

The Civil Engineering Practice					Page 1																																																																																																																																																																																																																			
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Date 27/06/2019 File Soakaway 7.SRCX			Designed by S Burgess Checked by SRD																																																																																																																																																																																																																					
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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 154 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>15.246</td><td>1.096</td><td>0.8</td><td>6.6</td><td>O K</td></tr><tr><td>30 min Summer</td><td>15.643</td><td>1.493</td><td>0.8</td><td>8.6</td><td>O K</td></tr><tr><td>60 min Summer</td><td>15.987</td><td>1.837</td><td>0.8</td><td>10.3</td><td>O K</td></tr><tr><td>120 min Summer</td><td>16.169</td><td>2.019</td><td>0.8</td><td>11.3</td><td>O K</td></tr><tr><td>180 min Summer</td><td>16.177</td><td>2.027</td><td>0.8</td><td>11.3</td><td>O K</td></tr><tr><td>240 min Summer</td><td>16.134</td><td>1.984</td><td>0.8</td><td>11.1</td><td>O K</td></tr><tr><td>360 min Summer</td><td>16.021</td><td>1.871</td><td>0.8</td><td>10.5</td><td>O K</td></tr><tr><td>480 min Summer</td><td>15.888</td><td>1.738</td><td>0.8</td><td>9.8</td><td>O K</td></tr><tr><td>600 min Summer</td><td>15.752</td><td>1.602</td><td>0.8</td><td>9.1</td><td>O K</td></tr><tr><td>720 min Summer</td><td>15.618</td><td>1.468</td><td>0.8</td><td>8.5</td><td>O K</td></tr><tr><td>960 min Summer</td><td>15.366</td><td>1.216</td><td>0.8</td><td>7.2</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>14.953</td><td>0.803</td><td>0.8</td><td>5.1</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>14.572</td><td>0.422</td><td>0.8</td><td>3.1</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>14.463</td><td>0.313</td><td>0.7</td><td>2.5</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>14.387</td><td>0.237</td><td>0.5</td><td>1.9</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>14.342</td><td>0.192</td><td>0.4</td><td>1.5</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>14.312</td><td>0.162</td><td>0.4</td><td>1.3</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>14.291</td><td>0.141</td><td>0.3</td><td>1.1</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>14.275</td><td>0.125</td><td>0.3</td><td>1.0</td><td>O K</td></tr><tr><td>15 min Winter</td><td>15.412</td><td>1.262</td><td>0.8</td><td>7.4</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>128.238</td><td>0.0</td><td>20</td></tr><tr><td>30 min Summer</td><td>86.178</td><td>0.0</td><td>34</td></tr><tr><td>60 min Summer</td><td>55.250</td><td>0.0</td><td>62</td></tr><tr><td>120 min Summer</td><td>34.177</td><td>0.0</td><td>114</td></tr><tr><td>180 min Summer</td><td>25.410</td><td>0.0</td><td>144</td></tr><tr><td>240 min Summer</td><td>20.436</td><td>0.0</td><td>176</td></tr><tr><td>360 min Summer</td><td>15.037</td><td>0.0</td><td>244</td></tr><tr><td>480 min Summer</td><td>12.081</td><td>0.0</td><td>312</td></tr><tr><td>600 min Summer</td><td>10.185</td><td>0.0</td><td>380</td></tr><tr><td>720 min Summer</td><td>8.854</td><td>0.0</td><td>446</td></tr><tr><td>960 min Summer</td><td>7.093</td><td>0.0</td><td>574</td></tr><tr><td>1440 min Summer</td><td>5.178</td><td>0.0</td><td>812</td></tr><tr><td>2160 min Summer</td><td>3.772</td><td>0.0</td><td>1144</td></tr><tr><td>2880 min Summer</td><td>3.009</td><td>0.0</td><td>1476</td></tr><tr><td>4320 min Summer</td><td>2.184</td><td>0.0</td><td>2208</td></tr><tr><td>5760 min Summer</td><td>1.738</td><td>0.0</td><td>2936</td></tr><tr><td>7200 min Summer</td><td>1.455</td><td>0.0</td><td>3672</td></tr><tr><td>8640 min Summer</td><td>1.260</td><td>0.0</td><td>4400</td></tr><tr><td>10080 min Summer</td><td>1.115</td><td>0.0</td><td>5136</td></tr><tr><td>15 min Winter</td><td>128.238</td><td>0.0</td><td>20</td></tr></table>							Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	15.246	1.096	0.8	6.6	O K	30 min Summer	15.643	1.493	0.8	8.6	O K	60 min Summer	15.987	1.837	0.8	10.3	O K	120 min Summer	16.169	2.019	0.8	11.3	O K	180 min Summer	16.177	2.027	0.8	11.3	O K	240 min Summer	16.134	1.984	0.8	11.1	O K	360 min Summer	16.021	1.871	0.8	10.5	O K	480 min Summer	15.888	1.738	0.8	9.8	O K	600 min Summer	15.752	1.602	0.8	9.1	O K	720 min Summer	15.618	1.468	0.8	8.5	O K	960 min Summer	15.366	1.216	0.8	7.2	O K	1440 min Summer	14.953	0.803	0.8	5.1	O K	2160 min Summer	14.572	0.422	0.8	3.1	O K	2880 min Summer	14.463	0.313	0.7	2.5	O K	4320 min Summer	14.387	0.237	0.5	1.9	O K	5760 min Summer	14.342	0.192	0.4	1.5	O K	7200 min Summer	14.312	0.162	0.4	1.3	O K	8640 min Summer	14.291	0.141	0.3	1.1	O K	10080 min Summer	14.275	0.125	0.3	1.0	O K	15 min Winter	15.412	1.262	0.8	7.4	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	128.238	0.0	20	30 min Summer	86.178	0.0	34	60 min Summer	55.250	0.0	62	120 min Summer	34.177	0.0	114	180 min Summer	25.410	0.0	144	240 min 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11 Tungsten Building George Street Fishersgate BN41 1RA		Manor Nursery Angmering West Sussex			
Date 27/06/2019 File Soakaway 7.SRCX		Designed by S Burgess Checked by SRD			
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	15.866	1.716	0.8	9.7	O K
60 min Winter	16.272	2.122	0.8	11.8	O K
120 min Winter	16.518	2.368	0.8	13.0	Flood Risk
180 min Winter	16.515	2.365	0.8	13.0	Flood Risk
240 min Winter	16.452	2.302	0.8	12.7	Flood Risk
360 min Winter	16.282	2.132	0.8	11.8	O K
480 min Winter	16.077	1.927	0.8	10.8	O K
600 min Winter	15.864	1.714	0.8	9.7	O K
720 min Winter	15.655	1.505	0.8	8.7	O K
960 min Winter	15.268	1.118	0.8	6.7	O K
1440 min Winter	14.684	0.534	0.8	3.7	O K
2160 min Winter	14.448	0.298	0.6	2.4	O K
2880 min Winter	14.391	0.241	0.5	1.9	O K
4320 min Winter	14.327	0.177	0.4	1.4	O K
5760 min Winter	14.291	0.141	0.3	1.1	O K
7200 min Winter	14.268	0.118	0.3	0.9	O K
8640 min Winter	14.253	0.103	0.2	0.8	O K
10080 min Winter	14.241	0.091	0.2	0.7	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	86.178	0.0	34		
60 min Winter	55.250	0.0	62		
120 min Winter	34.177	0.0	118		
180 min Winter	25.410	0.0	168		
240 min Winter	20.436	0.0	190		
360 min Winter	15.037	0.0	266		
480 min Winter	12.081	0.0	340		
600 min Winter	10.185	0.0	412		
720 min Winter	8.854	0.0	480		
960 min Winter	7.093	0.0	608		
1440 min Winter	5.178	0.0	826		
2160 min Winter	3.772	0.0	1132		
2880 min Winter	3.009	0.0	1500		
4320 min Winter	2.184	0.0	2208		
5760 min Winter	1.738	0.0	2936		
7200 min Winter	1.455	0.0	3672		
8640 min Winter	1.260	0.0	4408		
10080 min Winter	1.115	0.0	5136		
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<u>Model Details</u> Storage is Online Cover Level (m) 16.600 <u>Lined Soakaway Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Ring Diameter (m)</td> <td>1.80</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.72360</td> <td>Pit Multiplier</td> <td>1.5</td> </tr> <tr> <td>Safety Factor</td> <td>2.0</td> <td>Number Required</td> <td>2</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Cap Volume Depth (m)</td> <td>2.500</td> </tr> <tr> <td>Invert Level (m)</td> <td>14.150</td> <td>Cap Infiltration Depth (m)</td> <td>0.350</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Ring Diameter (m)	1.80	Infiltration Coefficient Side (m/hr)	0.72360	Pit Multiplier	1.5	Safety Factor	2.0	Number Required	2	Porosity	0.30	Cap Volume Depth (m)	2.500	Invert Level (m)	14.150	Cap Infiltration Depth (m)	0.350
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