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Spring Lodge 172 Chester Road Helsby Cheshire WA6 0AR																																																																																																																																																																																																																							
Date 21/12/2021 12:31 File Soakaway TP101 large se...		Designed by mrayner Checked by																																																																																																																																																																																																																					
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<u>Summary of Results for 30 year Return Period</u> Half Drain Time : 119 minutes. <table><thead><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (m³)</th><th>Status</th></tr></thead><tbody><tr><td>15 min Summer</td><td>98.962</td><td>0.212</td><td>0.1</td><td>1.0</td><td>O K</td></tr><tr><td>30 min Summer</td><td>99.019</td><td>0.269</td><td>0.1</td><td>1.3</td><td>O K</td></tr><tr><td>60 min Summer</td><td>99.062</td><td>0.312</td><td>0.1</td><td>1.5</td><td>O K</td></tr><tr><td>120 min Summer</td><td>99.078</td><td>0.328</td><td>0.1</td><td>1.6</td><td>O K</td></tr><tr><td>180 min Summer</td><td>99.074</td><td>0.324</td><td>0.1</td><td>1.5</td><td>O K</td></tr><tr><td>240 min Summer</td><td>99.065</td><td>0.315</td><td>0.1</td><td>1.5</td><td>O K</td></tr><tr><td>360 min Summer</td><td>99.041</td><td>0.291</td><td>0.1</td><td>1.4</td><td>O K</td></tr><tr><td>480 min 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Summer	99.019	0.269	0.1	1.3	O K	60 min Summer	99.062	0.312	0.1	1.5	O K	120 min Summer	99.078	0.328	0.1	1.6	O K	180 min Summer	99.074	0.324	0.1	1.5	O K	240 min Summer	99.065	0.315	0.1	1.5	O K	360 min Summer	99.041	0.291	0.1	1.4	O K	480 min Summer	99.017	0.267	0.1	1.3	O K	600 min Summer	98.992	0.242	0.1	1.2	O K	720 min Summer	98.969	0.219	0.1	1.0	O K	960 min Summer	98.925	0.175	0.1	0.8	O K	1440 min Summer	98.858	0.108	0.1	0.5	O K	2160 min Summer	98.804	0.054	0.1	0.3	O K	2880 min Summer	98.793	0.043	0.1	0.2	O K	4320 min Summer	98.782	0.032	0.1	0.2	O K	5760 min Summer	98.776	0.026	0.1	0.1	O K	7200 min Summer	98.772	0.022	0.1	0.1	O K	8640 min Summer	98.769	0.019	0.0	0.1	O K	10080 min Summer	98.767	0.017	0.0	0.1	O K	15 min Winter	98.990	0.240	0.1	1.1	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	65.808	0.0	18	30 min Summer	43.570	0.0	32	60 min Summer	27.653	0.0	60	120 min Summer	17.064	0.0	104	180 min Summer	12.735	0.0	136	240 min Summer	10.303	0.0	170	360 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Date 21/12/2021 12:31 File Soakaway TP101 large se...		Designed by mrayner Checked by			
Micro Drainage			Source Control 2017.1.2		
Summary of Results for 30 year Return Period					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	99.056	0.306	0.1	1.5	O K
60 min Winter	99.109	0.359	0.1	1.7	O K
120 min Winter	99.133	0.383	0.1	1.8	O K
180 min Winter	99.126	0.376	0.1	1.8	O K
240 min Winter	99.113	0.363	0.1	1.7	O K
360 min Winter	99.076	0.326	0.1	1.5	O K
480 min Winter	99.037	0.287	0.1	1.4	O K
600 min Winter	98.998	0.248	0.1	1.2	O K
720 min Winter	98.961	0.211	0.1	1.0	O K
960 min Winter	98.895	0.145	0.1	0.7	O K
1440 min Winter	98.809	0.059	0.1	0.3	O K
2160 min Winter	98.789	0.039	0.1	0.2	O K
2880 min Winter	98.782	0.032	0.1	0.2	O K
4320 min Winter	98.773	0.023	0.1	0.1	O K
5760 min Winter	98.769	0.019	0.0	0.1	O K
7200 min Winter	98.766	0.016	0.0	0.1	O K
8640 min Winter	98.764	0.014	0.0	0.1	O K
10080 min Winter	98.762	0.012	0.0	0.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	43.570	0.0	32		
60 min Winter	27.653	0.0	60		
120 min Winter	17.064	0.0	116		
180 min Winter	12.735	0.0	146		
240 min Winter	10.303	0.0	184		
360 min Winter	7.597	0.0	260		
480 min Winter	6.121	0.0	332		
600 min Winter	5.173	0.0	400		
720 min Winter	4.507	0.0	468		
960 min Winter	3.624	0.0	588		
1440 min Winter	2.661	0.0	780		
2160 min Winter	1.952	0.0	1108		
2880 min Winter	1.565	0.0	1468		
4320 min Winter	1.145	0.0	2204		
5760 min Winter	0.917	0.0	2872		
7200 min Winter	0.772	0.0	3552		
8640 min Winter	0.670	0.0	4368		
10080 min Winter	0.594	0.0	4992		
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Micro Drainage Source Control 2017.1.2		

Model Details

Storage is Online Cover Level (m) 100.000

Cellular Storage Structure

Invert Level (m) 98.750 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.18792 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.18792

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	5.0	5.0	0.401	0.0	5.0
0.400	5.0	5.0			

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