

Robert Clark Associates				Page 1																																																																																																																																																																																																																			
Willow Cottage Herne Lane Rustington BN16 3EE		Walberton Farm SA1 FEH 22 rainfall data																																																																																																																																																																																																																					
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<u>Summary of Results for 30 year Return Period (+45%)</u> Half Drain Time : 74 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>12.305</td><td>0.680</td><td>0.9</td><td>5.8</td><td>O K</td></tr><tr><td>30 min Summer</td><td>12.419</td><td>0.794</td><td>1.1</td><td>6.8</td><td>O K</td></tr><tr><td>60 min Summer</td><td>12.503</td><td>0.878</td><td>1.2</td><td>7.5</td><td>O K</td></tr><tr><td>120 min Summer</td><td>12.571</td><td>0.946</td><td>1.3</td><td>8.1</td><td>O K</td></tr><tr><td>180 min Summer</td><td>12.589</td><td>0.964</td><td>1.3</td><td>8.2</td><td>O K</td></tr><tr><td>240 min Summer</td><td>12.585</td><td>0.960</td><td>1.3</td><td>8.2</td><td>O K</td></tr><tr><td>360 min Summer</td><td>12.555</td><td>0.930</td><td>1.3</td><td>7.9</td><td>O K</td></tr><tr><td>480 min Summer</td><td>12.515</td><td>0.890</td><td>1.2</td><td>7.6</td><td>O K</td></tr><tr><td>600 min Summer</td><td>12.474</td><td>0.849</td><td>1.2</td><td>7.3</td><td>O K</td></tr><tr><td>720 min Summer</td><td>12.436</td><td>0.811</td><td>1.1</td><td>6.9</td><td>O K</td></tr><tr><td>960 min Summer</td><td>12.340</td><td>0.715</td><td>1.0</td><td>6.1</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>12.209</td><td>0.584</td><td>0.8</td><td>5.0</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>12.087</td><td>0.462</td><td>0.6</td><td>3.9</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>12.011</td><td>0.386</td><td>0.5</td><td>3.3</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>11.934</td><td>0.309</td><td>0.4</td><td>2.6</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>11.887</td><td>0.262</td><td>0.4</td><td>2.2</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>11.854</td><td>0.229</td><td>0.3</td><td>2.0</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>11.829</td><td>0.204</td><td>0.3</td><td>1.7</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>11.810</td><td>0.185</td><td>0.3</td><td>1.6</td><td>O K</td></tr><tr><td>15 min Winter</td><td>12.306</td><td>0.681</td><td>0.9</td><td>5.8</td><td>O K</td></tr></tbody></table> <table><thead><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr></thead><tbody><tr><td>15 min Summer</td><td>109.937</td><td>0.0</td><td>17</td></tr><tr><td>30 min Summer</td><td>68.477</td><td>0.0</td><td>31</td></tr><tr><td>60 min Summer</td><td>42.652</td><td>0.0</td><td>50</td></tr><tr><td>120 min Summer</td><td>26.567</td><td>0.0</td><td>84</td></tr><tr><td>180 min Summer</td><td>20.141</td><td>0.0</td><td>118</td></tr><tr><td>240 min Summer</td><td>16.548</td><td>0.0</td><td>152</td></tr><tr><td>360 min Summer</td><td>12.545</td><td>0.0</td><td>218</td></tr><tr><td>480 min Summer</td><td>10.307</td><td>0.0</td><td>282</td></tr><tr><td>600 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Date 8.8.26 File SA1 calcs 30yr rain.SRCX		Designed by RTFC Checked by			
Micro Drainage		Source Control 2016.1			
Summary of Results for 30 year Return Period (+45%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	12.423	0.798	1.1	6.8	O K
60 min Winter	12.505	0.880	1.2	7.5	O K
120 min Winter	12.558	0.933	1.3	8.0	O K
180 min Winter	12.556	0.931	1.3	7.9	O K
240 min Winter	12.535	0.910	1.3	7.8	O K
360 min Winter	12.477	0.852	1.2	7.3	O K
480 min Winter	12.418	0.793	1.1	6.8	O K
600 min Winter	12.365	0.740	1.0	6.3	O K
720 min Winter	12.317	0.692	1.0	5.9	O K
960 min Winter	12.214	0.589	0.8	5.0	O K
1440 min Winter	12.081	0.456	0.6	3.9	O K
2160 min Winter	11.969	0.344	0.5	2.9	O K
2880 min Winter	11.903	0.278	0.4	2.4	O K
4320 min Winter	11.839	0.214	0.3	1.8	O K
5760 min Winter	11.802	0.177	0.2	1.5	O K
7200 min Winter	11.777	0.152	0.2	1.3	O K
8640 min Winter	11.760	0.135	0.2	1.2	O K
10080 min Winter	11.746	0.121	0.2	1.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	68.477	0.0	31		
60 min Winter	42.652	0.0	54		
120 min Winter	26.567	0.0	88		
180 min Winter	20.141	0.0	126		
240 min Winter	16.548	0.0	162		
360 min Winter	12.545	0.0	230		
480 min Winter	10.307	0.0	298		
600 min Winter	8.850	0.0	362		
720 min Winter	7.814	0.0	428		
960 min Winter	6.163	0.0	552		
1440 min Winter	4.411	0.0	796		
2160 min Winter	3.157	0.0	1168		
2880 min Winter	2.490	0.0	1528		
4320 min Winter	1.880	0.0	2248		
5760 min Winter	1.540	0.0	2984		
7200 min Winter	1.319	0.0	3680		
8640 min Winter	1.163	0.0	4408		
10080 min Winter	1.045	0.0	5144		
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<u>Model Details</u> Storage is Online Cover Level (m) 13.500 <u>Lined Soakaway Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Ring Diameter (m)</td> <td>1.80</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.32479</td> <td>Pit Multiplier</td> <td>1.6</td> </tr> <tr> <td>Safety Factor</td> <td>1.5</td> <td>Number Required</td> <td>2</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Cap Volume Depth (m)</td> <td>0.000</td> </tr> <tr> <td>Invert Level (m)</td> <td>11.625</td> <td>Cap Infiltration Depth (m)</td> <td>0.000</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Ring Diameter (m)	1.80	Infiltration Coefficient Side (m/hr)	0.32479	Pit Multiplier	1.6	Safety Factor	1.5	Number Required	2	Porosity	0.30	Cap Volume Depth (m)	0.000	Invert Level (m)	11.625	Cap Infiltration Depth (m)	0.000
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