

Robert Clark Associates			Page 1		
Willow Cottage Herne Lane Rustington BN16 3EE		Walberton Farm SA1 FEH 22 rainfall data			
Date 8.8.26 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%)					
Half Drain Time : 72 minutes.					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	11.835	0.210	0.3	1.8	O K
30 min Summer	11.886	0.261	0.4	2.2	O K
60 min Summer	11.932	0.307	0.4	2.6	O K
120 min Summer	11.976	0.351	0.5	3.0	O K
180 min Summer	11.995	0.370	0.5	3.2	O K
240 min Summer	12.004	0.379	0.5	3.2	O K
360 min Summer	12.005	0.380	0.5	3.2	O K
480 min Summer	11.998	0.373	0.5	3.2	O K
600 min Summer	11.988	0.363	0.5	3.1	O K
720 min Summer	11.977	0.352	0.5	3.0	O K
960 min Summer	11.944	0.319	0.4	2.7	O K
1440 min Summer	11.895	0.270	0.4	2.3	O K
2160 min Summer	11.846	0.221	0.3	1.9	O K
2880 min Summer	11.814	0.189	0.3	1.6	O K
4320 min Summer	11.782	0.157	0.2	1.3	O K
5760 min Summer	11.762	0.137	0.2	1.2	O K
7200 min Summer	11.747	0.122	0.2	1.0	O K
8640 min Summer	11.735	0.110	0.2	0.9	O K
10080 min Summer	11.726	0.101	0.1	0.9	O K
15 min Winter	11.836	0.211	0.3	1.8	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
15 min Summer	33.968	0.0	17		
30 min Summer	22.488	0.0	31		
60 min Summer	14.888	0.0	50		
120 min Summer	9.857	0.0	84		
180 min Summer	7.744	0.0	118		
240 min Summer	6.526	0.0	152		
360 min Summer	5.127	0.0	218		
480 min Summer	4.320	0.0	284		
600 min Summer	3.783	0.0	346		
720 min Summer	3.394	0.0	410		
960 min Summer	2.746	0.0	532		
1440 min Summer	2.036	0.0	780		
2160 min Summer	1.510	0.0	1144		
2880 min Summer	1.222	0.0	1500		
4320 min Summer	0.956	0.0	2244		
5760 min Summer	0.803	0.0	2944		
7200 min Summer	0.702	0.0	3672		
8640 min Summer	0.629	0.0	4408		
10080 min Summer	0.573	0.0	5144		
15 min Winter	33.968	0.0	17		
©1982-2016 XP Solutions					

Robert Clark Associates				Page 2	
Willow Cottage Herne Lane Rustington BN16 3EE		Walberton Farm SA1 FEH 22 rainfall data			
Date 8.8.26 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	11.887	0.262	0.4	2.2	O K
60 min Winter	11.932	0.307	0.4	2.6	O K
120 min Winter	11.971	0.346	0.5	3.0	O K
180 min Winter	11.983	0.358	0.5	3.1	O K
240 min Winter	11.984	0.359	0.5	3.1	O K
360 min Winter	11.973	0.348	0.5	3.0	O K
480 min Winter	11.958	0.333	0.5	2.8	O K
600 min Winter	11.941	0.316	0.4	2.7	O K
720 min Winter	11.926	0.301	0.4	2.6	O K
960 min Winter	11.888	0.263	0.4	2.2	O K
1440 min Winter	11.836	0.211	0.3	1.8	O K
2160 min Winter	11.790	0.165	0.2	1.4	O K
2880 min Winter	11.761	0.136	0.2	1.2	O K
4320 min Winter	11.734	0.109	0.2	0.9	O K
5760 min Winter	11.717	0.092	0.1	0.8	O K
7200 min Winter	11.706	0.081	0.1	0.7	O K
8640 min Winter	11.698	0.073	0.1	0.6	O K
10080 min Winter	11.692	0.067	0.1	0.6	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	22.488	0.0	31		
60 min Winter	14.888	0.0	54		
120 min Winter	9.857	0.0	88		
180 min Winter	7.744	0.0	126		
240 min Winter	6.526	0.0	162		
360 min Winter	5.127	0.0	230		
480 min Winter	4.320	0.0	298		
600 min Winter	3.783	0.0	362		
720 min Winter	3.394	0.0	426		
960 min Winter	2.746	0.0	552		
1440 min Winter	2.036	0.0	796		
2160 min Winter	1.510	0.0	1168		
2880 min Winter	1.222	0.0	1528		
4320 min Winter	0.956	0.0	2248		
5760 min Winter	0.803	0.0	2992		
7200 min Winter	0.702	0.0	3680		
8640 min Winter	0.629	0.0	4408		
10080 min Winter	0.573	0.0	5136		
©1982-2016 XP Solutions					

Robert Clark Associates		Page 3																																						
Willow Cottage Herne Lane Rustington BN16 3EE	Walberton Farm SA1 FEH 22 rainfall data																																							
Date 8.8.26 File SA1 calcs 1yr rain.SRCX	Designed by RTFC Checked by																																							
Micro Drainage		Source Control 2016.1																																						
<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>497914 105490 SU 979 054</td> </tr> <tr> <td>C (1km)</td> <td>-0.026</td> </tr> <tr> <td>D1 (1km)</td> <td>0.405</td> </tr> <tr> <td>D2 (1km)</td> <td>0.263</td> </tr> <tr> <td>D3 (1km)</td> <td>0.395</td> </tr> <tr> <td>E (1km)</td> <td>0.311</td> </tr> <tr> <td>F (1km)</td> <td>2.329</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) 0.023 <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 0.023</td> </tr> </table>			Rainfall Model	FEH	Return Period (years)	1	Site Location	497914 105490 SU 979 054	C (1km)	-0.026	D1 (1km)	0.405	D2 (1km)	0.263	D3 (1km)	0.395	E (1km)	0.311	F (1km)	2.329	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 0.023
Rainfall Model	FEH																																							
Return Period (years)	1																																							
Site Location	497914 105490 SU 979 054																																							
C (1km)	-0.026																																							
D1 (1km)	0.405																																							
D2 (1km)	0.263																																							
D3 (1km)	0.395																																							
E (1km)	0.311																																							
F (1km)	2.329																																							
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 0.023																																							
©1982-2016 XP Solutions																																								

Robert Clark Associates		Page 4																				
Willow Cottage Herne Lane Rustington BN16 3EE	Walberton Farm SA1 FEH 22 rainfall data																					
Date 8.8.26 File SA1 calcs 1yr rain.SRCX	Designed by RTFC Checked by																					
Micro Drainage		Source Control 2016.1																				
<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
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																			
©1982-2016 XP Solutions																						