

Robert Clark Associates		Page 1
Willow Cottage Herne Lane Rustington BN16 3EE	The Old Brewery Duke Street Littlehampton	
Date 7.3.18 File SA2.SRCX	Designed by RTFC Checked by	
Micro Drainage	Source Control 2016.1	

Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 454 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	3.132	0.702	0.1	6.0	0 K
30 min Summer	3.363	0.933	0.2	8.0	0 K
60 min Summer	3.602	1.172	0.2	10.0	0 K
120 min Summer	3.822	1.392	0.3	11.9	0 K
180 min Summer	3.920	1.490	0.3	12.7	0 K
240 min Summer	3.964	1.534	0.3	13.1	0 K
360 min Summer	4.000	1.570	0.3	13.4	0 K
480 min Summer	4.021	1.591	0.3	13.6	0 K
600 min Summer	4.033	1.603	0.3	13.7	0 K
720 min Summer	4.036	1.606	0.3	13.7	0 K
960 min Summer	4.027	1.597	0.3	13.6	0 K
1440 min Summer	3.979	1.549	0.3	13.2	0 K
2160 min Summer	3.883	1.453	0.3	12.4	0 K
2880 min Summer	3.788	1.358	0.3	11.6	0 K
4320 min Summer	3.626	1.196	0.3	10.2	0 K
5760 min Summer	3.500	1.070	0.2	9.1	0 K
7200 min Summer	3.400	0.970	0.2	8.3	0 K
8640 min Summer	3.320	0.890	0.2	7.6	0 K
10080 min Summer	3.254	0.824	0.2	7.0	0 K
15 min Winter	3.216	0.786	0.2	6.7	0 K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	124.633	0.0	19
30 min Summer	83.789	0.0	33
60 min Summer	53.779	0.0	62
120 min Summer	33.337	0.0	122
180 min Summer	24.832	0.0	182
240 min Summer	20.006	0.0	240
360 min Summer	14.706	0.0	306
480 min Summer	11.818	0.0	364
600 min Summer	9.966	0.0	428
720 min Summer	8.665	0.0	496
960 min Summer	6.943	0.0	634
1440 min Summer	5.071	0.0	908
2160 min Summer	3.696	0.0	1300
2880 min Summer	2.949	0.0	1700
4320 min Summer	2.142	0.0	2464
5760 min Summer	1.705	0.0	3224
7200 min Summer	1.427	0.0	3960
8640 min Summer	1.235	0.0	4672
10080 min Summer	1.093	0.0	5448
15 min Winter	124.633	0.0	19

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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	3.476	1.046	0.2	8.9	0 K
60 min Winter	3.745	1.315	0.3	11.2	0 K
120 min Winter	3.993	1.563	0.3	13.4	0 K
180 min Winter	4.106	1.676	0.4	14.3	0 K
240 min Winter	4.160	1.730	0.4	14.8	0 K
360 min Winter	4.197	1.767	0.4	15.1	0 K
480 min Winter	4.212	1.782	0.4	15.2	0 K
600 min Winter	4.217	1.787	0.4	15.3	0 K
720 min Winter	4.211	1.781	0.4	15.2	0 K
960 min Winter	4.179	1.749	0.4	14.9	0 K
1440 min Winter	4.085	1.655	0.3	14.1	0 K
2160 min Winter	3.934	1.504	0.3	12.8	0 K
2880 min Winter	3.799	1.369	0.3	11.7	0 K
4320 min Winter	3.585	1.155	0.2	9.9	0 K
5760 min Winter	3.429	0.999	0.2	8.5	0 K
7200 min Winter	3.310	0.880	0.2	7.5	0 K
8640 min Winter	3.219	0.789	0.2	6.7	0 K
10080 min Winter	3.146	0.716	0.2	6.1	0 K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
30 min Winter	83.789	0.0	33
60 min Winter	53.779	0.0	62
120 min Winter	33.337	0.0	120
180 min Winter	24.832	0.0	176
240 min Winter	20.006	0.0	232
360 min Winter	14.706	0.0	334
480 min Winter	11.818	0.0	376
600 min Winter	9.966	0.0	452
720 min Winter	8.665	0.0	528
960 min Winter	6.943	0.0	682
1440 min Winter	5.071	0.0	968
2160 min Winter	3.696	0.0	1388
2880 min Winter	2.949	0.0	1788
4320 min Winter	2.142	0.0	2592
5760 min Winter	1.705	0.0	3344
7200 min Winter	1.427	0.0	4104
8640 min Winter	1.235	0.0	4840
10080 min Winter	1.093	0.0	5552

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<u>Model Details</u> Storage is Online Cover Level (m) 4.930 <u>Lined Soakaway Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.04918</td> </tr> <tr> <td>Safety Factor</td> <td>1.5</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> </tr> <tr> <td>Invert Level (m)</td> <td>2.430</td> </tr> <tr> <td>Ring Diameter (m)</td> <td>1.80</td> </tr> <tr> <td>Pit Multiplier</td> <td>1.6</td> </tr> <tr> <td>Number Required</td> <td>2</td> </tr> <tr> <td>Cap Volume Depth (m)</td> <td>0.000</td> </tr> <tr> <td>Cap Infiltration Depth (m)</td> <td>1.900</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Infiltration Coefficient Side (m/hr)	0.04918	Safety Factor	1.5	Porosity	0.30	Invert Level (m)	2.430	Ring Diameter (m)	1.80	Pit Multiplier	1.6	Number Required	2	Cap Volume Depth (m)	0.000	Cap Infiltration Depth (m)	1.900
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