

Robert Clark Associates				Page 1																																																																																																																																																																																																																			
Willow Cottage Herne Lane Rustington BN16 3EE		Walberton Farm SA1																																																																																																																																																																																																																					
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<u>Summary of Results for 1 year Return Period (+45%)</u> Half Drain Time : 72 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>11.850</td><td>0.225</td><td>0.3</td><td>1.9</td><td>O K</td></tr><tr><td>30 min Summer</td><td>11.906</td><td>0.281</td><td>0.4</td><td>2.4</td><td>O K</td></tr><tr><td>60 min Summer</td><td>11.957</td><td>0.332</td><td>0.5</td><td>2.8</td><td>O K</td></tr><tr><td>120 min Summer</td><td>12.007</td><td>0.382</td><td>0.5</td><td>3.3</td><td>O K</td></tr><tr><td>180 min Summer</td><td>12.030</td><td>0.405</td><td>0.6</td><td>3.5</td><td>O K</td></tr><tr><td>240 min Summer</td><td>12.040</td><td>0.415</td><td>0.6</td><td>3.5</td><td>O K</td></tr><tr><td>360 min Summer</td><td>12.042</td><td>0.417</td><td>0.6</td><td>3.6</td><td>O K</td></tr><tr><td>480 min Summer</td><td>12.035</td><td>0.410</td><td>0.6</td><td>3.5</td><td>O K</td></tr><tr><td>600 min Summer</td><td>12.025</td><td>0.400</td><td>0.6</td><td>3.4</td><td>O K</td></tr><tr><td>720 min Summer</td><td>12.014</td><td>0.389</td><td>0.5</td><td>3.3</td><td>O K</td></tr><tr><td>960 min Summer</td><td>11.975</td><td>0.350</td><td>0.5</td><td>3.0</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>11.919</td><td>0.294</td><td>0.4</td><td>2.5</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>11.864</td><td>0.239</td><td>0.3</td><td>2.0</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>11.828</td><td>0.203</td><td>0.3</td><td>1.7</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>11.794</td><td>0.169</td><td>0.2</td><td>1.4</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>11.772</td><td>0.147</td><td>0.2</td><td>1.3</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>11.757</td><td>0.132</td><td>0.2</td><td>1.1</td><td>O K</td></tr><tr><td>8640 min 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Summer	11.906	0.281	0.4	2.4	O K	60 min Summer	11.957	0.332	0.5	2.8	O K	120 min Summer	12.007	0.382	0.5	3.3	O K	180 min Summer	12.030	0.405	0.6	3.5	O K	240 min Summer	12.040	0.415	0.6	3.5	O K	360 min Summer	12.042	0.417	0.6	3.6	O K	480 min Summer	12.035	0.410	0.6	3.5	O K	600 min Summer	12.025	0.400	0.6	3.4	O K	720 min Summer	12.014	0.389	0.5	3.3	O K	960 min Summer	11.975	0.350	0.5	3.0	O K	1440 min Summer	11.919	0.294	0.4	2.5	O K	2160 min Summer	11.864	0.239	0.3	2.0	O K	2880 min Summer	11.828	0.203	0.3	1.7	O K	4320 min Summer	11.794	0.169	0.2	1.4	O K	5760 min Summer	11.772	0.147	0.2	1.3	O K	7200 min Summer	11.757	0.132	0.2	1.1	O K	8640 min Summer	11.745	0.120	0.2	1.0	O K	10080 min Summer	11.735	0.110	0.2	0.9	O K	15 min Winter	11.850	0.225	0.3	1.9	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	33.459	0.0	17	30 min Summer	22.274	0.0	31	60 min Summer	14.829	0.0	50	120 min Summer	9.872	0.0	84	180 min Summer	7.781	0.0	118	240 min Summer	6.572	0.0	152	360 min 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Willow Cottage Herne Lane Rustington BN16 3EE		Walberton Farm SA1			
Date 9.6.26 File SA1 calcs 1yr rain.SRCX		Designed by RTFC Checked by			
Micro Drainage		Source Control 2016.1			
Summary of Results for 1 year Return Period (+45%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	11.907	0.282	0.4	2.4	O K
60 min Winter	11.958	0.333	0.5	2.8	O K
120 min Winter	12.002	0.377	0.5	3.2	O K
180 min Winter	12.016	0.391	0.5	3.3	O K
240 min Winter	12.018	0.393	0.5	3.4	O K
360 min Winter	12.008	0.383	0.5	3.3	O K
480 min Winter	11.991	0.366	0.5	3.1	O K
600 min Winter	11.974	0.349	0.5	3.0	O K
720 min Winter	11.957	0.332	0.5	2.8	O K
960 min Winter	11.913	0.288	0.4	2.5	O K
1440 min Winter	11.854	0.229	0.3	2.0	O K
2160 min Winter	11.803	0.178	0.2	1.5	O K
2880 min Winter	11.771	0.146	0.2	1.3	O K
4320 min Winter	11.742	0.117	0.2	1.0	O K
5760 min Winter	11.725	0.100	0.1	0.9	O K
7200 min Winter	11.713	0.088	0.1	0.7	O K
8640 min Winter	11.704	0.079	0.1	0.7	O K
10080 min Winter	11.697	0.072	0.1	0.6	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	22.274	0.0	31		
60 min Winter	14.829	0.0	54		
120 min Winter	9.872	0.0	88		
180 min Winter	7.781	0.0	126		
240 min Winter	6.572	0.0	162		
360 min Winter	5.180	0.0	230		
480 min Winter	4.375	0.0	298		
600 min Winter	3.838	0.0	362		
720 min Winter	3.448	0.0	426		
960 min Winter	2.774	0.0	552		
1440 min Winter	2.041	0.0	806		
2160 min Winter	1.501	0.0	1168		
2880 min Winter	1.207	0.0	1528		
4320 min Winter	0.947	0.0	2248		
5760 min Winter	0.798	0.0	2952		
7200 min Winter	0.698	0.0	3680		
8640 min Winter	0.626	0.0	4408		
10080 min Winter	0.571	0.0	5136		
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Date 9.6.26 File SA1 calcs 1yr rain.SRCX	Designed by RTFC Checked by	
Micro Drainage		Source Control 2016.1

Rainfall Details

Rainfall Model	FEH
Return Period (years)	1
Site Location	493650 105600 SU 93650 05600
C (1km)	-0.026
D1 (1km)	0.413
D2 (1km)	0.243
D3 (1km)	0.402
E (1km)	0.310
F (1km)	2.325
Summer Storms	Yes
Winter Storms	Yes
Cv (Summer)	1.000
Cv (Winter)	1.000
Shortest Storm (mins)	15
Longest Storm (mins)	10080
Climate Change %	+45

Time Area Diagram

Total Area (ha) 0.025

Time (mins)	Area
From: To:	(ha)
0	4 0.025

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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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