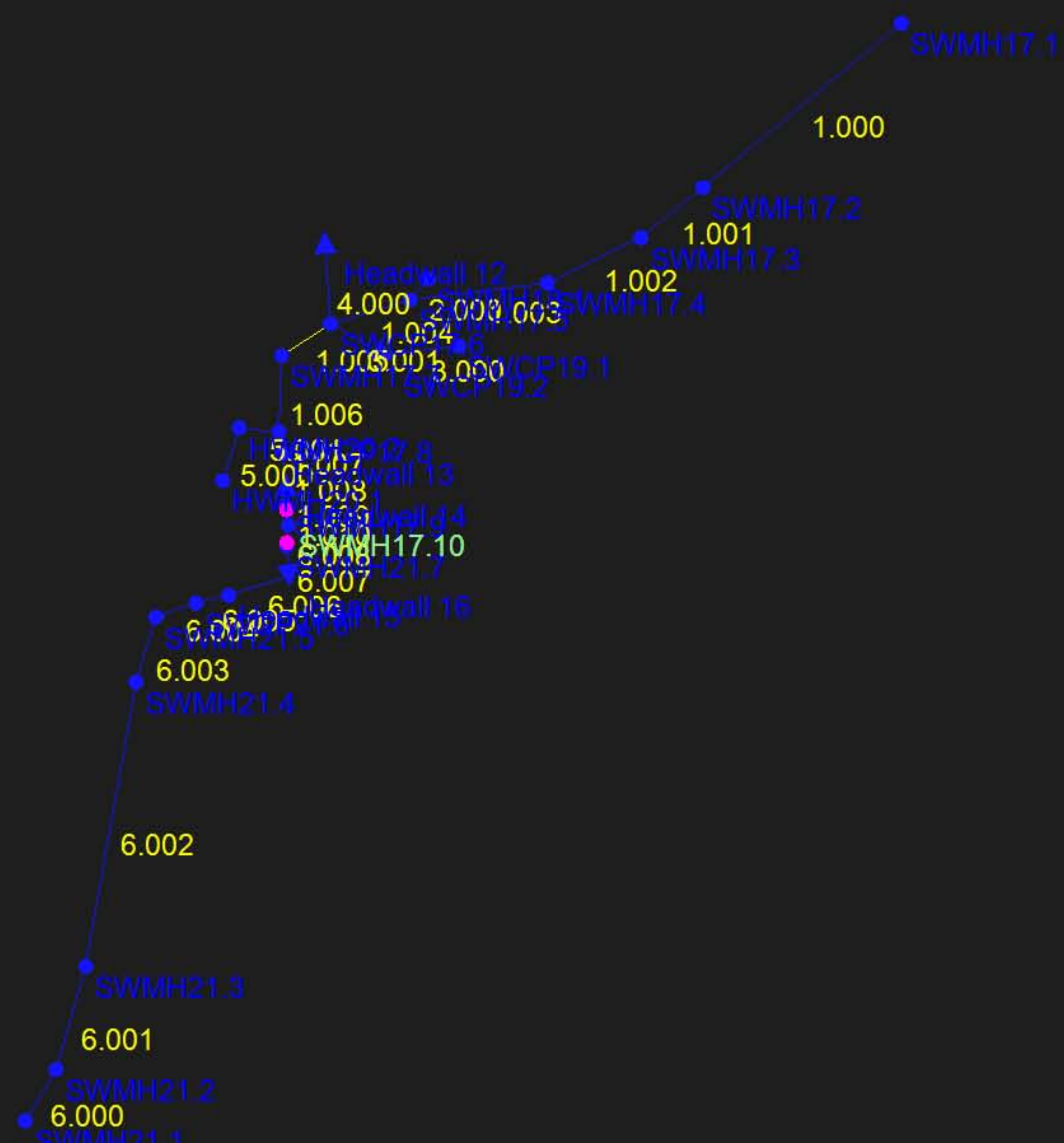




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Gloucester House	10768-Sefter Road	
66a Church Walk	Simulation Network 2	
Burgess Hill, BN43 6LB	Revision B	
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File 10768_NETWORK 2_REVB.MDX	Checked by MR	
XP Solutions	Network 2020.1.3	

Network Design Table for Surface Network 2

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.000	56.721	0.110	515.6	0.216	5.00	0.0	0.600	o	600	Pipe/Conduit	
1.001	17.615	0.040	440.4	0.016	0.00	0.0	0.600	o	600	Pipe/Conduit	
1.002	22.812	0.050	456.2	0.032	0.00	0.0	0.600	o	600	Pipe/Conduit	
1.003	30.540	0.060	509.0	0.024	0.00	0.0	0.600	o	600	Pipe/Conduit	
2.000	6.105	0.020	305.3	0.236	5.00	0.0	0.600	o	600	Pipe/Conduit	
1.004	18.275	0.035	522.1	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
3.000	16.402	0.045	364.5	0.000	5.00	0.0	0.600	o	225	Pipe/Conduit	
3.001	13.824	0.025	553.0	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
4.000	18.025	0.045	400.6	0.000	5.00	0.0	0.600	o	600	Pipe/Conduit	
1.005	12.836	0.025	513.4	0.000	0.00	0.0	0.600	ooo	225	Triple Pipe	
1.006	16.750	0.030	558.3	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
5.000	12.197	0.080	152.5	0.010	5.00	0.0	0.600	o	225	Pipe/Conduit	
5.001	8.820	0.055	160.4	0.033	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.007	4.996	0.010	499.6	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
1.008	6.850	0.005	1370.1	0.000	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)
1.000	50.00	5.89	4.550	0.216	0.0	0.0	0.0	1.07	301.3	39.1
1.001	50.00	6.14	4.440	0.233	0.0	0.0	0.0	1.15	326.3	42.0
1.002	50.00	6.48	4.400	0.265	0.0	0.0	0.0	1.13	320.5	47.8
1.003	50.00	6.95	4.350	0.289	0.0	0.0	0.0	1.07	303.2	52.1
2.000	50.00	5.07	4.310	0.236	0.0	0.0	0.0	1.39	392.6	42.6
1.004	50.00	7.24	4.290	0.525	0.0	0.0	0.0	1.06	299.4	94.7
3.000	50.00	5.40	4.325	0.000	0.0	0.0	0.0	0.68	27.0	0.0
3.001	50.00	5.63	4.280	0.000	0.0	0.0	0.0	1.03	290.8	0.0
4.000	50.00	5.25	4.300	0.000	0.0	0.0	0.0	1.21	342.3	0.0
1.005	50.00	7.61	4.255	0.525	0.0	0.0	0.0	0.57	68.0	94.7
1.006	50.00	7.89	4.230	0.525	0.0	0.0	0.0	1.02	289.4	94.7
5.000	50.00	5.19	4.710	0.010	0.0	0.0	0.0	1.06	42.0	1.8
5.001	50.00	5.34	4.630	0.043	0.0	0.0	0.0	1.03	40.9	7.8
1.007	50.00	7.96	4.200	0.568	0.0	0.0	0.0	1.08	306.1	102.5
1.008	50.00	8.14	4.190	0.568	0.0	0.0	0.0	0.65	183.5	102.5

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XP Solutions		Network 2020.1.3

Network Design Table for Surface Network 2

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.009	4.433	0.015	295.5	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
1.010	4.407	0.035	125.9	0.000	0.00	0.0	0.600	o	150	Pipe/Conduit	
6.000	13.171	0.065	202.6	0.031	5.00	0.0	0.600	o	300	Pipe/Conduit	
6.001	23.685	0.100	236.8	0.041	0.00	0.0	0.600	o	300	Pipe/Conduit	
6.002	63.535	0.210	302.5	0.149	0.00	0.0	0.600	o	375	Pipe/Conduit	
6.003	14.949	0.055	271.8	0.051	0.00	0.0	0.600	o	450	Pipe/Conduit	
6.004	9.363	0.025	374.5	0.071	0.00	0.0	0.600	o	450	Pipe/Conduit	
6.005	7.401	0.020	370.1	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
6.006	13.950	0.035	398.6	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
6.007	6.567	0.020	328.3	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
6.008	4.609	0.035	131.7	0.000	0.00	0.0	0.600	o	150	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.009	50.00	8.19	4.185	0.568	0.0	0.0	0.0	1.41	399.1	102.5
1.010	50.00	8.27	4.170	0.568	0.0	0.0	0.0	0.89	15.8«	102.5
6.000	50.00	5.20	4.850	0.031	0.0	0.0	0.0	1.10	77.8	5.5
6.001	50.00	5.59	4.785	0.072	0.0	0.0	0.0	1.02	71.9	13.0
6.002	50.00	6.61	4.610	0.221	0.0	0.0	0.0	1.04	114.5	39.9
6.003	50.00	6.81	4.325	0.272	0.0	0.0	0.0	1.23	195.4	49.0
6.004	50.00	6.96	4.270	0.343	0.0	0.0	0.0	1.04	166.1	61.9
6.005	50.00	7.08	4.245	0.343	0.0	0.0	0.0	1.05	167.1	61.9
6.006	50.00	7.31	4.225	0.343	0.0	0.0	0.0	1.01	161.0	61.9
6.007	50.00	7.41	4.190	0.343	0.0	0.0	0.0	1.12	177.6	61.9
6.008	50.00	7.49	4.170	0.343	0.0	0.0	0.0	0.87	15.4«	61.9

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Manhole Schedules for Surface Network 2

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	Pipe Out PN	Invert Level (m)	Diameter (mm)	Pipes In PN	Invert Level (m)	Diameter (mm)	Backdrop (mm)
SWMH17.1	6.852	2.302	Open Manhole	1500	1.000	4.550	600				
SWMH17.2	6.275	1.835	Open Manhole	1500	1.001	4.440	600	1.000	4.440	600	
SWMH17.3	6.098	1.698	Open Manhole	1500	1.002	4.400	600	1.001	4.400	600	
SWMH17.4	5.978	1.628	Open Manhole	1500	1.003	4.350	600	1.002	4.350	600	
SWMH18.1	6.206	1.896	Open Manhole	1500	2.000	4.310	600				
SWMH17.5	6.310	2.020	Open Manhole	1800	1.004	4.290	600	1.003	4.290	600	
								2.000	4.290	600	
SWCP19.1	5.539	1.214	Open Manhole	1800	3.000	4.325	225				
SWCP19.2	5.892	1.612	Open Manhole	1800	3.001	4.280	600	3.000	4.280	225	
Headwall 12	5.750	1.450	Open Manhole	1500	4.000	4.300	600				
SWCP17.6	6.534	2.279	Open Manhole	1800	1.005	4.255	225	1.004	4.255	600	
								3.001	4.255	600	
								4.000	4.255	600	
SWMH17.7	6.444	2.214	Open Manhole	1800	1.006	4.230	600	1.005	4.230	225	
HWMH20.1	6.428	1.718	Open Manhole	1350	5.000	4.710	225				
HWMH20.2	6.314	1.684	Open Manhole	1350	5.001	4.630	225	5.000	4.630	225	
SWCP17.8	5.428	1.228	Open Manhole	1800	1.007	4.200	600	1.006	4.200	600	
								5.001	4.575	225	
Headwall 13	5.350	1.160	Open Manhole	1500	1.008	4.190	600	1.007	4.190	600	
Headwall 14	5.350	1.165	Open Manhole	1500	1.009	4.185	600	1.008	4.185	600	
SWMH17.9	5.800	1.630	Open Manhole	2100	1.010	4.170	150	1.009	4.170	600	
SWMH17.10	5.750	1.615	Open Manhole	1500		OUTFALL		1.010	4.135	150	
SWMH21.1	6.546	1.696	Open Manhole	1350	6.000	4.850	300				
SWMH21.2	6.677	1.892	Open Manhole	1200	6.001	4.785	300	6.000	4.785	300	
SWMH21.3	6.386	1.776	Open Manhole	1350	6.002	4.610	375	6.001	4.685	300	
SWMH21.4	6.218	1.893	Open Manhole	1350	6.003	4.325	450	6.002	4.400	375	
SWMH21.5	6.391	2.121	Open Manhole	1350	6.004	4.270	450	6.003	4.270	450	
SWCP21.6	5.885	1.640	Open Manhole	1800	6.005	4.245	450	6.004	4.245	450	
Headwall 15	5.600	1.375	Open Manhole	1350	6.006	4.225	450	6.005	4.225	450	
Headwall 16	5.600	1.410	Open Manhole	1350	6.007	4.190	450	6.006	4.190	450	
SWMH21.7	5.690	1.520	Open Manhole	1500	6.008	4.170	150	6.007	4.170	450	
SWMH17.10	5.750	1.615	Open Manhole	1500		OUTFALL		6.008	4.135	150	

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SWMH17.1	490019.677	99664.408	490019.677	99664.408	Required	
SWMH17.2	489975.968	99628.259	489975.968	99628.259	Required	
SWMH17.3	489962.258	99617.198	489962.258	99617.198	Required	
SWMH17.4	489941.722	99607.268	489941.722	99607.268	Required	
SWMH18.1	489915.433	99608.153	489915.433	99608.153	Required	
SWMH17.5	489911.408	99603.563	489911.408	99603.563	Required	
SWCP19.1	489922.165	99593.393	489922.165	99593.393	Required	
SWCP19.2	489905.892	99591.344	489905.892	99591.344	Required	
Headwall 12	489892.711	99616.242	489892.711	99616.242	Required	
SWCP17.6	489893.920	99598.257	489893.920	99598.257	Required	
SWMH17.7	489883.153	99591.268	489883.153	99591.268	Required	
HWMH20.1	489870.211	99563.764	489870.211	99563.764	Required	
HWMH20.2	489873.838	99575.409	489873.838	99575.409	Required	
SWCP17.8	489882.614	99574.526	489882.614	99574.526	Required	
Headwall 13	489883.514	99569.612	489883.514	99569.612	Required	
Headwall 14	489884.085	99562.785	489884.085	99562.785	Required	

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Manhole Schedules for Surface Network 2

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SWMH17.9	489884.141	99558.353	489884.141	99558.353	Required	
SWMH17.10	489884.670	99553.977			No Entry	
SWMH21.1	489826.700	99422.830	489826.700	99422.830	Required	
SWMH21.2	489833.509	99434.105	489833.509	99434.105	Required	
SWMH21.3	489840.064	99456.865	489840.064	99456.865	Required	
SWMH21.4	489851.097	99519.435	489851.097	99519.435	Required	
SWMH21.5	489855.481	99533.726	489855.481	99533.726	Required	
SWCP21.6	489864.327	99536.798	489864.327	99536.798	Required	
Headwall 15	489871.530	99538.499	489871.530	99538.499	Required	
Headwall 16	489884.787	99542.842	489884.787	99542.842	Required	
SWMH21.7	489884.252	99549.387	489884.252	99549.387	Required	
SWMH17.10	489884.670	99553.977			No Entry	

Free Flowing Outfall Details for Surface Network 2

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
1.010	SWMH17.10	5.750	4.135	0.000	1500	0

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Gloucester House 66a Church Walk Burgess Hill, BN43 6LB	10768-Sefter Road Simulation Network 2 Revision B																																																																																																																																																													
	Date 14/04/2022 File 10768_NETWORK 2_REVB.MDX XP Solutions		Designed by DT Checked by MR Network 2020.1.3																																																																																																																																																											
Storage Structures for Surface Network 2 Cellular Storage Manhole: SWCP19.2, DS/PN: 3.001 Invert Level (m) 4.300 Infiltration Coefficient Side (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Base (m/hr) 0.00000 Safety Factor 2.0 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th></tr><tr><td>0.000</td><td>102.0</td><td>102.0</td><td>0.400</td><td>102.0</td><td>118.2</td><td>0.401</td><td>0.0</td><td>118.2</td></tr></table> Tank or Pond Manhole: Headwall 12, DS/PN: 4.000 Invert Level (m) 4.300 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>80.4</td><td>0.201</td><td>110.8</td><td>0.401</td><td>144.1</td><td>0.601</td><td>180.0</td><td>0.801</td><td>218.7</td><td>1.001</td><td>260.2</td><td>1.201</td><td>304.4</td><td>1.401</td><td>351.4</td></tr><tr><td>0.101</td><td>95.3</td><td>0.301</td><td>127.1</td><td>0.501</td><td>161.7</td><td>0.701</td><td>199.0</td><td>0.901</td><td>239.1</td><td>1.101</td><td>282.0</td><td>1.301</td><td>327.6</td><td>1.450</td><td>363.3</td></tr></table> Tank or Pond Manhole: Headwall 14, DS/PN: 1.009 Invert Level (m) 4.185 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>69.0</td><td>0.201</td><td>92.2</td><td>0.401</td><td>117.8</td><td>0.601</td><td>145.5</td><td>0.801</td><td>175.6</td><td>1.001</td><td>207.9</td><td>1.165</td><td>236.0</td></tr><tr><td>0.101</td><td>80.3</td><td>0.301</td><td>104.7</td><td>0.501</td><td>131.4</td><td>0.701</td><td>160.3</td><td>0.901</td><td>191.4</td><td>1.101</td><td>224.8</td><td></td><td></td></tr></table> Tank or Pond Manhole: Headwall 16, DS/PN: 6.007 Invert Level (m) 4.190 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>166.2</td><td>0.201</td><td>199.1</td><td>0.401</td><td>234.3</td><td>0.601</td><td>271.8</td><td>0.801</td><td>311.5</td><td>1.001</td><td>353.5</td><td>1.201</td><td>397.7</td><td>1.401</td><td>444.2</td></tr><tr><td>0.101</td><td>182.4</td><td>0.301</td><td>216.4</td><td>0.501</td><td>252.8</td><td>0.701</td><td>291.3</td><td>0.901</td><td>332.2</td><td>1.101</td><td>375.3</td><td>1.301</td><td>420.7</td><td>1.410</td><td>446.4</td></tr></table>			Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	0.000	102.0	102.0	0.400	102.0	118.2	0.401	0.0	118.2	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	80.4	0.201	110.8	0.401	144.1	0.601	180.0	0.801	218.7	1.001	260.2	1.201	304.4	1.401	351.4	0.101	95.3	0.301	127.1	0.501	161.7	0.701	199.0	0.901	239.1	1.101	282.0	1.301	327.6	1.450	363.3	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	69.0	0.201	92.2	0.401	117.8	0.601	145.5	0.801	175.6	1.001	207.9	1.165	236.0	0.101	80.3	0.301	104.7	0.501	131.4	0.701	160.3	0.901	191.4	1.101	224.8			Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	166.2	0.201	199.1	0.401	234.3	0.601	271.8	0.801	311.5	1.001	353.5	1.201	397.7	1.401	444.2	0.101	182.4	0.301	216.4	0.501	252.8	0.701	291.3	0.901	332.2	1.101	375.3	1.301	420.7	1.410	446.4
Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)																																																																																																																																																						
0.000	102.0	102.0	0.400	102.0	118.2	0.401	0.0	118.2																																																																																																																																																						
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0.000	80.4	0.201	110.8	0.401	144.1	0.601	180.0	0.801	218.7	1.001	260.2	1.201	304.4	1.401	351.4																																																																																																																																															
0.101	95.3	0.301	127.1	0.501	161.7	0.701	199.0	0.901	239.1	1.101	282.0	1.301	327.6	1.450	363.3																																																																																																																																															
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																																																																																																	
0.000	69.0	0.201	92.2	0.401	117.8	0.601	145.5	0.801	175.6	1.001	207.9	1.165	236.0																																																																																																																																																	
0.101	80.3	0.301	104.7	0.501	131.4	0.701	160.3	0.901	191.4	1.101	224.8																																																																																																																																																			
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																																																																																															
0.000	166.2	0.201	199.1	0.401	234.3	0.601	271.8	0.801	311.5	1.001	353.5	1.201	397.7	1.401	444.2																																																																																																																																															
0.101	182.4	0.301	216.4	0.501	252.8	0.701	291.3	0.901	332.2	1.101	375.3	1.301	420.7	1.410	446.4																																																																																																																																															
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Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 2

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Online Controls 2 Number of Offline Controls 0 Number of Storage Structures 4 Number of Time/Area Diagrams 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model	FEH Site Location	GB 490175 99535 SZ 90175 99535	Cv (Summer)	1.000
FEH Rainfall Version 2013	Data Type		Point Cv (Winter)	1.000

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

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	10
Climate Change (%)	0

WARNING: Half Drain Time has not been calculated as the structure is too full.

										Water	Surcharged	Flooded			Half Drain	Pipe		
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)	Status	Level Exceeded	
1.000	SWMH17.1	15 Summer	10	+0%					4.804	-0.346	0.000	0.27			72.4	OK		
1.001	SWMH17.2	15 Summer	10	+0%					4.741	-0.299	0.000	0.31			66.9	OK		
1.002	SWMH17.3	15 Summer	10	+0%					4.718	-0.282	0.000	0.29			72.7	OK		
1.003	SWMH17.4	360 Winter	10	+0%					4.716	-0.234	0.000	0.05			13.0	OK		
2.000	SWMH18.1	360 Winter	10	+0%					4.716	-0.194	0.000	0.06			11.5	OK		
1.004	SWMH17.5	360 Winter	10	+0%					4.715	-0.175	0.000	0.13			23.4	OK		
3.000	SWCP19.1	360 Winter	10	+0%	10/30 Summer				4.715	0.165	0.000	0.00			0.0	SURCHARGED		
3.001	SWCP19.2	360 Winter	10	+0%					4.715	-0.165	0.000	0.00			0.7	OK		
4.000	Headwall 12	360 Winter	10	+0%					4.715	-0.185	0.000	0.00			1.0	OK		
1.005	SWCP17.6	360 Winter	10	+0%	10/15 Summer				4.715	0.235	0.000	0.20			8.9	SURCHARGED		
1.006	SWMH17.7	360 Winter	10	+0%					4.713	-0.117	0.000	0.05			8.7	OK		
5.000	HWMH20.1	15 Summer	10	+0%					4.765	-0.170	0.000	0.10			3.6	OK		
5.001	HWMH20.2	15 Summer	10	+0%					4.743	-0.112	0.000	0.50			16.6	OK		
1.007	SWCP17.8	360 Winter	10	+0%					4.713	-0.087	0.000	0.05			10.1	OK		
1.008	Headwall 13	360 Winter	10	+0%					4.713	-0.077	0.000	0.05			9.8	OK		
1.009	Headwall 14	360 Winter	10	+0%					4.712	-0.073	0.000	0.02			3.7	OK		
1.010	SWMH17.9	360 Winter	10	+0%	10/15 Summer				4.713	0.393	0.000	0.26			3.0	SURCHARGED		
6.000	SWMH21.1	15 Summer	10	+0%					4.947	-0.203	0.000	0.17			10.8	OK		
6.001	SWMH21.2	15 Summer	10	+0%					4.923	-0.162	0.000	0.41			26.3	OK		
6.002	SWMH21.3	15 Summer	10	+0%					4.863	-0.122	0.000	0.73			78.6	OK		
6.003	SWMH21.4	480 Winter	10	+0%					4.726	-0.049	0.000	0.07			10.4	OK		
6.004	SWMH21.5	480 Winter	10	+0%	10/480 Summer				4.726	0.006	0.000	0.13			12.8	SURCHARGED		
6.005	SWCP21.6	480 Winter	10	+0%	10/240 Summer				4.725	0.030	0.000	0.13			12.5	SURCHARGED		
6.006	Headwall 15	480 Winter	10	+0%	10/240 Summer				4.725	0.050	0.000	0.12			12.3	SURCHARGED		
6.007	Headwall 16	480 Winter	10	+0%	10/240 Summer				4.725	0.085	0.000	0.01			1.4	SURCHARGED		

GTA Civils Ltd										Page 1																																													
Gloucester House 66a Church Walk Burgess Hill, BN43 6LB										10768-Sefter Road Simulation Network 2 Revision B																																													
Date 14/04/2022										Designed by DT																																													
File 10768_NETWORK 2_REVB.MDX										Checked by MR																																													
XP Solutions										Network 2020.1.3																																													
Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 2 <table><tr><th>PN</th><th>US/MH Name</th><th>Storm</th><th>Return Period</th><th>Climate Change</th><th>First (X) Surcharge</th><th>First (Y) Flood</th><th>First (Z) Overflow</th><th>Overflow Act.</th><th>Water Level (m)</th><th>Surcharged Depth (m)</th><th>Flooded Volume (m³)</th><th>Flow / Cap.</th><th>Overflow (l/s)</th><th>Half Drain Time (mins)</th><th>Pipe Flow (l/s)</th><th>Status</th><th>Level Exceeded</th></tr><tr><td>6.008</td><td>SWMH21.7</td><td>360 Winter</td><td>10</td><td>+0%</td><td>10/15 Summer</td><td></td><td></td><td></td><td>4.732</td><td>0.412</td><td>0.000</td><td>0.09</td><td></td><td></td><td>1.1</td><td>SURCHARGED</td><td></td></tr></table>																				PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded	6.008	SWMH21.7	360 Winter	10	+0%	10/15 Summer				4.732	0.412	0.000	0.09			1.1	SURCHARGED	
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded																																						
6.008	SWMH21.7	360 Winter	10	+0%	10/15 Summer				4.732	0.412	0.000	0.09			1.1	SURCHARGED																																							
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Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 2																																
Simulation Criteria																																
Areal Reduction Factor 1.000			Hot Start Level (mm) 0			Foul Sewage per hectare (l/s) 0.000			MADD Factor * 10m³/ha Storage 2.000			Flow per Person per Day (l/per/day) 0.000																				
Hot Start (mins) 0			Manhole Headloss Coeff (Global) 0.500			Additional Flow - % of Total Flow 0.000			Inlet Coeffiecient 0.800																							
Number of Input Hydrographs 0 Number of Online Controls 2 Number of Offline Controls 0 Number of Storage Structures 4 Number of Time/Area Diagrams 0 Number of Real Time Controls 0																																
Synthetic Rainfall Details																																
Rainfall Model FEH			Site Location GB 490175 99535 SZ			90175 99535 Cv (Summer) 1.000																										
FEH Rainfall Version 2013			Data Type			Point Cv (Winter) 1.000																										
Margin for Flood Risk Warning (mm)									300.0 DTS Status OFF Inertia Status ON																							
Analysis Timestep 2.5 Second Increment (Extended)									DVD Status ON																							
Profile(s)									Summer and Winter																							
Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440																																
Return Period(s) (years)									30																							
Climate Change (%)									0																							
WARNING: Half Drain Time has not been calculated as the structure is too full.																																
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surchage	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded															
1.000	SWMH17.1	15 Summer	30	+0%					4.861	-0.289	0.000	0.35			92.8	OK																
1.001	SWMH17.2	360 Winter	30	+0%					4.843	-0.197	0.000	0.06			12.7	OK																
1.002	SWMH17.3	360 Winter	30	+0%					4.843	-0.157	0.000	0.06			14.1	OK																
1.003	SWMH17.4	360 Winter	30	+0%					4.843	-0.107	0.000	0.06			14.6	OK																
2.000	SWMH18.1	360 Winter	30	+0%					4.842	-0.068	0.000	0.07			14.2	OK																
1.004	SWMH17.5	360 Winter	30	+0%					4.842	-0.048	0.000	0.15			27.2	OK																
3.000	SWCP19.1	360 Winter	30	+0%	30/15 Summer				4.841	0.291	0.000	0.00			0.0	SURCHARGED																
3.001	SWCP19.2	360 Winter	30	+0%					4.841	-0.039	0																					

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water				Surcharged		Flooded		Half Drain		Pipe	Level Exceeded
									Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)	Status				
6.008	SWMH21.7	360 Winter	30	+0%	30/15 Summer				4.847	0.527	0.000	0.09					1.1	SURCHARGED		

Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 2																	
Simulation Criteria																	
Areal Reduction Factor 1.000			Hot Start Level (mm) 0			Foul Sewage per hectare (l/s) 0.000			MADD Factor * 10m³/ha Storage 2.000			Flow per Person per Day (l/per/day) 0.000					
Hot Start (mins) 0			Manhole Headloss Coeff (Global) 0.500			Additional Flow - % of Total Flow 0.000			Inlet Coeffiecient 0.800								
Number of Input Hydrographs 0			Number of Online Controls 2			Number of Offline Controls 0			Number of Storage Structures 4			Number of Time/Area Diagrams 0			Number of Real Time Controls 0		
Synthetic Rainfall Details																	
Rainfall Model FEH			Site Location GB 490175 99535 SZ 90175 99535			Cv (Summer) 1.000											
FEH Rainfall Version 2013			Data Type			Point Cv (Winter) 1.000											
Margin for Flood Risk Warning (mm)			300.0			DTS Status OFF			Inertia Status ON								
Analysis Timestep 2.5			Second Increment (Extended)			DVD Status ON											
Profile(s)			Summer and Winter														
Duration(s) (mins)			15, 30, 60, 120, 240, 360, 480, 960, 1440														
Return Period(s) (years)			100														
Climate Change (%)			40														
WARNING: Half Drain Time has not been calculated as the structure is too full.																	
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
1.000	SWMH17.1	480 Winter	100	+40%	100/15 Winter				5.310	0.160	0.000	0.07			17.7	SURCHARGED	
1.001	SWMH17.2	480 Winter	100	+40%	100/15 Summer				5.311	0.271	0.000	0.09			19.0	SURCHARGED	
1.002	SWMH17.3	480 Winter	100	+40%	100/15 Summer				5.310	0.310	0.000	0.09			21.5	SURCHARGED	
1.003	SWMH17.4	480 Winter	100	+40%	100/15 Summer				5.310	0.360	0.000	0.09			23.4	SURCHARGED	
2.000	SWMH18.1	480 Winter	100	+40%	100/15 Summer				5.310	0.400	0.000	0.10			19.8	SURCHARGED	
1.004	SWMH17.5	480 Winter	100	+40%	100/15 Summer				5.310	0.420	0.000	0.23					

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water	Surcharged	Flooded	Half Drain		Pipe	Level Exceeded	
									Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)		Flow (l/s)
6.008	SWMH21.7	960 Winter	100	+40%	100/15 Summer				5.239	0.919	0.000	0.11			1.3	SURCHARGED