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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 897 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>59.831</td><td>0.331</td><td>0.0</td><td>2.0</td><td>O K</td></tr><tr><td>30 min Summer</td><td>59.886</td><td>0.386</td><td>0.0</td><td>2.6</td><td>O K</td></tr><tr><td>60 min Summer</td><td>59.929</td><td>0.429</td><td>0.0</td><td>3.3</td><td>O K</td></tr><tr><td>120 min Summer</td><td>59.963</td><td>0.463</td><td>0.0</td><td>3.8</td><td>O K</td></tr><tr><td>180 min Summer</td><td>59.978</td><td>0.478</td><td>0.0</td><td>4.1</td><td>O K</td></tr><tr><td>240 min Summer</td><td>59.985</td><td>0.485</td><td>0.0</td><td>4.2</td><td>O K</td></tr><tr><td>360 min Summer</td><td>59.992</td><td>0.492</td><td>0.0</td><td>4.3</td><td>O K</td></tr><tr><td>480 min Summer</td><td>59.994</td><td>0.494</td><td>0.0</td><td>4.4</td><td>O K</td></tr><tr><td>600 min Summer</td><td>59.992</td><td>0.492</td><td>0.0</td><td>4.3</td><td>O K</td></tr><tr><td>720 min Summer</td><td>59.989</td><td>0.489</td><td>0.0</td><td>4.3</td><td>O K</td></tr><tr><td>960 min Summer</td><td>59.981</td><td>0.481</td><td>0.0</td><td>4.1</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>59.966</td><td>0.466</td><td>0.0</td><td>3.9</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>59.945</td><td>0.445</td><td>0.0</td><td>3.5</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>59.924</td><td>0.424</td><td>0.0</td><td>3.2</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>59.882</td><td>0.382</td><td>0.0</td><td>2.6</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>59.839</td><td>0.339</td><td>0.0</td><td>2.1</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>59.786</td><td>0.286</td><td>0.0</td><td>1.7</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>59.719</td><td>0.219</td><td>0.0</td><td>1.3</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>59.666</td><td>0.166</td><td>0.0</td><td>1.0</td><td>O K</td></tr><tr><td>15 min Winter</td><td>59.855</td><td>0.355</td><td>0.0</td><td>2.3</td><td>O K</td></tr></tbody></table> <table><thead><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr></thead><tbody><tr><td>15 min Summer</td><td>138.153</td><td>0.0</td><td>19</td></tr><tr><td>30 min Summer</td><td>90.705</td><td>0.0</td><td>34</td></tr><tr><td>60 min Summer</td><td>56.713</td><td>0.0</td><td>64</td></tr><tr><td>120 min Summer</td><td>34.246</td><td>0.0</td><td>122</td></tr><tr><td>180 min Summer</td><td>25.149</td><td>0.0</td><td>182</td></tr><tr><td>240 min Summer</td><td>20.078</td><td>0.0</td><td>242</td></tr><tr><td>360 min Summer</td><td>14.585</td><td>0.0</td><td>362</td></tr><tr><td>480 min Summer</td><td>11.622</td><td>0.0</td><td>480</td></tr><tr><td>600 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Summer	59.886	0.386	0.0	2.6	O K	60 min Summer	59.929	0.429	0.0	3.3	O K	120 min Summer	59.963	0.463	0.0	3.8	O K	180 min Summer	59.978	0.478	0.0	4.1	O K	240 min Summer	59.985	0.485	0.0	4.2	O K	360 min Summer	59.992	0.492	0.0	4.3	O K	480 min Summer	59.994	0.494	0.0	4.4	O K	600 min Summer	59.992	0.492	0.0	4.3	O K	720 min Summer	59.989	0.489	0.0	4.3	O K	960 min Summer	59.981	0.481	0.0	4.1	O K	1440 min Summer	59.966	0.466	0.0	3.9	O K	2160 min Summer	59.945	0.445	0.0	3.5	O K	2880 min Summer	59.924	0.424	0.0	3.2	O K	4320 min Summer	59.882	0.382	0.0	2.6	O K	5760 min Summer	59.839	0.339	0.0	2.1	O K	7200 min Summer	59.786	0.286	0.0	1.7	O K	8640 min Summer	59.719	0.219	0.0	1.3	O K	10080 min Summer	59.666	0.166	0.0	1.0	O K	15 min Winter	59.855	0.355	0.0	2.3	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	138.153	0.0	19	30 min Summer	90.705	0.0	34	60 min Summer	56.713	0.0	64	120 min Summer	34.246	0.0	122	180 min Summer	25.149	0.0	182	240 min Summer	20.078	0.0	242	360 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The Stables High Cogges, Witney Oxfordshire					
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Micro Drainage		Source Control 2015.1			
<u>Summary of Results for 100 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	59.910	0.410	0.0	3.0	O K
60 min Winter	59.954	0.454	0.0	3.7	O K
120 min Winter	59.990	0.490	0.0	4.3	O K
180 min Winter	60.006	0.506	0.0	4.6	O K
240 min Winter	60.015	0.515	0.0	4.8	O K
360 min Winter	60.024	0.524	0.0	5.0	O K
480 min Winter	60.027	0.527	0.0	5.1	O K
600 min Winter	60.028	0.528	0.0	5.1	O K
720 min Winter	60.026	0.526	0.0	5.0	O K
960 min Winter	60.019	0.519	0.0	4.9	O K
1440 min Winter	60.001	0.501	0.0	4.5	O K
2160 min Winter	59.975	0.475	0.0	4.0	O K
2880 min Winter	59.947	0.447	0.0	3.5	O K
4320 min Winter	59.886	0.386	0.0	2.6	O K
5760 min Winter	59.823	0.323	0.0	2.0	O K
7200 min Winter	59.722	0.222	0.0	1.3	O K
8640 min Winter	59.633	0.133	0.0	0.8	O K
10080 min Winter	59.571	0.071	0.0	0.4	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	90.705	0.0	33		
60 min Winter	56.713	0.0	62		
120 min Winter	34.246	0.0	122		
180 min Winter	25.149	0.0	180		
240 min Winter	20.078	0.0	238		
360 min Winter	14.585	0.0	354		
480 min Winter	11.622	0.0	470		
600 min Winter	9.738	0.0	582		
720 min Winter	8.424	0.0	692		
960 min Winter	6.697	0.0	904		
1440 min Winter	4.839	0.0	1126		
2160 min Winter	3.490	0.0	1580		
2880 min Winter	2.766	0.0	2020		
4320 min Winter	1.989	0.0	2852		
5760 min Winter	1.573	0.0	3632		
7200 min Winter	1.311	0.0	4392		
8640 min Winter	1.129	0.0	5008		
10080 min Winter	0.994	0.0	5544		
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Micro Drainage Source Control 2015.1																										
<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>0.400</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>			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	0.400	Longest Storm (mins)	10080	Summer Storms	Yes	Climate Change %	+40
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<u>Time Area Diagram</u>																										
Total Area (ha) 0.008																										
<table> <tr> <th colspan="2">Time (mins)</th> <th>Area</th> </tr> <tr> <th>From:</th> <th>To:</th> <th>(ha)</th> </tr> <tr> <td>0</td> <td>4</td> <td>0.008</td> </tr> </table>			Time (mins)		Area	From:	To:	(ha)	0	4	0.008															
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Infrastruct CS Ltd		Page 4
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Date 15/08/2018 13:06 File 10 section of road swal...	Designed by tim Checked by	
Micro Drainage Source Control 2015.1		

Model Details

Storage is Online Cover Level (m) 60.100

Complex Structure

Infiltration Trench

Infiltration Coefficient Base (m/hr)	0.01548	Trench Width (m)	2.0
Infiltration Coefficient Side (m/hr)	0.00000	Trench Length (m)	10.0
Safety Factor	2.0	Slope (1:X)	1000.0
Porosity	0.30	Cap Volume Depth (m)	0.000
Invert Level (m)	59.500	Cap Infiltration Depth (m)	0.000

Swale

Infiltration Coefficient Base (m/hr)	0.01548	Length (m)	10.0
Infiltration Coefficient Side (m/hr)	0.00000	Side Slope (1:X)	3.0
Safety Factor	2.0	Slope (1:X)	1000.0
Porosity	1.00	Cap Volume Depth (m)	0.000
Invert Level (m)	59.800	Cap Infiltration Depth (m)	0.000
Base Width (m)	0.2		

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