

Campbell Reith Hill LLP				Page 1																																																																																																																																																																																																																			
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<u>Summary of Results for 100 year Return Period (+30%)</u> Half Drain Time : 53 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>71.274</td><td>0.774</td><td>0.9</td><td>3.7</td><td>O K</td></tr><tr><td>30 min Summer</td><td>71.477</td><td>0.977</td><td>1.0</td><td>4.7</td><td>O K</td></tr><tr><td>60 min Summer</td><td>71.608</td><td>1.108</td><td>1.1</td><td>5.3</td><td>O K</td></tr><tr><td>120 min Summer</td><td>71.647</td><td>1.147</td><td>1.1</td><td>5.5</td><td>O K</td></tr><tr><td>180 min Summer</td><td>71.603</td><td>1.103</td><td>1.1</td><td>5.3</td><td>O K</td></tr><tr><td>240 min Summer</td><td>71.550</td><td>1.050</td><td>1.0</td><td>5.0</td><td>O K</td></tr><tr><td>360 min Summer</td><td>71.447</td><td>0.947</td><td>1.0</td><td>4.5</td><td>O K</td></tr><tr><td>480 min Summer</td><td>71.350</td><td>0.850</td><td>0.9</td><td>4.1</td><td>O K</td></tr><tr><td>600 min Summer</td><td>71.262</td><td>0.762</td><td>0.9</td><td>3.7</td><td>O K</td></tr><tr><td>720 min Summer</td><td>71.184</td><td>0.684</td><td>0.8</td><td>3.3</td><td>O K</td></tr><tr><td>960 min Summer</td><td>71.051</td><td>0.551</td><td>0.8</td><td>2.6</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>70.857</td><td>0.357</td><td>0.7</td><td>1.7</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>70.673</td><td>0.173</td><td>0.6</td><td>0.8</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>70.573</td><td>0.073</td><td>0.5</td><td>0.4</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>70.540</td><td>0.040</td><td>0.4</td><td>0.2</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>70.532</td><td>0.032</td><td>0.3</td><td>0.2</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>70.527</td><td>0.027</td><td>0.3</td><td>0.1</td><td>O K</td></tr><tr><td>8640 min 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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	71.618	1.118	1.1	5.4	O K
60 min Winter	71.769	1.269	1.2	6.1	O K
120 min Winter	71.801	1.301	1.2	6.2	O K
180 min Winter	71.725	1.225	1.1	5.9	O K
240 min Winter	71.638	1.138	1.1	5.5	O K
360 min Winter	71.477	0.977	1.0	4.7	O K
480 min Winter	71.336	0.836	0.9	4.0	O K
600 min Winter	71.215	0.715	0.9	3.4	O K
720 min Winter	71.110	0.610	0.8	2.9	O K
960 min Winter	70.942	0.442	0.7	2.1	O K
1440 min Winter	70.712	0.212	0.6	1.0	O K
2160 min Winter	70.549	0.049	0.5	0.2	O K
2880 min Winter	70.539	0.039	0.4	0.2	O K
4320 min Winter	70.529	0.029	0.3	0.1	O K
5760 min Winter	70.523	0.023	0.2	0.1	O K
7200 min Winter	70.520	0.020	0.2	0.1	O K
8640 min Winter	70.517	0.017	0.2	0.1	O K
10080 min Winter	70.515	0.015	0.1	0.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	79.998	0.0	30		
60 min Winter	52.662	0.0	50		
120 min Winter	33.322	0.0	88		
180 min Winter	24.998	0.0	126		
240 min Winter	20.313	0.0	162		
360 min Winter	15.144	0.0	232		
480 min Winter	12.271	0.0	300		
600 min Winter	10.413	0.0	366		
720 min Winter	9.099	0.0	430		
960 min Winter	7.345	0.0	558		
1440 min Winter	5.419	0.0	794		
2160 min Winter	3.986	0.0	1100		
2880 min Winter	3.200	0.0	1456		
4320 min Winter	2.349	0.0	2200		
5760 min Winter	1.888	0.0	2936		
7200 min Winter	1.594	0.0	3544		
8640 min Winter	1.389	0.0	4312		
10080 min Winter	1.237	0.0	4960		
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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) 0.020

Time (mins)	Area
From:	To: (ha)
0	4 0.020

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Model Details

Storage is Online Cover Level (m) 73.000

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.20400	Trench Width (m)	2.0
Infiltration Coefficient Side (m/hr)	0.20400	Trench Length (m)	8.0
Safety Factor	2.0	Slope (1:X)	0.0
Porosity	0.30	Cap Volume Depth (m)	0.000
Invert Level (m)	70.500	Cap Infiltration Depth (m)	1.500

Event: 120 min Winter

