

Keytech Development Design Ltd					Page 1																																																																																																																																																																																																																			
Riverside Offices Mountbatten Way Congleton, CW12 1DY			Tenford Lane Soakaway Trench ROAD 7																																																																																																																																																																																																																					
Date 15/02/2024 16:35 File SOAKAWAY TRENCH ROAD 7....			Designed by HB Checked by GS																																																																																																																																																																																																																					
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<u>Summary of Results for 100 year Return Period</u> Half Drain Time : 416 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>98.909</td><td>1.209</td><td>0.2</td><td>5.3</td><td>O K</td></tr><tr><td>30 min Summer</td><td>99.088</td><td>1.388</td><td>0.2</td><td>6.9</td><td>O K</td></tr><tr><td>60 min Summer</td><td>99.244</td><td>1.544</td><td>0.2</td><td>8.6</td><td>O K</td></tr><tr><td>120 min Summer</td><td>99.369</td><td>1.669</td><td>0.3</td><td>10.0</td><td>O K</td></tr><tr><td>180 min Summer</td><td>99.421</td><td>1.721</td><td>0.3</td><td>10.7</td><td>O K</td></tr><tr><td>240 min Summer</td><td>99.443</td><td>1.743</td><td>0.3</td><td>10.9</td><td>O K</td></tr><tr><td>360 min Summer</td><td>99.450</td><td>1.750</td><td>0.3</td><td>11.0</td><td>O K</td></tr><tr><td>480 min Summer</td><td>99.445</td><td>1.745</td><td>0.3</td><td>11.0</td><td>O K</td></tr><tr><td>600 min Summer</td><td>99.436</td><td>1.736</td><td>0.3</td><td>10.9</td><td>O K</td></tr><tr><td>720 min Summer</td><td>99.426</td><td>1.726</td><td>0.3</td><td>10.7</td><td>O K</td></tr><tr><td>960 min Summer</td><td>99.400</td><td>1.700</td><td>0.3</td><td>10.4</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>99.337</td><td>1.637</td><td>0.3</td><td>9.6</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>99.241</td><td>1.541</td><td>0.2</td><td>8.6</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>99.154</td><td>1.454</td><td>0.2</td><td>7.6</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>99.005</td><td>1.305</td><td>0.2</td><td>6.1</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>98.884</td><td>1.184</td><td>0.2</td><td>5.0</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>98.784</td><td>1.084</td><td>0.2</td><td>4.2</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>98.700</td><td>1.000</td><td>0.2</td><td>3.6</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>98.628</td><td>0.928</td><td>0.1</td><td>3.1</td><td>O K</td></tr><tr><td>15 min Winter</td><td>98.984</td><td>1.284</td><td>0.2</td><td>5.9</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>82.560</td><td>0.0</td><td>26</td></tr><tr><td>30 min Summer</td><td>54.324</td><td>0.0</td><td>40</td></tr><tr><td>60 min Summer</td><td>34.158</td><td>0.0</td><td>68</td></tr><tr><td>120 min Summer</td><td>20.834</td><td>0.0</td><td>126</td></tr><tr><td>180 min Summer</td><td>15.431</td><td>0.0</td><td>184</td></tr><tr><td>240 min Summer</td><td>12.414</td><td>0.0</td><td>242</td></tr><tr><td>360 min Summer</td><td>9.075</td><td>0.0</td><td>314</td></tr><tr><td>480 min Summer</td><td>7.228</td><td>0.0</td><td>374</td></tr><tr><td>600 min 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Summer	99.088	1.388	0.2	6.9	O K	60 min Summer	99.244	1.544	0.2	8.6	O K	120 min Summer	99.369	1.669	0.3	10.0	O K	180 min Summer	99.421	1.721	0.3	10.7	O K	240 min Summer	99.443	1.743	0.3	10.9	O K	360 min Summer	99.450	1.750	0.3	11.0	O K	480 min Summer	99.445	1.745	0.3	11.0	O K	600 min Summer	99.436	1.736	0.3	10.9	O K	720 min Summer	99.426	1.726	0.3	10.7	O K	960 min Summer	99.400	1.700	0.3	10.4	O K	1440 min Summer	99.337	1.637	0.3	9.6	O K	2160 min Summer	99.241	1.541	0.2	8.6	O K	2880 min Summer	99.154	1.454	0.2	7.6	O K	4320 min Summer	99.005	1.305	0.2	6.1	O K	5760 min Summer	98.884	1.184	0.2	5.0	O K	7200 min Summer	98.784	1.084	0.2	4.2	O K	8640 min Summer	98.700	1.000	0.2	3.6	O K	10080 min Summer	98.628	0.928	0.1	3.1	O K	15 min Winter	98.984	1.284	0.2	5.9	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	82.560	0.0	26	30 min Summer	54.324	0.0	40	60 min Summer	34.158	0.0	68	120 min Summer	20.834	0.0	126	180 min Summer	15.431	0.0	184	240 min 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Innovyze			Source Control 2020.1.3			
Summary of Results for 100 year Return Period						
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	
30 min Winter	99.174	1.474	0.2	7.8	O K	
60 min Winter	99.340	1.640	0.3	9.7	O K	
120 min Winter	99.477	1.777	0.3	11.4	O K	
180 min Winter	99.535	1.835	0.3	12.1	O K	
240 min Winter	99.562	1.862	0.3	12.5	O K	
360 min Winter	99.573	1.873	0.3	12.6	O K	
480 min Winter	99.561	1.861	0.3	12.5	O K	
600 min Winter	99.550	1.850	0.3	12.3	O K	
720 min Winter	99.535	1.835	0.3	12.1	O K	
960 min Winter	99.497	1.797	0.3	11.6	O K	
1440 min Winter	99.408	1.708	0.3	10.5	O K	
2160 min Winter	99.275	1.575	0.3	8.9	O K	
2880 min Winter	99.155	1.455	0.2	7.6	O K	
4320 min Winter	98.955	1.255	0.2	5.7	O K	
5760 min Winter	98.798	1.098	0.2	4.3	O K	
7200 min Winter	98.673	0.973	0.2	3.4	O K	
8640 min Winter	98.572	0.872	0.1	2.7	O K	
10080 min Winter	98.488	0.788	0.1	2.2	O K	
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)			
30 min Winter	54.324	0.0	40			
60 min Winter	34.158	0.0	68			
120 min Winter	20.834	0.0	124			
180 min Winter	15.431	0.0	180			
240 min Winter	12.414	0.0	236			
360 min Winter	9.075	0.0	344			
480 min Winter	7.228	0.0	390			
600 min Winter	6.055	0.0	466			
720 min Winter	5.243	0.0	542			
960 min Winter	4.174	0.0	694			
1440 min Winter	3.023	0.0	988			
2160 min Winter	2.185	0.0	1408			
2880 min Winter	1.734	0.0	1816			
4320 min Winter	1.251	0.0	2592			
5760 min Winter	0.991	0.0	3336			
7200 min Winter	0.827	0.0	4040			
8640 min Winter	0.713	0.0	4760			
10080 min Winter	0.628	0.0	5448			
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