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Willow Cottage Herne Lane Rustington BN16 3EE		Woodfield Farm Wandleys Lane Eastergate				
Date 7 November 2017 File Infiltration Basin-4.SRCX		Designed by RTFC Checked by				
Micro Drainage		Source Control 2016.1				
Summary of Results for 100 year Return Period (+30%) Half Drain Time : 6384 minutes.						
Storm Event		Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer		8.649	0.133	0.0	6.2	0 K
30 min Summer		8.694	0.178	0.0	8.4	0 K
60 min Summer		8.743	0.227	0.0	10.7	0 K
120 min Summer		8.796	0.280	0.0	13.1	0 K
180 min Summer		8.826	0.310	0.0	14.6	0 K
240 min Summer		8.847	0.331	0.0	15.6	0 K
360 min Summer		8.878	0.362	0.0	17.0	0 K
480 min Summer		8.900	0.384	0.0	18.1	0 K
600 min Summer		8.918	0.402	0.0	18.9	0 K
720 min Summer		8.932	0.416	0.0	19.5	0 K
960 min Summer		8.953	0.437	0.0	20.5	0 K
1440 min Summer		8.980	0.464	0.0	21.8	0 K
2160 min Summer		9.001	0.485	0.0	22.8	0 K
2880 min Summer		9.010	0.494	0.0	23.2	0 K
4320 min Summer		9.010	0.494	0.0	23.2	0 K
5760 min Summer		9.000	0.484	0.0	22.7	0 K
7200 min Summer		8.990	0.474	0.0	22.3	0 K
8640 min Summer		8.980	0.464	0.0	21.8	0 K
10080 min Summer		8.971	0.455	0.0	21.4	0 K
15 min Winter		8.664	0.148	0.0	7.0	0 K
Storm Event		Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
15 min Summer		119.078	0.0	19		
30 min Summer		80.023	0.0	34		
60 min Summer		51.304	0.0	64		
120 min Summer		31.736	0.0	124		
180 min Summer		23.595	0.0	184		
240 min Summer		18.976	0.0	244		
360 min Summer		13.963	0.0	364		
480 min Summer		11.218	0.0	484		
600 min Summer		9.457	0.0	604		
720 min Summer		8.222	0.0	724		
960 min Summer		6.586	0.0	962		
1440 min Summer		4.808	0.0	1442		
2160 min Summer		3.503	0.0	2160		
2880 min Summer		2.794	0.0	2880		
4320 min Summer		2.028	0.0	4320		
5760 min Summer		1.614	0.0	5016		
7200 min Summer		1.351	0.0	5768		
8640 min Summer		1.170	0.0	6488		
10080 min Summer		1.036	0.0	7264		
15 min Winter		119.078	0.0	19		
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Micro Drainage		Source Control 2016.1			
<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	8.715	0.199	0.0	9.4	0 K
60 min Winter	8.771	0.255	0.0	12.0	0 K
120 min Winter	8.830	0.314	0.0	14.7	0 K
180 min Winter	8.864	0.348	0.0	16.4	0 K
240 min Winter	8.888	0.372	0.0	17.5	0 K
360 min Winter	8.923	0.407	0.0	19.1	0 K
480 min Winter	8.948	0.432	0.0	20.3	0 K
600 min Winter	8.968	0.452	0.0	21.2	0 K
720 min Winter	8.984	0.468	0.0	22.0	0 K
960 min Winter	9.009	0.493	0.0	23.2	0 K
1440 min Winter	9.041	0.525	0.0	24.7	0 K
2160 min Winter	9.067	0.551	0.0	25.9	0 K
2880 min Winter	9.081	0.565	0.0	26.5	0 K
4320 min Winter	9.087	0.571	0.0	26.8	0 K
5760 min Winter	9.080	0.564	0.0	26.5	0 K
7200 min Winter	9.067	0.551	0.0	25.9	0 K
8640 min Winter	9.054	0.538	0.0	25.3	0 K
10080 min Winter	9.042	0.526	0.0	24.7	0 K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	80.023	0.0	34		
60 min Winter	51.304	0.0	64		
120 min Winter	31.736	0.0	124		
180 min Winter	23.595	0.0	182		
240 min Winter	18.976	0.0	242		
360 min Winter	13.963	0.0	360		
480 min Winter	11.218	0.0	478		
600 min Winter	9.457	0.0	596		
720 min Winter	8.222	0.0	716		
960 min Winter	6.586	0.0	952		
1440 min Winter	4.808	0.0	1426		
2160 min Winter	3.503	0.0	2120		
2880 min Winter	2.794	0.0	2820		
4320 min Winter	2.028	0.0	4152		
5760 min Winter	1.614	0.0	5472		
7200 min Winter	1.351	0.0	6632		
8640 min Winter	1.170	0.0	6912		
10080 min Winter	1.036	0.0	7768		
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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)	19.500	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time Area Diagram

Total Area (ha) 0.028

Time (mins)	Area
From:	To: (ha)
0	4 0.028

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Model Details

Storage is Online Cover Level (m) 9.420

Infiltration Basin Structure

Invert Level (m)	8.516
Infiltration Coefficient Base (m/hr)	0.00551
Infiltration Coefficient Side (m/hr)	0.00551
Safety Factor	2.5
Porosity	1.00

Depth (m)	Area (m²)
0.000	47.0

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