

MJA Consulting				Page 1																																																																																																																																																																																																																			
Monarch House Barton Lane OX14 3NB		Plots 160 - 172																																																																																																																																																																																																																					
Date 07/03/2018 13:22 File Trench SA Plots 160 - 1...		Designed by stewart Checked by																																																																																																																																																																																																																					
Innovyze		Source Control 2017.1.2																																																																																																																																																																																																																					
<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 34 minutes. <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>99.087</td><td>0.087</td><td>2.2</td><td>5.2</td><td>O K</td></tr><tr><td>30 min Summer</td><td>99.104</td><td>0.104</td><td>2.2</td><td>6.3</td><td>O K</td></tr><tr><td>60 min Summer</td><td>99.112</td><td>0.112</td><td>2.3</td><td>6.8</td><td>O K</td></tr><tr><td>120 min Summer</td><td>99.106</td><td>0.106</td><td>2.2</td><td>6.4</td><td>O K</td></tr><tr><td>180 min Summer</td><td>99.094</td><td>0.094</td><td>2.2</td><td>5.7</td><td>O K</td></tr><tr><td>240 min Summer</td><td>99.082</td><td>0.082</td><td>2.2</td><td>4.9</td><td>O K</td></tr><tr><td>360 min Summer</td><td>99.063</td><td>0.063</td><td>2.1</td><td>3.8</td><td>O K</td></tr><tr><td>480 min Summer</td><td>99.050</td><td>0.050</td><td>2.1</td><td>3.1</td><td>O K</td></tr><tr><td>600 min Summer</td><td>99.044</td><td>0.044</td><td>1.9</td><td>2.7</td><td>O K</td></tr><tr><td>720 min Summer</td><td>99.040</td><td>0.040</td><td>1.7</td><td>2.4</td><td>O K</td></tr><tr><td>960 min Summer</td><td>99.033</td><td>0.033</td><td>1.4</td><td>2.0</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>99.025</td><td>0.025</td><td>1.1</td><td>1.5</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>99.019</td><td>0.019</td><td>0.8</td><td>1.2</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>99.015</td><td>0.015</td><td>0.6</td><td>0.9</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>99.011</td><td>0.011</td><td>0.5</td><td>0.7</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>99.009</td><td>0.009</td><td>0.4</td><td>0.5</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>99.008</td><td>0.008</td><td>0.3</td><td>0.5</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>99.007</td><td>0.007</td><td>0.3</td><td>0.4</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>99.006</td><td>0.006</td><td>0.2</td><td>0.3</td><td>O K</td></tr><tr><td>15 min Winter</td><td>99.098</td><td>0.098</td><td>2.2</td><td>6.0</td><td>O K</td></tr></table> <table><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr><tr><td>15 min Summer</td><td>134.746</td><td>0.0</td><td>16</td></tr><tr><td>30 min Summer</td><td>90.474</td><td>0.0</td><td>26</td></tr><tr><td>60 min Summer</td><td>57.877</td><td>0.0</td><td>44</td></tr><tr><td>120 min Summer</td><td>35.655</td><td>0.0</td><td>78</td></tr><tr><td>180 min Summer</td><td>26.413</td><td>0.0</td><td>110</td></tr><tr><td>240 min Summer</td><td>21.237</td><td>0.0</td><td>142</td></tr><tr><td>360 min Summer</td><td>15.626</td><td>0.0</td><td>202</td></tr><tr><td>480 min Summer</td><td>12.548</td><td>0.0</td><td>256</td></tr><tr><td>600 min Summer</td><td>10.575</td><td>0.0</td><td>316</td></tr><tr><td>720 min Summer</td><td>9.191</td><td>0.0</td><td>376</td></tr><tr><td>960 min Summer</td><td>7.358</td><td>0.0</td><td>500</td></tr><tr><td>1440 min Summer</td><td>5.368</td><td>0.0</td><td>738</td></tr><tr><td>2160 min Summer</td><td>3.907</td><td>0.0</td><td>1100</td></tr><tr><td>2880 min Summer</td><td>3.115</td><td>0.0</td><td>1468</td></tr><tr><td>4320 min Summer</td><td>2.259</td><td>0.0</td><td>2200</td></tr><tr><td>5760 min Summer</td><td>1.796</td><td>0.0</td><td>2896</td></tr><tr><td>7200 min Summer</td><td>1.506</td><td>0.0</td><td>3608</td></tr><tr><td>8640 min Summer</td><td>1.304</td><td>0.0</td><td>4384</td></tr><tr><td>10080 min Summer</td><td>1.154</td><td>0.0</td><td>5136</td></tr><tr><td>15 min Winter</td><td>134.746</td><td>0.0</td><td>16</td></tr></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	99.087	0.087	2.2	5.2	O K	30 min Summer	99.104	0.104	2.2	6.3	O K	60 min Summer	99.112	0.112	2.3	6.8	O K	120 min Summer	99.106	0.106	2.2	6.4	O K	180 min Summer	99.094	0.094	2.2	5.7	O K	240 min Summer	99.082	0.082	2.2	4.9	O K	360 min Summer	99.063	0.063	2.1	3.8	O K	480 min Summer	99.050	0.050	2.1	3.1	O K	600 min Summer	99.044	0.044	1.9	2.7	O K	720 min Summer	99.040	0.040	1.7	2.4	O K	960 min Summer	99.033	0.033	1.4	2.0	O K	1440 min Summer	99.025	0.025	1.1	1.5	O K	2160 min Summer	99.019	0.019	0.8	1.2	O K	2880 min Summer	99.015	0.015	0.6	0.9	O K	4320 min Summer	99.011	0.011	0.5	0.7	O K	5760 min Summer	99.009	0.009	0.4	0.5	O K	7200 min Summer	99.008	0.008	0.3	0.5	O K	8640 min Summer	99.007	0.007	0.3	0.4	O K	10080 min Summer	99.006	0.006	0.2	0.3	O K	15 min Winter	99.098	0.098	2.2	6.0	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	134.746	0.0	16	30 min Summer	90.474	0.0	26	60 min Summer	57.877	0.0	44	120 min Summer	35.655	0.0	78	180 min Summer	26.413	0.0	110	240 min Summer	21.237	0.0	142	360 min Summer	15.626	0.0	202	480 min Summer	12.548	0.0	256	600 min Summer	10.575	0.0	316	720 min Summer	9.191	0.0	376	960 min Summer	7.358	0.0	500	1440 min Summer	5.368	0.0	738	2160 min Summer	3.907	0.0	1100	2880 min Summer	3.115	0.0	1468	4320 min Summer	2.259	0.0	2200	5760 min Summer	1.796	0.0	2896	7200 min Summer	1.506	0.0	3608	8640 min Summer	1.304	0.0	4384	10080 min Summer	1.154	0.0	5136	15 min Winter	134.746	0.0	16
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Innovyze	Source Control 2017.1.2				
<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	99.118	0.118	2.3	7.2	O K
60 min Winter	99.126	0.126	2.3	7.6	O K
120 min Winter	99.114	0.114	2.3	6.9	O K
180 min Winter	99.094	0.094	2.2	5.7	O K
240 min Winter	99.076	0.076	2.2	4.6	O K
360 min Winter	99.051	0.051	2.1	3.1	O K
480 min Winter	99.042	0.042	1.8	2.6	O K
600 min Winter	99.036	0.036	1.5	2.2	O K
720 min Winter	99.032	0.032	1.3	1.9	O K
960 min Winter	99.026	0.026	1.1	1.6	O K
1440 min Winter	99.019	0.019	0.8	1.2	O K
2160 min Winter	99.014	0.014	0.6	0.9	O K
2880 min Winter	99.011	0.011	0.5	0.7	O K
4320 min Winter	99.008	0.008	0.4	0.5	O K
5760 min Winter	99.007	0.007	0.3	0.4	O K
7200 min Winter	99.006	0.006	0.2	0.3	O K
8640 min Winter	99.005	0.005	0.2	0.3	O K
10080 min Winter	99.004	0.004	0.2	0.2	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	90.474	0.0	29		
60 min Winter	57.877	0.0	46		
120 min Winter	35.655	0.0	84		
180 min Winter	26.413	0.0	118		
240 min Winter	21.237	0.0	150		
360 min Winter	15.626	0.0	202		
480 min Winter	12.548	0.0	262		
600 min Winter	10.575	0.0	322		
720 min Winter	9.191	0.0	384		
960 min Winter	7.358	0.0	504		
1440 min Winter	5.368	0.0	736		
2160 min Winter	3.907	0.0	1092		
2880 min Winter	3.115	0.0	1484		
4320 min Winter	2.259	0.0	2128		
5760 min Winter	1.796	0.0	2968		
7200 min Winter	1.506	0.0	3544		
8640 min Winter	1.304	0.0	4312		
10080 min Winter	1.154	0.0	5128		
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Monarch House
Barton Lane
OX14 3NB

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Model Details

Storage is Online Cover Level (m) 100.000

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr) 0.07200	Trench Width (m) 2.0
Infiltration Coefficient Side (m/hr) 0.07200	Trench Length (m) 101.0
Safety Factor 2.0	Slope (1:X) 0.0
Porosity 0.30	Cap Volume Depth (m) 0.000
Invert Level (m) 99.000	Cap Infiltration Depth (m) 0.000

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