0.026	492.7	0.016	0.00	0.0	0.600		o	750	Pipe/Conduit	⚡
S1.009	9.391	0.019	494.3	0.018	0.00	0.0	0.600		o	750	Pipe/Conduit	⚡
S1.010	64.152	1.036	61.9	0.130	0.00	0.0	0.600		o	750	Pipe/Conduit	⚡
S1.011	10.287	0.170	60.5	0.074	0.00	0.0	0.600		o	750	Pipe/Conduit	⚡
S5.000	24.808	0.378	65.6	0.061	5.00	0.0	0.600		o	150	Pipe/Conduit	⚡
S5.001	73.068	1.114	65.6	0.189	0.00	0.0	0.600		o	300	Pipe/Conduit	⚡
S1.012	26.687	0.053	503.5	0.040	0.00	0.0	0.600		o	900	Pipe/Conduit	⚡
S1.013	15.378	0.031	496.1	0.030	0.00	0.0	0.600		o	900	Pipe/Conduit	⚡
S1.014	16.427	0.014	1173.4	0.012	0.00	0.0	0.600		o	900	Pipe/Conduit	⚡
S6.000	33.176	1.660	20.0	0.136	5.00	0.0	0.600		o	225	Pipe/Conduit	⚡
S6.001	15.082	0.640	23.6	0.028	0.00	0.0	0.600		o	225	Pipe/Conduit	⚡
S6.002	30.161	0.580	52.0	0.039	0.00	0.0	0.600		o	225	Pipe/Conduit	⚡
S7.000	41.909	0.965	43.4	0.136	5.00	0.0	0.600		o	225	Pipe/Conduit	⚡
S7.001	32.312	0.325	99.4	0.105	0.00	0.0	0.600		o	300	Pipe/Conduit	⚡
S7.002	15.058	0.150	100.4	0.032	0.00	0.0	0.600		o	375	Pipe/Conduit	⚡
S7.003	23.125	0.230	100.5	0.074	0.00	0.0	0.600		o	375	Pipe/Conduit	⚡
S7.004	35.652	0.395	90.3	0.044	0.00	0.0	0.600		o	375	Pipe/Conduit	⚡
S6.003	24.959	0.490	50.9	0.036	0.00	0.0	0.600		o	375	Pipe/Conduit	⚡
S6.004	43.011	3.072	14.0	0.085	0.00	0.0	0.600		o	375	Pipe/Conduit	⚡
S8.000	27.733	0.275	100.8	0.048	5.00	0.0	0.600		o	150	Pipe/Conduit	⚡
S8.001	26.245	0.177	148.3	0.082	0.00	0.0	0.600		o	225	Pipe/Conduit	⚡
S8.002	22.377	0.093	240.6	0.028	0.00	0.0	0.600		o	300	Pipe/Conduit	⚡

Network Results Table

PN	Rain (mm/hr)	T. C. (mins)	US/IL (m)	Σ I. Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.007	63.62	9.06	23.733	1.288	0.0	0.0	0.0	1.28	459.8	222.0
S4.000	78.28	5.79	24.593	0.168	0.0	0.0	0.0	1.02	40.7	35.6
S4.001	77.35	5.96	24.218	0.240	0.0	0.0	0.0	1.00	70.5	50.3
S4.002	74.56	6.48	24.103	0.312	0.0	0.0	0.0	1.00	110.2	63.1
S4.003	71.47	7.12	24.007	0.377	0.0	0.0	0.0	1.00	110.6	73.1
S1.008	63.03	9.23	23.514	1.682	0.0	0.0	0.0	1.25	554.0	287.1
S1.009	62.60	9.35	23.488	1.700	0.0	0.0	0.0	1.25	553.1	288.3
S1.010	61.60	9.65	23.469	1.830	0.0	0.0	0.0	3.56	1572.8	305.4
S1.011	61.45	9.70	22.433	1.905	0.0	0.0	0.0	3.60	1591.1	317.0
S5.000	81.03	5.33	24.355	0.061	0.0	0.0	0.0	1.24	22.0	13.3
S5.001	77.34	5.96	23.827	0.250	0.0	0.0	0.0	1.94	137.4	52.4
S1.012	60.43	10.02	22.113	2.195	0.0	0.0	0.0	1.39	883.9	359.2
S1.013	59.86	10.21	22.060	2.224	0.0	0.0	0.0	1.40	890.6	360.6
S1.014	58.96	10.51	22.029	2.236	0.0	0.0	0.0	0.91	576.4	360.6
S6.000	81.95	5.19	29.800	0.136	0.0	0.0	0.0	2.94	116.9	30.3
S6.001	81.35	5.28	28.140	0.164	0.0	0.0	0.0	2.71	107.6	36.2
S6.002	79.65	5.56	27.500	0.203	0.0	0.0	0.0	1.82	72.3	43.7
S7.000	80.91	5.35	28.985	0.136	0.0	0.0	0.0	1.99	79.1	29.7
S7.001	78.86	5.69	27.945	0.241	0.0	0.0	0.0	1.58	111.5	51.4
S7.002	78.06	5.83	27.545	0.272	0.0	0.0	0.0	1.81	199.7	57.6
S7.003	76.87	6.04	27.395	0.347	0.0	0.0	0.0	1.81	199.6	72.2
S7.004	75.20	6.36	27.165	0.391	0.0	0.0	0.0	1.91	210.7	79.6
S6.003	74.36	6.52	26.770	0.629	0.0	0.0	0.0	2.54	281.0	126.8
S6.004	73.62	6.67	26.280	0.715	0.0	0.0	0.0	4.86	537.2	142.5
S8.000	80.23	5.46	23.978	0.048	0.0	0.0	0.0	1.00	17.7	10.5
S8.001	77.84	5.87	23.628	0.131	0.0	0.0	0.0	1.07	42.6	27.6
S8.002	75.81	6.24	23.376	0.159	0.0	0.0	0.0	1.01	71.3	32.6

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Network Design Table for Catch C+D

PN	Length (m)	Fall (m)	Slope (1:X)	I. Area (ha)	T. E. (mins)	Base Flow (l/s)	k (mm)	n	HYD SECT	DIA (mm)	Section Type	Auto Design
S6.005	31.872	0.064	498.0	0.054	0.00	0.0	0.600		o	600	Pipe/Conduit	⚠
S6.006	8.022	0.533	15.1	0.009	0.00	0.0	0.600		o	600	Pipe/Conduit	⚠
S6.007	12.185	0.024	507.7	0.012	0.00	0.0	0.600		o	600	Pipe/Conduit	⚠
S6.008	9.943	0.046	216.2	0.012	0.00	0.0	0.600		o	750	Pipe/Conduit	⚠
S6.009	7.177	0.007	1025.3	0.051	0.00	0.0	0.600		o	900	Pipe/Conduit	⚠
S6.010	9.883	0.010	988.3	0.000	0.00	0.0	0.600		o	900	Pipe/Conduit	⚠
S1.015	11.514	0.012	959.5	0.025	0.00	0.0	0.600		o	900	Pipe/Conduit	⚠
S1.016	14.009	0.015	933.9	0.000	0.00	0.0	0.600		o	900	Pipe/Conduit	⚠
S1.017	12.204	0.013	938.8	0.000	0.00	0.0	0.600		o	900	Pipe/Conduit	⚠
S9.000	40.635	0.590	68.9	0.085	5.00	0.0	0.600		o	225	Pipe/Conduit	⚠
S9.001	38.986	0.249	156.6	0.100	0.00	0.0	0.600		o	300	Pipe/Conduit	⚠
S9.002	8.268	0.074	111.7	0.027	0.00	0.0	0.600		o	300	Pipe/Conduit	⚠
S9.003	23.600	0.229	103.1	0.047	0.00	0.0	0.600		o	300	Pipe/Conduit	⚠
S10.000	16.795	0.218	77.0	0.075	5.00	0.0	0.600		o	225	Pipe/Conduit	⚠
S9.004	19.671	0.247	79.6	0.033	0.00	0.0	0.600		o	300	Pipe/Conduit	⚠
S9.005	9.366	0.111	84.4	0.039	0.00	0.0	0.600		o	375	Pipe/Conduit	⚠
S9.006	12.815	0.232	55.2	0.000	0.00	0.0	0.600		o	450	Pipe/Conduit	⚠
S9.007	24.711	0.322	76.7	0.045	0.00	0.0	0.600		o	450	Pipe/Conduit	⚠
S9.008	19.546	0.204	95.8	0.039	0.00	0.0	0.600		o	450	Pipe/Conduit	⚠
S9.009	12.446	0.049	254.0	0.034	0.00	0.0	0.600		o	450	Pipe/Conduit	⚠
S1.018	15.136	0.035	432.5	0.038	0.00	0.0	0.600		o	900	Pipe/Conduit	⚠
S1.019	38.718	0.100	387.2	0.000	0.00	0.0	0.600		o	900	Pipe/Conduit	⚠
S1.020	16.627	0.130	127.9	0.000	0.00	0.0	0.600		o	525	Pipe/Conduit	⚠
S1.021	89.994	0.210	428.5	0.000	0.00	0.0	0.600		o	525	Pipe/Conduit	⚠
S1.022	89.992	0.210	428.5	0.000	0.00	0.0	0.600		o	525	Pipe/Conduit	⚠
S1.023	89.821	0.210	427.7	0.000	0.00	0.0	0.600		o	525	Pipe/Conduit	⚠
S1.024	54.518	0.120	454.3	0.000	0.00	0.0	0.600		o	525	Pipe/Conduit	⚠
S1.025	14.238#	0.030	474.6	0.000	0.00	0.0	0.600		o	525	Pipe/Conduit	⚠
S11.000	39.107	0.622	62.9	0.035	5.00	0.0	0.600		o	150	Pipe/Conduit	⚠
S11.001	32.411	0.540	60.0	0.076	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)
S6.005	71.28	7.16	22.983	0.927	0.0	0.0	0.0	1.08	306.6	179.0
S6.006	71.19	7.18	22.919	0.936	0.0	0.0	0.0	6.30	1780.7	180.4
S6.007	70.33	7.37	22.386	0.947	0.0	0.0	0.0	1.07	303.6	180.4
S6.008	69.94	7.45	22.212	0.960	0.0	0.0	0.0	1.90	839.2	181.8
S6.009	69.41	7.58	22.002	1.010	0.0	0.0	0.0	0.97	617.1	189.9
S6.010	68.69	7.74	21.995	1.010	0.0	0.0	0.0	0.99	628.7	189.9
S1.015	58.40	10.70	21.985	3.271	0.0	0.0	0.0	1.00	638.2	517.4
S1.016	57.75	10.93	21.973	3.271	0.0	0.0	0.0	1.02	647.0	517.4
S1.017	57.19	11.13	21.958	3.271	0.0	0.0	0.0	1.01	645.3	517.4
S9.000	80.43	5.43	24.927	0.085	0.0	0.0	0.0	1.58	62.7	18.4
S9.001	77.40	5.95	24.262	0.185	0.0	0.0	0.0	1.25	88.6	38.7
S9.002	76.89	6.04	24.013	0.212	0.0	0.0	0.0	1.49	105.1	44.2
S9.003	75.53	6.29	23.939	0.259	0.0	0.0	0.0	1.55	109.5	53.1
S10.000	81.95	5.19	24.003	0.075	0.0	0.0	0.0	1.49	59.3	16.6
S9.004	74.56	6.48	23.710	0.367	0.0	0.0	0.0	1.76	124.6	74.2
S9.005	74.16	6.56	23.388	0.406	0.0	0.0	0.0	1.97	218.0	81.6
S9.006	73.77	6.64	23.202	0.406	0.0	0.0	0.0	2.74	435.8	81.6
S9.007	72.90	6.81	22.970	0.451	0.0	0.0	0.0	2.32	369.4	89.1
S9.008	72.15	6.97	22.648	0.490	0.0	0.0	0.0	2.08	330.4	95.7
S9.009	71.39	7.13	22.444	0.524	0.0	0.0	0.0	1.27	202.1	101.2
S1.018	56.74	11.30	21.945	3.833	0.0	0.0	0.0	1.50	954.4	588.9
S1.019	55.67	11.70	21.910	3.833	0.0	0.0	0.0	1.59	1009.1	588.9
S1.020	55.31	11.84	21.810	3.833	0.0	0.0	0.0	1.98	428.5	588.9
S1.021	52.03	13.24	21.680	3.833	0.0	0.0	0.0	1.08	232.8	588.9
S1.022	49.18	14.63	21.470	3.833	0.0	0.0	0.0	1.08	232.8	588.9
S1.023	46.69	16.02	21.260	3.833	0.0	0.0	0.0	1.08	233.1	588.9
S1.024	45.27	16.89	21.050	3.833	0.0	0.0	0.0	1.04	226.1	588.9
S1.025	44.91	17.13	20.930	3.833	0.0	0.0	0.0	1.02	221.1	588.9
S11.000	79.92	5.51	26.512	0.035	0.0	0.0	0.0	1.27	22.5	7.6
S11.001	78.05	5.83	25.815	0.111	0.0	0.0	0.0	1.69	67.2	23.5

PFA Consulting		Page 4
Stratton Park House Wanborough Road Swindon SN3 4HG	M380: Boorley Gardens SW Drainage - Planning Catchments C + D (FEH 15 & 30)	
Date 08/05/2024	Designed by PS	
File M380-Catch C&D-V5.11 with weirs (RM Ph3).MDX	Checked by BF	
Causeway	Network 2020.1.3	

Network Design Table for Catch C+D

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	n	HYD SECT	DIA (mm)	Section Type	Auto Design
S11.002	10.303	0.193	53.4	0.058	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S11.003	10.303	0.142	72.6	0.009	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S11.004	23.248	0.862	27.0	0.016	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S12.000	7.032	0.344	20.4	0.048	5.00	0.0	0.600		o	150	Pipe/Conduit	🔴
S13.000	9.073	0.390	23.3	0.049	5.00	0.0	0.600		o	225	Pipe/Conduit	🔴
S12.001	19.266	0.290	66.4	0.040	0.00	0.0	0.600		o	225	Pipe/Conduit	🔴
S12.002	17.962	0.364	49.3	0.053	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S12.003	11.800	0.231	51.1	0.041	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S12.004	28.031	0.402	69.7	0.032	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S11.005	39.725	0.119	333.8	0.064	0.00	0.0	0.600		o	450	Pipe/Conduit	🔴
S11.006	8.588	0.057	150.7	0.068	0.00	0.0	0.600		o	450	Pipe/Conduit	🔴
S14.000	27.512	0.288	95.5	0.065	5.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S14.001	24.054	0.738	32.6	0.099	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S14.002	23.286	0.595	39.1	0.089	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S15.000	12.458	0.523	23.8	0.030	5.00	0.0	0.600		o	225	Pipe/Conduit	🟡
S11.007	12.441	0.031	401.3	0.110	0.00	0.0	0.600		o	600	Pipe/Conduit	🔴
S11.008	50.277	0.126	399.0	0.000	0.00	0.0	0.600		o	600	Pipe/Conduit	🔴
S11.009	16.281	0.033	493.4	0.000	0.00	0.0	0.600		o	600	Pipe/Conduit	🔴
S16.000	6.404	0.572	11.2	0.043	5.00	0.0	0.600		o	150	Pipe/Conduit	🔴
S17.000	9.571	0.413	23.2	0.036	5.00	0.0	0.600		o	150	Pipe/Conduit	🔴
S16.001	17.473	0.202	86.5	0.030	0.00	0.0	0.600		o	225	Pipe/Conduit	🔴
S16.002	16.645	0.192	86.7	0.028	0.00	0.0	0.600		o	225	Pipe/Conduit	🟢
S16.003	10.486	0.062	169.1	0.041	0.00	0.0	0.600		o	225	Pipe/Conduit	🔴
S11.010	31.952	0.080	399.4	0.021	0.00	0.0	0.600		o	600	Pipe/Conduit	🔴
S11.011	12.436	0.093	133.7	0.052	0.00	0.0	0.600		o	600	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)
S11.002	77.60	5.91	25.200	0.169	0.0	0.0	0.0	2.16	152.4	35.5
S11.003	77.08	6.00	25.007	0.178	0.0	0.0	0.0	1.85	130.6	37.2
S11.004	76.39	6.13	24.865	0.194	0.0	0.0	0.0	3.04	214.8	40.1
S12.000	82.85	5.05	25.784	0.048	0.0	0.0	0.0	2.24	39.5	10.8
S13.000	82.83	5.06	25.755	0.049	0.0	0.0	0.0	2.72	108.3	11.0
S12.001	81.52	5.26	25.365	0.137	0.0	0.0	0.0	1.61	63.9	30.2
S12.002	80.68	5.39	25.000	0.190	0.0	0.0	0.0	2.24	158.6	41.5
S12.003	80.13	5.48	24.636	0.231	0.0	0.0	0.0	2.20	155.9	50.1
S12.004	78.66	5.73	24.405	0.263	0.0	0.0	0.0	1.89	133.3	56.0
S11.005	73.31	6.73	23.853	0.521	0.0	0.0	0.0	1.11	176.1	103.4
S11.006	72.89	6.82	23.734	0.589	0.0	0.0	0.0	1.65	263.1	116.3
S14.000	81.33	5.28	25.448	0.065	0.0	0.0	0.0	1.61	113.7	14.3
S14.001	80.42	5.43	25.160	0.164	0.0	0.0	0.0	2.76	195.3	35.7
S14.002	79.49	5.58	24.422	0.253	0.0	0.0	0.0	2.52	178.2	54.5
S15.000	82.68	5.08	24.425	0.030	0.0	0.0	0.0	2.69	107.0	6.7
S11.007	72.07	6.99	23.527	0.982	0.0	0.0	0.0	1.21	341.9	191.7
S11.008	68.97	7.68	23.496	0.982	0.0	0.0	0.0	1.21	342.9	191.7
S11.009	67.93	7.93	23.370	0.982	0.0	0.0	0.0	1.09	308.1	191.7
S16.000	82.97	5.04	24.815	0.043	0.0	0.0	0.0	3.03	53.5	9.7
S17.000	82.69	5.08	24.656	0.036	0.0	0.0	0.0	2.10	37.1	8.1
S16.001	81.34	5.28	24.168	0.109	0.0	0.0	0.0	1.41	55.9	24.0
S16.002	80.12	5.48	23.966	0.137	0.0	0.0	0.0	1.41	55.9	29.7
S16.003	79.08	5.65	23.774	0.178	0.0	0.0	0.0	1.00	39.9	38.1
S11.010	66.18	8.37	23.337	1.181	0.0	0.0	0.0	1.21	342.8	211.7
S11.011	65.80	8.47	23.257	1.233	0.0	0.0	0.0	2.10	595.0	219.7

Network Design Table for Catch C+D

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	n	HYD SECT	DIA (mm)	Section Type	Auto Design
S18.000	10.976	0.079	138.9	0.000	5.00	0.0	0.600		o	225	Pipe/Conduit	🟡
S18.001	17.571	0.100	175.7	0.112	0.00	0.0	0.600		o	225	Pipe/Conduit	🔴
S18.002	7.268	0.041	177.3	0.028	0.00	0.0	0.600		o	225	Pipe/Conduit	🟢
S11.012	43.134	0.074	582.9	0.010	0.00	0.0	0.600		o	600	Pipe/Conduit	🔴
S11.013	10.732	0.019	564.8	0.069	0.00	0.0	0.600		o	600	Pipe/Conduit	🔴
S11.014	9.000	0.143	62.9	0.000	0.00	0.0		0.045	3	¥=/	1000 1:3 Swale	🔴
S19.000	10.468	0.043	243.4	0.038	5.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S20.000	7.532	0.031	243.0	0.044	5.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S19.001	31.106	0.103	302.0	0.032	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S19.002	10.395	0.066	157.5	0.026	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S11.015	22.426	0.262	85.6	0.000	0.00	0.0		0.045	3	¥=/	1000 1:3 Swale	🔴
S11.016	12.703	0.115	110.5	0.000	0.00	0.0		0.045	3	¥=/	1000 1:3 Swale	🔴
S21.000	15.822	0.093	170.1	0.017	5.00	0.0	0.600		o	225	Pipe/Conduit	🔴
S21.001	11.323	0.067	169.0	0.054	0.00	0.0	0.600		o	225	Pipe/Conduit	🔴
S11.017	22.290	0.226	98.6	0.000	0.00	0.0		0.045	3	¥=/	1000 1:3 Swale	🔴
S22.000	22.392	0.093	240.8	0.026	5.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S22.001	22.392	0.093	240.8	0.043	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S22.002	11.234	0.047	239.0	0.027	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴
S11.018	1.710	0.021	81.4	0.000	0.00	0.0		0.045	3	¥=/	1000 1:3 Swale	🔴
S11.019	20.296	0.226	89.8	0.000	0.00	0.0		0.045	3	¥=/	1000 1:3 Swale	🔴
S11.020	28.551	0.288	99.1	0.000	0.00	0.0		0.045	3	¥=/	1000 1:3 Swale	🔴
S23.000	36.485	0.215	169.7	0.019	5.00	0.0	0.600		o	225	Pipe/Conduit	🔴
S23.001	9.144	0.054	169.3	0.090	0.00	0.0	0.600		o	225	Pipe/Conduit	🔴
S11.021	30.393	0.224	135.7	0.000	0.00	0.0		0.045	3	¥=/	1000 1:3 Swale	🔴

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)
S18.000	82.10	5.17	23.759	0.000	0.0	0.0	0.0	1.11	44.0	0.0
S18.001	80.22	5.46	23.680	0.112	0.0	0.0	0.0	0.98	39.1	24.4
S18.002	79.48	5.59	23.580	0.140	0.0	0.0	0.0	0.98	38.9	30.2
S11.012	63.19	9.18	23.164	1.383	0.0	0.0	0.0	1.00	283.1	236.7
S11.013	62.58	9.36	23.090	1.452	0.0	0.0	0.0	1.02	287.7	246.2
S11.014	61.81	9.59	22.971	1.452	0.0	0.0	0.0	0.65	141.2	246.2
S19.000	82.04	5.17	23.140	0.038	0.0	0.0	0.0	1.00	70.9	8.4
S20.000	82.36	5.13	23.128	0.044	0.0	0.0	0.0	1.00	71.0	9.8
S19.001	78.52	5.75	23.097	0.114	0.0	0.0	0.0	0.90	63.6	24.2
S19.002	77.73	5.89	22.994	0.140	0.0	0.0	0.0	1.25	88.4	29.4
S11.015	59.69	10.26	22.828	1.592	0.0	0.0	0.0	0.56	121.1	257.4
S11.016	58.42	10.69	22.566	1.592	0.0	0.0	0.0	0.49	106.6	257.4
S21.000	81.46	5.26	22.711	0.017	0.0	0.0	0.0	1.00	39.7	3.8
S21.001	80.29	5.45	22.618	0.071	0.0	0.0	0.0	1.00	39.9	15.4
S11.017	56.44	11.41	22.451	1.663	0.0	0.0	0.0	0.52	112.8	257.4
S22.000	80.79	5.37	22.558	0.026	0.0	0.0	0.0	1.01	71.3	5.7
S22.001	78.58	5.74	22.465	0.069	0.0	0.0	0.0	1.01	71.3	14.8
S22.002	77.53	5.92	22.372	0.096	0.0	0.0	0.0	1.01	71.6	20.2
S11.018	56.30	11.46	22.225	1.760	0.0	0.0	0.0	0.57	124.2	268.3
S11.019	54.72	12.08	22.204	1.760	0.0	0.0	0.0	0.54	118.2	268.3
S11.020	52.56	13.00	21.978	1.760	0.0	0.0	0.0	0.52	112.5	268.3
S23.000	79.35	5.61	22.059	0.019	0.0	0.0	0.0	1.00	39.8	4.1
S23.001	78.47	5.76	21.844	0.109	0.0	0.0	0.0	1.00	39.8	23.2
S11.021	50.13	14.15	21.690	1.869	0.0	0.0	0.0	0.44	96.2	268.3

PFA Consulting		Page 6
Stratton Park House Wanborough Road Swindon SN3 4HG	M380: Boorley Gardens SW Drainage - Planning Catchments C + D (FEH 15 & 30)	
Date 08/05/2024	Designed by PS	
File M380-Catch C&D-V5.11 with weirs (RM Ph3).MDX	Checked by BF	
Causeway	Network 2020.1.3	

Network Design Table for Catch C+D

PN	Length (m)	Fall (m)	Slope (1:X)	I. Area (ha)	T. E. (mins)	Base Flow (l/s)	k (mm)	n	HYD SECT	DIA (mm)	Section Type	Auto Design	
S11.022	4.573	0.027	169.4	0.000	0.00	0.0	0.600	0.045	o	525	Pipe/Conduit	🔴	
S11.023	5.237#	0.039	134.3	0.000	0.00	0.0			3	¥=/	1000	1:3 Swale	🔴
S24.000	14.348	0.164	87.5	0.028	5.00	0.0	0.600	0.045	o	300	Pipe/Conduit	🔴	
S24.001	38.017	0.660	57.6	0.013	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴	
S24.002	16.044	0.117	137.1	0.071	0.00	0.0	0.600		o	375	Pipe/Conduit	🔴	
S24.003	15.071	0.177	85.1	0.033	0.00	0.0	0.600		o	375	Pipe/Conduit	🔴	
S24.004	34.848	0.366	95.2	0.047	0.00	0.0	0.600		o	375	Pipe/Conduit	🔴	
S24.005	34.848	0.108	322.7	0.090	0.00	0.0	0.600		o	375	Pipe/Conduit	🔴	
S24.006	16.578	0.082	202.2	0.128	0.00	0.0	0.600		o	450	Pipe/Conduit	🔴	
S24.007	14.379	0.036	399.4	0.037	0.00	0.0	0.600		o	450	Pipe/Conduit	🔴	
S24.008	10.673	0.027	395.3	0.021	0.00	0.0	0.600	o	450	Pipe/Conduit	🔴		
S25.000	8.564	1.068	8.0	0.028	5.00	0.0	0.600	0.045	o	225	Pipe/Conduit	🔴	
S24.009	41.724	0.104	401.2	0.038	0.00	0.0	0.600		o	450	Pipe/Conduit	🔴	
S24.010	81.518	0.691	118.0	0.058	0.00	0.0	0.600	o	450	Pipe/Conduit	🔴		
S26.000	13.781	0.512	26.9	0.025	5.00	0.0	0.600	0.045	o	300	Pipe/Conduit	🔴	
S24.011	29.760	0.060	496.0	0.253	0.00	0.0	0.600		o	525	Pipe/Conduit	🔴	
S24.012	37.653	0.075	502.0	0.094	0.00	0.0	0.600		o	525	Pipe/Conduit	🔴	
S24.013	26.529	0.053	500.5	0.127	0.00	0.0	0.600		o	525	Pipe/Conduit	🟢	
S24.014	38.681	0.078	495.9	0.054	0.00	0.0	0.600		o	525	Pipe/Conduit	🔴	
S24.015	15.856	0.032	495.5	0.079	0.00	0.0	0.600		o	525	Pipe/Conduit	🔴	
S24.016	15.562	0.232	67.1	0.000	0.00	0.0			3	¥=/	1000	1:3 Swale	🔴
S24.017	26.215	0.328	79.9	0.000	0.00	0.0			3	¥=/	1000	1:3 Swale	🔴
S24.018	7.830	0.082	95.5	0.000	0.00	0.0		3	¥=/	1000	1:3 Swale	🔴	
S24.019	7.038	0.101	69.7	0.000	0.00	0.0		3	¥=/	1000	1:3 Swale	🔴	
S27.000	8.972	0.041	218.8	0.008	5.00	0.0	0.600	0.045	o	300	Pipe/Conduit	🔴	
S27.001	47.357	0.215	220.3	0.062	0.00	0.0	0.600		o	300	Pipe/Conduit	🟡	
S27.002	13.843	0.063	219.7	0.037	0.00	0.0	0.600		o	300	Pipe/Conduit	🔴	
S24.020	8.133	0.110	73.9	0.000	0.00	0.0		0.045	3	¥=/	1000	1:3 Swale	🔴
S24.021	4.890	0.152	32.2	0.000	0.00	0.0		0.045	3	¥=/	1000	1:3 Swale	🔴

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)
S11.022	50.05	14.19	21.466	1.869	0.0	0.0	0.0	1.72	372.0	268.3
S11.023	49.66	14.39	21.439	1.869	0.0	0.0	0.0	0.44	96.7	268.3
S24.000	82.25	5.14	26.162	0.028	0.0	0.0	0.0	1.68	118.9	6.2
S24.001	80.32	5.45	25.998	0.041	0.0	0.0	0.0	2.08	146.7	8.9
S24.002	79.28	5.62	25.263	0.112	0.0	0.0	0.0	1.55	170.7	24.0
S24.003	78.53	5.75	25.146	0.145	0.0	0.0	0.0	1.96	217.0	30.8
S24.004	76.78	6.06	24.969	0.192	0.0	0.0	0.0	1.86	205.1	39.9
S24.005	73.76	6.64	24.604	0.282	0.0	0.0	0.0	1.00	110.8	56.3
S24.006	72.81	6.83	24.420	0.410	0.0	0.0	0.0	1.43	226.8	80.8
S24.007	71.68	7.07	24.338	0.447	0.0	0.0	0.0	1.01	160.8	86.8
S24.008	70.88	7.25	24.303	0.468	0.0	0.0	0.0	1.02	161.7	89.8
S25.000	83.00	5.03	25.569	0.028	0.0	0.0	0.0	4.65	184.9	6.3
S24.009	67.90	7.94	24.276	0.534	0.0	0.0	0.0	1.01	160.4	98.2
S24.010	65.06	8.66	24.172	0.592	0.0	0.0	0.0	1.87	297.5	104.3
S26.000	82.69	5.08	24.143	0.025	0.0	0.0	0.0	3.04	215.1	5.6
S24.011	63.28	9.16	23.406	0.870	0.0	0.0	0.0	1.00	216.2	149.1
S24.012	61.17	9.79	23.346	0.964	0.0	0.0	0.0	0.99	214.9	159.7
S24.013	59.78	10.23	23.271	1.091	0.0	0.0	0.0	0.99	215.2	176.6
S24.014	57.89	10.88	23.218	1.145	0.0	0.0	0.0	1.00	216.3	179.5
S24.015	57.15	11.14	23.140	1.224	0.0	0.0	0.0	1.00	216.4	189.5
S24.016	56.05	11.56	23.008	1.224	0.0	0.0	0.0	0.63	136.8	189.5
S24.017	54.15	12.31	22.776	1.224	0.0	0.0	0.0	0.58	125.3	189.5
S24.018	53.56	12.56	22.448	1.224	0.0	0.0	0.0	0.53	114.7	189.5
S24.019	53.12	12.75	22.366	1.224	0.0	0.0	0.0	0.62	134.2	189.5
S27.000	82.25	5.14	22.683	0.008	0.0	0.0	0.0	1.06	74.8	1.8
S27.001	77.73	5.89	22.642	0.070	0.0	0.0	0.0	1.06	74.6	14.6
S27.002	76.52	6.11	22.427	0.107	0.0	0.0	0.0	1.06	74.7	22.1
S24.020	52.61	12.98	22.264	1.331	0.0	0.0	0.0	0.60	130.3	189.6
S24.021	52.41	13.07	22.147	1.331	0.0	0.0	0.0	0.91	197.5	189.6

PFA Consulting		Page 7
Stratton Park House Wanborough Road Swindon SN3 4HG	M380: Boorley Gardens SW Drainage - Planning Catchments C + D (FEH 15 & 30)	
Date 08/05/2024	Designed by PS	
File M380-Catch C&D-V5.11 with weirs (RM Ph3).MDX	Checked by BF	
Causeway	Network 2020.1.3	

Network Design Table for Catch C+D

PN	Length (m)	Fall (m)	Slope (1:X)	I. Area (ha)	T. E. (mins)	Base Flow (l/s)	k (mm)	n	HYD SECT	DIA (mm)	Section Type	Auto Design
S24. 022	4. 890	0. 012	407. 5	0. 000	0. 00	0. 0	0. 600		o	450	Pipe/Conduit	⚠
S24. 023	19. 341#	0. 193	100. 2	0. 000	0. 00	0. 0		0. 045	3	¥=/	1000 1:3 Swale	⚠
S1. 026	7. 696	0. 263	29. 3	0. 000	0. 00	0. 0	0. 600		o	450	Pipe/Conduit	⚠
S1. 027	14. 529	0. 503	28. 9	0. 000	0. 00	0. 0	0. 600		o	450	Pipe/Conduit	⚠
S1. 028	24. 965	0. 079	316. 0	0. 000	0. 00	0. 0	0. 600		o	450	Pipe/Conduit	⚠
S28. 000	87. 610	0. 180	486. 7	0. 498	5. 00	0. 0	0. 600		o	525	Pipe/Conduit	⚠
S28. 001	90. 939	0. 190	478. 6	0. 523	0. 00	0. 0	0. 600		o	525	Pipe/Conduit	⚠
S28. 002	17. 829	0. 040	445. 7	0. 000	0. 00	0. 0	0. 600		o	525	Pipe/Conduit	⚠
S28. 003	21. 428	0. 045	476. 2	0. 000	0. 00	0. 0	0. 600		o	900	Pipe/Conduit	⚠
S28. 004	10. 185	0. 020	509. 3	0. 000	0. 00	0. 0	0. 600		o	900	Pipe/Conduit	⚠
S29. 000	26. 543	0. 320	82. 9	0. 117	5. 00	0. 0	0. 600		o	300	Pipe/Conduit	⚠
S29. 001	17. 413	0. 180	96. 7	0. 050	0. 00	0. 0	0. 600		o	300	Pipe/Conduit	⚠
S29. 002	17. 634	0. 195	90. 4	0. 034	0. 00	0. 0	0. 600		o	300	Pipe/Conduit	⚠
S29. 003	13. 134	0. 420	31. 3	0. 009	0. 00	0. 0	0. 600		o	300	Pipe/Conduit	⚠
S30. 000	5. 619	0. 395	14. 2	0. 020	5. 00	0. 0	0. 600		o	225	Pipe/Conduit	⚠
S28. 005	19. 028	0. 040	475. 7	0. 060	0. 00	0. 0	0. 600		o	1200	Pipe/Conduit	⚠
S28. 006	29. 716	0. 060	495. 3	0. 043	0. 00	0. 0	0. 600		o	1200	Pipe/Conduit	⚠
S28. 007	12. 115	0. 025	484. 6	0. 007	0. 00	0. 0	0. 600		o	1200	Pipe/Conduit	⚠
S28. 008	10. 831	0. 025	433. 2	0. 034	0. 00	0. 0	0. 600		o	1200	Pipe/Conduit	⚠
S31. 000	29. 691	0. 270	110. 0	0. 053	5. 00	0. 0	0. 600		o	225	Pipe/Conduit	⚠
S31. 001	12. 611	0. 075	168. 1	0. 034	0. 00	0. 0	0. 600		o	225	Pipe/Conduit	⚠
S31. 002	22. 843	0. 175	130. 5	0. 023	0. 00	0. 0	0. 600		o	225	Pipe/Conduit	⚠
S31. 003	7. 180	0. 060	119. 7	0. 012	0. 00	0. 0	0. 600		o	225	Pipe/Conduit	⚠
S31. 004	8. 808	0. 300	29. 4	0. 017	0. 00	0. 0	0. 600		o	225	Pipe/Conduit	⚠
S28. 009	8. 968	0. 020	448. 4	0. 000	0. 00	0. 0	0. 600		o	1200	Pipe/Conduit	⚠
S28. 010	19. 865	0. 040	496. 6	0. 000	0. 00	0. 0	0. 600		o	1200	Pipe/Conduit	⚠
S1. 029	26. 753	0. 041	652. 5	0. 000	0. 00	0. 0	0. 600		o	1200	Pipe/Conduit	⚠
S1. 030	40. 649	0. 123	330. 5	0. 000	0. 00	0. 0	0. 600		o	450	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)
S24. 022	52. 23	13. 15	21. 995	1. 331	0. 0	0. 0	0. 0	1. 00	159. 2	189. 6
S24. 023	50. 89	13. 78	21. 983	1. 331	0. 0	0. 0	0. 0	0. 51	111. 9	189. 6
S1. 026	44. 86	17. 16	20. 550	7. 032	0. 0	0. 0	0. 0	3. 77	599. 5	854. 3
S1. 027	44. 76	17. 22	20. 287	7. 032	0. 0	0. 0	0. 0	3. 79	603. 4	854. 3
S1. 028	44. 21	17. 59	19. 784	7. 032	0. 0	0. 0	0. 0	1. 14	181. 0	854. 3
S28. 000	74. 73	6. 45	21. 065	0. 498	0. 0	0. 0	0. 0	1. 01	218. 3	100. 9
S28. 001	67. 89	7. 94	20. 885	1. 021	0. 0	0. 0	0. 0	1. 02	220. 2	187. 8
S28. 002	66. 75	8. 22	20. 695	1. 021	0. 0	0. 0	0. 0	1. 05	228. 3	187. 8
S28. 003	65. 78	8. 47	20. 280	1. 021	0. 0	0. 0	0. 0	1. 43	909. 2	187. 8
S28. 004	65. 32	8. 59	20. 235	1. 021	0. 0	0. 0	0. 0	1. 38	878. 9	187. 8
S29. 000	81. 51	5. 26	21. 930	0. 117	0. 0	0. 0	0. 0	1. 73	122. 1	25. 8
S29. 001	80. 38	5. 44	21. 610	0. 167	0. 0	0. 0	0. 0	1. 60	113. 0	36. 4
S29. 002	79. 31	5. 62	21. 430	0. 201	0. 0	0. 0	0. 0	1. 65	116. 9	43. 2
S29. 003	78. 85	5. 69	21. 235	0. 210	0. 0	0. 0	0. 0	2. 82	199. 5	44. 8
S30. 000	83. 02	5. 03	21. 285	0. 020	0. 0	0. 0	0. 0	3. 49	138. 7	4. 5
S28. 005	64. 63	8. 78	19. 915	1. 311	0. 0	0. 0	0. 0	1. 71	1932. 4	229. 5
S28. 006	63. 57	9. 07	19. 875	1. 354	0. 0	0. 0	0. 0	1. 67	1893. 5	233. 2
S28. 007	63. 16	9. 19	19. 815	1. 361	0. 0	0. 0	0. 0	1. 69	1914. 4	233. 2
S28. 008	62. 81	9. 29	19. 790	1. 395	0. 0	0. 0	0. 0	1. 79	2025. 5	237. 3
S31. 000	80. 63	5. 40	21. 620	0. 053	0. 0	0. 0	0. 0	1. 25	49. 5	11. 6
S31. 001	79. 36	5. 61	21. 350	0. 087	0. 0	0. 0	0. 0	1. 01	40. 0	18. 7
S31. 002	77. 45	5. 94	21. 275	0. 110	0. 0	0. 0	0. 0	1. 14	45. 4	23. 1
S31. 003	76. 89	6. 04	21. 100	0. 122	0. 0	0. 0	0. 0	1. 19	47. 5	25. 4
S31. 004	76. 56	6. 10	21. 040	0. 139	0. 0	0. 0	0. 0	2. 42	96. 4	28. 8
S28. 009	62. 52	9. 38	19. 765	1. 534	0. 0	0. 0	0. 0	1. 76	1990. 7	259. 8
S28. 010	61. 86	9. 58	19. 745	1. 534	0. 0	0. 0	0. 0	1. 67	1890. 9	259. 8
S1. 029	43. 76	17. 90	19. 705	8. 566	0. 0	0. 0	0. 0	1. 46	1647. 8	1015. 2
S1. 030	42. 90	18. 50	19. 664	8. 566	0. 0	0. 0	0. 0	1. 11	177. 0	1015. 2

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Stratton Park House Wanborough Road Swindon SN3 4HG	M380: Boorley Gardens SW Drainage - Planning Catchments C + D (FEH 15 & 30)	
Date 08/05/2024	Designed by PS	
File M380-Catch C&D-V5.11 with weirs (RM Ph3).MDX	Checked by BF	
Causeway	Network 2020.1.3	

Network Design Table for Catch C+D

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	n	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.031	20.060	0.048	417.9	0.000	0.00	0.0	0.600		o	450	Pipe/Conduit	
S1.032	36.421	0.090	404.7	0.000	0.00	0.0	0.600		o	450	Pipe/Conduit	
S1.033	70.745	0.175	404.3	0.000	0.00	0.0	0.600		o	450	Pipe/Conduit	
S1.034	65.150	0.162	402.2	0.000	0.00	0.0	0.600		o	450	Pipe/Conduit	
S1.035	16.217	0.043	377.1	0.000	0.00	0.0	0.600		o	450	Pipe/Conduit	
S1.036	6.607	0.020	330.4	0.000	0.00	0.0		0.045	3	¥=/ 1000	1:3 Swale	
S1.037	15.185	0.043	353.1	0.000	0.00	0.0		0.045	3	¥=/ 1000	1:3 Swale	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.031	42.44	18.84	19.542	8.566	0.0	0.0	0.0	0.99	157.2	1015.2
S1.032	41.65	19.45	19.494	8.566	0.0	0.0	0.0	1.00	159.7	1015.2
S1.033	40.20	20.62	19.403	8.566	0.0	0.0	0.0	1.00	159.8	1015.2
S1.034	38.97	21.70	19.228	8.566	0.0	0.0	0.0	1.01	160.2	1015.2
S1.035	38.69	21.96	19.066	8.566	0.0	0.0	0.0	1.04	165.5	1015.2
S1.036	38.27	22.35	19.023	8.566	0.0	0.0	0.0	0.28	61.6	1015.2
S1.037	37.33	23.27	19.003	8.566	0.0	0.0	0.0	0.27	59.6	1015.2

PFA Consulting		Page 9
Stratton Park House Wanborough Road Swindon SN3 4HG	M380: Boorley Gardens SW Drainage - Planning Catchments C + D (FEH 15 & 30)	
Date 08/05/2024	Designed by PS	
File M380-Catch C&D-V5.11 with weirs (RM Ph3).MDX	Checked by BF	
Causeway	Network 2020.1.3	

PIPELINE SCHEDULES for Catch C+D

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. (mm)	L*W
S1.000	o	225	S3000	27.478	26.053	1.200	Open Manhole		1200
S1.001	o	300	S3001	26.966	25.466	1.200	Open Manhole		1200
S1.002	o	375	S3002	26.704	25.235	1.094	Open Manhole		1350
S1.003	o	375	S3003	28.014	25.045	2.594	Open Manhole		1350
S2.000	o	225	S3050	33.607	32.182	1.200	Open Manhole		1200
S2.001	o	225	S3051	33.552	32.067	1.260	Open Manhole		1200
S2.002	o	225	S3052	32.390	30.964	1.201	Open Manhole		1200
S2.003	o	225	S3053	31.592	30.167	1.200	Open Manhole		1200
S2.004	o	225	S3054	30.545	29.152	1.168	Open Manhole		1200
S2.005	o	225	S3055	29.217	27.906	1.086	Open Manhole		1200
S2.006	o	225	S3056	28.782	27.470	1.087	Open Manhole		1200
S1.004	o	525	S3004	28.294	24.847	2.922	Open Manhole		1500
S1.005	o	525	S3005	28.322	24.818	2.979	Open Manhole		1500
S1.006	o	525	S3006	27.532	24.725	2.282	Open Manhole		1500
S3.000	o	225	S3060	26.680	25.255	1.200	Open Manhole		1200
S3.001	o	375	S3061	26.141	24.446	1.320	Open Manhole		1350
S3.002	o	375	S3062	26.114	24.235	1.504	Open Manhole		1350
S3.003	o	375	S3063	26.410	24.188	1.847	Open Manhole		1350
S3.004	o	375	S3064	27.500	24.074	3.051	Open Manhole		1350
S1.007	o	675	S3007	27.348	23.733	2.940	Open Manhole		1500
S4.000	o	225	S3070	25.790	24.593	0.972	Open Manhole		1200
S4.001	o	300	S3072	25.325	24.218	0.807	Open Manhole		1200
S4.002	o	375	S3073	25.456	24.103	0.978	Open Manhole		1350
S4.003	o	375	S3074	25.586	24.007	1.204	Open Manhole		1350
S1.008	o	750	S3008	26.600	23.514	2.336	Open Manhole		1800
S1.009	o	750	S3009	26.345	23.488	2.107	Open Manhole		1800
S1.010	o	750	S3010	26.150	23.469	1.931	Open Manhole		1800

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM. (mm)	L*W
S1.000	35.949	70.2	S3001	26.966	25.541	1.200	Open Manhole		1200
S1.001	37.616	241.1	S3002	26.704	25.310	1.094	Open Manhole		1350
S1.002	60.836	320.2	S3003	28.014	25.045	2.594	Open Manhole		1350
S1.003	15.123	315.1	S3004	28.294	24.997	2.922	Open Manhole		1500
S2.000	19.287	167.7	S3051	33.552	32.067	1.260	Open Manhole		1200
S2.001	33.215	30.1	S3052	32.390	30.964	1.201	Open Manhole		1200
S2.002	15.620	19.6	S3053	31.592	30.167	1.200	Open Manhole		1200
S2.003	21.369	21.1	S3054	30.545	29.152	1.168	Open Manhole		1200
S2.004	36.334	29.2	S3055	29.217	27.906	1.086	Open Manhole		1200
S2.005	13.620	31.2	S3056	28.782	27.470	1.087	Open Manhole		1200
S2.006	14.675	6.3	S3004	28.294	25.147	2.922	Open Manhole		1500
S1.004	14.479	499.3	S3005	28.322	24.818	2.979	Open Manhole		1500
S1.005	45.757	492.0	S3006	27.532	24.725	2.282	Open Manhole		1500
S1.006	10.237	12.1	S3007	27.348	23.882	2.941	Open Manhole		1500
S3.000	53.557	81.3	S3061	26.141	24.596	1.320	Open Manhole		1350
S3.001	41.576	197.0	S3062	26.114	24.235	1.504	Open Manhole		1350
S3.002	14.948	318.0	S3063	26.410	24.188	1.847	Open Manhole		1350
S3.003	36.706	322.0	S3064	27.500	24.074	3.051	Open Manhole		1350
S3.004	12.697	309.7	S3007	27.348	24.033	2.940	Open Manhole		1500
S1.007	59.337	412.1	S3008	26.600	23.589	2.336	Open Manhole		1800
S4.000	48.639	162.1	S3072	25.325	24.293	0.807	Open Manhole		1200
S4.001	9.863	246.6	S3073	25.456	24.178	0.978	Open Manhole		1350
S4.002	31.323	326.3	S3074	25.586	24.007	1.204	Open Manhole		1350
S4.003	38.232	324.0	S3008	26.600	23.889	2.336	Open Manhole		1800
S1.008	12.810	492.7	S3009	26.345	23.488	2.107	Open Manhole		1800
S1.009	9.391	494.3	S3010	26.150	23.469	1.931	Open Manhole		1800
S1.010	64.152	61.9	S3011	26.845	22.433	1.662	Open Manhole		1800

PIPELINE SCHEDULES for Catch C+D

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C. Level (m)	I. Level (m)	D. Depth (m)	MH Connection	MH DIAM. (mm)	L*W
S1. 011	o	750	S3011	24. 845	22. 433	1. 662	Open Manhole		1800
S5. 000	o	150	S3080	25. 677	24. 355	1. 172	Open Manhole		1200
S5. 001	o	300	S3081	25. 276	23. 827	1. 149	Open Manhole		1200
S1. 012	o	900	S3012	24. 078	22. 113	1. 065	Open Manhole		1800
S1. 013	o	900	S3013	23. 942	22. 060	0. 982	Open Manhole		1800
S1. 014	o	900	S3014	23. 833	22. 029	0. 904	Open Manhole		1800
S6. 000	o	225	S3090	31. 555	29. 800	1. 530	Open Manhole		1200
S6. 001	o	225	S3091	29. 895	28. 140	1. 530	Open Manhole		1200
S6. 002	o	225	S3092	29. 250	27. 500	1. 525	Open Manhole		1200
S7. 000	o	225	S3110	30. 720	28. 985	1. 510	Open Manhole		1200
S7. 001	o	300	S3111	29. 740	27. 945	1. 495	Open Manhole		1200
S7. 002	o	375	S3112	29. 410	27. 545	1. 490	Open Manhole		1350
S7. 003	o	375	S3113	29. 250	27. 395	1. 480	Open Manhole		1350
S7. 004	o	375	S3114	29. 025	27. 165	1. 485	Open Manhole		1350
S6. 003	o	375	S3093	28. 650	26. 770	1. 505	Open Manhole		1350
S6. 004	o	375	S3094	28. 150	26. 280	1. 495	Open Manhole		1350
S8. 000	o	150	S3120	26. 200	23. 978	2. 072	Open Manhole		1200
S8. 001	o	225	S3121	26. 500	23. 628	2. 647	Open Manhole		1200
S8. 002	o	300	S3122	26. 440	23. 376	2. 764	Open Manhole		1200
S6. 005	o	600	S3095	26. 160	22. 983	2. 577	Open Manhole		1500
S6. 006	o	600	S3096	24. 555	22. 919	1. 036	Open Manhole		1500
S6. 007	o	600	S3097	24. 220	22. 386	1. 234	Open Manhole		1500
S6. 008	o	750	S3098	23. 845	22. 212	0. 883	Open Manhole		1800
S6. 009	o	900	S3099	23. 675	22. 002	0. 773	Open Manhole		1800
S6. 010	o	900	S3100	23. 600	21. 995	0. 705	Open Manhole		1800
S1. 015	o	900	S3015	23. 565	21. 985	0. 680	Open Manhole		1800

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C. Level (m)	I. Level (m)	D. Depth (m)	MH Connection	MH DIAM. (mm)	L*W
S1. 011	10. 287	60. 5	S3012	24. 078	22. 263	1. 065	Open Manhole		1800
S5. 000	24. 808	65. 6	S3081	25. 276	23. 977	1. 149	Open Manhole		1200
S5. 001	73. 068	65. 6	S3012	24. 078	22. 713	1. 065	Open Manhole		1800
S1. 012	26. 687	503. 5	S3013	23. 942	22. 060	0. 982	Open Manhole		1800
S1. 013	15. 378	496. 1	S3014	23. 833	22. 029	0. 904	Open Manhole		1800
S1. 014	16. 427	1173. 4	S3015	23. 565	22. 015	0. 650	Open Manhole		1800
S6. 000	33. 176	20. 0	S3091	29. 895	28. 140	1. 530	Open Manhole		1200
S6. 001	15. 082	23. 6	S3092	29. 250	27. 500	1. 525	Open Manhole		1200
S6. 002	30. 161	52. 0	S3093	28. 650	26. 920	1. 505	Open Manhole		1350
S7. 000	41. 909	43. 4	S3111	29. 740	28. 020	1. 495	Open Manhole		1200
S7. 001	32. 312	99. 4	S3112	29. 410	27. 620	1. 490	Open Manhole		1350
S7. 002	15. 058	100. 4	S3113	29. 250	27. 395	1. 480	Open Manhole		1350
S7. 003	23. 125	100. 5	S3114	29. 025	27. 165	1. 485	Open Manhole		1350
S7. 004	35. 652	90. 3	S3093	28. 650	26. 770	1. 505	Open Manhole		1350
S6. 003	24. 959	50. 9	S3094	28. 150	26. 280	1. 495	Open Manhole		1350
S6. 004	43. 011	14. 0	S3095	26. 160	23. 208	2. 577	Open Manhole		1500
S8. 000	27. 733	100. 8	S3121	26. 500	23. 703	2. 647	Open Manhole		1200
S8. 001	26. 245	148. 3	S3122	26. 440	23. 451	2. 764	Open Manhole		1200
S8. 002	22. 377	240. 6	S3095	26. 160	23. 283	2. 577	Open Manhole		1500
S6. 005	31. 872	498. 0	S3096	24. 555	22. 919	1. 036	Open Manhole		1500
S6. 006	8. 022	15. 1	S3097	24. 220	22. 386	1. 234	Open Manhole		1500
S6. 007	12. 185	507. 7	S3098	23. 845	22. 362	0. 883	Open Manhole		1800
S6. 008	9. 943	216. 2	S3099	23. 675	22. 166	0. 759	Open Manhole		1800
S6. 009	7. 177	1025. 3	S3100	23. 600	21. 995	0. 705	Open Manhole		1800
S6. 010	9. 883	988. 3	S3015	23. 565	21. 985	0. 680	Open Manhole		1800
S1. 015	11. 514	959. 5	S3016	23. 660	21. 973	0. 787	Open Manhole		1800

Stratton Park House
Wanborough Road
Swindon SN3 4HG

M380: Boorley Gardens
SW Drainage - Planning
Catchments C + D (FEH 15 & 30)

Date 08/05/2024

Designed by PS

File M380-Catch C&D-V5.11 with weirs (RM Ph3).MDX

Checked by BF

Causeway

Network 2020.1.3



PIPELINE SCHEDULES for Catch C+D

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C. Level (m)	I. Level (m)	D. Depth (m)	MH Connection	MH DIAM. (mm)	L*W
S1. 016	o	900	S3016	23. 660	21. 973	0. 787	Open Manhole		1800
S1. 017	o	900	S3017	23. 840	21. 958	0. 982	Open Manhole		1800
S9. 000	o	225	S3130	26. 352	24. 927	1. 200	Open Manhole		1200
S9. 001	o	300	S3131	25. 763	24. 262	1. 201	Open Manhole		1200
S9. 002	o	300	S3132	25. 576	24. 013	1. 263	Open Manhole		1200
S9. 003	o	300	S3133	25. 493	23. 939	1. 254	Open Manhole		1200
S10. 000	o	225	S3140	25. 428	24. 003	1. 200	Open Manhole		1200
S9. 004	o	300	S3134	25. 210	23. 710	1. 200	Open Manhole		1200
S9. 005	o	375	S3135	24. 964	23. 388	1. 201	Open Manhole		1350
S9. 006	o	450	S3136	24. 852	23. 202	1. 200	Open Manhole		1350
S9. 007	o	450	S3137	24. 696	22. 970	1. 276	Open Manhole		1350
S9. 008	o	450	S3138	24. 374	22. 648	1. 276	Open Manhole		1350
S9. 009	o	450	S3139	24. 123	22. 444	1. 229	Open Manhole		1350
S1. 018	o	900	S3018	23. 970	21. 945	1. 125	Open Manhole		1800
S1. 019	o	900	S3019	23. 500	21. 910	0. 690	Open Manhole		1800
S1. 020	o	525	S3020-BASIN D	23. 500	21. 810	1. 165	Open Manhole		1800
S1. 021	o	525	S3021-CON	24. 020	21. 680	1. 815	Open Manhole		1500
S1. 022	o	525	S3023	25. 220	21. 470	3. 225	Open Manhole		1500
S1. 023	o	525	S3024	25. 535	21. 260	3. 750	Open Manhole		1500
S1. 024	o	525	S3026	24. 960	21. 050	3. 385	Open Manhole		1500
S1. 025	o	525	S3028	24. 350	20. 930	2. 895	Open Manhole		1500
S11. 000	o	150	S3150	28. 020	26. 512	1. 358	Open Manhole		1200
S11. 001	o	225	S3151	27. 356	25. 815	1. 316	Open Manhole		1200
S11. 002	o	300	S3152	26. 707	25. 200	1. 207	Open Manhole		1200
S11. 003	o	300	S3153	26. 514	25. 007	1. 207	Open Manhole		1200
S11. 004	o	300	S3154	26. 322	24. 865	1. 157	Open Manhole		1200
S12. 000	o	150	S3180	27. 308	25. 784	1. 374	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. (mm)	L*W
S1. 016	14. 009	933. 9	S3017	23. 840	21. 958	0. 982	Open Manhole		1800
S1. 017	12. 204	938. 8	S3018	23. 970	21. 945	1. 125	Open Manhole		1800
S9. 000	40. 635	68. 9	S3131	25. 763	24. 337	1. 201	Open Manhole		1200
S9. 001	38. 986	156. 6	S3132	25. 576	24. 013	1. 263	Open Manhole		1200
S9. 002	8. 268	111. 7	S3133	25. 493	23. 939	1. 254	Open Manhole		1200
S9. 003	23. 600	103. 1	S3134	25. 210	23. 710	1. 200	Open Manhole		1200
S10. 000	16. 795	77. 0	S3134	25. 210	23. 785	1. 200	Open Manhole		1200
S9. 004	19. 671	79. 6	S3135	24. 964	23. 463	1. 201	Open Manhole		1350
S9. 005	9. 366	84. 4	S3136	24. 852	23. 277	1. 200	Open Manhole		1350
S9. 006	12. 815	55. 2	S3137	24. 696	22. 970	1. 276	Open Manhole		1350
S9. 007	24. 711	76. 7	S3138	24. 374	22. 648	1. 276	Open Manhole		1350
S9. 008	19. 546	95. 8	S3139	24. 123	22. 444	1. 229	Open Manhole		1350
S9. 009	12. 446	254. 0	S3018	23. 970	22. 395	1. 125	Open Manhole		1800
S1. 018	15. 136	432. 5	S3019	23. 500	21. 910	0. 690	Open Manhole		1800
S1. 019	38. 718	387. 2	S3020-BASIN D	23. 500	21. 810	0. 790	Open Manhole		1800
S1. 020	16. 627	127. 9	S3021-CON	24. 020	21. 680	1. 815	Open Manhole		1500
S1. 021	89. 994	428. 5	S3023	25. 220	21. 470	3. 225	Open Manhole		1500
S1. 022	89. 992	428. 5	S3024	25. 535	21. 260	3. 750	Open Manhole		1500
S1. 023	89. 821	427. 7	S3026	24. 960	21. 050	3. 385	Open Manhole		1500
S1. 024	54. 518	454. 3	S3028	24. 350	20. 930	2. 895	Open Manhole		1500
S1. 025	14. 238#	474. 6	S3029-Basin C	21. 900	20. 900	0. 475	Open Manhole		2700
S11. 000	39. 107	62. 9	S3151	27. 356	25. 890	1. 316	Open Manhole		1200
S11. 001	32. 411	60. 0	S3152	26. 707	25. 275	1. 207	Open Manhole		1200
S11. 002	10. 303	53. 4	S3153	26. 514	25. 007	1. 207	Open Manhole		1200
S11. 003	10. 303	72. 6	S3154	26. 322	24. 865	1. 157	Open Manhole		1200
S11. 004	23. 248	27. 0	S3155	25. 834	24. 003	1. 531	Open Manhole		1350
S12. 000	7. 032	20. 4	S3181	27. 233	25. 440	1. 643	Open Manhole		1200

PIPELINE SCHEDULES for Catch C+D

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C. Level (m)	I. Level (m)	D. Depth (m)	MH Connection	MH DIAM. (mm)	L*W
S13. 000	o	225	S3190	27. 405	25. 755	1. 425	Open Manhole		1200
S12. 001	o	225	S3181	27. 233	25. 365	1. 643	Open Manhole		1200
S12. 002	o	300	S3182	26. 894	25. 000	1. 594	Open Manhole		1200
S12. 003	o	300	S3183	26. 521	24. 636	1. 585	Open Manhole		1200
S12. 004	o	300	S3184	26. 290	24. 405	1. 585	Open Manhole		1200
S11. 005	o	450	S3155	25. 834	23. 853	1. 531	Open Manhole		1350
S11. 006	o	450	S3156	26. 130	23. 734	1. 946	Open Manhole		1350
S14. 000	o	300	S3200	27. 248	25. 448	1. 500	Open Manhole		1200
S14. 001	o	300	S3201	26. 960	25. 160	1. 500	Open Manhole		1200
S14. 002	o	300	S3202	26. 657	24. 422	1. 935	Open Manhole		1200
S15. 000	o	225	SH316	26. 150	24. 425	1. 500	Open Manhole		1200
S11. 007	o	600	S3157	26. 356	23. 527	2. 229	Open Manhole		1500
S11. 008	o	600	S3158	25. 760	23. 496	1. 664	Open Manhole		1500
S11. 009	o	600	S3159	25. 205	23. 370	1. 235	Open Manhole		1500
S16. 000	o	150	S3210	26. 390	24. 815	1. 425	Open Manhole		1200
S17. 000	o	150	S3220	26. 231	24. 656	1. 425	Open Manhole		1200
S16. 001	o	225	S3211	26. 202	24. 168	1. 809	Open Manhole		1200
S16. 002	o	225	S3212	26. 040	23. 966	1. 849	Open Manhole		1200
S16. 003	o	225	S3213	25. 813	23. 774	1. 814	Open Manhole		1200
S11. 010	o	600	S3160	25. 672	23. 337	1. 735	Open Manhole		1500
S11. 011	o	600	S3161	25. 057	23. 257	1. 200	Open Manhole		1500
S18. 000	o	225	SH323	25. 250	23. 759	1. 266	Open Manhole		1200
S18. 001	o	225	S3230	25. 150	23. 680	1. 245	Open Manhole		1200
S18. 002	o	225	S3231	24. 920	23. 580	1. 115	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. (mm)	L*W
S13. 000	9. 073	23. 3	S3181	27. 233	25. 365	1. 643	Open Manhole		1200
S12. 001	19. 266	66. 4	S3182	26. 894	25. 075	1. 594	Open Manhole		1200
S12. 002	17. 962	49. 3	S3183	26. 521	24. 636	1. 585	Open Manhole		1200
S12. 003	11. 800	51. 1	S3184	26. 290	24. 405	1. 585	Open Manhole		1200
S12. 004	28. 031	69. 7	S3155	25. 834	24. 003	1. 531	Open Manhole		1350
S11. 005	39. 725	333. 8	S3156	26. 130	23. 734	1. 946	Open Manhole		1350
S11. 006	8. 588	150. 7	S3157	26. 356	23. 677	2. 229	Open Manhole		1500
S14. 000	27. 512	95. 5	S3201	26. 960	25. 160	1. 500	Open Manhole		1200
S14. 001	24. 054	32. 6	S3202	26. 657	24. 422	1. 935	Open Manhole		1200
S14. 002	23. 286	39. 1	S3157	26. 356	23. 827	2. 229	Open Manhole		1500
S15. 000	12. 458	23. 8	S3157	26. 356	23. 902	2. 229	Open Manhole		1500
S11. 007	12. 441	401. 3	S3158	25. 760	23. 496	1. 664	Open Manhole		1500
S11. 008	50. 277	399. 0	S3159	25. 205	23. 370	1. 235	Open Manhole		1500
S11. 009	16. 281	493. 4	S3160	25. 672	23. 337	1. 735	Open Manhole		1500
S16. 000	6. 404	11. 2	S3211	26. 202	24. 243	1. 809	Open Manhole		1200
S17. 000	9. 571	23. 2	S3211	26. 202	24. 243	1. 809	Open Manhole		1200
S16. 001	17. 473	86. 5	S3212	26. 040	23. 966	1. 849	Open Manhole		1200
S16. 002	16. 645	86. 7	S3213	25. 813	23. 774	1. 814	Open Manhole		1200
S16. 003	10. 486	169. 1	S3160	25. 672	23. 712	1. 735	Open Manhole		1500
S11. 010	31. 952	399. 4	S3161	25. 057	23. 257	1. 200	Open Manhole		1500
S11. 011	12. 436	133. 7	S3162	24. 964	23. 164	1. 200	Open Manhole		1500
S18. 000	10. 976	138. 9	S3230	25. 150	23. 680	1. 245	Open Manhole		1200
S18. 001	17. 571	175. 7	S3231	24. 920	23. 580	1. 115	Open Manhole		1200
S18. 002	7. 268	177. 3	S3162	24. 964	23. 539	1. 200	Open Manhole		1500

PIPELINE SCHEDULES for Catch C+D

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C. Level (m)	I. Level (m)	D. Depth (m)	MH Connection	MH DIAM., (mm)	L*W
S11.012	o	600	S3162	24.964	23.164	1.200	Open Manhole		1500
S11.013	o	600	S3163	24.890	23.090	1.200	Open Manhole		1500
S11.014	3 ¥=/	1000	S3164	24.022	22.971	0.901	Junction		
S19.000	o	300	S3240	24.640	23.140	1.200	Open Manhole		1200
S20.000	o	300	S3250	24.628	23.128	1.200	Open Manhole		1200
S19.001	o	300	S3241	24.597	23.097	1.200	Open Manhole		1200
S19.002	o	300	S3242	24.000	22.994	0.706	Open Manhole		1200
S11.015	3 ¥=/	1000	S3165	23.922	22.828	0.944	Junction		
S11.016	3 ¥=/	1000	S3166	23.652	22.566	0.936	Junction		
S21.000	o	225	S3260	24.136	22.711	1.200	Open Manhole		1200
S21.001	o	225	S3261	24.043	22.618	1.200	Open Manhole		1200
S11.017	3 ¥=/	1000	S3167	23.459	22.451	0.858	Junction		
S22.000	o	300	S3270	24.058	22.558	1.200	Open Manhole		1200
S22.001	o	300	S3271	23.965	22.465	1.200	Open Manhole		1200
S22.002	o	300	S3272	23.872	22.372	1.200	Open Manhole		1200
S11.018	3 ¥=/	1000	S3168	23.365	22.225	0.990	Junction		
S11.019	3 ¥=/	1000	S3169	23.316	22.204	0.962	Junction		
S11.020	3 ¥=/	1000	S3170	22.996	21.978	0.868	Junction		
S23.000	o	225	S3280	23.484	22.059	1.200	Open Manhole		1200
S23.001	o	225	S3281	23.269	21.844	1.200	Open Manhole		1200
S11.021	3 ¥=/	1000	S3171	22.739	21.690	0.899	Junction		
S11.022	o	525	S3172	22.621	21.466	0.630	Junction		
S11.023	3 ¥=/	1000	S3173	22.633	21.439	1.044	Junction		

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C. Level (m)	I. Level (m)	D. Depth (m)	MH Connection	MH DIAM., (mm)	L*W
S11.012	43.134	582.9	S3163	24.890	23.090	1.200	Open Manhole		1500
S11.013	10.732	564.8	S3164	24.022	23.071	0.351	Junction		
S11.014	9.000	62.9	S3165	23.922	22.828	0.944	Junction		
S19.000	10.468	243.4	S3241	24.597	23.097	1.200	Open Manhole		1200
S20.000	7.532	243.0	S3241	24.597	23.097	1.200	Open Manhole		1200
S19.001	31.106	302.0	S3242	24.000	22.994	0.706	Open Manhole		1200
S19.002	10.395	157.5	S3165	23.922	22.928	0.694	Junction		
S11.015	22.426	85.6	S3166	23.652	22.566	0.936	Junction		
S11.016	12.703	110.5	S3167	23.459	22.451	0.858	Junction		
S21.000	15.822	170.1	S3261	24.043	22.618	1.200	Open Manhole		1200
S21.001	11.323	169.0	S3167	23.459	22.551	0.683	Junction		
S11.017	22.290	98.6	S3168	23.365	22.225	0.990	Junction		
S22.000	22.392	240.8	S3271	23.965	22.465	1.200	Open Manhole		1200
S22.001	22.392	240.8	S3272	23.872	22.372	1.200	Open Manhole		1200
S22.002	11.234	239.0	S3168	23.365	22.325	0.740	Junction		
S11.018	1.710	81.4	S3169	23.316	22.204	0.962	Junction		
S11.019	20.296	89.8	S3170	22.996	21.978	0.868	Junction		
S11.020	28.551	99.1	S3171	22.739	21.690	0.899	Junction		
S23.000	36.485	169.7	S3281	23.269	21.844	1.200	Open Manhole		1200
S23.001	9.144	169.3	S3171	22.739	21.790	0.724	Junction		
S11.021	30.393	135.7	S3172	22.621	21.466	1.005	Junction		
S11.022	4.573	169.4	S3173	22.633	21.439	0.669	Junction		
S11.023	5.237#	134.3	S3029-Basin C	21.900	21.400	0.350	Open Manhole		2700

PIPELINE SCHEDULES for Catch C+D

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C. Level (m)	I. Level (m)	D. Depth (m)	MH Connection	MH DIAM. (mm)	L*W
S24.000	o	300	S3290	27.878	26.162	1.416	Open Manhole		1200
S24.001	o	300	S3291	27.725	25.998	1.427	Open Manhole		1200
S24.002	o	375	S3292	27.292	25.263	1.654	Open Manhole		1350
S24.003	o	375	S3293	27.136	25.146	1.615	Open Manhole		1350
S24.004	o	375	S3294	26.998	24.969	1.654	Open Manhole		1350
S24.005	o	375	S3295	26.633	24.604	1.654	Open Manhole		1350
S24.006	o	450	S3296	26.623	24.420	1.753	Open Manhole		1800
S24.007	o	450	S3297	26.942	24.338	2.154	Open Manhole		1350
S24.008	o	450	S3298	27.141	24.303	2.388	Open Manhole		1350
S25.000	o	225	S3320	27.291	25.569	1.497	Open Manhole		1200
S24.009	o	450	S3299	27.239	24.276	2.513	Open Manhole		1350
S24.010	o	450	S3300	26.728	24.172	2.106	Open Manhole		1350
S26.000	o	300	S3330	25.706	24.143	1.263	Open Manhole		1200
S24.011	o	525	S3301	25.786	23.406	1.855	Open Manhole		1500
S24.012	o	525	S3302	25.425	23.346	1.554	Open Manhole		1500
S24.013	o	525	S3303	24.980	23.271	1.184	Open Manhole		1500
S24.014	o	525	S3304	24.943	23.218	1.200	Open Manhole		1500
S24.015	o	525	S3305	24.865	23.140	1.200	Open Manhole		1500
S24.016	3 ¥=	1000	S3306	24.643	23.008	1.485	Open Manhole		1200
S24.017	3 ¥=	1000	S3307	24.775	22.776	1.849	Junction		
S24.018	3 ¥=	1000	S3308	24.194	22.448	1.596	Junction		
S24.019	3 ¥=	1000	S3309	24.085	22.366	1.569	Junction		
S27.000	o	300	S3340	24.183	22.683	1.200	Open Manhole		1200
S27.001	o	300	S3341	24.142	22.642	1.200	Open Manhole		1200
S27.002	o	300	S3342	23.927	22.427	1.200	Open Manhole		1200
S24.020	3 ¥=	1000	S3310	23.831	22.264	1.417	Junction		
S24.021	3 ¥=	1000	S3311	23.455	22.147	1.158	Junction		

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C. Level (m)	I. Level (m)	D. Depth (m)	MH Connection	MH DIAM. (mm)	L*W
S24.000	14.348	87.5	S3291	27.725	25.998	1.427	Open Manhole		1200
S24.001	38.017	57.6	S3292	27.292	25.338	1.654	Open Manhole		1350
S24.002	16.044	137.1	S3293	27.136	25.146	1.615	Open Manhole		1350
S24.003	15.071	85.1	S3294	26.998	24.969	1.654	Open Manhole		1350
S24.004	34.848	95.2	S3295	26.633	24.603	1.655	Open Manhole		1350
S24.005	34.848	322.7	S3296	26.623	24.496	1.752	Open Manhole		1800
S24.006	16.578	202.2	S3297	26.942	24.338	2.154	Open Manhole		1350
S24.007	14.379	399.4	S3298	27.141	24.302	2.389	Open Manhole		1350
S24.008	10.673	395.3	S3299	27.239	24.276	2.513	Open Manhole		1350
S25.000	8.564	8.0	S3299	27.239	24.501	2.513	Open Manhole		1350
S24.009	41.724	401.2	S3300	26.728	24.172	2.106	Open Manhole		1350
S24.010	81.518	118.0	S3301	25.786	23.481	1.855	Open Manhole		1500
S26.000	13.781	26.9	S3301	25.786	23.631	1.855	Open Manhole		1500
S24.011	29.760	496.0	S3302	25.425	23.346	1.554	Open Manhole		1500
S24.012	37.653	502.0	S3303	24.980	23.271	1.184	Open Manhole		1500
S24.013	26.529	500.5	S3304	24.943	23.218	1.200	Open Manhole		1500
S24.014	38.681	495.9	S3305	24.865	23.140	1.200	Open Manhole		1500
S24.015	15.856	495.5	S3306	24.643	23.108	1.010	Open Manhole		1200
S24.016	15.562	67.1	S3307	24.775	22.776	1.849	Junction		
S24.017	26.215	79.9	S3308	24.194	22.448	1.596	Junction		
S24.018	7.830	95.5	S3309	24.085	22.366	1.569	Junction		
S24.019	7.038	69.7	S3310	23.831	22.265	1.416	Junction		
S27.000	8.972	218.8	S3341	24.142	22.642	1.200	Open Manhole		1200
S27.001	47.357	220.3	S3342	23.927	22.427	1.200	Open Manhole		1200
S27.002	13.843	219.7	S3310	23.831	22.364	1.167	Junction		
S24.020	8.133	73.9	S3311	23.455	22.154	1.151	Junction		
S24.021	4.890	32.2	S3312	23.461	21.995	1.316	Junction		

PIPELINE SCHEDULES for Catch C+D

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. 022	o	450	S3312	23. 461	21. 995	1. 016	Junction	
S24. 023	3 ¥=	1000	S3313	23. 546	21. 983	1. 413	Junction	
S1. 026	o	450	S3029-Basin C	21. 900	20. 550	0. 900	Open Manhole	2700
S1. 027	o	450	S3030	22. 440	20. 287	1. 703	Open Manhole	1350
S1. 028	o	450	S3031	22. 645	19. 784	2. 411	Open Manhole	1350
S28. 000	o	525	S3350	24. 100	21. 065	2. 510	Open Manhole	1500
S28. 001	o	525	S3351	23. 360	20. 885	1. 950	Open Manhole	1500
S28. 002	o	525	S3352	22. 750	20. 695	1. 530	Open Manhole	1500
S28. 003	o	900	S3353	22. 520	20. 280	1. 340	Open Manhole	1800
S28. 004	o	900	S3354	23. 200	20. 235	2. 065	Open Manhole	1800
S29. 000	o	300	S3370	23. 335	21. 930	1. 105	Open Manhole	1200
S29. 001	o	300	S3371	23. 155	21. 610	1. 245	Open Manhole	1200
S29. 002	o	300	S3372	23. 950	21. 430	2. 220	Open Manhole	1200
S29. 003	o	300	S3373	23. 780	21. 235	2. 245	Open Manhole	1200
S30. 000	o	225	SH338	22. 975	21. 285	1. 465	Open Manhole	1200
S28. 005	o	1200	S3355	22. 755	19. 915	1. 640	Open Manhole	2100
S28. 006	o	1200	S3356	22. 665	19. 875	1. 590	Open Manhole	2100
S28. 007	o	1200	S3357	22. 610	19. 815	1. 595	Open Manhole	2100
S28. 008	o	1200	S3358	22. 600	19. 790	1. 610	Open Manhole	2100
S31. 000	o	225	S3390	23. 345	21. 620	1. 500	Open Manhole	1200
S31. 001	o	225	S3391	23. 145	21. 350	1. 570	Open Manhole	1200
S31. 002	o	225	S3392	23. 060	21. 275	1. 560	Open Manhole	1200
S31. 003	o	225	S3393	22. 825	21. 100	1. 500	Open Manhole	1200
S31. 004	o	225	S3394	22. 765	21. 040	1. 500	Open Manhole	1200
S28. 009	o	1200	S3359	22. 710	19. 765	1. 745	Open Manhole	2100
S28. 010	o	1200	S3360	22. 945	19. 745	2. 000	Open Manhole	2100

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. 022	4. 890	407. 5	S3313	23. 546	21. 983	1. 113	Junction	
S24. 023	19. 341#	100. 2	S3029-Basin C	21. 900	21. 790	-0. 040	Open Manhole	2700
S1. 026	7. 696	29. 3	S3030	22. 440	20. 287	1. 703	Open Manhole	1350
S1. 027	14. 529	28. 9	S3031	22. 645	19. 784	2. 411	Open Manhole	1350
S1. 028	24. 965	316. 0	S3032	22. 290	19. 705	2. 135	Open Manhole	3000
S28. 000	87. 610	486. 7	S3351	23. 360	20. 885	1. 950	Open Manhole	1500
S28. 001	90. 939	478. 6	S3352	22. 750	20. 695	1. 530	Open Manhole	1500
S28. 002	17. 829	445. 7	S3353	22. 520	20. 655	1. 340	Open Manhole	1800
S28. 003	21. 428	476. 2	S3354	23. 200	20. 235	2. 065	Open Manhole	1800
S28. 004	10. 185	509. 3	S3355	22. 755	20. 215	1. 640	Open Manhole	2100
S29. 000	26. 543	82. 9	S3371	23. 155	21. 610	1. 245	Open Manhole	1200
S29. 001	17. 413	96. 7	S3372	23. 950	21. 430	2. 220	Open Manhole	1200
S29. 002	17. 634	90. 4	S3373	23. 780	21. 235	2. 245	Open Manhole	1200
S29. 003	13. 134	31. 3	S3355	22. 755	20. 815	1. 640	Open Manhole	2100
S30. 000	5. 619	14. 2	S3355	22. 755	20. 890	1. 640	Open Manhole	2100
S28. 005	19. 028	475. 7	S3356	22. 665	19. 875	1. 590	Open Manhole	2100
S28. 006	29. 716	495. 3	S3357	22. 610	19. 815	1. 595	Open Manhole	2100
S28. 007	12. 115	484. 6	S3358	22. 600	19. 790	1. 610	Open Manhole	2100
S28. 008	10. 831	433. 2	S3359	22. 710	19. 765	1. 745	Open Manhole	2100
S31. 000	29. 691	110. 0	S3391	23. 145	21. 350	1. 570	Open Manhole	1200
S31. 001	12. 611	168. 1	S3392	23. 060	21. 275	1. 560	Open Manhole	1200
S31. 002	22. 843	130. 5	S3393	22. 825	21. 100	1. 500	Open Manhole	1200
S31. 003	7. 180	119. 7	S3394	22. 765	21. 040	1. 500	Open Manhole	1200
S31. 004	8. 808	29. 4	S3359	22. 710	20. 740	1. 745	Open Manhole	2100
S28. 009	8. 968	448. 4	S3360	22. 945	19. 745	2. 000	Open Manhole	2100
S28. 010	19. 865	496. 6	S3032	22. 290	19. 705	1. 385	Open Manhole	3000

M380: Boorley Gardens
SW Drainage - Planning
Catchments C + D (FEH 15 & 30)

Designed by PS

Checked by BF

Network 2020.1.3



Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C. Level (m)	I. Level (m)	D. Depth (m)	MH Connection	MH DIAM., (mm)	L=W
S1. 029	o	1200	S3032	22. 290	19. 705	1. 385	Open Manhole		3000
S1. 030	o	450	S3033-CON	22. 415	19. 664	2. 301	Open Manhole		2700
S1. 031	o	450	S3034	23. 160	19. 542	3. 168	Open Manhole		1350
S1. 032	o	450	S3035	23. 110	19. 494	3. 166	Open Manhole		1350
S1. 033	o	450	S3036	21. 990	19. 403	2. 137	Open Manhole		1350
S1. 034	o	450	S3037	21. 475	19. 228	1. 797	Open Manhole		1350
S1. 035	o	450	S3038	21. 015	19. 066	1. 499	Open Manhole		1350
S1. 036	3 ¥=/ 3 ¥=	1000	S3039-HW	19. 850	19. 023	0. 677	Open Manhole		1000
S1. 037	3 ¥=/ 3 ¥=	1000	S3040	20. 192	19. 003	1. 039	Junction		

PN	Length (m)	Slope (1:X)	MH Name	C. Level (m)	I. Level (m)	D. Depth (m)	MH Connection	MH DIAM., (mm)	L=W
S1.029	26.753	652.5	S3033-CON	22.415	19.664	1.551	Open Manhole		2700
S1.030	40.649	330.5	S3034	23.160	19.541	3.169	Open Manhole		1350
S1.031	20.060	417.9	S3035	23.110	19.494	3.166	Open Manhole		1350
S1.032	36.421	404.7	S3036	21.990	19.404	2.136	Open Manhole		1350
S1.033	70.745	404.3	S3037	21.475	19.228	1.797	Open Manhole		1350
S1.034	65.150	402.2	S3038	21.015	19.066	1.499	Open Manhole		1350
S1.035	16.217	377.1	S3039-HW	19.850	19.023	0.377	Open Manhole		1000
S1.036	6.607	330.4	S3040	20.192	19.003	1.039	Junction		
S1.037	15.185	353.1	SStream	19.460	18.960	0.350	Open Manhole		0

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Causeway	Network 2020.1.3	

Area Summary for Catch C+D

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
1.000	User	-	100	0.007	0.007	0.007
	User	-	100	0.084	0.084	0.091
	User	-	100	0.005	0.005	0.096
1.001	User	-	100	0.061	0.061	0.061
	User	-	100	0.005	0.005	0.066
1.002	User	-	100	0.118	0.118	0.118
	User	-	100	0.003	0.003	0.120
	User	-	100	0.001	0.001	0.122
	User	-	100	0.002	0.002	0.123
	User	-	100	0.001	0.001	0.125
	User	-	100	0.001	0.001	0.126
1.003	User	-	100	0.009	0.009	0.009
2.000	User	-	100	0.037	0.037	0.037
	User	-	100	0.040	0.040	0.078
	User	-	100	0.017	0.017	0.095
	User	-	100	0.004	0.004	0.099
	User	-	100	0.002	0.002	0.101
	User	-	100	0.002	0.002	0.103
	User	-	100	0.002	0.002	0.105
2.001	User	-	100	0.049	0.049	0.049
	User	-	100	0.006	0.006	0.055
	User	-	100	0.005	0.005	0.060
2.002	User	-	100	0.018	0.018	0.018
	User	-	100	0.006	0.006	0.024
2.003	User	-	100	0.023	0.023	0.023
	User	-	100	0.008	0.008	0.031
	User	-	100	0.008	0.008	0.039
2.004	User	-	100	0.043	0.043	0.043
2.005	User	-	100	0.018	0.018	0.018
2.006	User	-	100	0.009	0.009	0.009
1.004	User	-	100	0.022	0.022	0.022
1.005	User	-	100	0.138	0.138	0.138
1.006	User	-	100	0.009	0.009	0.009
	User	-	100	0.008	0.008	0.017
3.000	User	-	100	0.132	0.132	0.132
	User	-	100	0.002	0.002	0.133
	User	-	100	0.003	0.003	0.136
	User	-	100	0.002	0.002	0.138
	User	-	100	0.002	0.002	0.141
	User	-	100	0.001	0.001	0.141
	User	-	100	0.001	0.001	0.142
	User	-	100	0.001	0.001	0.143
	User	-	100	0.000	0.000	0.144
	User	-	100	0.003	0.003	0.147
3.001	User	-	100	0.056	0.056	0.056
	User	-	100	0.006	0.006	0.062
	User	-	100	0.007	0.007	0.070
	User	-	100	0.007	0.007	0.077
	User	-	100	0.005	0.005	0.082
3.002	User	-	100	0.043	0.043	0.043
	User	-	100	0.001	0.001	0.045
	User	-	100	0.001	0.001	0.045
	User	-	100	0.001	0.001	0.047
3.003	User	-	100	0.059	0.059	0.059
	User	-	100	0.006	0.006	0.065
	User	-	100	0.005	0.005	0.070
3.004	User	-	100	0.009	0.009	0.009
1.007	User	-	100	0.163	0.163	0.163
4.000	-	-	100	0.168	0.168	0.168
4.001	-	-	100	0.072	0.072	0.072
4.002	User	-	100	0.043	0.043	0.043
	User	-	100	0.029	0.029	0.072
4.003	User	-	100	0.052	0.052	0.052
	User	-	100	0.010	0.010	0.062
	User	-	100	0.003	0.003	0.065
1.008	User	-	100	0.016	0.016	0.016
1.009	User	-	100	0.009	0.009	0.009
	User	-	100	0.009	0.009	0.018
1.010	User	-	100	0.017	0.017	0.017
	User	-	100	0.113	0.113	0.130
1.011	User	-	100	0.074	0.074	0.074
5.000	User	-	100	0.059	0.059	0.059
	User	-	100	0.002	0.002	0.061
5.001	User	-	100	0.189	0.189	0.189
1.012	User	-	100	0.040	0.040	0.040
1.013	User	-	100	0.030	0.030	0.030
1.014	User	-	100	0.012	0.012	0.012
6.000	User	-	100	0.072	0.072	0.072

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Area Summary for Catch C+D

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
	User	-	100	0.052	0.052	0.123
	User	-	100	0.003	0.003	0.127
	User	-	100	0.004	0.004	0.131
	User	-	100	0.006	0.006	0.136
6.001	User	-	100	0.022	0.022	0.022
	User	-	100	0.002	0.002	0.024
	User	-	100	0.003	0.003	0.028
6.002	User	-	100	0.033	0.033	0.033
	User	-	100	0.006	0.006	0.039
7.000	User	-	100	0.136	0.136	0.136
7.001	User	-	100	0.105	0.105	0.105
7.002	User	-	100	0.032	0.032	0.032
7.003	User	-	100	0.068	0.068	0.068
	User	-	100	0.006	0.006	0.074
7.004	User	-	100	0.044	0.044	0.044
6.003	User	-	100	0.029	0.029	0.029
	User	-	100	0.007	0.007	0.036
6.004	User	-	100	0.085	0.085	0.085
8.000	User	-	100	0.000	0.000	0.000
	User	-	100	0.035	0.035	0.035
	User	-	100	0.013	0.013	0.048
8.001	User	-	100	0.082	0.082	0.082
8.002	User	-	100	0.028	0.028	0.028
6.005	User	-	100	0.054	0.054	0.054
6.006	User	-	100	0.009	0.009	0.009
6.007	User	-	100	0.012	0.012	0.012
6.008	User	-	100	0.012	0.012	0.012
6.009	User	-	100	0.051	0.051	0.051
6.010	-	-	100	0.000	0.000	0.000
1.015	User	-	100	0.009	0.009	0.009
	User	-	100	0.008	0.008	0.017
	User	-	100	0.008	0.008	0.025
1.016	-	-	100	0.000	0.000	0.000
1.017	-	-	100	0.000	0.000	0.000
9.000	User	-	100	0.080	0.080	0.080
	User	-	100	0.005	0.005	0.085
9.001	User	-	100	0.033	0.033	0.033
	User	-	100	0.003	0.003	0.036
	User	-	100	0.057	0.057	0.093
	User	-	100	0.007	0.007	0.100
9.002	User	-	100	0.021	0.021	0.021
	User	-	100	0.006	0.006	0.027
9.003	User	-	100	0.047	0.047	0.047
10.000	User	-	100	0.058	0.058	0.058
	User	-	100	0.017	0.017	0.075
9.004	User	-	100	0.033	0.033	0.033
9.005	User	-	100	0.039	0.039	0.039
9.006	-	-	100	0.000	0.000	0.000
9.007	User	-	100	0.045	0.045	0.045
9.008	User	-	100	0.039	0.039	0.039
9.009	User	-	100	0.034	0.034	0.034
1.018	User	-	100	0.038	0.038	0.038
1.019	-	-	100	0.000	0.000	0.000
1.020	-	-	100	0.000	0.000	0.000
1.021	-	-	100	0.000	0.000	0.000
1.022	-	-	100	0.000	0.000	0.000
1.023	-	-	100	0.000	0.000	0.000
1.024	-	-	100	0.000	0.000	0.000
1.025	-	-	100	0.000	0.000	0.000
11.000	-	-	100	0.035	0.035	0.035
11.001	-	-	100	0.076	0.076	0.076
11.002	-	-	100	0.058	0.058	0.058
11.003	-	-	100	0.009	0.009	0.009
11.004	-	-	100	0.016	0.016	0.016
12.000	-	-	100	0.048	0.048	0.048
13.000	-	-	100	0.049	0.049	0.049
12.001	-	-	100	0.040	0.040	0.040
12.002	-	-	100	0.053	0.053	0.053
12.003	-	-	100	0.041	0.041	0.041
12.004	-	-	100	0.032	0.032	0.032
11.005	-	-	100	0.064	0.064	0.064
11.006	-	-	100	0.068	0.068	0.068
14.000	-	-	100	0.065	0.065	0.065
14.001	-	-	100	0.099	0.099	0.099
14.002	-	-	100	0.089	0.089	0.089
15.000	-	-	100	0.030	0.030	0.030
11.007	-	-	100	0.110	0.110	0.110
11.008	-	-	100	0.000	0.000	0.000

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Causeway	Network 2020.1.3	

Area Summary for Catch C+D

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
11.009	-	-	100	0.000	0.000	0.000
16.000	-	-	100	0.043	0.043	0.043
17.000	-	-	100	0.036	0.036	0.036
16.001	-	-	100	0.030	0.030	0.030
16.002	-	-	100	0.028	0.028	0.028
16.003	-	-	100	0.041	0.041	0.041
11.010	-	-	100	0.021	0.021	0.021
11.011	-	-	100	0.052	0.052	0.052
18.000	-	-	100	0.000	0.000	0.000
18.001	User	-	100	0.112	0.112	0.112
18.002	-	-	100	0.028	0.028	0.028
11.012	-	-	100	0.010	0.010	0.010
11.013	-	-	100	0.069	0.069	0.069
11.014	-	-	100	0.000	0.000	0.000
19.000	-	-	100	0.038	0.038	0.038
20.000	-	-	100	0.044	0.044	0.044
19.001	-	-	100	0.032	0.032	0.032
19.002	User	-	100	0.026	0.026	0.026
11.015	-	-	100	0.000	0.000	0.000
11.016	-	-	100	0.000	0.000	0.000
21.000	-	-	100	0.017	0.017	0.017
21.001	-	-	100	0.054	0.054	0.054
11.017	-	-	100	0.000	0.000	0.000
22.000	-	-	100	0.026	0.026	0.026
22.001	User	-	100	0.043	0.043	0.043
22.002	-	-	100	0.027	0.027	0.027
11.018	-	-	100	0.000	0.000	0.000
11.019	-	-	100	0.000	0.000	0.000
11.020	-	-	100	0.000	0.000	0.000
23.000	-	-	100	0.019	0.019	0.019
23.001	-	-	100	0.090	0.090	0.090
11.021	-	-	100	0.000	0.000	0.000
11.022	-	-	100	0.000	0.000	0.000
11.023	-	-	100	0.000	0.000	0.000
24.000	-	-	100	0.028	0.028	0.028
24.001	-	-	100	0.013	0.013	0.013
24.002	-	-	100	0.071	0.071	0.071
24.003	-	-	100	0.033	0.033	0.033
24.004	-	-	100	0.047	0.047	0.047
24.005	-	-	100	0.090	0.090	0.090
24.006	-	-	100	0.128	0.128	0.128
24.007	-	-	100	0.037	0.037	0.037
24.008	-	-	100	0.021	0.021	0.021
25.000	-	-	100	0.028	0.028	0.028
24.009	-	-	100	0.038	0.038	0.038
24.010	-	-	100	0.058	0.058	0.058
26.000	-	-	100	0.025	0.025	0.025
24.011	-	-	100	0.253	0.253	0.253
24.012	-	-	100	0.094	0.094	0.094
24.013	-	-	100	0.127	0.127	0.127
24.014	-	-	100	0.054	0.054	0.054
24.015	-	-	100	0.079	0.079	0.079
24.016	-	-	100	0.000	0.000	0.000
24.017	-	-	100	0.000	0.000	0.000
24.018	-	-	100	0.000	0.000	0.000
24.019	-	-	100	0.000	0.000	0.000
27.000	-	-	100	0.008	0.008	0.008
27.001	User	-	100	0.062	0.062	0.062
27.002	-	-	100	0.037	0.037	0.037
24.020	-	-	100	0.000	0.000	0.000
24.021	-	-	100	0.000	0.000	0.000
24.022	-	-	100	0.000	0.000	0.000
24.023	-	-	100	0.000	0.000	0.000
1.026	-	-	100	0.000	0.000	0.000
1.027	-	-	100	0.000	0.000	0.000
1.028	-	-	100	0.000	0.000	0.000
28.000	User	-	50	0.997	0.498	0.498
28.001	User	-	50	1.046	0.523	0.523
28.002	-	-	100	0.000	0.000	0.000
28.003	-	-	100	0.000	0.000	0.000
28.004	-	-	100	0.000	0.000	0.000
29.000	-	-	100	0.117	0.117	0.117
29.001	-	-	100	0.050	0.050	0.050
29.002	-	-	100	0.034	0.034	0.034
29.003	-	-	100	0.009	0.009	0.009
30.000	-	-	100	0.020	0.020	0.020
28.005	-	-	100	0.060	0.060	0.060
28.006	-	-	100	0.043	0.043	0.043

Area Summary for Catch C+D

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
28.007	-	-	100	0.007	0.007	0.007
28.008	-	-	100	0.034	0.034	0.034
31.000	-	-	100	0.053	0.053	0.053
31.001	-	-	100	0.034	0.034	0.034
31.002	-	-	100	0.023	0.023	0.023
31.003	-	-	100	0.012	0.012	0.012
31.004	-	-	100	0.017	0.017	0.017
28.009	-	-	100	0.000	0.000	0.000
28.010	-	-	100	0.000	0.000	0.000
1.029	-	-	100	0.000	0.000	0.000
1.030	-	-	100	0.000	0.000	0.000
1.031	-	-	100	0.000	0.000	0.000
1.032	-	-	100	0.000	0.000	0.000
1.033	-	-	100	0.000	0.000	0.000
1.034	-	-	100	0.000	0.000	0.000
1.035	-	-	100	0.000	0.000	0.000
1.036	-	-	100	0.000	0.000	0.000
1.037	-	-	100	0.000	0.000	0.000
				Total	Total	Total
				9.587	8.566	8.566

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Online Controls for Catch C+D

Complex Manhole: S3021-CON, DS/PN: S1.021, Volume (m³): 7.4

Orifice

Diameter (m) 0.100 Discharge Coefficient 0.600 Invert Level (m) 21.680

Weir

Discharge Coef 0.544 Width (m) 1.500 Invert Level (m) 22.301

Hydro-Brake® Optimum Manhole: S3033-CON, DS/PN: S1.030, Volume (m³): 42.8

Unit Reference	MD-SFF-0239-7040-2551-2790	Sump Available	Yes
Design Head (m)	2.551	Diameter (mm)	239
Design Flow (l/s)	70.4	Invert Level (m)	19.664
Flush-Flo™	User Defined	Minimum Outlet Pipe Diameter (mm)	300
Objective	Minimise upstream storage	Suggested Manhole Diameter (mm)	1200
Application	Surface		

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	2.551	70.4	Kick-Flo®	0.362	27.5
Flush-Flo™	0.300	27.9	Mean Flow over Head Range	-	47.3

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

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	7.9	0.800	40.2	2.000	62.5	4.000	87.6	7.000	115.2
0.200	24.1	1.000	44.7	2.200	65.5	4.500	92.8	7.500	119.2
0.300	27.9	1.200	48.8	2.400	68.3	5.000	97.7	8.000	123.0
0.400	28.8	1.400	52.6	2.600	71.0	5.500	102.4	8.500	126.7
0.500	32.0	1.600	56.1	3.000	76.2	6.000	106.8	9.000	130.3
0.600	35.0	1.800	59.4	3.500	82.1	6.500	111.1	9.500	133.8

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Offline Controls for Catch C+D

Weir Manhole: S3015, DS/PN: S1.015, Loop to PN: S1.020

Discharge Coef 0.544 Width (m) 2.000 Invert Level (m) 23.370

Storage Structures for Catch C+D

Tank or Pond Manhole: S3020-BASIN D, DS/PN: S1.020

Invert Level (m) 21.810

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	73.7	0.290	356.4	0.590	693.1	0.990	1249.9	1.290	1645.1	1.690	2292.5
0.090	160.7	0.390	472.8	0.690	841.9	1.090	1380.3	1.490	1920.5		
0.190	256.2	0.490	581.7	0.890	1116.3	1.190	1513.6	1.590	2101.9		

Tank or Pond Manhole: S3029-Basin C, DS/PN: S1.026

Invert Level (m) 20.600

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	173.9	0.300	3228.6	0.600	4148.5	0.900	4628.0	1.200	5149.0	1.500	5725.0
0.100	1267.8	0.400	3815.8	0.700	4307.7	1.000	4790.0	1.300	5341.0	1.600	5914.0
0.200	2672.8	0.500	3988.0	0.800	4467.3	1.100	4954.0	1.400	5537.0	1.700	6110.0

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2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 1 Number of Time/Area Diagrams 0
 Number of Online Controls 2 Number of Storage Structures 2 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FEH Site Location GB 450306 114752 Cv (Summer) 0.750
 FEH Rainfall Version 2013 Data Type Point Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 40

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S1.000	S3000	15 minute 2 year Winter I+0%	15	1	27.478	26.133	-0.145	0.000	0.26		0.084	15.5	OK
S1.001	S3001	15 minute 2 year Winter I+0%	15	1	26.966	25.594	-0.172	0.000	0.37		0.159	24.3	OK
S1.002	S3002	15 minute 2 year Winter I+0%	15	1	26.704	25.399	-0.211	0.000	0.38		0.431	39.7	OK
S1.003	S3003	15 minute 2 year Winter I+0%	15	1	28.014	25.223	-0.197	0.000	0.46		1.493	40.1	OK
S2.000	S3050	15 minute 2 year Winter I+0%	15	1	33.607	32.292	-0.115	0.000	0.47		0.119	16.9	OK
S2.001	S3051	15 minute 2 year Winter I+0%	15	1	33.552	32.149	-0.143	0.000	0.28		0.175	25.4	OK
S2.002	S3052	15 minute 2 year Winter I+0%	15	1	32.390	31.045	-0.144	0.000	0.28		0.102	28.9	OK
S2.003	S3053	15 minute 2 year Winter I+0%	15	1	31.592	30.256	-0.136	0.000	0.33		0.106	34.3	OK
S2.004	S3054	15 minute 2 year Winter I+0%	15	1	30.545	29.256	-0.121	0.000	0.44		0.127	40.2	OK
S2.005	S3055	15 minute 2 year Winter I+0%	15	1	29.217	28.022	-0.109	0.000	0.52		0.154	42.5	OK
S2.006	S3056	15 minute 2 year Winter I+0%	15	1	28.782	27.544	-0.151	0.000	0.24		0.093	43.6	OK
S1.004	S3004	15 minute 2 year Winter I+0%	15	1	28.294	25.169	-0.203	0.000	0.69		1.030	83.4	OK
S1.005	S3005	15 minute 2 year Winter I+0%	15	1	28.322	25.088	-0.255	0.000	0.51		1.542	97.1	OK
S1.006	S3006	15 minute 2 year Winter I+0%	15	1	27.532	24.856	-0.394	0.000	0.14		1.162	99.1	OK
S3.000	S3060	15 minute 2 year Winter I+0%	15	1	26.680	25.359	-0.121	0.000	0.43		0.112	24.1	OK
S3.001	S3061	15 minute 2 year Winter I+0%	15	1	26.141	24.580	-0.241	0.000	0.27		0.187	34.8	OK
S3.002	S3062	15 minute 2 year Winter I+0%	15	1	26.114	24.420	-0.190	0.000	0.47		1.076	40.5	OK
S3.003	S3063	15 minute 2 year Winter I+0%	15	1	26.410	24.374	-0.189	0.000	0.48		0.797	48.1	OK
S3.004	S3064	15 minute 2 year Winter I+0%	15	1	27.500	24.276	-0.173	0.000	0.57		1.626	48.9	OK
S1.007	S3007	15 minute 2 year Winter I+0%	15	1	27.348	24.088	-0.320	0.000	0.40		0.762	160.2	OK
S4.000	S3070	15 minute 2 year Winter I+0%	15	1	25.790	24.734	-0.084	0.000	0.69		0.154	26.7	OK
S4.001	S3072	15 minute 2 year Winter I+0%	15	1	25.325	24.397	-0.121	0.000	0.66		0.341	36.4	OK
S4.002	S3073	15 minute 2 year Winter I+0%	15	1	25.456	24.285	-0.193	0.000	0.47		0.382	45.6	OK

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2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S4.003	S3074	15 minute 2 year Winter I+0%	15	1	25.586	24.202	-0.180	0.000	0.53		1.437	52.8	OK
S1.008	S3008	15 minute 2 year Winter I+0%	15	1	26.600	24.007	-0.257	0.000	0.76		12.170	203.7	OK
S1.009	S3009	15 minute 2 year Winter I+0%	15	1	26.345	23.966	-0.272	0.000	0.80		3.827	204.5	OK
S1.010	S3010	15 minute 2 year Winter I+0%	15	1	26.150	23.666	-0.553	0.000	0.15		0.845	212.6	OK
S1.011	S3011	15 minute 2 year Winter I+0%	15	1	24.845	22.746	-0.437	0.000	0.33		2.124	215.7	OK
S5.000	S3080	15 minute 2 year Winter I+0%	15	1	25.677	24.429	-0.076	0.000	0.47		0.078	9.8	OK
S5.001	S3081	15 minute 2 year Winter I+0%	15	1	25.276	23.935	-0.192	0.000	0.28		0.116	36.5	OK
S1.012	S3012	15 minute 2 year Winter I+0%	15	1	24.078	22.718	-0.295	0.000	0.37		3.340	234.9	OK
S1.013	S3013	15 minute 2 year Winter I+0%	15	1	23.942	22.700	-0.260	0.000	0.54		11.606	231.6	OK
S1.014	S3014	15 minute 2 year Winter I+0%	15	1	23.833	22.680	-0.249	0.000	0.85		7.222	232.8	OK
S6.000	S3090	15 minute 2 year Winter I+0%	15	1	31.555	29.869	-0.156	0.000	0.20		0.073	22.4	OK
S6.001	S3091	15 minute 2 year Winter I+0%	15	1	29.895	28.221	-0.144	0.000	0.28		0.097	26.1	OK
S6.002	S3092	15 minute 2 year Winter I+0%	15	1	29.250	27.609	-0.116	0.000	0.47		0.136	31.6	OK
S7.000	S3110	15 minute 2 year Winter I+0%	15	1	30.720	29.069	-0.141	0.000	0.29		0.089	21.9	OK
S7.001	S3111	15 minute 2 year Winter I+0%	15	1	29.740	28.070	-0.175	0.000	0.36		0.147	36.6	OK
S7.002	S3112	15 minute 2 year Winter I+0%	15	1	29.410	27.678	-0.242	0.000	0.27		0.223	41.1	OK
S7.003	S3113	15 minute 2 year Winter I+0%	15	1	29.250	27.535	-0.235	0.000	0.30		0.408	51.2	OK
S7.004	S3114	15 minute 2 year Winter I+0%	15	1	29.025	27.306	-0.234	0.000	0.30		0.426	56.4	OK
S6.003	S3093	15 minute 2 year Winter I+0%	15	1	28.650	26.930	-0.215	0.000	0.38		0.509	92.3	OK
S6.004	S3094	15 minute 2 year Winter I+0%	15	1	28.150	26.397	-0.258	0.000	0.21		0.231	103.1	OK
S8.000	S3120	15 minute 2 year Winter I+0%	15	1	26.200	24.051	-0.077	0.000	0.46		0.077	7.8	OK
S8.001	S3121	15 minute 2 year Winter I+0%	15	1	26.500	23.740	-0.113	0.000	0.49		0.129	19.2	OK
S8.002	S3122	15 minute 2 year Winter I+0%	15	1	26.440	23.501	-0.175	0.000	0.36		0.173	23.0	OK
S6.005	S3095	15 minute 2 year Winter I+0%	15	1	26.160	23.296	-0.287	0.000	0.53		0.569	132.7	OK
S6.006	S3096	15 minute 2 year Winter I+0%	15	1	24.555	23.091	-0.428	0.000	0.18		1.436	133.1	OK
S6.007	S3097	15 minute 2 year Winter I+0%	15	1	24.220	22.820	-0.166	0.000	0.86		1.268	134.4	OK
S6.008	S3098	15 minute 2 year Winter I+0%	15	1	23.845	22.662	-0.300	0.000	0.27		2.224	129.8	OK
S6.009	S3099	15 minute 2 year Winter I+0%	15	1	23.675	22.656	-0.246	0.000	0.28		3.659	127.6	OK
S6.010	S3100	15 minute 2 year Winter I+0%	15	1	23.600	22.652	-0.243	0.000	0.33		3.900	121.0	OK
S1.015	S3015	15 minute 2 year Winter I+0%	15	1	23.565	22.647	-0.238	0.000	0.96	0.0	10.860	320.8	OK
S1.016	S3016	15 minute 2 year Winter I+0%	15	1	23.660	22.620	-0.253	0.000	1.10		5.599	320.6	OK
S1.017	S3017	15 minute 2 year Winter I+0%	15	1	23.840	22.572	-0.286	0.000	1.00		6.176	320.4	OK
S9.000	S3130	15 minute 2 year Winter I+0%	15	1	26.352	25.001	-0.151	0.000	0.23		0.078	13.7	OK
S9.001	S3131	15 minute 2 year Winter I+0%	15	1	25.763	24.383	-0.179	0.000	0.33		0.145	27.5	OK
S9.002	S3132	15 minute 2 year Winter I+0%	15	1	25.576	24.155	-0.158	0.000	0.45		0.485	30.9	OK
S9.003	S3133	15 minute 2 year Winter I+0%	15	1	25.493	24.068	-0.171	0.000	0.38		0.268	37.0	OK
S10.000	S3140	15 minute 2 year Winter I+0%	15	1	25.428	24.077	-0.151	0.000	0.23		0.078	12.3	OK
S9.004	S3134	15 minute 2 year Winter I+0%	15	1	25.210	23.859	-0.151	0.000	0.49		0.440	53.0	OK
S9.005	S3135	15 minute 2 year Winter I+0%	15	1	24.964	23.564	-0.199	0.000	0.44		0.323	58.0	OK
S9.006	S3136	15 minute 2 year Winter I+0%	15	1	24.852	23.343	-0.309	0.000	0.22		0.240	58.4	OK
S9.007	S3137	15 minute 2 year Winter I+0%	15	1	24.696	23.109	-0.311	0.000	0.21		0.324	64.3	OK
S9.008	S3138	15 minute 2 year Winter I+0%	15	1	24.374	22.808	-0.290	0.000	0.27		0.485	69.2	OK
S9.009	S3139	15 minute 2 year Winter I+0%	15	1	24.123	22.667	-0.227	0.000	0.49		0.957	72.9	OK
S1.018	S3018	15 minute 2 year Winter I+0%	15	1	23.970	22.521	-0.324	0.000	0.73		5.273	358.4	OK
S1.019	S3019	30 minute 2 year Winter I+0%	30	1	23.500	22.448	-0.362	0.000	0.45		5.517	351.8	OK
S1.020	S3020-BASIN D	30 minute 2 year Winter I+0%	30	1	23.500	22.440	0.105	0.000	0.35		264.047	95.6	SURCHARGED

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2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S1.021	S3021-CON	30 minute 2 year Winter I+0%	30	1	24.020	22.417	0.212	0.000	0.41		4.537	89.7	SURCHARGED
S1.022	S3023	30 minute 2 year Winter I+0%	30	1	25.220	21.704	-0.291	0.000	0.41		4.184	88.8	OK
S1.023	S3024	30 minute 2 year Winter I+0%	30	1	25.535	21.492	-0.293	0.000	0.40		4.118	87.8	OK
S1.024	S3026	30 minute 2 year Winter I+0%	30	1	24.960	21.321	-0.254	0.000	0.42		5.687	85.7	OK
S1.025	S3028	30 minute 2 year Winter I+0%	30	1	24.350	21.245	-0.210	0.000	0.67		5.934	85.4	OK
S11.000	S3150	15 minute 2 year Winter I+0%	15	1	28.020	26.565	-0.097	0.000	0.26		0.054	5.7	OK
S11.001	S3151	15 minute 2 year Winter I+0%	15	1	27.356	25.893	-0.147	0.000	0.26		0.083	16.3	OK
S11.002	S3152	15 minute 2 year Winter I+0%	15	1	26.707	25.296	-0.204	0.000	0.22		0.104	24.3	OK
S11.003	S3153	15 minute 2 year Winter I+0%	15	1	26.514	25.113	-0.194	0.000	0.27		0.157	25.6	OK
S11.004	S3154	15 minute 2 year Winter I+0%	15	1	26.322	24.941	-0.224	0.000	0.15		0.120	27.8	OK
S12.000	S3180	15 minute 2 year Winter I+0%	15	1	27.308	25.833	-0.101	0.000	0.23		0.050	7.9	OK
S13.000	S3190	15 minute 2 year Winter I+0%	15	1	27.405	25.801	-0.179	0.000	0.09		0.046	8.1	OK
S12.001	S3181	15 minute 2 year Winter I+0%	15	1	27.233	25.461	-0.129	0.000	0.37		0.116	21.3	OK
S12.002	S3182	15 minute 2 year Winter I+0%	15	1	26.894	25.094	-0.206	0.000	0.21		0.102	28.7	OK
S12.003	S3183	15 minute 2 year Winter I+0%	15	1	26.521	24.746	-0.190	0.000	0.29		0.167	34.6	OK
S12.004	S3184	15 minute 2 year Winter I+0%	15	1	26.290	24.523	-0.182	0.000	0.33		0.187	39.1	OK
S11.005	S3155	15 minute 2 year Winter I+0%	15	1	25.834	24.073	-0.230	0.000	0.47		0.351	74.1	OK
S11.006	S3156	15 minute 2 year Winter I+0%	15	1	26.130	23.956	-0.228	0.000	0.49		2.235	82.5	OK
S14.000	S3200	15 minute 2 year Winter I+0%	15	1	27.248	25.513	-0.235	0.000	0.10		0.068	10.6	OK
S14.001	S3201	15 minute 2 year Winter I+0%	15	1	26.960	25.235	-0.225	0.000	0.14		0.134	24.2	OK
S14.002	S3202	15 minute 2 year Winter I+0%	15	1	26.657	24.521	-0.201	0.000	0.23		0.131	36.6	OK
S15.000	SH316	15 minute 2 year Winter I+0%	15	1	26.150	24.459	-0.191	0.000	0.05		0.032	4.9	OK
S11.007	S3157	15 minute 2 year Winter I+0%	15	1	26.356	23.894	-0.233	0.000	0.68		1.052	135.3	OK
S11.008	S3158	15 minute 2 year Winter I+0%	15	1	25.760	23.815	-0.281	0.000	0.43		1.806	130.6	OK
S11.009	S3159	15 minute 2 year Winter I+0%	15	1	25.205	23.742	-0.228	0.000	0.70		7.667	125.7	OK
S16.000	S3210	15 minute 2 year Winter I+0%	15	1	26.390	24.855	-0.110	0.000	0.16		0.039	7.1	OK
S17.000	S3220	15 minute 2 year Winter I+0%	15	1	26.231	24.699	-0.107	0.000	0.18		0.043	5.9	OK
S16.001	S3211	15 minute 2 year Winter I+0%	15	1	26.202	24.260	-0.133	0.000	0.34		0.098	17.0	OK
S16.002	S3212	15 minute 2 year Winter I+0%	15	1	26.040	24.069	-0.122	0.000	0.42		0.168	21.0	OK
S16.003	S3213	15 minute 2 year Winter I+0%	15	1	25.813	23.928	-0.071	0.000	0.80		0.334	26.8	OK
S11.010	S3160	15 minute 2 year Winter I+0%	15	1	25.672	23.693	-0.244	0.000	0.50		2.630	142.0	OK
S11.011	S3161	15 minute 2 year Winter I+0%	15	1	25.057	23.641	-0.216	0.000	0.40		5.321	140.0	OK
S18.000	SH323	15 minute 2 year Winter I+0%	15	1	25.250	23.777	-0.207	0.000	0.00		0.015	0.1	OK
S18.001	S3230	15 minute 2 year Winter I+0%	15	1	25.150	23.786	-0.119	0.000	0.44		0.202	15.5	OK
S18.002	S3231	15 minute 2 year Winter I+0%	15	1	24.920	23.713	-0.092	0.000	0.65		0.355	19.4	OK
S11.012	S3162	15 minute 2 year Winter I+0%	15	1	24.964	23.620	-0.144	0.000	0.61		2.971	148.8	OK
S11.013	S3163	15 minute 2 year Winter I+0%	15	1	24.890	23.564	-0.126	0.000	1.07		9.335	151.9	OK
S11.014	S3164	15 minute 2 year Winter I+0%	15	1	24.022	23.122	-0.900	0.000	0.02		0.195	151.4	OK
S19.000	S3240	15 minute 2 year Winter I+0%	15	1	24.640	23.225	-0.215	0.000	0.11		0.090	6.1	OK
S20.000	S3250	15 minute 2 year Winter I+0%	15	1	24.628	23.221	-0.207	0.000	0.14		0.100	7.1	OK
S19.001	S3241	15 minute 2 year Winter I+0%	15	1	24.597	23.211	-0.186	0.000	0.30		0.360	17.4	OK
S19.002	S3242	15 minute 2 year Winter I+0%	15	1	24.000	23.111	-0.183	0.000	0.32		0.473	20.7	OK
S11.015	S3165	15 minute 2 year Winter I+0%	15	1	23.922	22.997	-0.925	0.000	0.02		0.991	160.3	OK
S11.016	S3166	15 minute 2 year Winter I+0%	15	1	23.652	22.749	-0.903	0.000	0.02		2.155	160.7	OK
S21.000	S3260	15 minute 2 year Winter I+0%	15	1	24.136	22.753	-0.183	0.000	0.08		0.042	2.7	OK
S21.001	S3261	15 minute 2 year Winter I+0%	15	1	24.043	22.703	-0.140	0.000	0.30		0.182	10.3	OK

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S11.017	S3167	15 minute 2 year Winter I+0%	15	1	23.459	22.631	-0.828	0.000	0.03		1.680	164.1	OK
S22.000	S3270	15 minute 2 year Winter I+0%	15	1	24.058	22.609	-0.249	0.000	0.07		0.052	4.2	OK
S22.001	S3271	15 minute 2 year Winter I+0%	15	1	23.965	22.546	-0.219	0.000	0.16		0.234	10.2	OK
S22.002	S3272	15 minute 2 year Winter I+0%	15	1	23.872	22.472	-0.200	0.000	0.24		0.291	13.9	OK
S11.018	S3168	15 minute 2 year Winter I+0%	15	1	23.365	22.396	-0.969	0.000	0.02		2.267	169.2	OK
S11.019	S3169	15 minute 2 year Winter I+0%	15	1	23.316	22.380	-0.936	0.000	0.02		0.214	169.0	OK
S11.020	S3170	15 minute 2 year Winter I+0%	15	1	22.996	22.162	-0.834	0.000	0.03		2.272	168.6	OK
S23.000	S3280	15 minute 2 year Winter I+0%	15	1	23.484	22.103	-0.181	0.000	0.08		0.044	3.1	OK
S23.001	S3281	15 minute 2 year Winter I+0%	15	1	23.269	21.954	-0.115	0.000	0.47		0.258	15.5	OK
S11.021	S3171	15 minute 2 year Winter I+0%	15	1	22.739	21.892	-0.847	0.000	0.03		3.010	171.1	OK
S11.022	S3172	30 minute 2 year Winter I+0%	30	1	22.621	21.783	-0.208	0.000	0.68		10.284	168.0	OK*
S11.023	S3173	30 minute 2 year Winter I+0%	30	1	22.633	21.635	-0.998	0.000	0.02		0.404	167.9	OK
S24.000	S3290	15 minute 2 year Winter I+0%	15	1	27.878	26.204	-0.258	0.000	0.05		0.041	4.6	OK
S24.001	S3291	15 minute 2 year Winter I+0%	15	1	27.725	26.040	-0.258	0.000	0.05		0.067	6.4	OK
S24.002	S3292	15 minute 2 year Winter I+0%	15	1	27.292	25.350	-0.288	0.000	0.12		0.119	16.2	OK
S24.003	S3293	15 minute 2 year Winter I+0%	15	1	27.136	25.235	-0.286	0.000	0.13		0.222	20.9	OK
S24.004	S3294	15 minute 2 year Winter I+0%	15	1	26.998	25.065	-0.279	0.000	0.15		0.200	27.4	OK
S24.005	S3295	15 minute 2 year Winter I+0%	15	1	26.633	24.768	-0.211	0.000	0.39		0.545	38.9	OK
S24.006	S3296	15 minute 2 year Winter I+0%	15	1	26.623	24.625	-0.245	0.000	0.32		1.014	54.2	OK
S24.007	S3297	15 minute 2 year Winter I+0%	15	1	26.942	24.595	-0.193	0.000	0.55		1.435	57.7	OK
S24.008	S3298	15 minute 2 year Winter I+0%	15	1	27.141	24.557	-0.196	0.000	0.61		1.279	60.5	OK
S25.000	S3320	15 minute 2 year Winter I+0%	15	1	27.291	25.595	-0.199	0.000	0.03		0.024	4.6	OK
S24.009	S3299	15 minute 2 year Winter I+0%	15	1	27.239	24.495	-0.231	0.000	0.46		0.817	66.6	OK
S24.010	S3300	15 minute 2 year Winter I+0%	15	1	26.728	24.328	-0.294	0.000	0.26		1.359	71.5	OK
S26.000	S3330	15 minute 2 year Winter I+0%	15	1	25.706	24.174	-0.269	0.000	0.02		0.029	4.1	OK
S24.011	S3301	15 minute 2 year Winter I+0%	15	1	25.786	23.732	-0.199	0.000	0.53		1.716	95.2	OK
S24.012	S3302	15 minute 2 year Winter I+0%	15	1	25.425	23.679	-0.192	0.000	0.54		3.829	100.3	OK
S24.013	S3303	15 minute 2 year Winter I+0%	15	1	24.980	23.621	-0.175	0.000	0.60		5.066	105.8	OK
S24.014	S3304	15 minute 2 year Winter I+0%	15	1	24.943	23.571	-0.172	0.000	0.57		3.746	106.4	OK
S24.015	S3305	30 minute 2 year Winter I+0%	30	1	24.865	23.514	-0.151	0.000	0.85		5.708	109.9	OK
S24.016	S3306	30 minute 2 year Winter I+0%	30	1	24.643	23.142	-1.501	0.000	0.01		0.193	109.9	OK
S24.017	S3307	30 minute 2 year Winter I+0%	30	1	24.775	22.915	-1.860	0.000	0.00		0.506	109.7	OK
S24.018	S3308	30 minute 2 year Winter I+0%	30	1	24.194	22.594	-1.600	0.000	0.00		1.267	109.8	OK
S24.019	S3309	30 minute 2 year Winter I+0%	30	1	24.085	22.500	-1.585	0.000	0.00		0.334	109.9	OK
S27.000	S3340	15 minute 2 year Winter I+0%	15	1	24.183	22.724	-0.259	0.000	0.02		0.041	1.3	OK
S27.001	S3341	15 minute 2 year Winter I+0%	15	1	24.142	22.717	-0.225	0.000	0.14		0.149	9.7	OK
S27.002	S3342	15 minute 2 year Winter I+0%	15	1	23.927	22.526	-0.201	0.000	0.24		0.278	14.7	OK
S24.020	S3310	30 minute 2 year Winter I+0%	30	1	23.831	22.404	-1.427	0.000	0.01		0.428	115.8	OK
S24.021	S3311	30 minute 2 year Winter I+0%	30	1	23.455	22.278	-1.177	0.000	0.01		0.354	115.8	OK
S24.022	S3312	30 minute 2 year Winter I+0%	30	1	23.461	22.269	-0.176	0.000	0.68		1.241	115.6	OK*
S24.023	S3313	30 minute 2 year Winter I+0%	30	1	23.546	22.136	-1.410	0.000	0.01		0.292	115.5	OK
S1.026	S3029-Basin C	30 minute 2 year Winter I+0%	30	1	21.900	20.823	-0.177	0.000	0.34		321.317	97.9	OK
S1.027	S3030	30 minute 2 year Winter I+0%	30	1	22.440	20.813	0.076	0.000	0.23		1.528	92.8	SURCHARGED
S1.028	S3031	30 minute 2 year Winter I+0%	30	1	22.645	20.797	0.563	0.000	0.58		3.539	87.5	SURCHARGED
S28.000	S3350	15 minute 2 year Winter I+0%	15	1	24.100	21.304	-0.286	0.000	0.36		0.413	73.4	OK
S28.001	S3351	15 minute 2 year Winter I+0%	15	1	23.360	21.197	-0.213	0.000	0.62		7.881	127.8	OK

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S28.002	S3352	15 minute 2 year Winter I+0%	15	1	22.750	21.042	-0.178	0.000	0.77		9.601	119.5	OK
S28.003	S3353	30 minute 2 year Winter I+0%	30	1	22.520	20.782	-0.398	0.000	0.19		1.564	109.1	OK
S28.004	S3354	30 minute 2 year Winter I+0%	30	1	23.200	20.780	-0.355	0.000	0.30		7.625	108.8	OK
S29.000	S3370	15 minute 2 year Winter I+0%	15	1	23.335	22.015	-0.215	0.000	0.17		0.090	19.0	OK
S29.001	S3371	15 minute 2 year Winter I+0%	15	1	23.155	21.717	-0.193	0.000	0.27		0.187	26.0	OK
S29.002	S3372	15 minute 2 year Winter I+0%	15	1	23.950	21.544	-0.186	0.000	0.31		0.231	30.9	OK
S29.003	S3373	15 minute 2 year Winter I+0%	15	1	23.780	21.325	-0.210	0.000	0.20		0.158	32.2	OK
S30.000	SH338	15 minute 2 year Winter I+0%	15	1	22.975	21.313	-0.197	0.000	0.04		0.026	3.3	OK
S28.005	S3355	30 minute 2 year Winter I+0%	30	1	22.755	20.779	-0.336	0.000	0.12		5.736	121.5	OK
S28.006	S3356	30 minute 2 year Winter I+0%	30	1	22.665	20.778	-0.297	0.000	0.08		16.223	102.9	OK
S28.007	S3357	30 minute 2 year Winter I+0%	30	1	22.610	20.777	-0.238	0.000	0.09		26.503	71.1	OK
S28.008	S3358	30 minute 2 year Winter I+0%	30	1	22.600	20.777	-0.213	0.000	0.08		12.086	64.7	OK
S31.000	S3390	15 minute 2 year Winter I+0%	15	1	23.345	21.686	-0.159	0.000	0.18		0.069	8.6	OK
S31.001	S3391	15 minute 2 year Winter I+0%	15	1	23.145	21.448	-0.127	0.000	0.39		0.175	13.4	OK
S31.002	S3392	15 minute 2 year Winter I+0%	15	1	23.060	21.374	-0.126	0.000	0.40		0.205	16.5	OK
S31.003	S3393	15 minute 2 year Winter I+0%	15	1	22.825	21.216	-0.109	0.000	0.52		0.252	17.9	OK
S31.004	S3394	15 minute 2 year Winter I+0%	15	1	22.765	21.119	-0.146	0.000	0.26		0.130	20.2	OK
S28.009	S3359	30 minute 2 year Winter I+0%	30	1	22.710	20.777	-0.188	0.000	0.10		11.291	72.0	OK
S28.010	S3360	30 minute 2 year Winter I+0%	30	1	22.945	20.778	-0.167	0.000	0.06		9.816	63.4	OK
S1.029	S3032	30 minute 2 year Winter I+0%	30	1	22.290	20.778	-0.127	0.000	0.08		27.566	75.4	OK
S1.030	S3033-CON	30 minute 2 year Winter I+0%	30	1	22.415	20.775	0.661	0.000	0.29		29.784	45.4	SURCHARGED
S1.031	S3034	30 minute 2 year Winter I+0%	30	1	23.160	19.732	-0.260	0.000	0.36		1.717	45.4	OK
S1.032	S3035	30 minute 2 year Winter I+0%	30	1	23.110	19.669	-0.275	0.000	0.32		0.951	45.4	OK
S1.033	S3036	30 minute 2 year Winter I+0%	30	1	21.990	19.572	-0.281	0.000	0.30		1.471	45.4	OK
S1.034	S3037	30 minute 2 year Winter I+0%	30	1	21.475	19.398	-0.280	0.000	0.31		1.849	45.4	OK
S1.035	S3038	30 minute 2 year Winter I+0%	30	1	21.015	19.258	-0.258	0.000	0.38		2.251	45.3	OK
S1.036	S3039-HW	30 minute 2 year Winter I+0%	30	1	19.850	19.151	-0.699	0.000	0.03		0.406	45.3	OK
S1.037	S3040	30 minute 2 year Winter I+0%	30	1	20.192	19.130	-1.062	0.000	0.01		0.303	45.3	OK

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

Simulation Criteria

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

Number of Input Hydrographs 0	Number of Offline Controls 1	Number of Time/Area Diagrams 0
Number of Online Controls 2	Number of Storage Structures 2	Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FEH	Site Location GB 450306	114752 Cv (Summer) 0.750
FEH Rainfall Version 2013	Data Type	Point Cv (Winter) 0.840

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

Profile(s) Summer and Winter

Duration(s) (mins)	15, 30	
Return Period(s) (years)	2, 30, 100	
Climate Change (%)	0, 0, 40	

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S1.000	S3000	15 minute 30 year Winter I+0%	15	1	27.478	26.175	-0.103	0.000	0.55		0.132	32.4	OK
S1.001	S3001	15 minute 30 year Winter I+0%	15	1	26.966	25.682	-0.084	0.000	0.83		0.346	54.8	OK
S1.002	S3002	15 minute 30 year Winter I+0%	15	1	26.704	25.580	-0.030	0.000	0.84		2.110	87.1	OK
S1.003	S3003	15 minute 30 year Winter I+0%	15	1	28.014	25.442	0.022	0.000	1.00		5.973	88.3	SURCHARGED
S2.000	S3050	15 minute 30 year Winter I+0%	15	1	33.607	32.370	-0.037	0.000	0.99		0.207	35.6	OK
S2.001	S3051	15 minute 30 year Winter I+0%	15	1	33.552	32.200	-0.092	0.000	0.64		0.357	56.9	OK
S2.002	S3052	15 minute 30 year Winter I+0%	15	1	32.390	31.095	-0.094	0.000	0.63		0.185	65.2	OK
S2.003	S3053	15 minute 30 year Winter I+0%	15	1	31.592	30.317	-0.075	0.000	0.76		0.200	78.7	OK
S2.004	S3054	15 minute 30 year Winter I+0%	15	1	30.545	29.514	0.137	0.000	0.99		0.597	90.4	SURCHARGED
S2.005	S3055	15 minute 30 year Winter I+0%	15	1	29.217	28.295	0.164	0.000	1.17		0.738	95.1	SURCHARGED
S2.006	S3056	15 minute 30 year Winter I+0%	15	1	28.782	27.588	-0.107	0.000	0.53		0.158	97.6	OK
S1.004	S3004	15 minute 30 year Winter I+0%	15	1	28.294	25.395	0.023	0.000	1.54		2.403	187.6	SURCHARGED
S1.005	S3005	15 minute 30 year Winter I+0%	15	1	28.322	25.351	0.008	0.000	1.11		3.544	212.6	SURCHARGED
S1.006	S3006	15 minute 30 year Winter I+0%	15	1	27.532	24.923	-0.327	0.000	0.31		2.455	215.8	OK
S3.000	S3060	15 minute 30 year Winter I+0%	15	1	26.680	25.425	-0.055	0.000	0.89		0.186	49.6	OK
S3.001	S3061	15 minute 30 year Winter I+0%	15	1	26.141	24.669	-0.152	0.000	0.59		0.348	76.6	OK
S3.002	S3062	15 minute 30 year Winter I+0%	15	1	26.114	24.604	-0.006	0.000	0.94		3.676	81.8	OK
S3.003	S3063	15 minute 30 year Winter I+0%	15	1	26.410	24.561	-0.002	0.000	0.98		1.885	98.3	OK
S3.004	S3064	15 minute 30 year Winter I+0%	15	1	27.500	24.452	0.003	0.000	1.14		3.938	98.5	SURCHARGED
S1.007	S3007	15 minute 30 year Winter I+0%	15	1	27.348	24.394	-0.014	0.000	0.82		2.799	330.0	OK
S4.000	S3070	15 minute 30 year Winter I+0%	15	1	25.790	25.117	0.299	0.000	1.33		0.587	51.9	SURCHARGED
S4.001	S3072	15 minute 30 year Winter I+0%	15	1	25.325	24.557	0.039	0.000	1.31		1.298	72.0	SURCHARGED
S4.002	S3073	15 minute 30 year Winter I+0%	15	1	25.456	24.474	-0.004	0.000	0.93		1.059	90.6	OK

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S4.003	S3074	15 minute 30 year Winter I+0%	15	1	25.586	24.398	0.016	0.000	1.03		3.621	103.5	SURCHARGED
S1.008	S3008	15 minute 30 year Winter I+0%	15	1	26.600	24.280	0.016	0.000	1.60		24.865	430.2	SURCHARGED
S1.009	S3009	30 minute 30 year Summer I+0%	30	1	26.345	24.238	0.000	0.000	1.52		6.410	387.4	OK
S1.010	S3010	15 minute 30 year Winter I+0%	15	1	26.150	23.766	-0.453	0.000	0.33		1.560	450.3	OK
S1.011	S3011	15 minute 30 year Winter I+0%	15	1	24.845	23.159	-0.024	0.000	0.69		11.053	446.6	OK
S5.000	S3080	15 minute 30 year Winter I+0%	15	1	25.677	24.482	-0.023	0.000	0.99		0.138	20.6	OK
S5.001	S3081	15 minute 30 year Winter I+0%	15	1	25.276	24.010	-0.117	0.000	0.68		0.207	89.3	OK
S1.012	S3012	15 minute 30 year Winter I+0%	15	1	24.078	23.121	0.108	0.000	0.76		7.422	480.9	SURCHARGED
S1.013	S3013	15 minute 30 year Winter I+0%	15	1	23.942	23.083	0.123	0.000	1.10		18.308	476.6	SURCHARGED
S1.014	S3014	15 minute 30 year Winter I+0%	15	1	23.833	23.049	0.120	0.000	1.74		11.157	476.9	SURCHARGED
S6.000	S3090	15 minute 30 year Winter I+0%	15	1	31.555	29.903	-0.122	0.000	0.43		0.111	47.1	OK
S6.001	S3091	15 minute 30 year Winter I+0%	15	1	29.895	28.267	-0.098	0.000	0.60		0.164	56.8	OK
S6.002	S3092	15 minute 30 year Winter I+0%	15	1	29.250	27.761	0.036	0.000	1.03		0.415	69.5	SURCHARGED
S7.000	S3110	15 minute 30 year Winter I+0%	15	1	30.720	29.115	-0.095	0.000	0.61		0.141	46.1	OK
S7.001	S3111	15 minute 30 year Winter I+0%	15	1	29.740	28.157	-0.088	0.000	0.81		0.294	82.8	OK
S7.002	S3112	15 minute 30 year Winter I+0%	15	1	29.410	27.763	-0.157	0.000	0.62		0.496	93.9	OK
S7.003	S3113	15 minute 30 year Winter I+0%	15	1	29.250	27.631	-0.139	0.000	0.70		0.936	119.6	OK
S7.004	S3114	15 minute 30 year Winter I+0%	15	1	29.025	27.402	-0.138	0.000	0.71		1.040	135.0	OK
S6.003	S3093	15 minute 30 year Winter I+0%	15	1	28.650	27.045	-0.100	0.000	0.89		1.372	215.9	OK
S6.004	S3094	15 minute 30 year Winter I+0%	15	1	28.150	26.467	-0.188	0.000	0.49		0.472	242.6	OK
S8.000	S3120	15 minute 30 year Winter I+0%	15	1	26.200	24.145	0.017	0.000	0.95		0.183	16.0	SURCHARGED
S8.001	S3121	15 minute 30 year Winter I+0%	15	1	26.500	23.899	0.046	0.000	1.12		0.500	44.2	SURCHARGED
S8.002	S3122	15 minute 30 year Winter I+0%	15	1	26.440	23.652	-0.024	0.000	0.83		0.794	52.2	OK
S6.005	S3095	15 minute 30 year Winter I+0%	15	1	26.160	23.588	0.005	0.000	1.20		2.662	303.9	SURCHARGED
S6.006	S3096	15 minute 30 year Winter I+0%	15	1	24.555	23.191	-0.328	0.000	0.42		3.140	308.7	OK
S6.007	S3097	15 minute 30 year Winter I+0%	15	1	24.220	23.080	0.094	0.000	1.96		2.516	305.4	SURCHARGED
S6.008	S3098	15 minute 30 year Winter I+0%	15	1	23.845	23.046	0.084	0.000	0.62		5.055	296.8	SURCHARGED
S6.009	S3099	15 minute 30 year Winter I+0%	15	1	23.675	23.032	0.130	0.000	0.68		6.185	304.7	SURCHARGED
S6.010	S3100	15 minute 30 year Winter I+0%	15	1	23.600	23.024	0.129	0.000	0.82		6.004	303.6	SURCHARGED
S1.015	S3015	15 minute 30 year Winter I+0%	15	1	23.565	23.014	0.129	0.000	2.15	0.0	16.877	718.1	SURCHARGED
S1.016	S3016	15 minute 30 year Winter I+0%	15	1	23.660	22.971	0.098	0.000	2.47		8.639	721.5	SURCHARGED
S1.017	S3017	15 minute 30 year Winter I+0%	15	1	23.840	22.923	0.065	0.000	2.24		9.995	719.1	SURCHARGED
S9.000	S3130	15 minute 30 year Winter I+0%	15	1	26.352	25.039	-0.113	0.000	0.48		0.121	28.6	OK
S9.001	S3131	15 minute 30 year Winter I+0%	15	1	25.763	24.467	-0.095	0.000	0.77		0.307	63.2	OK
S9.002	S3132	15 minute 30 year Winter I+0%	15	1	25.576	24.299	-0.014	0.000	1.00		1.731	68.1	OK
S9.003	S3133	15 minute 30 year Winter I+0%	15	1	25.493	24.203	-0.036	0.000	0.84		0.679	82.0	OK
S10.000	S3140	15 minute 30 year Winter I+0%	15	1	25.428	24.115	-0.113	0.000	0.49		0.121	25.8	OK
S9.004	S3134	15 minute 30 year Winter I+0%	15	1	25.210	24.037	0.027	0.000	1.07		1.827	115.4	SURCHARGED
S9.005	S3135	15 minute 30 year Winter I+0%	15	1	24.964	23.686	-0.077	0.000	0.97		0.824	126.3	OK
S9.006	S3136	15 minute 30 year Winter I+0%	15	1	24.852	23.420	-0.232	0.000	0.47		0.460	127.2	OK
S9.007	S3137	15 minute 30 year Winter I+0%	15	1	24.696	23.184	-0.236	0.000	0.45		0.622	139.0	OK
S9.008	S3138	15 minute 30 year Winter I+0%	15	1	24.374	22.957	-0.141	0.000	0.58		1.550	147.4	OK
S9.009	S3139	15 minute 30 year Winter I+0%	15	1	24.123	22.897	0.003	0.000	1.04		2.948	154.0	SURCHARGED
S1.018	S3018	15 minute 30 year Winter I+0%	15	1	23.970	22.876	0.031	0.000	1.68		10.329	821.8	SURCHARGED
S1.019	S3019	15 minute 30 year Winter I+0%	15	1	23.500	22.810	0.000	0.000	1.02		10.226	802.0	OK
S1.020	S3020-BASIN D	30 minute 30 year Winter I+0%	30	1	23.500	22.713	0.378	0.000	0.74		529.335	204.2	SURCHARGED

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S1.021	S3021-CON	30 minute 30 year Winter I+0%	30	1	24.020	22.661	0.456	0.000	0.93		4.967	202.9	SURCHARGED
S1.022	S3023	30 minute 30 year Winter I+0%	30	1	25.220	21.876	-0.119	0.000	0.92		11.806	200.5	OK
S1.023	S3024	30 minute 30 year Winter I+0%	30	1	25.535	21.719	-0.066	0.000	0.87		14.110	190.0	OK
S1.024	S3026	30 minute 30 year Winter I+0%	30	1	24.960	21.559	-0.016	0.000	0.93		16.246	189.2	OK
S1.025	S3028	15 minute 30 year Winter I+0%	15	1	24.350	21.455	0.000	0.000	1.12		11.369	143.0	OK
S11.000	S3150	15 minute 30 year Winter I+0%	15	1	28.020	26.593	-0.069	0.000	0.54		0.085	11.8	OK
S11.001	S3151	15 minute 30 year Winter I+0%	15	1	27.356	25.945	-0.095	0.000	0.62		0.157	39.2	OK
S11.002	S3152	15 minute 30 year Winter I+0%	15	1	26.707	25.360	-0.140	0.000	0.55		0.215	60.3	OK
S11.003	S3153	15 minute 30 year Winter I+0%	15	1	26.514	25.189	-0.118	0.000	0.67		0.369	63.0	OK
S11.004	S3154	15 minute 30 year Winter I+0%	15	1	26.322	24.991	-0.174	0.000	0.36		0.235	68.2	OK
S12.000	S3180	15 minute 30 year Winter I+0%	15	1	27.308	25.859	-0.075	0.000	0.49		0.079	16.5	OK
S13.000	S3190	15 minute 30 year Winter I+0%	15	1	27.405	25.822	-0.158	0.000	0.19		0.070	16.9	OK
S12.001	S3181	15 minute 30 year Winter I+0%	15	1	27.233	25.524	-0.066	0.000	0.83		0.228	47.8	OK
S12.002	S3182	15 minute 30 year Winter I+0%	15	1	26.894	25.151	-0.149	0.000	0.49		0.200	67.0	OK
S12.003	S3183	15 minute 30 year Winter I+0%	15	1	26.521	24.820	-0.116	0.000	0.68		0.370	81.6	OK
S12.004	S3184	15 minute 30 year Winter I+0%	15	1	26.290	24.639	-0.066	0.000	0.77		0.540	92.1	OK
S11.005	S3155	15 minute 30 year Winter I+0%	15	1	25.834	24.441	0.138	0.000	1.08		2.670	169.4	SURCHARGED
S11.006	S3156	15 minute 30 year Winter I+0%	15	1	26.130	24.325	0.141	0.000	1.10		6.924	186.1	SURCHARGED
S14.000	S3200	15 minute 30 year Winter I+0%	15	1	27.248	25.543	-0.205	0.000	0.22		0.102	22.2	OK
S14.001	S3201	15 minute 30 year Winter I+0%	15	1	26.960	25.281	-0.179	0.000	0.34		0.259	58.4	OK
S14.002	S3202	15 minute 30 year Winter I+0%	15	1	26.657	24.587	-0.135	0.000	0.58		0.273	91.0	OK
S15.000	SH316	15 minute 30 year Winter I+0%	15	1	26.150	24.475	-0.175	0.000	0.11		0.051	10.4	OK
S11.007	S3157	15 minute 30 year Winter I+0%	15	1	26.356	24.233	0.106	0.000	1.56		3.211	309.7	SURCHARGED
S11.008	S3158	15 minute 30 year Winter I+0%	15	1	25.760	24.191	0.095	0.000	0.98		4.294	293.2	SURCHARGED
S11.009	S3159	15 minute 30 year Winter I+0%	15	1	25.205	24.093	0.123	0.000	1.55		15.046	279.1	SURCHARGED
S16.000	S3210	15 minute 30 year Winter I+0%	15	1	26.390	24.874	-0.091	0.000	0.33		0.062	14.8	OK
S17.000	S3220	15 minute 30 year Winter I+0%	15	1	26.231	24.720	-0.086	0.000	0.38		0.067	12.4	OK
S16.001	S3211	15 minute 30 year Winter I+0%	15	1	26.202	24.396	0.003	0.000	0.73		0.290	36.5	SURCHARGED
S16.002	S3212	15 minute 30 year Winter I+0%	15	1	26.040	24.284	0.093	0.000	0.92		0.912	45.6	SURCHARGED
S16.003	S3213	15 minute 30 year Winter I+0%	15	1	25.813	24.153	0.154	0.000	1.74		1.015	58.4	SURCHARGED
S11.010	S3160	15 minute 30 year Winter I+0%	15	1	25.672	24.046	0.109	0.000	1.16		5.783	326.3	SURCHARGED
S11.011	S3161	15 minute 30 year Winter I+0%	15	1	25.057	23.949	0.092	0.000	0.96		9.751	331.6	SURCHARGED
S18.000	SH323	15 minute 30 year Winter I+0%	15	1	25.250	24.003	0.019	0.000	0.03		0.270	1.2	SURCHARGED
S18.001	S3230	15 minute 30 year Winter I+0%	15	1	25.150	24.004	0.099	0.000	1.08		0.750	37.9	SURCHARGED
S18.002	S3231	15 minute 30 year Winter I+0%	15	1	24.920	23.911	0.106	0.000	1.56		1.017	46.7	SURCHARGED
S11.012	S3162	15 minute 30 year Winter I+0%	15	1	24.964	23.892	0.128	0.000	1.41		4.603	344.4	SURCHARGED
S11.013	S3163	15 minute 30 year Winter I+0%	15	1	24.890	23.761	0.071	0.000	2.45		12.711	347.3	SURCHARGED
S11.014	S3164	15 minute 30 year Winter I+0%	15	1	24.022	23.209	-0.813	0.000	0.04		0.470	347.6	OK
S19.000	S3240	15 minute 30 year Winter I+0%	15	1	24.640	23.289	-0.151	0.000	0.23		0.163	12.9	OK
S20.000	S3250	15 minute 30 year Winter I+0%	15	1	24.628	23.289	-0.139	0.000	0.29		0.176	15.0	OK
S19.001	S3241	15 minute 30 year Winter I+0%	15	1	24.597	23.280	-0.117	0.000	0.67		0.749	38.6	OK
S19.002	S3242	15 minute 30 year Winter I+0%	15	1	24.000	23.184	-0.110	0.000	0.72		1.136	46.5	OK
S11.015	S3165	15 minute 30 year Winter I+0%	15	1	23.922	23.097	-0.825	0.000	0.05		2.761	379.1	OK
S11.016	S3166	15 minute 30 year Winter I+0%	15	1	23.652	22.851	-0.801	0.000	0.05		5.653	375.8	OK
S21.000	S3260	15 minute 30 year Winter I+0%	15	1	24.136	22.787	-0.149	0.000	0.17		0.080	5.8	OK
S21.001	S3261	15 minute 30 year Winter I+0%	15	1	24.043	22.766	-0.077	0.000	0.75		0.405	25.4	OK

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S11. 017	S3167	15 minute 30 year Winter I+0%	15	1	23.459	22.734	-0.725	0.000	0.06		4.201	385.7	OK
S22. 000	S3270	15 minute 30 year Winter I+0%	15	1	24.058	22.641	-0.217	0.000	0.14		0.088	8.8	OK
S22. 001	S3271	15 minute 30 year Winter I+0%	15	1	23.965	22.597	-0.168	0.000	0.38		0.495	23.8	OK
S22. 002	S3272	15 minute 30 year Winter I+0%	15	1	23.872	22.538	-0.134	0.000	0.58		0.729	33.2	OK
S11. 018	S3168	15 minute 30 year Winter I+0%	15	1	23.365	22.496	-0.869	0.000	0.04		5.992	398.5	OK
S11. 019	S3169	15 minute 30 year Winter I+0%	15	1	23.316	22.481	-0.835	0.000	0.05		0.665	397.6	OK
S11. 020	S3170	15 minute 30 year Winter I+0%	15	1	22.996	22.265	-0.731	0.000	0.06		5.800	396.2	OK
S23. 000	S3280	30 minute 30 year Winter I+0%	30	1	23.484	22.146	-0.138	0.000	0.14		0.093	5.2	OK
S23. 001	S3281	30 minute 30 year Winter I+0%	30	1	23.269	22.142	0.073	0.000	0.92		1.438	30.2	SURCHARGED
S11. 021	S3171	30 minute 30 year Winter I+0%	30	1	22.739	22.135	-0.604	0.000	0.06		17.521	353.7	OK
S11. 022	S3172	30 minute 30 year Winter I+0%	30	1	22.621	22.120	0.129	0.000	1.32		43.468	327.1	SURCHARGED*
S11. 023	S3173	30 minute 30 year Winter I+0%	30	1	22.633	21.717	-0.916	0.000	0.04		0.672	326.6	OK
S24. 000	S3290	15 minute 30 year Winter I+0%	15	1	27.878	26.225	-0.237	0.000	0.10		0.065	9.7	OK
S24. 001	S3291	15 minute 30 year Winter I+0%	15	1	27.725	26.063	-0.235	0.000	0.10		0.109	14.3	OK
S24. 002	S3292	15 minute 30 year Winter I+0%	15	1	27.292	25.404	-0.234	0.000	0.30		0.226	40.3	OK
S24. 003	S3293	15 minute 30 year Winter I+0%	15	1	27.136	25.291	-0.230	0.000	0.32		0.502	52.2	OK
S24. 004	S3294	15 minute 30 year Winter I+0%	15	1	26.998	25.129	-0.215	0.000	0.37		0.472	68.1	OK
S24. 005	S3295	15 minute 30 year Winter I+0%	15	1	26.633	24.960	-0.019	0.000	0.92		2.191	91.9	OK
S24. 006	S3296	15 minute 30 year Winter I+0%	15	1	26.623	24.870	0.000	0.000	0.76		4.303	128.2	SURCHARGED
S24. 007	S3297	15 minute 30 year Winter I+0%	15	1	26.942	24.824	0.036	0.000	1.29		2.986	136.3	SURCHARGED
S24. 008	S3298	15 minute 30 year Winter I+0%	15	1	27.141	24.776	0.023	0.000	1.43		2.632	142.4	SURCHARGED
S25. 000	S3320	15 minute 30 year Winter I+0%	15	1	27.291	25.607	-0.187	0.000	0.07		0.037	9.7	OK
S24. 009	S3299	15 minute 30 year Winter I+0%	15	1	27.239	24.734	0.008	0.000	1.08		2.047	154.2	SURCHARGED
S24. 010	S3300	15 minute 30 year Winter I+0%	15	1	26.728	24.424	-0.198	0.000	0.58		3.044	162.3	OK
S26. 000	S3330	15 minute 30 year Winter I+0%	15	1	25.706	24.185	-0.258	0.000	0.05		0.042	8.6	OK
S24. 011	S3301	15 minute 30 year Winter I+0%	15	1	25.786	24.071	0.140	0.000	1.11		8.295	201.2	SURCHARGED
S24. 012	S3302	15 minute 30 year Winter I+0%	15	1	25.425	23.997	0.126	0.000	1.15		7.250	213.3	SURCHARGED
S24. 013	S3303	15 minute 30 year Winter I+0%	15	1	24.980	23.896	0.100	0.000	1.30		8.905	228.9	SURCHARGED
S24. 014	S3304	15 minute 30 year Winter I+0%	15	1	24.943	23.804	0.061	0.000	1.24		6.335	233.3	SURCHARGED
S24. 015	S3305	30 minute 30 year Winter I+0%	30	1	24.865	23.681	0.016	0.000	1.90		8.496	244.2	SURCHARGED
S24. 016	S3306	30 minute 30 year Winter I+0%	30	1	24.643	23.208	-1.435	0.000	0.01		0.373	244.1	OK
S24. 017	S3307	30 minute 30 year Winter I+0%	30	1	24.775	22.986	-1.789	0.000	0.01		1.337	243.6	OK
S24. 018	S3308	30 minute 30 year Winter I+0%	30	1	24.194	22.663	-1.531	0.000	0.01		2.641	244.0	OK
S24. 019	S3309	30 minute 30 year Winter I+0%	30	1	24.085	22.617	-1.468	0.000	0.01		1.343	241.8	OK
S27. 000	S3340	15 minute 30 year Winter I+0%	15	1	24.183	22.769	-0.214	0.000	0.05		0.092	2.8	OK
S27. 001	S3341	15 minute 30 year Winter I+0%	15	1	24.142	22.767	-0.175	0.000	0.35		0.279	24.2	OK
S27. 002	S3342	30 minute 30 year Winter I+0%	30	1	23.927	22.617	-0.110	0.000	0.47		1.040	29.2	OK
S24. 020	S3310	30 minute 30 year Winter I+0%	30	1	23.831	22.608	-1.223	0.000	0.01		3.211	250.4	OK
S24. 021	S3311	30 minute 30 year Winter I+0%	30	1	23.455	22.605	-0.850	0.000	0.01		5.645	247.9	OK
S24. 022	S3312	30 minute 30 year Winter I+0%	30	1	23.461	22.604	0.159	0.000	1.47		6.019	247.8	SURCHARGED*
S24. 023	S3313	30 minute 30 year Winter I+0%	30	1	23.546	22.202	-1.344	0.000	0.01		0.481	247.7	OK
S1. 026	S3029-Basin C	30 minute 30 year Winter I+0%	30	1	21.900	21.017	0.017	0.000	0.31		970.975	90.0	SURCHARGED
S1. 027	S3030	30 minute 30 year Winter I+0%	30	1	22.440	21.035	0.298	0.000	0.20		1.966	81.1	SURCHARGED
S1. 028	S3031	30 minute 30 year Winter I+0%	30	1	22.645	21.115	0.881	0.000	0.48		3.995	72.1	SURCHARGED
S28. 000	S3350	15 minute 30 year Winter I+0%	15	1	24.100	21.658	0.068	0.000	0.73		1.039	148.0	SURCHARGED
S28. 001	S3351	15 minute 30 year Winter I+0%	15	1	23.360	21.566	0.156	0.000	1.23		19.683	253.7	SURCHARGED

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S28.002	S3352	30 minute 30 year Winter I+0%	30	1	22.750	21.283	0.063	0.000	1.48		19.162	229.6	SURCHARGED
S28.003	S3353	30 minute 30 year Winter I+0%	30	1	22.520	21.260	0.080	0.000	0.37		5.932	216.3	SURCHARGED
S28.004	S3354	30 minute 30 year Winter I+0%	30	1	23.200	21.252	0.117	0.000	0.52		14.969	189.5	SURCHARGED
S29.000	S3370	15 minute 30 year Winter I+0%	15	1	23.335	22.056	-0.174	0.000	0.36		0.137	40.0	OK
S29.001	S3371	15 minute 30 year Winter I+0%	15	1	23.155	21.780	-0.130	0.000	0.60		0.437	57.7	OK
S29.002	S3372	15 minute 30 year Winter I+0%	15	1	23.950	21.618	-0.112	0.000	0.69		0.547	69.4	OK
S29.003	S3373	15 minute 30 year Winter I+0%	15	1	23.780	21.377	-0.158	0.000	0.45		0.338	72.9	OK
S30.000	SH338	15 minute 30 year Winter I+0%	15	1	22.975	21.327	-0.183	0.000	0.08		0.042	6.9	OK
S28.005	S3355	30 minute 30 year Winter I+0%	30	1	22.755	21.245	0.130	0.000	0.22		10.335	222.1	SURCHARGED
S28.006	S3356	30 minute 30 year Winter I+0%	30	1	22.665	21.240	0.165	0.000	0.15		23.624	197.4	SURCHARGED
S28.007	S3357	30 minute 30 year Winter I+0%	30	1	22.610	21.234	0.219	0.000	0.21		36.111	158.9	SURCHARGED
S28.008	S3358	30 minute 30 year Winter I+0%	30	1	22.600	21.229	0.239	0.000	0.20		16.289	159.8	SURCHARGED
S31.000	S3390	15 minute 30 year Winter I+0%	15	1	23.345	21.719	-0.126	0.000	0.39		0.106	17.9	OK
S31.001	S3391	15 minute 30 year Winter I+0%	15	1	23.145	21.523	-0.052	0.000	0.86		0.464	29.5	OK
S31.002	S3392	15 minute 30 year Winter I+0%	15	1	23.060	21.470	-0.030	0.000	0.87		0.539	36.3	OK
S31.003	S3393	15 minute 30 year Winter I+0%	15	1	22.825	21.335	0.010	0.000	1.16		0.794	40.0	SURCHARGED
S31.004	S3394	30 minute 30 year Winter I+0%	30	1	22.765	21.228	-0.037	0.000	0.49		0.377	37.7	OK
S28.009	S3359	30 minute 30 year Winter I+0%	30	1	22.710	21.225	0.260	0.000	0.23		15.181	165.8	SURCHARGED
S28.010	S3360	30 minute 30 year Winter I+0%	30	1	22.945	21.221	0.276	0.000	0.16		12.858	162.4	SURCHARGED
S1.029	S3032	30 minute 30 year Winter I+0%	30	1	22.290	21.215	0.310	0.000	0.10		33.837	102.0	SURCHARGED
S1.030	S3033-CON	30 minute 30 year Winter I+0%	30	1	22.415	21.212	1.098	0.000	0.34		35.866	53.3	SURCHARGED
S1.031	S3034	30 minute 30 year Winter I+0%	30	1	23.160	19.749	-0.243	0.000	0.43		1.968	53.1	OK
S1.032	S3035	30 minute 30 year Winter I+0%	30	1	23.110	19.685	-0.259	0.000	0.38		1.082	53.1	OK
S1.033	S3036	30 minute 30 year Winter I+0%	30	1	21.990	19.588	-0.265	0.000	0.35		1.695	52.8	OK
S1.034	S3037	30 minute 30 year Winter I+0%	30	1	21.475	19.413	-0.265	0.000	0.35		2.150	52.6	OK
S1.035	S3038	30 minute 30 year Winter I+0%	30	1	21.015	19.274	-0.242	0.000	0.44		2.607	52.6	OK
S1.036	S3039-HW	30 minute 30 year Winter I+0%	30	1	19.850	19.162	-0.688	0.000	0.03		0.470	52.6	OK
S1.037	S3040	30 minute 30 year Winter I+0%	30	1	20.192	19.140	-1.052	0.000	0.01		0.377	52.5	OK

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

Simulation Criteria

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

Number of Input Hydrographs 0	Number of Offline Controls 1	Number of Time/Area Diagrams 0
Number of Online Controls 2	Number of Storage Structures 2	Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FEH	Site Location GB 450306	114752 Cv (Summer) 0.750
FEH Rainfall Version 2013	Data Type	Point Cv (Winter) 0.840

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

Profile(s) Summer and Winter

Duration(s) (mins) 15, 30
Return Period(s) (years) 2, 30, 100
Climate Change (%) 0, 0, 40

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S1.000	S3000	15 minute 100 year Winter I+40%	15	1	27.478	26.757	0.479	0.000	0.86		0.791	50.3	SURCHARGED
S1.001	S3001	15 minute 100 year Winter I+40%	15	1	26.966	26.387	0.621	0.000	1.22		2.418	80.4	SURCHARGED
S1.002	S3002	15 minute 100 year Winter I+40%	15	1	26.704	26.148	0.538	0.000	1.32		3.869	138.0	SURCHARGED
S1.003	S3003	15 minute 100 year Winter I+40%	15	1	28.014	25.785	0.365	0.000	1.61		7.623	141.8	SURCHARGED
S2.000	S3050	15 minute 100 year Winter I+40%	15	1	33.607	33.053	0.646	0.000	1.47		0.980	53.3	SURCHARGED
S2.001	S3051	15 minute 100 year Winter I+40%	15	1	33.552	32.828	0.536	0.000	0.92		1.575	82.3	SURCHARGED
S2.002	S3052	15 minute 100 year Winter I+40%	15	1	32.390	32.033	0.844	0.000	0.82		2.296	85.3	SURCHARGED
S2.003	S3053	15 minute 100 year Winter I+40%	15	1	31.592	31.507	1.115	0.000	0.97		2.083	100.2	FLOOD RISK
S2.004	S3054	15 minute 100 year Winter I+40%	15	1	30.545	30.546	1.169	0.665	1.25		3.032	113.8	FLOOD
S2.005	S3055	15 minute 100 year Winter I+40%	15	1	29.217	28.664	0.533	0.000	1.49		1.571	120.9	SURCHARGED
S2.006	S3056	15 minute 100 year Winter I+40%	15	1	28.782	27.608	-0.087	0.000	0.68		0.197	124.9	OK
S1.004	S3004	15 minute 100 year Winter I+40%	15	1	28.294	25.655	0.283	0.000	2.26		3.021	275.3	SURCHARGED
S1.005	S3005	15 minute 100 year Winter I+40%	15	1	28.322	25.526	0.183	0.000	1.70		4.052	327.1	SURCHARGED
S1.006	S3006	15 minute 100 year Winter I+40%	15	1	27.532	25.004	-0.246	0.000	0.47		4.355	330.9	OK
S3.000	S3060	15 minute 100 year Winter I+40%	15	1	26.680	26.466	0.986	0.000	1.28		1.364	70.8	FLOOD RISK
S3.001	S3061	15 minute 100 year Winter I+40%	15	1	26.141	25.424	0.603	0.000	0.77		3.436	99.7	SURCHARGED
S3.002	S3062	15 minute 100 year Winter I+40%	15	1	26.114	25.295	0.685	0.000	1.36		5.952	117.6	SURCHARGED
S3.003	S3063	15 minute 100 year Winter I+40%	15	1	26.410	25.203	0.640	0.000	1.48		2.948	148.3	SURCHARGED
S3.004	S3064	15 minute 100 year Winter I+40%	15	1	27.500	24.964	0.515	0.000	1.71		5.172	147.6	SURCHARGED
S1.007	S3007	15 minute 100 year Winter I+40%	15	1	27.348	24.823	0.415	0.000	1.30		4.642	523.7	SURCHARGED
S4.000	S3070	15 minute 100 year Winter I+40%	15	1	25.790	25.796	0.978	5.565	1.78		6.888	69.5	FLOOD
S4.001	S3072	15 minute 100 year Winter I+40%	15	1	25.325	25.138	0.620	0.000	1.81		2.921	99.6	FLOOD RISK
S4.002	S3073	15 minute 100 year Winter I+40%	15	1	25.456	25.009	0.531	0.000	1.40		1.896	136.7	SURCHARGED

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S4.003	S3074	15 minute 100 year Winter I+40%	15	1	25.586	24.855	0.473	0.000	1.63		4.518	162.8	SURCHARGED
S1.008	S3008	15 minute 100 year Winter I+40%	15	1	26.600	24.594	0.330	0.000	2.51		27.427	677.3	SURCHARGED
S1.009	S3009	15 minute 100 year Winter I+40%	15	1	26.345	24.416	0.178	0.000	2.67		7.213	682.4	SURCHARGED
S1.010	S3010	15 minute 100 year Winter I+40%	15	1	26.150	24.234	0.015	0.000	0.50		5.093	692.0	SURCHARGED
S1.011	S3011	15 minute 100 year Winter I+40%	15	1	24.845	23.978	0.795	0.000	1.09		30.509	703.7	SURCHARGED
S5.000	S3080	15 minute 100 year Winter I+40%	15	1	25.677	25.215	0.710	0.000	1.49		0.967	31.1	SURCHARGED
S5.001	S3081	15 minute 100 year Winter I+40%	15	1	25.276	24.388	0.261	0.000	1.03		0.985	135.8	SURCHARGED
S1.012	S3012	15 minute 100 year Winter I+40%	15	1	24.078	23.779	0.766	0.000	1.25		12.113	790.6	FLOOD RISK
S1.013	S3013	15 minute 100 year Winter I+40%	15	1	23.942	23.698	0.738	0.000	1.84		19.987	792.9	FLOOD RISK
S1.014	S3014	15 minute 100 year Winter I+40%	15	1	23.833	23.632	0.703	0.000	2.90		12.704	795.1	FLOOD RISK
S6.000	S3090	15 minute 100 year Winter I+40%	15	1	31.555	30.086	0.061	0.000	0.73		0.318	80.5	SURCHARGED
S6.001	S3091	15 minute 100 year Winter I+40%	15	1	29.895	29.337	0.972	0.000	0.91		2.174	86.0	SURCHARGED
S6.002	S3092	15 minute 100 year Winter I+40%	15	1	29.250	28.814	1.089	0.000	1.53		2.033	103.6	SURCHARGED
S7.000	S3110	15 minute 100 year Winter I+40%	15	1	30.720	29.588	0.378	0.000	0.98		0.677	73.8	SURCHARGED
S7.001	S3111	15 minute 100 year Winter I+40%	15	1	29.740	28.666	0.421	0.000	1.28		1.698	130.5	SURCHARGED
S7.002	S3112	15 minute 100 year Winter I+40%	15	1	29.410	28.192	0.272	0.000	0.91		3.065	137.7	SURCHARGED
S7.003	S3113	15 minute 100 year Winter I+40%	15	1	29.250	28.068	0.298	0.000	0.99		2.470	169.8	SURCHARGED
S7.004	S3114	15 minute 100 year Winter I+40%	15	1	29.025	27.833	0.293	0.000	1.00		3.354	189.5	SURCHARGED
S6.003	S3093	15 minute 100 year Winter I+40%	15	1	28.650	27.426	0.281	0.000	1.27		5.326	307.9	SURCHARGED
S6.004	S3094	15 minute 100 year Winter I+40%	15	1	28.150	26.516	-0.139	0.000	0.70		0.693	343.7	OK
S8.000	S3120	15 minute 100 year Winter I+40%	15	1	26.200	25.075	0.947	0.000	1.48		1.235	25.0	SURCHARGED
S8.001	S3121	15 minute 100 year Winter I+40%	15	1	26.500	24.537	0.684	0.000	1.78		1.491	70.0	SURCHARGED
S8.002	S3122	15 minute 100 year Winter I+40%	15	1	26.440	24.212	0.536	0.000	1.34		1.935	84.5	SURCHARGED
S6.005	S3095	15 minute 100 year Winter I+40%	15	1	26.160	24.124	0.541	0.000	1.75		4.575	440.7	SURCHARGED
S6.006	S3096	15 minute 100 year Winter I+40%	15	1	24.555	23.966	0.447	0.000	0.58		10.428	421.0	SURCHARGED
S6.007	S3097	15 minute 100 year Winter I+40%	15	1	24.220	23.800	0.814	0.000	2.72		4.333	423.4	SURCHARGED
S6.008	S3098	15 minute 100 year Winter I+40%	15	1	23.845	23.636	0.674	0.000	0.88		6.591	424.6	FLOOD RISK
S6.009	S3099	15 minute 100 year Winter I+40%	15	1	23.675	23.604	0.702	0.000	0.97		7.663	435.0	FLOOD RISK
S6.010	S3100	15 minute 100 year Winter I+40%	15	1	23.600	23.586	0.691	0.000	1.17		7.458	430.6	FLOOD RISK
S1.015	S3015	15 minute 100 year Winter I+40%	15	1	23.565	23.564	0.679	0.000	2.87	235.8	18.453	956.6	FLOOD RISK
S1.016	S3016	30 minute 100 year Winter I+40%	30	1	23.660	23.441	0.568	0.000	3.27		9.904	956.3	FLOOD RISK
S1.017	S3017	30 minute 100 year Winter I+40%	30	1	23.840	23.355	0.497	0.000	2.98		11.310	956.0	SURCHARGED
S9.000	S3130	15 minute 100 year Winter I+40%	15	1	26.352	25.681	0.529	0.000	0.72		0.848	43.1	SURCHARGED
S9.001	S3131	15 minute 100 year Winter I+40%	15	1	25.763	25.390	0.828	0.000	1.07		2.838	87.7	SURCHARGED
S9.002	S3132	15 minute 100 year Winter I+40%	15	1	25.576	25.093	0.780	0.000	1.48		3.887	100.7	SURCHARGED
S9.003	S3133	15 minute 100 year Winter I+40%	15	1	25.493	24.932	0.693	0.000	1.26		1.617	122.2	SURCHARGED
S10.000	S3140	15 minute 100 year Winter I+40%	15	1	25.428	24.692	0.464	0.000	0.76		0.774	39.9	SURCHARGED
S9.004	S3134	15 minute 100 year Winter I+40%	15	1	25.210	24.564	0.554	0.000	1.63		3.164	176.9	SURCHARGED
S9.005	S3135	15 minute 100 year Winter I+40%	15	1	24.964	23.890	0.127	0.000	1.49		1.898	193.9	SURCHARGED
S9.006	S3136	15 minute 100 year Winter I+40%	15	1	24.852	23.686	0.034	0.000	0.70		1.510	189.2	SURCHARGED
S9.007	S3137	15 minute 100 year Winter I+40%	15	1	24.696	23.590	0.170	0.000	0.65		2.676	200.5	SURCHARGED
S9.008	S3138	15 minute 100 year Winter I+40%	15	1	24.374	23.470	0.372	0.000	0.81		4.885	206.5	SURCHARGED
S9.009	S3139	15 minute 100 year Winter I+40%	15	1	24.123	23.344	0.450	0.000	1.48		4.175	220.0	SURCHARGED
S1.018	S3018	30 minute 100 year Winter I+40%	30	1	23.970	23.271	0.426	0.000	2.39		11.710	1170.7	SURCHARGED
S1.019	S3019	30 minute 100 year Winter I+40%	30	1	23.500	23.080	0.270	0.000	1.49		11.437	1168.7	SURCHARGED
S1.020	S3020-BASIN D	30 minute 100 year Winter I+40%	30	1	23.500	23.054	0.719	0.000	0.97		994.924	269.6	SURCHARGED

PFA Consulting		Page 13
Stratton Park House Wanborough Road Swindon SN3 4HG	M380: Boorley Gardens SW Drainage - Planning Catchments C + D (FEH 15 & 30)	
Date 08/05/2024	Designed by PS	
File M380-Catch C&D-V5.11 with weirs (RM Ph3).MDX	Checked by BF	
Causeway	Network 2020.1.3	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S1.021	S3021-CON	30 minute 100 year Winter I+40%	30	1	24.020	22.981	0.776	0.000	1.21		5.532	264.4	SURCHARGED
S1.022	S3023	30 minute 100 year Winter I+40%	30	1	25.220	22.163	0.168	0.000	1.15		20.215	251.3	SURCHARGED
S1.023	S3024	30 minute 100 year Winter I+40%	30	1	25.535	21.903	0.118	0.000	1.12		19.627	244.7	SURCHARGED
S1.024	S3026	30 minute 100 year Winter I+40%	30	1	24.960	21.641	0.066	0.000	1.20		18.712	243.7	SURCHARGED
S1.025	S3028	30 minute 100 year Winter I+40%	30	1	24.350	21.468	0.013	0.000	1.91		11.548	243.7	SURCHARGED
S11.000	S3150	15 minute 100 year Winter I+40%	15	1	28.020	26.708	0.046	0.000	0.92		0.216	20.0	SURCHARGED
S11.001	S3151	15 minute 100 year Winter I+40%	15	1	27.356	26.292	0.252	0.000	1.02		0.880	64.3	SURCHARGED
S11.002	S3152	15 minute 100 year Winter I+40%	15	1	26.707	25.984	0.484	0.000	0.85		2.098	93.1	SURCHARGED
S11.003	S3153	15 minute 100 year Winter I+40%	15	1	26.514	25.906	0.599	0.000	0.99		1.654	93.0	SURCHARGED
S11.004	S3154	15 minute 100 year Winter I+40%	15	1	26.322	25.821	0.656	0.000	0.52		1.719	98.2	SURCHARGED
S12.000	S3180	15 minute 100 year Winter I+40%	15	1	27.308	26.628	0.694	0.000	0.71		0.949	23.8	SURCHARGED
S13.000	S3190	15 minute 100 year Winter I+40%	15	1	27.405	26.520	0.540	0.000	0.31		0.860	27.0	SURCHARGED
S12.001	S3181	15 minute 100 year Winter I+40%	15	1	27.233	26.494	0.904	0.000	1.19		1.687	68.7	SURCHARGED
S12.002	S3182	15 minute 100 year Winter I+40%	15	1	26.894	26.210	0.910	0.000	0.63		2.081	85.7	SURCHARGED
S12.003	S3183	15 minute 100 year Winter I+40%	15	1	26.521	26.096	1.160	0.000	0.79		2.830	95.1	SURCHARGED
S12.004	S3184	15 minute 100 year Winter I+40%	15	1	26.290	25.963	1.258	0.000	0.86		2.506	103.4	SURCHARGED
S11.005	S3155	15 minute 100 year Winter I+40%	15	1	25.834	25.671	1.368	0.000	1.33		6.040	207.7	FLOOD RISK
S11.006	S3156	15 minute 100 year Winter I+40%	15	1	26.130	25.464	1.280	0.000	1.39		8.572	235.2	SURCHARGED
S14.000	S3200	15 minute 100 year Winter I+40%	15	1	27.248	25.692	-0.056	0.000	0.38		0.270	38.9	OK
S14.001	S3201	15 minute 100 year Winter I+40%	15	1	26.960	25.656	0.196	0.000	0.55		2.334	95.2	SURCHARGED
S14.002	S3202	15 minute 100 year Winter I+40%	15	1	26.657	25.545	0.823	0.000	0.83		2.878	130.6	SURCHARGED
S15.000	SH316	15 minute 100 year Winter I+40%	15	1	26.150	25.315	0.665	0.000	0.18		1.001	16.5	SURCHARGED
S11.007	S3157	15 minute 100 year Winter I+40%	15	1	26.356	25.294	1.167	0.000	2.09		6.245	414.6	SURCHARGED
S11.008	S3158	15 minute 100 year Winter I+40%	15	1	25.760	25.142	1.046	0.000	1.32		5.993	397.0	SURCHARGED
S11.009	S3159	15 minute 100 year Winter I+40%	15	1	25.205	24.931	0.961	0.000	2.18		16.541	393.2	FLOOD RISK
S16.000	S3210	15 minute 100 year Winter I+40%	15	1	26.390	25.525	0.560	0.000	0.48		0.798	21.4	SURCHARGED
S17.000	S3220	15 minute 100 year Winter I+40%	15	1	26.231	25.518	0.712	0.000	0.49		0.970	16.2	SURCHARGED
S16.001	S3211	15 minute 100 year Winter I+40%	15	1	26.202	25.428	1.035	0.000	0.96		1.660	48.0	SURCHARGED
S16.002	S3212	15 minute 100 year Winter I+40%	15	1	26.040	25.268	1.077	0.000	1.21		2.114	59.9	SURCHARGED
S16.003	S3213	15 minute 100 year Winter I+40%	15	1	25.813	25.040	1.041	0.000	2.35		2.041	78.6	SURCHARGED
S11.010	S3160	15 minute 100 year Winter I+40%	15	1	25.672	24.777	0.840	0.000	1.66		7.079	467.7	SURCHARGED
S11.011	S3161	15 minute 100 year Winter I+40%	15	1	25.057	24.555	0.698	0.000	1.39		10.896	483.4	SURCHARGED
S18.000	SH323	15 minute 100 year Winter I+40%	15	1	25.250	24.702	0.718	0.000	0.07		1.061	2.7	SURCHARGED
S18.001	S3230	15 minute 100 year Winter I+40%	15	1	25.150	24.709	0.804	0.000	1.72		1.547	60.0	SURCHARGED
S18.002	S3231	15 minute 100 year Winter I+40%	15	1	24.920	24.486	0.681	0.000	2.42		1.670	72.4	SURCHARGED
S11.012	S3162	15 minute 100 year Winter I+40%	15	1	24.964	24.319	0.555	0.000	2.19		5.360	532.6	SURCHARGED
S11.013	S3163	15 minute 100 year Winter I+40%	15	1	24.890	23.947	0.257	0.000	3.88		13.278	550.4	SURCHARGED
S11.014	S3164	15 minute 100 year Winter I+40%	15	1	24.022	23.273	-0.749	0.000	0.07		0.795	549.1	OK
S19.000	S3240	15 minute 100 year Winter I+40%	15	1	24.640	23.461	0.021	0.000	0.39		0.358	22.0	SURCHARGED
S20.000	S3250	15 minute 100 year Winter I+40%	15	1	24.628	23.460	0.032	0.000	0.49		0.370	25.5	SURCHARGED
S19.001	S3241	15 minute 100 year Winter I+40%	15	1	24.597	23.446	0.049	0.000	1.11		1.457	64.2	SURCHARGED
S19.002	S3242	15 minute 100 year Winter I+40%	15	1	24.000	23.314	0.020	0.000	1.21		2.244	78.1	SURCHARGED
S11.015	S3165	15 minute 100 year Winter I+40%	15	1	23.922	23.172	-0.750	0.000	0.08		4.487	615.1	OK
S11.016	S3166	15 minute 100 year Winter I+40%	15	1	23.652	22.930	-0.722	0.000	0.09		9.510	616.1	OK
S21.000	S3260	15 minute 100 year Winter I+40%	15	1	24.136	22.903	-0.033	0.000	0.30		0.212	10.5	OK
S21.001	S3261	15 minute 100 year Winter I+40%	15	1	24.043	22.884	0.041	0.000	1.30		0.812	44.1	SURCHARGED

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Catch C+D

PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S11.017	S3167	15 minute 100 year Winter I+40%	15	1	23.459	22.811	-0.648	0.000	0.10		6.642	633.6	OK
S22.000	S3270	15 minute 100 year Winter I+40%	15	1	24.058	22.690	-0.168	0.000	0.24		0.143	15.4	OK
S22.001	S3271	15 minute 100 year Winter I+40%	15	1	23.965	22.665	-0.100	0.000	0.65		0.966	41.1	OK
S22.002	S3272	15 minute 100 year Winter I+40%	15	1	23.872	22.619	-0.053	0.000	1.00		1.283	57.2	OK
S11.018	S3168	15 minute 100 year Winter I+40%	15	1	23.365	22.577	-0.788	0.000	0.07		10.215	662.5	OK
S11.019	S3169	15 minute 100 year Winter I+40%	15	1	23.316	22.563	-0.753	0.000	0.08		1.106	661.9	OK
S11.020	S3170	30 minute 100 year Winter I+40%	30	1	22.996	22.424	-0.572	0.000	0.10		14.037	623.0	OK
S23.000	S3280	30 minute 100 year Winter I+40%	30	1	23.484	22.419	0.135	0.000	0.23		0.401	8.7	SURCHARGED
S23.001	S3281	30 minute 100 year Winter I+40%	30	1	23.269	22.413	0.344	0.000	1.57		2.041	51.4	SURCHARGED
S11.021	S3171	30 minute 100 year Winter I+40%	30	1	22.739	22.400	-0.339	0.000	0.10		44.664	570.3	OK
S11.022	S3172	30 minute 100 year Winter I+40%	30	1	22.621	22.391	0.400	0.000	2.08		84.861	516.0	FLOOD RISK*
S11.023	S3173	30 minute 100 year Winter I+40%	30	1	22.633	21.791	-0.842	0.000	0.07		0.918	516.0	OK
S24.000	S3290	15 minute 100 year Winter I+40%	15	1	27.878	26.245	-0.217	0.000	0.17		0.089	16.9	OK
S24.001	S3291	15 minute 100 year Winter I+40%	15	1	27.725	26.090	-0.208	0.000	0.18		0.159	25.0	OK
S24.002	S3292	15 minute 100 year Winter I+40%	15	1	27.292	26.063	0.425	0.000	0.49		3.366	66.0	SURCHARGED
S24.003	S3293	15 minute 100 year Winter I+40%	15	1	27.136	26.040	0.519	0.000	0.48		2.896	79.2	SURCHARGED
S24.004	S3294	15 minute 100 year Winter I+40%	15	1	26.998	26.011	0.667	0.000	0.49		2.999	90.9	SURCHARGED
S24.005	S3295	15 minute 100 year Winter I+40%	15	1	26.633	25.953	0.974	0.000	1.18		5.625	117.5	SURCHARGED
S24.006	S3296	15 minute 100 year Winter I+40%	15	1	26.623	25.831	0.961	0.000	1.07		7.254	180.2	SURCHARGED
S24.007	S3297	15 minute 100 year Winter I+40%	15	1	26.942	25.773	0.985	0.000	1.81		4.433	191.9	SURCHARGED
S24.008	S3298	15 minute 100 year Winter I+40%	15	1	27.141	25.708	0.955	0.000	1.95		4.078	194.9	SURCHARGED
S25.000	S3320	15 minute 100 year Winter I+40%	15	1	27.291	25.627	-0.167	0.000	0.12		0.060	17.0	OK
S24.009	S3299	15 minute 100 year Winter I+40%	15	1	27.239	25.615	0.889	0.000	1.46		3.659	208.6	SURCHARGED
S24.010	S3300	15 minute 100 year Winter I+40%	15	1	26.728	25.413	0.791	0.000	0.80		8.191	224.3	SURCHARGED
S26.000	S3330	15 minute 100 year Winter I+40%	15	1	25.706	24.974	0.531	0.000	0.08		0.934	13.5	SURCHARGED
S24.011	S3301	15 minute 100 year Winter I+40%	15	1	25.786	24.966	1.035	0.000	1.79		16.365	323.3	SURCHARGED
S24.012	S3302	15 minute 100 year Winter I+40%	15	1	25.425	24.771	0.900	0.000	1.87		8.626	347.9	SURCHARGED
S24.013	S3303	15 minute 100 year Winter I+40%	15	1	24.980	24.493	0.697	0.000	2.16		9.977	381.8	SURCHARGED
S24.014	S3304	30 minute 100 year Winter I+40%	30	1	24.943	24.248	0.505	0.000	2.09		7.230	391.2	SURCHARGED
S24.015	S3305	30 minute 100 year Winter I+40%	30	1	24.865	23.903	0.238	0.000	3.21		9.388	413.6	SURCHARGED
S24.016	S3306	30 minute 100 year Winter I+40%	30	1	24.643	23.272	-1.371	0.000	0.02		0.791	414.1	OK
S24.017	S3307	30 minute 100 year Winter I+40%	30	1	24.775	23.042	-1.733	0.000	0.01		2.322	414.1	OK
S24.018	S3308	30 minute 100 year Winter I+40%	30	1	24.194	22.869	-1.325	0.000	0.02		12.232	388.7	OK
S24.019	S3309	30 minute 100 year Winter I+40%	30	1	24.085	22.865	-1.220	0.000	0.01		5.699	379.7	OK
S27.000	S3340	30 minute 100 year Winter I+40%	30	1	24.183	22.890	-0.093	0.000	0.07		0.228	3.9	OK
S27.001	S3341	30 minute 100 year Winter I+40%	30	1	24.142	22.889	-0.053	0.000	0.48		0.678	34.0	OK
S27.002	S3342	30 minute 100 year Winter I+40%	30	1	23.927	22.876	0.149	0.000	0.80		3.621	49.2	SURCHARGED
S24.020	S3310	30 minute 100 year Winter I+40%	30	1	23.831	22.864	-0.967	0.000	0.02		8.825	391.2	OK
S24.021	S3311	30 minute 100 year Winter I+40%	30	1	23.455	22.863	-0.592	0.000	0.02		13.565	379.7	OK
S24.022	S3312	30 minute 100 year Winter I+40%	30	1	23.461	22.862	0.417	0.000	2.24		12.002	378.3	SURCHARGED*
S24.023	S3313	30 minute 100 year Winter I+40%	30	1	23.546	22.259	-1.287	0.000	0.02		0.664	378.4	OK
S1.026	S3029-Basin C	30 minute 100 year Winter I+40%	30	1	21.900	21.230	0.230	0.000	0.40		1830.843	115.5	SURCHARGED
S1.027	S3030	30 minute 100 year Winter I+40%	30	1	22.440	21.333	0.596	0.000	0.24		2.392	94.3	SURCHARGED
S1.028	S3031	30 minute 100 year Winter I+40%	30	1	22.645	21.696	1.462	0.000	0.49		4.826	74.8	SURCHARGED
S28.000	S3350	15 minute 100 year Winter I+40%	15	1	24.100	22.849	1.259	0.000	1.23		3.144	250.8	SURCHARGED
S28.001	S3351	30 minute 100 year Winter I+40%	30	1	23.360	22.738	1.328	0.000	2.00		21.906	412.8	SURCHARGED

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PN	US/MH Name	Event	Duration (mins)	Storm Rank	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Maximum Vol (m³)	Pipe Flow (l/s)	Status
S28.002	S3352	30 minute 100 year Winter I+40%	30	1	22.750	22.348	1.128	0.000	2.57		22.274	400.5	SURCHARGED
S28.003	S3353	30 minute 100 year Winter I+40%	30	1	22.520	22.207	1.027	0.000	0.66		8.393	385.2	SURCHARGED
S28.004	S3354	30 minute 100 year Winter I+40%	30	1	23.200	22.185	1.050	0.000	1.03		17.437	371.3	SURCHARGED
S29.000	S3370	30 minute 100 year Winter I+40%	30	1	23.335	22.263	0.033	0.000	0.52		0.371	56.7	SURCHARGED
S29.001	S3371	30 minute 100 year Winter I+40%	30	1	23.155	22.243	0.333	0.000	0.84		2.501	81.3	SURCHARGED
S29.002	S3372	30 minute 100 year Winter I+40%	30	1	23.950	22.220	0.490	0.000	0.98		2.034	97.9	SURCHARGED
S29.003	S3373	30 minute 100 year Winter I+40%	30	1	23.780	22.193	0.658	0.000	0.63		2.240	102.1	SURCHARGED
S30.000	SH338	30 minute 100 year Winter I+40%	30	1	22.975	22.172	0.662	0.000	0.11		0.998	9.7	SURCHARGED
S28.005	S3355	30 minute 100 year Winter I+40%	30	1	22.755	22.169	1.054	0.000	0.41		13.999	418.2	SURCHARGED
S28.006	S3356	30 minute 100 year Winter I+40%	30	1	22.665	22.156	1.081	0.000	0.32		27.029	406.6	SURCHARGED
S28.007	S3357	30 minute 100 year Winter I+40%	30	1	22.610	22.141	1.126	0.000	0.52		39.272	394.4	SURCHARGED
S28.008	S3358	30 minute 100 year Winter I+40%	30	1	22.600	22.129	1.139	0.000	0.49		19.411	394.9	SURCHARGED
S31.000	S3390	30 minute 100 year Winter I+40%	30	1	23.345	22.225	0.380	0.000	0.53		0.679	24.5	SURCHARGED
S31.001	S3391	30 minute 100 year Winter I+40%	30	1	23.145	22.206	0.631	0.000	1.13		2.095	39.0	SURCHARGED
S31.002	S3392	30 minute 100 year Winter I+40%	30	1	23.060	22.187	0.687	0.000	1.18		1.480	48.9	SURCHARGED
S31.003	S3393	30 minute 100 year Winter I+40%	30	1	22.825	22.155	0.830	0.000	1.56		2.049	54.0	SURCHARGED
S31.004	S3394	30 minute 100 year Winter I+40%	30	1	22.765	22.139	0.874	0.000	0.79		1.475	61.3	SURCHARGED
S28.009	S3359	30 minute 100 year Winter I+40%	30	1	22.710	22.118	1.153	0.000	0.56		18.290	409.6	SURCHARGED
S28.010	S3360	30 minute 100 year Winter I+40%	30	1	22.945	22.107	1.162	0.000	0.40		15.930	404.0	SURCHARGED
S1.029	S3032	30 minute 100 year Winter I+40%	30	1	22.290	22.091	1.186	0.000	0.12		40.038	117.9	FLOOD RISK
S1.030	S3033-CON	30 minute 100 year Winter I+40%	30	1	22.415	22.088	1.974	0.000	0.42		40.886	66.6	SURCHARGED
S1.031	S3034	30 minute 100 year Winter I+40%	30	1	23.160	19.777	-0.215	0.000	0.53		2.471	66.3	OK
S1.032	S3035	30 minute 100 year Winter I+40%	30	1	23.110	19.711	-0.233	0.000	0.47		1.315	66.2	OK
S1.033	S3036	30 minute 100 year Winter I+40%	30	1	21.990	19.612	-0.241	0.000	0.44		2.054	65.6	OK
S1.034	S3037	30 minute 100 year Winter I+40%	30	1	21.475	19.436	-0.242	0.000	0.44		2.647	65.0	OK
S1.035	S3038	30 minute 100 year Winter I+40%	30	1	21.015	19.302	-0.214	0.000	0.54		3.385	64.6	OK
S1.036	S3039-HW	30 minute 100 year Winter I+40%	30	1	19.850	19.180	-0.670	0.000	0.04		0.588	64.6	OK
S1.037	S3040	30 minute 100 year Winter I+40%	30	1	20.192	19.154	-1.038	0.000	0.01		0.494	64.6	OK