

Paul Basham Associates				Page 1																																																																																																																																																																																																																			
Lancaster Court Fareham Hampshire, PO15 5TU		04																																																																																																																																																																																																																					
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<p><u>Summary of Results for 10 year Return Period (+30%)</u></p> <p>Half Drain Time : 543 minutes.</p> <table><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><tr><td>15 min Summer</td><td>-1.682</td><td>0.318</td><td>0.1</td><td>1.9</td><td>O K</td></tr><tr><td>30 min Summer</td><td>-1.585</td><td>0.415</td><td>0.1</td><td>2.5</td><td>O K</td></tr><tr><td>60 min Summer</td><td>-1.486</td><td>0.514</td><td>0.1</td><td>3.1</td><td>O K</td></tr><tr><td>120 min Summer</td><td>-1.392</td><td>0.608</td><td>0.1</td><td>3.7</td><td>O K</td></tr><tr><td>180 min Summer</td><td>-1.344</td><td>0.656</td><td>0.1</td><td>4.0</td><td>O K</td></tr><tr><td>240 min Summer</td><td>-1.318</td><td>0.682</td><td>0.1</td><td>4.2</td><td>O K</td></tr><tr><td>360 min Summer</td><td>-1.296</td><td>0.704</td><td>0.1</td><td>4.3</td><td>O K</td></tr><tr><td>480 min Summer</td><td>-1.291</td><td>0.709</td><td>0.1</td><td>4.3</td><td>O K</td></tr><tr><td>600 min Summer</td><td>-1.291</td><td>0.709</td><td>0.1</td><td>4.3</td><td>O K</td></tr><tr><td>720 min Summer</td><td>-1.294</td><td>0.706</td><td>0.1</td><td>4.3</td><td>O K</td></tr><tr><td>960 min Summer</td><td>-1.304</td><td>0.696</td><td>0.1</td><td>4.2</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>-1.333</td><td>0.667</td><td>0.1</td><td>4.1</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>-1.381</td><td>0.619</td><td>0.1</td><td>3.8</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>-1.429</td><td>0.571</td><td>0.1</td><td>3.5</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>-1.519</td><td>0.481</td><td>0.1</td><td>2.9</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>-1.598</td><td>0.402</td><td>0.1</td><td>2.4</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>-1.667</td><td>0.333</td><td>0.1</td><td>2.0</td><td>O K</td></tr><tr><td>8640 min 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Summer</td><td>5.728</td><td>0.0</td><td>482</td></tr><tr><td>720 min Summer</td><td>5.011</td><td>0.0</td><td>548</td></tr><tr><td>960 min Summer</td><td>4.057</td><td>0.0</td><td>682</td></tr><tr><td>1440 min Summer</td><td>3.009</td><td>0.0</td><td>954</td></tr><tr><td>2160 min Summer</td><td>2.231</td><td>0.0</td><td>1368</td></tr><tr><td>2880 min Summer</td><td>1.803</td><td>0.0</td><td>1784</td></tr><tr><td>4320 min Summer</td><td>1.335</td><td>0.0</td><td>2556</td></tr><tr><td>5760 min Summer</td><td>1.078</td><td>0.0</td><td>3344</td></tr><tr><td>7200 min Summer</td><td>0.913</td><td>0.0</td><td>4104</td></tr><tr><td>8640 min Summer</td><td>0.798</td><td>0.0</td><td>4840</td></tr><tr><td>10080 min Summer</td><td>0.711</td><td>0.0</td><td>5544</td></tr><tr><td>15 min Winter</td><td>70.770</td><td>0.0</td><td>19</td></tr></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	-1.682	0.318	0.1	1.9	O K	30 min Summer	-1.585	0.415	0.1	2.5	O K	60 min Summer	-1.486	0.514	0.1	3.1	O K	120 min Summer	-1.392	0.608	0.1	3.7	O K	180 min Summer	-1.344	0.656	0.1	4.0	O K	240 min Summer	-1.318	0.682	0.1	4.2	O K	360 min Summer	-1.296	0.704	0.1	4.3	O K	480 min Summer	-1.291	0.709	0.1	4.3	O K	600 min Summer	-1.291	0.709	0.1	4.3	O K	720 min Summer	-1.294	0.706	0.1	4.3	O K	960 min Summer	-1.304	0.696	0.1	4.2	O K	1440 min Summer	-1.333	0.667	0.1	4.1	O K	2160 min Summer	-1.381	0.619	0.1	3.8	O K	2880 min Summer	-1.429	0.571	0.1	3.5	O K	4320 min Summer	-1.519	0.481	0.1	2.9	O K	5760 min Summer	-1.598	0.402	0.1	2.4	O K	7200 min Summer	-1.667	0.333	0.1	2.0	O K	8640 min Summer	-1.725	0.275	0.1	1.7	O K	10080 min Summer	-1.775	0.225	0.1	1.4	O K	15 min Winter	-1.643	0.357	0.1	2.2	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	70.770	0.0	19	30 min Summer	46.698	0.0	33	60 min Summer	29.629	0.0	64	120 min Summer	18.344	0.0	122	180 min Summer	13.747	0.0	182	240 min Summer	11.169	0.0	242	360 min Summer	8.317	0.0	360	480 min Summer	6.743	0.0	420	600 min Summer	5.728	0.0	482	720 min Summer	5.011	0.0	548	960 min Summer	4.057	0.0	682	1440 min Summer	3.009	0.0	954	2160 min Summer	2.231	0.0	1368	2880 min Summer	1.803	0.0	1784	4320 min Summer	1.335	0.0	2556	5760 min Summer	1.078	0.0	3344	7200 min Summer	0.913	0.0	4104	8640 min Summer	0.798	0.0	4840	10080 min Summer	0.711	0.0	5544	15 min Winter	70.770	0.0	19
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Date 24/04/2019		Designed by JB			
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Innovyze		Source Control 2018.1.1			
Summary of Results for 10 year Return Period (+30%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	-1.534	0.466	0.1	2.8	O K
60 min Winter	-1.421	0.579	0.1	3.5	O K
120 min Winter	-1.311	0.689	0.1	4.2	O K
180 min Winter	-1.255	0.745	0.1	4.5	O K
240 min Winter	-1.221	0.779	0.1	4.7	O K
360 min Winter	-1.189	0.811	0.1	4.9	O K
480 min Winter	-1.179	0.821	0.1	5.0	O K
600 min Winter	-1.181	0.819	0.1	5.0	O K
720 min Winter	-1.185	0.815	0.1	5.0	O K
960 min Winter	-1.199	0.801	0.1	4.9	O K
1440 min Winter	-1.243	0.757	0.1	4.6	O K
2160 min Winter	-1.320	0.680	0.1	4.1	O K
2880 min Winter	-1.395	0.605	0.1	3.7	O K
4320 min Winter	-1.530	0.470	0.1	2.9	O K
5760 min Winter	-1.642	0.358	0.1	2.2	O K
7200 min Winter	-1.736	0.264	0.1	1.6	O K
8640 min Winter	-1.812	0.188	0.1	1.1	O K
10080 min Winter	-1.874	0.126	0.1	0.8	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	46.698	0.0	33		
60 min Winter	29.629	0.0	62		
120 min Winter	18.344	0.0	120		
180 min Winter	13.747	0.0	178		
240 min Winter	11.169	0.0	236		
360 min Winter	8.317	0.0	348		
480 min Winter	6.743	0.0	456		
600 min Winter	5.728	0.0	550		
720 min Winter	5.011	0.0	572		
960 min Winter	4.057	0.0	730		
1440 min Winter	3.009	0.0	1038		
2160 min Winter	2.231	0.0	1488		
2880 min Winter	1.803	0.0	1904		
4320 min Winter	1.335	0.0	2724		
5760 min Winter	1.078	0.0	3520		
7200 min Winter	0.913	0.0	4256		
8640 min Winter	0.798	0.0	4936		
10080 min Winter	0.711	0.0	5648		
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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	10	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time Area Diagram

Total Area (ha) 0.015

Time (mins)		Area
From:	To:	(ha)
0	4	0.015

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<p style="text-align: center;"><u>Model Details</u></p> <p style="text-align: center;">Storage is Online Cover Level (m) 0.000</p> <p style="text-align: center;"><u>Trench Soakaway Structure</u></p> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.03499</td> <td>Trench Width (m)</td> <td>5.8</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.03499</td> <td>Trench Length (m)</td> <td>3.5</td> </tr> <tr> <td>Safety Factor</td> <td>4.0</td> <td>Slope (1:X)</td> <td>0.0</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Cap Volume Depth (m)</td> <td>1.850</td> </tr> <tr> <td>Invert Level (m)</td> <td>-2.000</td> <td>Cap Infiltration Depth (m)</td> <td>1.850</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.03499	Trench Width (m)	5.8	Infiltration Coefficient Side (m/hr)	0.03499	Trench Length (m)	3.5	Safety Factor	4.0	Slope (1:X)	0.0	Porosity	0.30	Cap Volume Depth (m)	1.850	Invert Level (m)	-2.000	Cap Infiltration Depth (m)	1.850
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