

		Page 1
	Flintstones Barnham Road Eastergate	
Date 28.3.19 File Geocell G1.SRCX	Designed by Checked by	
Micro Drainage	Source Control 2016.1	

Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 304 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	10.377	0.167	0.0	0.5	0 K
30 min Summer	10.431	0.221	0.0	0.6	0 K
60 min Summer	10.482	0.272	0.0	0.8	0 K
120 min Summer	10.523	0.313	0.0	0.9	0 K
180 min Summer	10.536	0.326	0.0	0.9	0 K
240 min Summer	10.537	0.327	0.0	0.9	0 K
360 min Summer	10.537	0.327	0.0	0.9	0 K
480 min Summer	10.533	0.323	0.0	0.9	0 K
600 min Summer	10.527	0.317	0.0	0.9	0 K
720 min Summer	10.519	0.309	0.0	0.9	0 K
960 min Summer	10.504	0.294	0.0	0.8	0 K
1440 min Summer	10.472	0.262	0.0	0.7	0 K
2160 min Summer	10.430	0.220	0.0	0.6	0 K
2880 min Summer	10.395	0.185	0.0	0.5	0 K
4320 min Summer	10.340	0.130	0.0	0.4	0 K
5760 min Summer	10.302	0.092	0.0	0.3	0 K
7200 min Summer	10.276	0.066	0.0	0.2	0 K
8640 min Summer	10.262	0.052	0.0	0.1	0 K
10080 min Summer	10.256	0.046	0.0	0.1	0 K
15 min Winter	10.398	0.188	0.0	0.5	0 K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	131.851	0.0	18
30 min Summer	88.566	0.0	33
60 min Summer	56.713	0.0	62
120 min Summer	35.004	0.0	122
180 min Summer	25.973	0.0	180
240 min Summer	20.877	0.0	216
360 min Summer	15.365	0.0	278
480 min Summer	12.341	0.0	342
600 min Summer	10.402	0.0	410
720 min Summer	9.042	0.0	480
960 min Summer	7.241	0.0	618
1440 min Summer	5.284	0.0	894
2160 min Summer	3.848	0.0	1280
2880 min Summer	3.068	0.0	1672
4320 min Summer	2.226	0.0	2380
5760 min Summer	1.771	0.0	3112
7200 min Summer	1.483	0.0	3752
8640 min Summer	1.284	0.0	4416
10080 min Summer	1.137	0.0	5144
15 min Winter	131.851	0.0	18

		Page 2
	Flintstones Barnham Road Eastergate	
Date 28.3.19 File Geocell G1.SRCX	Designed by Checked by	
Micro Drainage	Source Control 2016.1	

Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
30 min Winter	10.458	0.248	0.0	0.7	0 K
60 min Winter	10.517	0.307	0.0	0.9	0 K
120 min Winter	10.566	0.356	0.0	1.0	0 K
180 min Winter	10.582	0.372	0.0	1.1	0 K
240 min Winter	10.586	0.376	0.0	1.1	0 K
360 min Winter	10.583	0.373	0.0	1.1	0 K
480 min Winter	10.577	0.367	0.0	1.0	0 K
600 min Winter	10.568	0.358	0.0	1.0	0 K
720 min Winter	10.557	0.347	0.0	1.0	0 K
960 min Winter	10.534	0.324	0.0	0.9	0 K
1440 min Winter	10.487	0.277	0.0	0.8	0 K
2160 min Winter	10.427	0.217	0.0	0.6	0 K
2880 min Winter	10.378	0.168	0.0	0.5	0 K
4320 min Winter	10.307	0.097	0.0	0.3	0 K
5760 min Winter	10.264	0.054	0.0	0.2	0 K
7200 min Winter	10.254	0.044	0.0	0.1	0 K
8640 min Winter	10.248	0.038	0.0	0.1	0 K
10080 min Winter	10.244	0.034	0.0	0.1	0 K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
30 min Winter	88.566	0.0	33
60 min Winter	56.713	0.0	62
120 min Winter	35.004	0.0	118
180 min Winter	25.973	0.0	176
240 min Winter	20.877	0.0	230
360 min Winter	15.365	0.0	290
480 min Winter	12.341	0.0	366
600 min Winter	10.402	0.0	442
720 min Winter	9.042	0.0	520
960 min Winter	7.241	0.0	668
1440 min Winter	5.284	0.0	954
2160 min Winter	3.848	0.0	1364
2880 min Winter	3.068	0.0	1756
4320 min Winter	2.226	0.0	2464
5760 min Winter	1.771	0.0	3064
7200 min Winter	1.483	0.0	3728
8640 min Winter	1.284	0.0	4408
10080 min Winter	1.137	0.0	5152

		Page 3																																
	Flintstones Barnham Road Eastergate																																	
Date 28.3.19 File Geocell G1.SRCX	Designed by Checked by																																	
Micro Drainage	Source Control 2016.1																																	
<u>Rainfall Details</u> <table> <tr> <td>Rainfall Model</td> <td>FSR</td> <td>Winter Storms</td> <td>Yes</td> </tr> <tr> <td>Return Period (years)</td> <td>100</td> <td>Cv (Summer)</td> <td>0.750</td> </tr> <tr> <td>Region</td> <td>England and Wales</td> <td>Cv (Winter)</td> <td>0.840</td> </tr> <tr> <td>M5-60 (mm)</td> <td>20.000</td> <td>Shortest Storm (mins)</td> <td>15</td> </tr> <tr> <td>Ratio R</td> <td>0.350</td> <td>Longest Storm (mins)</td> <td>10080</td> </tr> <tr> <td>Summer Storms</td> <td>Yes</td> <td>Climate Change %</td> <td>+40</td> </tr> </table> <u>Time Area Diagram</u> Total Area (ha) 0.002 <table> <tr> <th colspan="2">Time (mins)</th> <th rowspan="2">Area (ha)</th> </tr> <tr> <th>From:</th> <th>To:</th> </tr> <tr> <td>0</td> <td>4</td> <td>0.002</td> </tr> </table>			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	0.350	Longest Storm (mins)	10080	Summer Storms	Yes	Climate Change %	+40	Time (mins)		Area (ha)	From:	To:	0	4	0.002
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	0.350	Longest Storm (mins)	10080																															
Summer Storms	Yes	Climate Change %	+40																															
Time (mins)		Area (ha)																																
From:	To:																																	
0	4	0.002																																
©1982-2016 XP Solutions																																		

		Page 4																		
	Flintstones Barnham Road Eastergate																			
Date 28.3.19 File Geocell G1.SRCX	Designed by Checked by																			
Micro Drainage Source Control 2016.1																				
<u>Model Details</u> Storage is Online Cover Level (m) 11.010 <u>Cellular Storage Structure</u> Invert Level (m) 10.210 Infiltration Coefficient Base (m/hr) 0.04165 Infiltration Coefficient Side (m/hr) 0.04165 Safety Factor 2.0 Porosity 0.95 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Depth (m)</th> <th style="text-align: left;">Area (m²)</th> <th style="text-align: left;">Inf. Area (m²)</th> <th style="text-align: left;">Depth (m)</th> <th style="text-align: left;">Area (m²)</th> <th style="text-align: left;">Inf. Area (m²)</th> </tr> </thead> <tbody> <tr> <td>0.000</td> <td>3.0</td> <td>3.0</td> <td>0.500</td> <td>0.0</td> <td>6.2</td> </tr> <tr> <td>0.400</td> <td>3.0</td> <td>6.2</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	0.000	3.0	3.0	0.500	0.0	6.2	0.400	3.0	6.2			
Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)															
0.000	3.0	3.0	0.500	0.0	6.2															
0.400	3.0	6.2																		
©1982-2016 XP Solutions																				