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Willow Cottage Herne Lane Rustington BN16 3EE		Woodfield Farm Wandleys Lane Eastergate				
Date 7 November 2017 File Roadway.SRCX		Designed by RTFC Checked by				
Micro Drainage		Source Control 2016.1				
Summary of Results for 100 year Return Period (+30%)						
Half Drain Time : 816 minutes.						
Storm Event		Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer		9.057	0.057	0.3	7.1	0 K
30 min Summer		9.082	0.082	0.3	10.2	0 K
60 min Summer		9.108	0.108	0.3	13.5	0 K
120 min Summer		9.134	0.134	0.3	16.7	0 K
180 min Summer		9.147	0.147	0.3	18.4	0 K
240 min Summer		9.155	0.155	0.3	19.3	0 K
360 min Summer		9.164	0.164	0.3	20.5	0 K
480 min Summer		9.169	0.169	0.3	21.1	0 K
600 min Summer		9.170	0.170	0.3	21.3	0 K
720 min Summer		9.171	0.171	0.3	21.3	0 K
960 min Summer		9.170	0.170	0.3	21.3	0 K
1440 min Summer		9.167	0.167	0.3	20.8	0 K
2160 min Summer		9.157	0.157	0.3	19.6	0 K
2880 min Summer		9.145	0.145	0.3	18.2	0 K
4320 min Summer		9.122	0.122	0.3	15.2	0 K
5760 min Summer		9.101	0.101	0.3	12.6	0 K
7200 min Summer		9.083	0.083	0.3	10.4	0 K
8640 min Summer		9.069	0.069	0.3	8.7	0 K
10080 min Summer		9.059	0.059	0.3	7.3	0 K
15 min Winter		9.066	0.066	0.3	8.3	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	122		
180 min Summer		23.595	0.0	182		
240 min Summer		18.976	0.0	242		
360 min Summer		13.963	0.0	362		
480 min Summer		11.218	0.0	480		
600 min Summer		9.457	0.0	596		
720 min Summer		8.222	0.0	644		
960 min Summer		6.586	0.0	760		
1440 min Summer		4.808	0.0	1022		
2160 min Summer		3.503	0.0	1428		
2880 min Summer		2.794	0.0	1820		
4320 min Summer		2.028	0.0	2632		
5760 min Summer		1.614	0.0	3352		
7200 min Summer		1.351	0.0	4104		
8640 min Summer		1.170	0.0	4752		
10080 min Summer		1.036	0.0	5440		
15 min Winter		119.078	0.0	19		
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Summary of Results for 100 year Return Period (+30%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	9.094	0.094	0.3	11.7	0 K
60 min Winter	9.123	0.123	0.3	15.4	0 K
120 min Winter	9.153	0.153	0.3	19.0	0 K
180 min Winter	9.168	0.168	0.3	21.0	0 K
240 min Winter	9.177	0.177	0.3	22.1	0 K
360 min Winter	9.189	0.189	0.3	23.5	0 K
480 min Winter	9.195	0.195	0.3	24.3	0 K
600 min Winter	9.198	0.198	0.3	24.7	0 K
720 min Winter	9.199	0.199	0.3	24.8	0 K
960 min Winter	9.197	0.197	0.3	24.6	0 K
1440 min Winter	9.190	0.190	0.3	23.7	0 K
2160 min Winter	9.175	0.175	0.3	21.8	0 K
2880 min Winter	9.157	0.157	0.3	19.6	0 K
4320 min Winter	9.121	0.121	0.3	15.1	0 K
5760 min Winter	9.090	0.090	0.3	11.2	0 K
7200 min Winter	9.065	0.065	0.3	8.1	0 K
8640 min Winter	9.050	0.050	0.3	6.3	0 K
10080 min Winter	9.045	0.045	0.2	5.6	0 K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
30 min Winter	80.023	0.0	33
60 min Winter	51.304	0.0	62
120 min Winter	31.736	0.0	122
180 min Winter	23.595	0.0	180
240 min Winter	18.976	0.0	238
360 min Winter	13.963	0.0	354
480 min Winter	11.218	0.0	468
600 min Winter	9.457	0.0	578
720 min Winter	8.222	0.0	686
960 min Winter	6.586	0.0	886
1440 min Winter	4.808	0.0	1098
2160 min Winter	3.503	0.0	1556
2880 min Winter	2.794	0.0	1992
4320 min Winter	2.028	0.0	2808
5760 min Winter	1.614	0.0	3520
7200 min Winter	1.351	0.0	4176
8640 min Winter	1.170	0.0	4672
10080 min Winter	1.036	0.0	5352

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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)	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) 0.042

Time (mins)	Area (ha)
From:	To:
0	4 0.042

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Model Details

Storage is Online Cover Level (m) 10.000

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.00551
Membrane Percolation (mm/hr)	1000
Max Percolation (l/s)	115.6
Safety Factor	2.5
Porosity	0.30
Invert Level (m)	9.000
Width (m)	5.0
Length (m)	83.2
Slope (1:X)	0.0
Depression Storage (mm)	5
Evaporation (mm/day)	3
Membrane Depth (m)	0

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