

The Civil Engineering Practice				Page 1																																																																																																																																																																																																																			
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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 182 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>14.295</td><td>0.995</td><td>0.3</td><td>2.7</td><td>O K</td></tr><tr><td>30 min Summer</td><td>14.609</td><td>1.309</td><td>0.3</td><td>3.5</td><td>O K</td></tr><tr><td>60 min Summer</td><td>14.884</td><td>1.584</td><td>0.3</td><td>4.2</td><td>O K</td></tr><tr><td>120 min Summer</td><td>15.038</td><td>1.738</td><td>0.3</td><td>4.6</td><td>O K</td></tr><tr><td>180 min Summer</td><td>15.028</td><td>1.728</td><td>0.3</td><td>4.5</td><td>O K</td></tr><tr><td>240 min Summer</td><td>14.985</td><td>1.685</td><td>0.3</td><td>4.4</td><td>O K</td></tr><tr><td>360 min Summer</td><td>14.895</td><td>1.595</td><td>0.3</td><td>4.2</td><td>O K</td></tr><tr><td>480 min Summer</td><td>14.800</td><td>1.500</td><td>0.3</td><td>4.0</td><td>O K</td></tr><tr><td>600 min Summer</td><td>14.703</td><td>1.403</td><td>0.3</td><td>3.7</td><td>O K</td></tr><tr><td>720 min Summer</td><td>14.607</td><td>1.307</td><td>0.3</td><td>3.5</td><td>O K</td></tr><tr><td>960 min Summer</td><td>14.419</td><td>1.119</td><td>0.3</td><td>3.0</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>14.080</td><td>0.780</td><td>0.3</td><td>2.1</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>13.702</td><td>0.402</td><td>0.3</td><td>1.2</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>13.479</td><td>0.179</td><td>0.3</td><td>0.6</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>13.385</td><td>0.085</td><td>0.2</td><td>0.3</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>13.368</td><td>0.068</td><td>0.2</td><td>0.3</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>13.357</td><td>0.057</td><td>0.1</td><td>0.2</td><td>O K</td></tr><tr><td>8640 min 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Summer</td><td>10.185</td><td>0.0</td><td>390</td></tr><tr><td>720 min Summer</td><td>8.854</td><td>0.0</td><td>456</td></tr><tr><td>960 min Summer</td><td>7.093</td><td>0.0</td><td>588</td></tr><tr><td>1440 min Summer</td><td>5.178</td><td>0.0</td><td>838</td></tr><tr><td>2160 min Summer</td><td>3.772</td><td>0.0</td><td>1188</td></tr><tr><td>2880 min Summer</td><td>3.009</td><td>0.0</td><td>1504</td></tr><tr><td>4320 min Summer</td><td>2.184</td><td>0.0</td><td>2200</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>5040</td></tr><tr><td>15 min Winter</td><td>128.238</td><td>0.0</td><td>18</td></tr></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	14.295	0.995	0.3	2.7	O K	30 min Summer	14.609	1.309	0.3	3.5	O K	60 min Summer	14.884	1.584	0.3	4.2	O K	120 min Summer	15.038	1.738	0.3	4.6	O K	180 min Summer	15.028	1.728	0.3	4.5	O K	240 min Summer	14.985	1.685	0.3	4.4	O K	360 min Summer	14.895	1.595	0.3	4.2	O K	480 min Summer	14.800	1.500	0.3	4.0	O K	600 min Summer	14.703	1.403	0.3	3.7	O K	720 min Summer	14.607	1.307	0.3	3.5	O K	960 min Summer	14.419	1.119	0.3	3.0	O K	1440 min Summer	14.080	0.780	0.3	2.1	O K	2160 min Summer	13.702	0.402	0.3	1.2	O K	2880 min Summer	13.479	0.179	0.3	0.6	O K	4320 min Summer	13.385	0.085	0.2	0.3	O K	5760 min Summer	13.368	0.068	0.2	0.3	O K	7200 min Summer	13.357	0.057	0.1	0.2	O K	8640 min Summer	13.349	0.049	0.1	0.2	O K	10080 min Summer	13.344	0.044	0.1	0.2	O K	15 min Winter	14.430	1.130	0.3	3.0	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	128.238	0.0	18	30 min Summer	86.178	0.0	33	60 min Summer	55.250	0.0	62	120 min Summer	34.177	0.0	120	180 min Summer	25.410	0.0	156	240 min Summer	20.436	0.0	188	360 min Summer	15.037	0.0	254	480 min Summer	12.081	0.0	322	600 min Summer	10.185	0.0	390	720 min Summer	8.854	0.0	456	960 min Summer	7.093	0.0	588	1440 min Summer	5.178	0.0	838	2160 min Summer	3.772	0.0	1188	2880 min Summer	3.009	0.0	1504	4320 min Summer	2.184	0.0	2200	5760 min Summer	1.738	0.0	2936	7200 min Summer	1.455	0.0	3672	8640 min Summer	1.260	0.0	4400	10080 min Summer	1.115	0.0	5040	15 min Winter	128.238	0.0	18
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Date 27/06/2019 File Soakaway 9.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	14.793	1.493	0.3	3.9	O K
60 min Winter	15.119	1.819	0.3	4.8	O K
120 min Winter	15.334	2.034	0.3	5.3	Flood Risk
180 min Winter	15.347	2.047	0.3	5.4	Flood Risk
240 min Winter	15.283	1.983	0.3	5.2	Flood Risk
360 min Winter	15.160	1.860	0.3	4.9	O K
480 min Winter	15.017	1.717	0.3	4.5	O K
600 min Winter	14.867	1.567	0.3	4.1	O K
720 min Winter	14.715	1.415	0.3	3.7	O K
960 min Winter	14.421	1.121	0.3	3.0	O K
1440 min Winter	13.910	0.610	0.3	1.7	O K
2160 min Winter	13.436	0.136	0.3	0.5	O K
2880 min Winter	13.385	0.085	0.2	0.3	O K
4320 min Winter	13.362	0.062	0.2	0.2	O K
5760 min Winter	13.349	0.049	0.1	0.2	O K
7200 min Winter	13.341	0.041	0.1	0.2	O K
8640 min Winter	13.336	0.036	0.1	0.1	O K
10080 min Winter	13.332	0.032	0.1	0.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	86.178	0.0	32		
60 min Winter	55.250	0.0	60		
120 min Winter	34.177	0.0	118		
180 min Winter	25.410	0.0	172		
240 min Winter	20.436	0.0	220		
360 min Winter	15.037	0.0	274		
480 min Winter	12.081	0.0	352		
600 min Winter	10.185	0.0	426		
720 min Winter	8.854	0.0	498		
960 min Winter	7.093	0.0	634		
1440 min Winter	5.178	0.0	880		
2160 min Winter	3.772	0.0	1168		
2880 min Winter	3.009	0.0	1468		
4320 min Winter	2.184	0.0	2200		
5760 min Winter	1.738	0.0	2912		
7200 min Winter	1.455	0.0	3576		
8640 min Winter	1.260	0.0	4328		
10080 min Winter	1.115	0.0	5072		
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<u>Model Details</u> Storage is Online Cover Level (m) 15.500 <u>Lined Soakaway Structure</u> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Infiltration Coefficient Base (m/hr) 0.00000</td> <td style="width: 50%;">Ring Diameter (m) 1.80</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr) 1.67040</td> <td>Pit Multiplier 1.5</td> </tr> <tr> <td>Safety Factor 2.0</td> <td>Number Required 1</td> </tr> <tr> <td>Porosity 0.30</td> <td>Cap Volume Depth (m) 2.200</td> </tr> <tr> <td>Invert Level (m) 13.300</td> <td>Cap Infiltration Depth (m) 0.100</td> </tr> </table>			Infiltration Coefficient Base (m/hr) 0.00000	Ring Diameter (m) 1.80	Infiltration Coefficient Side (m/hr) 1.67040	Pit Multiplier 1.5	Safety Factor 2.0	Number Required 1	Porosity 0.30	Cap Volume Depth (m) 2.200	Invert Level (m) 13.300	Cap Infiltration Depth (m) 0.100
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