

Campbell Reith Hill LLP				Page 1																																																																																																																																																																																																																			
Raven House 29 Linkfield Lane Surrey RH1 1SS		11557: Station Road, Barnsley Prelim SW Startegy Plot 15 Soakaway																																																																																																																																																																																																																					
Date 12/06/2014 10:49 File PLOT 15.SRCX		Designed by TF Checked by																																																																																																																																																																																																																					
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<u>Summary of Results for 100 year Return Period (+30%)</u> Half Drain Time : 246 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>71.335</td><td>0.585</td><td>0.2</td><td>2.5</td><td>O K</td></tr><tr><td>30 min Summer</td><td>71.539</td><td>0.789</td><td>0.2</td><td>3.4</td><td>O K</td></tr><tr><td>60 min Summer</td><td>71.744</td><td>0.994</td><td>0.2</td><td>4.2</td><td>O K</td></tr><tr><td>120 min Summer</td><td>71.905</td><td>1.155</td><td>0.2</td><td>4.9</td><td>O K</td></tr><tr><td>180 min Summer</td><td>71.948</td><td>1.198</td><td>0.2</td><td>5.1</td><td>O K</td></tr><tr><td>240 min Summer</td><td>71.964</td><td>1.214</td><td>0.2</td><td>5.2</td><td>O K</td></tr><tr><td>360 min Summer</td><td>71.971</td><td>1.221</td><td>0.2</td><td>5.2</td><td>O K</td></tr><tr><td>480 min 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Raven House 29 Linkfield Lane Surrey RH1 1SS		11557: Station Road, Barnsley Prelim SW Startegy Plot 15 Soakaway			
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Micro Drainage		Source Control 2014.1.1			
<u>Summary of Results for 100 year Return Period (+30%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	71.639	0.889	0.2	3.8	O K
60 min Winter	71.873	1.123	0.2	4.8	O K
120 min Winter	72.067	1.317	0.2	5.6	O K
180 min Winter	72.126	1.376	0.2	5.9	O K
240 min Winter	72.141	1.391	0.2	5.9	O K
360 min Winter	72.146	1.396	0.2	5.9	O K
480 min Winter	72.126	1.376	0.2	5.9	O K
600 min Winter	72.091	1.341	0.2	5.7	O K
720 min Winter	72.048	1.298	0.2	5.5	O K
960 min Winter	71.959	1.209	0.2	5.1	O K
1440 min Winter	71.796	1.046	0.2	4.5	O K
2160 min Winter	71.590	0.840	0.2	3.6	O K
2880 min Winter	71.425	0.675	0.2	2.9	O K
4320 min Winter	71.185	0.435	0.1	1.9	O K
5760 min Winter	71.021	0.271	0.1	1.2	O K
7200 min Winter	70.904	0.154	0.1	0.7	O K
8640 min Winter	70.824	0.074	0.1	0.3	O K
10080 min Winter	70.798	0.048	0.1	0.2	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	79.998	0.0	32		
60 min Winter	52.662	0.0	62		
120 min Winter	33.322	0.0	118		
180 min Winter	24.998	0.0	172		
240 min Winter	20.313	0.0	222		
360 min Winter	15.144	0.0	278		
480 min Winter	12.271	0.0	354		
600 min Winter	10.413	0.0	432		
720 min Winter	9.099	0.0	506		
960 min Winter	7.345	0.0	654		
1440 min Winter	5.419	0.0	938		
2160 min Winter	3.986	0.0	1344		
2880 min Winter	3.200	0.0	1732		
4320 min Winter	2.349	0.0	2504		
5760 min Winter	1.888	0.0	3232		
7200 min Winter	1.594	0.0	3896		
8640 min Winter	1.389	0.0	4576		
10080 min Winter	1.237	0.0	5104		
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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)	20.000	Shortest Storm (mins)	15
Ratio R	0.300	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time Area Diagram

Total Area (ha) 0.012

Time (mins)	Area
From:	To: (ha)
0	4 0.012

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Micro Drainage	Source Control 2014.1.1	

Model Details

Storage is Online Cover Level (m) 73.250

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.04390	Trench Width (m)	2.0
Infiltration Coefficient Side (m/hr)	0.04390	Trench Length (m)	7.1
Safety Factor	2.0	Slope (1:X)	0.0
Porosity	0.30	Cap Volume Depth (m)	0.000
Invert Level (m)	70.750	Cap Infiltration Depth (m)	1.500

Event: 360 min Winter

