

MJA Consulting			Page 1																																																																																																																																																																																																																			
Monarch House Barton Lane OX14 3NB		Westergate & Eastergate Plots 124 - 125 1:100+40%cc																																																																																																																																																																																																																				
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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 117 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>99.251</td><td>0.251</td><td>0.7</td><td>4.7</td><td>O K</td></tr><tr><td>30 min Summer</td><td>99.320</td><td>0.320</td><td>0.7</td><td>6.0</td><td>O K</td></tr><tr><td>60 min Summer</td><td>99.372</td><td>0.372</td><td>0.7</td><td>7.1</td><td>O K</td></tr><tr><td>120 min Summer</td><td>99.388</td><td>0.388</td><td>0.7</td><td>7.4</td><td>O K</td></tr><tr><td>180 min Summer</td><td>99.380</td><td>0.380</td><td>0.7</td><td>7.2</td><td>O K</td></tr><tr><td>240 min Summer</td><td>99.365</td><td>0.365</td><td>0.7</td><td>6.9</td><td>O K</td></tr><tr><td>360 min Summer</td><td>99.336</td><td>0.336</td><td>0.7</td><td>6.3</td><td>O K</td></tr><tr><td>480 min Summer</td><td>99.305</td><td>0.305</td><td>0.7</td><td>5.7</td><td>O K</td></tr><tr><td>600 min Summer</td><td>99.274</td><td>0.274</td><td>0.7</td><td>5.2</td><td>O K</td></tr><tr><td>720 min Summer</td><td>99.245</td><td>0.245</td><td>0.7</td><td>4.6</td><td>O K</td></tr><tr><td>960 min Summer</td><td>99.192</td><td>0.192</td><td>0.7</td><td>3.5</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>99.111</td><td>0.111</td><td>0.7</td><td>2.0</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>99.052</td><td>0.052</td><td>0.7</td><td>0.8</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>99.042</td><td>0.042</td><td>0.5</td><td>0.6</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>99.031</td><td>0.031</td><td>0.4</td><td>0.4</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>99.025</td><td>0.025</td><td>0.3</td><td>0.3</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>99.021</td><td>0.021</td><td>0.3</td><td>0.2</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>99.019</td><td>0.019</td><td>0.2</td><td>0.2</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>99.018</td><td>0.018</td><td>0.2</td><td>0.2</td><td>O K</td></tr><tr><td>15 min Winter</td><td>99.283</td><td>0.283</td><td>0.7</td><td>5.3</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>127.204</td><td>0.0</td><td>18</td></tr><tr><td>30 min Summer</td><td>85.821</td><td>0.0</td><td>32</td></tr><tr><td>60 min Summer</td><td>55.250</td><td>0.0</td><td>60</td></tr><tr><td>120 min Summer</td><td>34.307</td><td>0.0</td><td>104</td></tr><tr><td>180 min Summer</td><td>25.552</td><td>0.0</td><td>134</td></tr><tr><td>240 min Summer</td><td>20.570</td><td>0.0</td><td>168</td></tr><tr><td>360 min Summer</td><td>15.173</td><td>0.0</td><td>236</td></tr><tr><td>480 min Summer</td><td>12.206</td><td>0.0</td><td>304</td></tr><tr><td>600 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Summer	99.320	0.320	0.7	6.0	O K	60 min Summer	99.372	0.372	0.7	7.1	O K	120 min Summer	99.388	0.388	0.7	7.4	O K	180 min Summer	99.380	0.380	0.7	7.2	O K	240 min Summer	99.365	0.365	0.7	6.9	O K	360 min Summer	99.336	0.336	0.7	6.3	O K	480 min Summer	99.305	0.305	0.7	5.7	O K	600 min Summer	99.274	0.274	0.7	5.2	O K	720 min Summer	99.245	0.245	0.7	4.6	O K	960 min Summer	99.192	0.192	0.7	3.5	O K	1440 min Summer	99.111	0.111	0.7	2.0	O K	2160 min Summer	99.052	0.052	0.7	0.8	O K	2880 min Summer	99.042	0.042	0.5	0.6	O K	4320 min Summer	99.031	0.031	0.4	0.4	O K	5760 min Summer	99.025	0.025	0.3	0.3	O K	7200 min Summer	99.021	0.021	0.3	0.2	O K	8640 min Summer	99.019	0.019	0.2	0.2	O K	10080 min Summer	99.018	0.018	0.2	0.2	O K	15 min Winter	99.283	0.283	0.7	5.3	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	127.204	0.0	18	30 min Summer	85.821	0.0	32	60 min Summer	55.250	0.0	60	120 min Summer	34.307	0.0	104	180 min Summer	25.552	0.0	134	240 min Summer	20.570	0.0	168	360 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2160 min Winter	99.038	0.038	0.5	0.5	O K																																																																																																																																																																																											
2880 min Winter	99.031	0.031	0.4	0.4	O K																																																																																																																																																																																											
4320 min Winter	99.022	0.022	0.3	0.2	O K																																																																																																																																																																																											
5760 min Winter	99.019	0.019	0.2	0.2	O K																																																																																																																																																																																											
7200 min Winter	99.017	0.017	0.2	0.1	O K																																																																																																																																																																																											
8640 min Winter	99.016	0.016	0.2	0.1	O K																																																																																																																																																																																											
10080 min Winter	99.015	0.015	0.2	0.1	O K																																																																																																																																																																																											
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)																																																																																																																																																																																													
30 min Winter	85.821	0.0	32																																																																																																																																																																																													
60 min Winter	55.250	0.0	60																																																																																																																																																																																													
120 min Winter	34.307	0.0	114																																																																																																																																																																																													
180 min Winter	25.552	0.0	144																																																																																																																																																																																													
240 min Winter	20.570	0.0	182																																																																																																																																																																																													
360 min Winter	15.173	0.0	258																																																																																																																																																																																													
480 min Winter	12.206	0.0	330																																																																																																																																																																																													
600 min Winter	10.302	0.0	398																																																																																																																																																																																													
720 min Winter	8.963	0.0	464																																																																																																																																																																																													
960 min Winter	7.189	0.0	586																																																																																																																																																																																													
1440 min Winter	5.257	0.0	766																																																																																																																																																																																													
2160 min Winter	3.836	0.0	1100																																																																																																																																																																																													
2880 min Winter	3.063	0.0	1460																																																																																																																																																																																													
4320 min Winter	2.226	0.0	2208																																																																																																																																																																																													
5760 min Winter	1.773	0.0	2912																																																																																																																																																																																													
7200 min Winter	1.487	0.0	3536																																																																																																																																																																																													
8640 min Winter	1.289	0.0	4384																																																																																																																																																																																													
10080 min Winter	1.142	0.0	5104																																																																																																																																																																																													
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MJA Consulting		Page 4																								
Monarch House Barton Lane OX14 3NB	Westergate & Eastergate Plots 124 - 125 1:100+40%cc																									
Date 02/11/2018 File PLOTS 124-125.SRCX	Designed by S.Smith Checked by																									
Innovyze Source Control 2017.1.2																										
<u>Model Details</u> Storage is Online Cover Level (m) 100.000 <u>Porous Car Park Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.07200</td> <td>Width (m)</td> <td>6.5</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>10.0</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>18.1</td> <td>Slope (1:X)</td> <td>500.0</td> </tr> <tr> <td>Safety Factor</td> <td>2.0</td> <td>Depression Storage (mm)</td> <td>0</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Evaporation (mm/day)</td> <td>0</td> </tr> <tr> <td>Invert Level (m)</td> <td>99.000</td> <td>Cap Volume Depth (m)</td> <td>0.500</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.07200	Width (m)	6.5	Membrane Percolation (mm/hr)	1000	Length (m)	10.0	Max Percolation (l/s)	18.1	Slope (1:X)	500.0	Safety Factor	2.0	Depression Storage (mm)	0	Porosity	0.30	Evaporation (mm/day)	0	Invert Level (m)	99.000	Cap Volume Depth (m)	0.500
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