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Willow Cottage Herne Lane Rustington BN16 3EE	The Cottage Shripney Road Phase 1	
Date 13.2.19 File PP1.SRCX	Designed by RTFC Checked by	
Micro Drainage	Source Control 2016.1	

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

Half Drain Time : 10 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	2.409	0.029	0.2	0.1	0 K
30 min Summer	2.423	0.043	0.5	0.3	0 K
60 min Summer	2.430	0.050	0.7	0.4	0 K
120 min Summer	2.432	0.052	0.8	0.4	0 K
180 min Summer	2.429	0.049	0.7	0.4	0 K
240 min Summer	2.427	0.047	0.6	0.3	0 K
360 min Summer	2.422	0.042	0.5	0.3	0 K
480 min Summer	2.419	0.039	0.4	0.2	0 K
600 min Summer	2.416	0.036	0.4	0.2	0 K
720 min Summer	2.414	0.034	0.3	0.2	0 K
960 min Summer	2.410	0.030	0.3	0.1	0 K
1440 min Summer	2.406	0.026	0.2	0.1	0 K
2160 min Summer	2.402	0.022	0.1	0.1	0 K
2880 min Summer	2.400	0.020	0.1	0.1	0 K
4320 min Summer	2.397	0.017	0.1	0.0	0 K
5760 min Summer	2.395	0.015	0.1	0.0	0 K
7200 min Summer	2.393	0.013	0.1	0.0	0 K
8640 min Summer	2.392	0.012	0.0	0.0	0 K
10080 min Summer	2.392	0.012	0.0	0.0	0 K
15 min Winter	2.418	0.038	0.4	0.2	0 K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	124.633	0.0	17
30 min Summer	83.789	0.0	24
60 min Summer	53.779	0.0	40
120 min Summer	33.337	0.0	70
180 min Summer	24.832	0.0	100
240 min Summer	20.006	0.0	130
360 min Summer	14.706	0.0	188
480 min Summer	11.818	0.0	248
600 min Summer	9.966	0.0	308
720 min Summer	8.665	0.0	368
960 min Summer	6.943	0.0	490
1440 min Summer	5.071	0.0	728
2160 min Summer	3.696	0.0	1100
2880 min Summer	2.949	0.0	1440
4320 min Summer	2.142	0.0	2196
5760 min Summer	1.705	0.0	2912
7200 min Summer	1.427	0.0	3672
8640 min Summer	1.235	0.0	4336
10080 min Summer	1.093	0.0	5016
15 min Winter	124.633	0.0	16

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

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	2.430	0.050	0.7	0.4	0 K
60 min Winter	2.435	0.055	0.8	0.5	0 K
120 min Winter	2.431	0.051	0.8	0.4	0 K
180 min Winter	2.427	0.047	0.6	0.3	0 K
240 min Winter	2.423	0.043	0.5	0.3	0 K
360 min Winter	2.418	0.038	0.4	0.2	0 K
480 min Winter	2.414	0.034	0.3	0.2	0 K
600 min Winter	2.411	0.031	0.3	0.1	0 K
720 min Winter	2.409	0.029	0.3	0.1	0 K
960 min Winter	2.406	0.026	0.2	0.1	0 K
1440 min Winter	2.402	0.022	0.1	0.1	0 K
2160 min Winter	2.399	0.019	0.1	0.1	0 K
2880 min Winter	2.397	0.017	0.1	0.0	0 K
4320 min Winter	2.394	0.014	0.1	0.0	0 K
5760 min Winter	2.392	0.012	0.0	0.0	0 K
7200 min Winter	2.391	0.011	0.0	0.0	0 K
8640 min Winter	2.390	0.010	0.0	0.0	0 K
10080 min Winter	2.390	0.010	0.0	0.0	0 K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
30 min Winter	83.789	0.0	24
60 min Winter	53.779	0.0	42
120 min Winter	33.337	0.0	72
180 min Winter	24.832	0.0	102
240 min Winter	20.006	0.0	130
360 min Winter	14.706	0.0	188
480 min Winter	11.818	0.0	252
600 min Winter	9.966	0.0	306
720 min Winter	8.665	0.0	366
960 min Winter	6.943	0.0	500
1440 min Winter	5.071	0.0	736
2160 min Winter	3.696	0.0	1084
2880 min Winter	2.949	0.0	1420
4320 min Winter	2.142	0.0	2152
5760 min Winter	1.705	0.0	2840
7200 min Winter	1.427	0.0	3704
8640 min Winter	1.235	0.0	4304
10080 min Winter	1.093	0.0	5088

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<u>Model Details</u> Storage is Online Cover Level (m) 2.750 <u>Porous Car Park Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.15836</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>53.9</td> </tr> <tr> <td>Safety Factor</td> <td>3.0</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> </tr> <tr> <td>Invert Level (m)</td> <td>2.380</td> </tr> <tr> <td>Width (m)</td> <td>5.0</td> </tr> <tr> <td>Length (m)</td> <td>38.8</td> </tr> <tr> <td>Slope (1:X)</td> <td>200.0</td> </tr> <tr> <td>Depression Storage (mm)</td> <td>5</td> </tr> <tr> <td>Evaporation (mm/day)</td> <td>3</td> </tr> <tr> <td>Membrane Depth (m)</td> <td>0</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.15836	Membrane Percolation (mm/hr)	1000	Max Percolation (l/s)	53.9	Safety Factor	3.0	Porosity	0.30	Invert Level (m)	2.380	Width (m)	5.0	Length (m)	38.8	Slope (1:X)	200.0	Depression Storage (mm)	5	Evaporation (mm/day)	3	Membrane Depth (m)	0
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