

Shaun Tonge Engineering					Page 1																																																																																																																																																																																																																		
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<u>Summary of Results for 30 year Return Period</u> Half Drain Time : 675 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>71.752</td><td>0.302</td><td>0.2</td><td>7.9</td><td>O K</td></tr><tr><td>30 min Summer</td><td>71.846</td><td>0.396</td><td>0.2</td><td>10.4</td><td>O K</td></tr><tr><td>60 min Summer</td><td>71.943</td><td>0.493</td><td>0.2</td><td>12.9</td><td>O K</td></tr><tr><td>120 min Summer</td><td>72.036</td><td>0.586</td><td>0.3</td><td>15.3</td><td>O K</td></tr><tr><td>180 min Summer</td><td>72.083</td><td>0.633</td><td>0.3</td><td>16.5</td><td>O K</td></tr><tr><td>240 min Summer</td><td>72.109</td><td>0.659</td><td>0.3</td><td>17.2</td><td>O K</td></tr><tr><td>360 min Summer</td><td>72.133</td><td>0.683</td><td>0.3</td><td>17.8</td><td>O K</td></tr><tr><td>480 min Summer</td><td>72.138</td><td>0.688</td><td>0.3</td><td>18.0</td><td>O K</td></tr><tr><td>600 min Summer</td><td>72.136</td><td>0.686</td><td>0.3</td><td>17.9</td><td>O K</td></tr><tr><td>720 min Summer</td><td>72.132</td><td>0.682</td><td>0.3</td><td>17.8</td><td>O K</td></tr><tr><td>960 min Summer</td><td>72.120</td><td>0.670</td><td>0.3</td><td>17.5</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>72.091</td><td>0.641</td><td>0.3</td><td>16.7</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>72.044</td><td>0.594</td><td>0.3</td><td>15.5</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>71.998</td><td>0.548</td><td>0.3</td><td>14.3</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>71.913</td><td>0.463</td><td>0.2</td><td>12.1</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>71.837</td><td>0.387</td><td>0.2</td><td>10.1</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>71.771</td><td>0.321</td><td>0.2</td><td>8.4</td><td>O K</td></tr><tr><td>8640 min 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Summer	71.846	0.396	0.2	10.4	O K	60 min Summer	71.943	0.493	0.2	12.9	O K	120 min Summer	72.036	0.586	0.3	15.3	O K	180 min Summer	72.083	0.633	0.3	16.5	O K	240 min Summer	72.109	0.659	0.3	17.2	O K	360 min Summer	72.133	0.683	0.3	17.8	O K	480 min Summer	72.138	0.688	0.3	18.0	O K	600 min Summer	72.136	0.686	0.3	17.9	O K	720 min Summer	72.132	0.682	0.3	17.8	O K	960 min Summer	72.120	0.670	0.3	17.5	O K	1440 min Summer	72.091	0.641	0.3	16.7	O K	2160 min Summer	72.044	0.594	0.3	15.5	O K	2880 min Summer	71.998	0.548	0.3	14.3	O K	4320 min Summer	71.913	0.463	0.2	12.1	O K	5760 min Summer	71.837	0.387	0.2	10.1	O K	7200 min Summer	71.771	0.321	0.2	8.4	O K	8640 min Summer	71.715	0.265	0.2	6.9	O K	10080 min Summer	71.666	0.216	0.2	5.7	O K	15 min Winter	71.789	0.339	0.2	8.9	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	69.430	0.0	19	30 min Summer	46.032	0.0	34	60 min Summer	29.238	0.0	64	120 min Summer	18.034	0.0	122	180 min Summer	13.445	0.0	182	240 min 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Date 28/05/2020 10:25 File communal soakaway.SRCX		Designed by Shaun Checked by				
CADS			Source Control 2019.1			
<u>Summary of Results for 30 year Return Period</u>						
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	
30 min Winter	71.895	0.445	0.2	11.6	O K	
60 min Winter	72.005	0.555	0.3	14.5	O K	
120 min Winter	72.113	0.663	0.3	17.3	O K	
180 min Winter	72.168	0.718	0.3	18.8	O K	
240 min Winter	72.200	0.750	0.3	19.6	O K	
360 min Winter	72.234	0.784	0.3	20.5	O K	
480 min Winter	72.246	0.796	0.3	20.8	O K	
600 min Winter	72.247	0.797	0.3	20.8	O K	
720 min Winter	72.240	0.790	0.3	20.6	O K	
960 min Winter	72.225	0.775	0.3	20.2	O K	
1440 min Winter	72.185	0.735	0.3	19.2	O K	
2160 min Winter	72.115	0.665	0.3	17.4	O K	
2880 min Winter	72.045	0.595	0.3	15.5	O K	
4320 min Winter	71.917	0.467	0.2	12.2	O K	
5760 min Winter	71.808	0.358	0.2	9.3	O K	
7200 min Winter	71.716	0.266	0.2	6.9	O K	
8640 min Winter	71.640	0.190	0.2	5.0	O K	
10080 min Winter	71.579	0.129	0.2	3.4	O K	
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)			
30 min Winter	46.032	0.0	33			
60 min Winter	29.238	0.0	62			
120 min Winter	18.034	0.0	120			
180 min Winter	13.445	0.0	178			
240 min Winter	10.864	0.0	236			
360 min Winter	8.020	0.0	350			
480 min Winter	6.464	0.0	462			
600 min Winter	5.465	0.0	568			
720 min Winter	4.762	0.0	666			
960 min Winter	3.830	0.0	752			
1440 min Winter	2.814	0.0	1066			
2160 min Winter	2.065	0.0	1516			
2880 min Winter	1.656	0.0	1960			
4320 min Winter	1.213	0.0	2808			
5760 min Winter	0.971	0.0	3576			
7200 min Winter	0.817	0.0	4328			
8640 min Winter	0.709	0.0	5016			
10080 min Winter	0.630	0.0	5744			
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<u>Model Details</u> Storage is Online Cover Level (m) 73.000 <u>Cellular Storage Structure</u> Invert Level (m) 71.450 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.04680 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.04680 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Depth (m)</th> <th>Area (m²)</th> <th>Inf. Area (m²)</th> <th>Depth (m)</th> <th>Area (m²)</th> <th>Inf. Area (m²)</th> </tr> </thead> <tbody> <tr> <td>0.000</td> <td>27.5</td> <td>27.5</td> <td>0.900</td> <td>0.0</td> <td>44.3</td> </tr> <tr> <td>0.800</td> <td>27.5</td> <td>44.3</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	0.000	27.5	27.5	0.900	0.0	44.3	0.800	27.5	44.3			
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