

Robert Clark Associates			Page 1																																																																																																																																																																																																																					
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<u>Summary of Results for 1 year Return Period (+45%)</u> Half Drain Time : 77 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>12.209</td><td>0.234</td><td>0.4</td><td>2.5</td><td>O K</td></tr><tr><td>30 min Summer</td><td>12.269</td><td>0.294</td><td>0.5</td><td>3.1</td><td>O K</td></tr><tr><td>60 min Summer</td><td>12.325</td><td>0.350</td><td>0.5</td><td>3.7</td><td>O K</td></tr><tr><td>120 min Summer</td><td>12.380</td><td>0.405</td><td>0.6</td><td>4.3</td><td>O K</td></tr><tr><td>180 min Summer</td><td>12.407</td><td>0.432</td><td>0.7</td><td>4.6</td><td>O K</td></tr><tr><td>240 min Summer</td><td>12.420</td><td>0.445</td><td>0.7</td><td>4.7</td><td>O K</td></tr><tr><td>360 min Summer</td><td>12.428</td><td>0.453</td><td>0.7</td><td>4.8</td><td>O K</td></tr><tr><td>480 min Summer</td><td>12.423</td><td>0.448</td><td>0.7</td><td>4.7</td><td>O K</td></tr><tr><td>600 min Summer</td><td>12.415</td><td>0.440</td><td>0.7</td><td>4.7</td><td>O K</td></tr><tr><td>720 min Summer</td><td>12.404</td><td>0.429</td><td>0.7</td><td>4.5</td><td>O K</td></tr><tr><td>960 min Summer</td><td>12.363</td><td>0.388</td><td>0.6</td><td>4.1</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>12.303</td><td>0.328</td><td>0.5</td><td>3.5</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>12.245</td><td>0.270</td><td>0.4</td><td>2.9</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>12.205</td><td>0.230</td><td>0.4</td><td>2.4</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>12.168</td><td>0.193</td><td>0.3</td><td>2.0</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>12.143</td><td>0.168</td><td>0.3</td><td>1.8</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>12.126</td><td>0.151</td><td>0.2</td><td>1.6</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>12.112</td><td>0.137</td><td>0.2</td><td>1.5</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>12.101</td><td>0.126</td><td>0.2</td><td>1.3</td><td>O K</td></tr><tr><td>15 min Winter</td><td>12.210</td><td>0.235</td><td>0.4</td><td>2.5</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>33.459</td><td>0.0</td><td>18</td></tr><tr><td>30 min Summer</td><td>22.274</td><td>0.0</td><td>31</td></tr><tr><td>60 min Summer</td><td>14.829</td><td>0.0</td><td>52</td></tr><tr><td>120 min Summer</td><td>9.872</td><td>0.0</td><td>84</td></tr><tr><td>180 min Summer</td><td>7.781</td><td>0.0</td><td>118</td></tr><tr><td>240 min Summer</td><td>6.572</td><td>0.0</td><td>154</td></tr><tr><td>360 min Summer</td><td>5.180</td><td>0.0</td><td>220</td></tr><tr><td>480 min Summer</td><td>4.375</td><td>0.0</td><td>286</td></tr><tr><td>600 min Summer</td><td>3.838</td><td>0.0</td><td>350</td></tr><tr><td>720 min Summer</td><td>3.448</td><td>0.0</td><td>414</td></tr><tr><td>960 min Summer</td><td>2.774</td><td>0.0</td><td>540</td></tr><tr><td>1440 min Summer</td><td>2.041</td><td>0.0</td><td>782</td></tr><tr><td>2160 min Summer</td><td>1.501</td><td>0.0</td><td>1148</td></tr><tr><td>2880 min Summer</td><td>1.207</td><td>0.0</td><td>1504</td></tr><tr><td>4320 min Summer</td><td>0.947</td><td>0.0</td><td>2248</td></tr><tr><td>5760 min Summer</td><td>0.798</td><td>0.0</td><td>2944</td></tr><tr><td>7200 min Summer</td><td>0.698</td><td>0.0</td><td>3680</td></tr><tr><td>8640 min Summer</td><td>0.626</td><td>0.0</td><td>4408</td></tr><tr><td>10080 min Summer</td><td>0.571</td><td>0.0</td><td>5144</td></tr><tr><td>15 min Winter</td><td>33.459</td><td>0.0</td><td>17</td></tr></tbody></table>							Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	12.209	0.234	0.4	2.5	O K	30 min Summer	12.269	0.294	0.5	3.1	O K	60 min Summer	12.325	0.350	0.5	3.7	O K	120 min Summer	12.380	0.405	0.6	4.3	O K	180 min Summer	12.407	0.432	0.7	4.6	O K	240 min Summer	12.420	0.445	0.7	4.7	O K	360 min Summer	12.428	0.453	0.7	4.8	O K	480 min Summer	12.423	0.448	0.7	4.7	O K	600 min Summer	12.415	0.440	0.7	4.7	O K	720 min Summer	12.404	0.429	0.7	4.5	O K	960 min Summer	12.363	0.388	0.6	4.1	O K	1440 min Summer	12.303	0.328	0.5	3.5	O K	2160 min Summer	12.245	0.270	0.4	2.9	O K	2880 min Summer	12.205	0.230	0.4	2.4	O K	4320 min Summer	12.168	0.193	0.3	2.0	O K	5760 min Summer	12.143	0.168	0.3	1.8	O K	7200 min Summer	12.126	0.151	0.2	1.6	O K	8640 min Summer	12.112	0.137	0.2	1.5	O K	10080 min Summer	12.101	0.126	0.2	1.3	O K	15 min Winter	12.210	0.235	0.4	2.5	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	33.459	0.0	18	30 min Summer	22.274	0.0	31	60 min Summer	14.829	0.0	52	120 min Summer	9.872	0.0	84	180 min Summer	7.781	0.0	118	240 min Summer	6.572	0.0	154	360 min Summer	5.180	0.0	220	480 min Summer	4.375	0.0	286	600 min Summer	3.838	0.0	350	720 min Summer	3.448	0.0	414	960 min Summer	2.774	0.0	540	1440 min Summer	2.041	0.0	782	2160 min Summer	1.501	0.0	1148	2880 min Summer	1.207	0.0	1504	4320 min Summer	0.947	0.0	2248	5760 min Summer	0.798	0.0	2944	7200 min Summer	0.698	0.0	3680	8640 min Summer	0.626	0.0	4408	10080 min Summer	0.571	0.0	5144	15 min Winter	33.459	0.0	17
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Willow Cottage Herne Lane Rustington BN16 3EE		WAlberton Farm SA2			
Date 9.6.26 File SA2 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	12.271	0.296	0.5	3.1	O K
60 min Winter	12.327	0.352	0.5	3.7	O K
120 min Winter	12.377	0.402	0.6	4.2	O K
180 min Winter	12.395	0.420	0.6	4.4	O K
240 min Winter	12.400	0.425	0.7	4.5	O K
360 min Winter	12.394	0.419	0.6	4.4	O K
480 min Winter	12.379	0.404	0.6	4.3	O K
600 min Winter	12.363	0.388	0.6	4.1	O K
720 min Winter	12.346	0.371	0.6	3.9	O K
960 min Winter	12.299	0.324	0.5	3.4	O K
1440 min Winter	12.236	0.261	0.4	2.8	O K
2160 min Winter	12.178	0.203	0.3	2.1	O K
2880 min Winter	12.143	0.168	0.3	1.8	O K
4320 min Winter	12.110	0.135	0.2	1.4	O K
5760 min Winter	12.090	0.115	0.2	1.2	O K
7200 min Winter	12.076	0.101	0.2	1.1	O K
8640 min Winter	12.066	0.091	0.1	1.0	O K
10080 min Winter	12.058	0.083	0.1	0.9	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	56		
120 min Winter	9.872	0.0	90		
180 min Winter	7.781	0.0	128		
240 min Winter	6.572	0.0	164		
360 min Winter	5.180	0.0	234		
480 min Winter	4.375	0.0	302		
600 min Winter	3.838	0.0	368		
720 min Winter	3.448	0.0	432		
960 min Winter	2.774	0.0	560		
1440 min Winter	2.041	0.0	808		
2160 min Winter	1.501	0.0	1172		
2880 min Winter	1.207	0.0	1532		
4320 min Winter	0.947	0.0	2248		
5760 min Winter	0.798	0.0	2992		
7200 min Winter	0.698	0.0	3680		
8640 min Winter	0.626	0.0	4408		
10080 min Winter	0.571	0.0	5144		
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<u>Rainfall Details</u> <table> <tr> <td>Rainfall Model</td> <td>FEH</td> </tr> <tr> <td>Return Period (years)</td> <td>1</td> </tr> <tr> <td>Site Location</td> <td>493650 105600 SU 93650 05600</td> </tr> <tr> <td>C (1km)</td> <td>-0.026</td> </tr> <tr> <td>D1 (1km)</td> <td>0.413</td> </tr> <tr> <td>D2 (1km)</td> <td>0.243</td> </tr> <tr> <td>D3 (1km)</td> <td>0.402</td> </tr> <tr> <td>E (1km)</td> <td>0.310</td> </tr> <tr> <td>F (1km)</td> <td>2.325</td> </tr> <tr> <td>Summer Storms</td> <td>Yes</td> </tr> <tr> <td>Winter Storms</td> <td>Yes</td> </tr> <tr> <td>Cv (Summer)</td> <td>1.000</td> </tr> <tr> <td>Cv (Winter)</td> <td>1.000</td> </tr> <tr> <td>Shortest Storm (mins)</td> <td>15</td> </tr> <tr> <td>Longest Storm (mins)</td> <td>10080</td> </tr> <tr> <td>Climate Change %</td> <td>+45</td> </tr> </table> <u>Time Area Diagram</u> Total Area (ha) 0.032 <table> <tr> <td>Time (mins)</td> <td>Area</td> </tr> <tr> <td>From: To:</td> <td>(ha)</td> </tr> <tr> <td>0</td> <td>4 0.032</td> </tr> </table>			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 (mins)	Area	From: To:	(ha)	0	4 0.032
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Micro Drainage Source Control 2016.1		

Model Details

Storage is Online Cover Level (m) 13.600

Lined Soakaway Structure

Infiltration Coefficient Base (m/hr) 0.00000	Ring Diameter (m) 1.80
Infiltration Coefficient Side (m/hr) 0.30262	Pit Multiplier 1.9
Safety Factor 1.5	Number Required 2
Porosity 0.30	Cap Volume Depth (m) 0.000
Invert Level (m) 11.975	Cap Infiltration Depth (m) 0.000

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