

Robert Clark Associates					Page 1																																																																																																																																																																																																																		
Willow Cottage Herne Lane Rustington BN16 3EE			The Thatched House Littleheath Lane Fontwell																																																																																																																																																																																																																				
Date 24 March 2017 File Thatched House-1.SRCX			Designed by RTFC Checked by																																																																																																																																																																																																																				
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Summary of Results for 100 year Return Period (+40%) Half Drain Time : 69 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>0.724</td><td>0.724</td><td>0.5</td><td>2.8</td><td>O K</td></tr><tr><td>30 min Summer</td><td>0.908</td><td>0.908</td><td>0.6</td><td>3.5</td><td>O K</td></tr><tr><td>60 min Summer</td><td>1.021</td><td>1.021</td><td>0.7</td><td>3.9</td><td>O K</td></tr><tr><td>120 min Summer</td><td>1.060</td><td>1.060</td><td>0.7</td><td>4.0</td><td>O K</td></tr><tr><td>180 min Summer</td><td>1.028</td><td>1.028</td><td>0.7</td><td>3.9</td><td>O K</td></tr><tr><td>240 min Summer</td><td>0.979</td><td>0.979</td><td>0.7</td><td>3.7</td><td>O K</td></tr><tr><td>360 min Summer</td><td>0.889</td><td>0.889</td><td>0.6</td><td>3.4</td><td>O K</td></tr><tr><td>480 min Summer</td><td>0.808</td><td>0.808</td><td>0.6</td><td>3.1</td><td>O K</td></tr><tr><td>600 min Summer</td><td>0.736</td><td>0.736</td><td>0.5</td><td>2.8</td><td>O K</td></tr><tr><td>720 min Summer</td><td>0.672</td><td>0.672</td><td>0.5</td><td>2.6</td><td>O K</td></tr><tr><td>960 min Summer</td><td>0.564</td><td>0.564</td><td>0.5</td><td>2.1</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>0.404</td><td>0.404</td><td>0.4</td><td>1.5</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>0.247</td><td>0.247</td><td>0.3</td><td>0.9</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>0.147</td><td>0.147</td><td>0.3</td><td>0.6</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>0.049</td><td>0.049</td><td>0.2</td><td>0.2</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>0.039</td><td>0.039</td><td>0.2</td><td>0.1</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>0.033</td><td>0.033</td><td>0.2</td><td>0.1</td><td>O K</td></tr><tr><td>8640 min 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Summer	0.908	0.908	0.6	3.5	O K	60 min Summer	1.021	1.021	0.7	3.9	O K	120 min Summer	1.060	1.060	0.7	4.0	O K	180 min Summer	1.028	1.028	0.7	3.9	O K	240 min Summer	0.979	0.979	0.7	3.7	O K	360 min Summer	0.889	0.889	0.6	3.4	O K	480 min Summer	0.808	0.808	0.6	3.1	O K	600 min Summer	0.736	0.736	0.5	2.8	O K	720 min Summer	0.672	0.672	0.5	2.6	O K	960 min Summer	0.564	0.564	0.5	2.1	O K	1440 min Summer	0.404	0.404	0.4	1.5	O K	2160 min Summer	0.247	0.247	0.3	0.9	O K	2880 min Summer	0.147	0.147	0.3	0.6	O K	4320 min Summer	0.049	0.049	0.2	0.2	O K	5760 min Summer	0.039	0.039	0.2	0.1	O K	7200 min Summer	0.033	0.033	0.2	0.1	O K	8640 min Summer	0.029	0.029	0.1	0.1	O K	10080 min Summer	0.026	0.026	0.1	0.1	O K	15 min Winter	0.818	0.818	0.6	3.1	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	128.109	0.0	17	30 min Summer	86.590	0.0	31	60 min Summer	55.837	0.0	50	120 min Summer	34.707	0.0	84	180 min Summer	25.852	0.0	118	240 min Summer	20.825	0.0	154	360 min 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Willow Cottage Herne Lane Rustington BN16 3EE		The Thatched House Littleheath Lane Fontwell			
Date 24 March 2017 File Thatched House-1.SRCX		Designed by RTFC Checked by			
Micro Drainage		Source Control 2016.1			
<u>Summary of Results for 100 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	1.032	1.032	0.7	3.9	O K
60 min Winter	1.164	1.164	0.7	4.4	O K
120 min Winter	1.138	1.138	0.6	4.6	O K
180 min Winter	1.145	1.145	0.7	4.3	O K
240 min Winter	1.069	1.069	0.7	4.1	O K
360 min Winter	0.933	0.933	0.6	3.5	O K
480 min Winter	0.817	0.817	0.6	3.1	O K
600 min Winter	0.717	0.717	0.5	2.7	O K
720 min Winter	0.631	0.631	0.5	2.4	O K
960 min Winter	0.493	0.493	0.4	1.9	O K
1440 min Winter	0.301	0.301	0.4	1.1	O K
2160 min Winter	0.130	0.130	0.3	0.5	O K
2880 min Winter	0.049	0.049	0.2	0.2	O K
4320 min Winter	0.036	0.036	0.2	0.1	O K
5760 min Winter	0.029	0.029	0.1	0.1	O K
7200 min Winter	0.024	0.024	0.1	0.1	O K
8640 min Winter	0.021	0.021	0.1	0.1	O K
10080 min Winter	0.019	0.019	0.1	0.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	86.590	0.0	31		
60 min Winter	55.837	0.0	56		
120 min Winter	34.767	0.0	90		
180 min Winter	25.852	0.0	128		
240 min Winter	20.825	0.0	164		
360 min Winter	15.376	0.0	236		
480 min Winter	12.377	0.0	304		
600 min Winter	10.450	0.0	370		
720 min Winter	9.095	0.0	434		
960 min Winter	7.298	0.0	560		
1440 min Winter	5.341	0.0	808		
2160 min Winter	3.899	0.0	1168		
2880 min Winter	3.115	0.0	1452		
4320 min Winter	2.265	0.0	2140		
5760 min Winter	1.805	0.0	2912		
7200 min Winter	1.516	0.0	3608		
8640 min Winter	1.314	0.0	4304		
10080 min Winter	1.164	0.0	5040		
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Micro Drainage Source Control 2016.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.700	Shortest Storm (mins)	15
Ratio R	0.338	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.013

Time (mins)		Area
From:	To:	(ha)
0	4	0.013

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Model Details

Storage is Online Cover Level (m) 1.800

Cellular Storage Structure

Invert Level (m) 0.000 Safety Factor 1.5
Infiltration Coefficient Base (m/hr) 0.29916 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.29916

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	4.0	4.0	1.300	0.0	13.6
1.200	4.0	13.6			

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