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Unit B10, Elmbridge Court Business Park Gloucester GL3 1JZ	Steam Mill Road Cinderford	
Date 07/02/2024 18:15 File P23-1026 - SOURCE CONTR...	Designed by EL Checked by AdC	
XP Solutions	Source Control 2020.1.3	

Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 400 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max E Outflow (l/s)	Max Volume (m ³)	Status
15 min Summer	157.281	0.681	0.0	1.6	1.6	38.8	O K
30 min Summer	157.506	0.906	0.0	1.6	1.6	51.7	O K
60 min Summer	157.735	1.135	0.0	1.8	1.8	64.7	O K
120 min Summer	157.937	1.337	0.0	1.9	1.9	76.2	O K
180 min Summer	158.016	1.416	0.0	2.0	2.0	80.7	O K
240 min Summer	158.043	1.443	0.0	2.0	2.0	82.3	O K
360 min Summer	158.040	1.440	0.0	2.0	2.0	82.1	O K
480 min Summer	158.022	1.422	0.0	2.0	2.0	81.0	O K
600 min Summer	157.997	1.397	0.0	2.0	2.0	79.7	O K
720 min Summer	157.972	1.372	0.0	2.0	2.0	78.2	O K
960 min Summer	157.920	1.320	0.0	1.9	1.9	75.2	O K
1440 min Summer	157.818	1.218	0.0	1.9	1.9	69.4	O K
2160 min Summer	157.673	1.073	0.0	1.8	1.8	61.2	O K
2880 min Summer	157.539	0.939	0.0	1.7	1.7	53.5	O K
4320 min Summer	157.305	0.705	0.0	1.6	1.6	40.2	O K
5760 min Summer	157.056	0.456	0.0	1.6	1.6	26.0	O K
7200 min Summer	156.860	0.260	0.0	1.6	1.6	14.8	O K
8640 min Summer	156.756	0.156	0.0	1.5	1.5	8.9	O K
10080 min Summer	156.698	0.098	0.0	1.5	1.5	5.6	O K
15 min Winter	157.281	0.681	0.0	1.6	1.6	38.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Discharge Volume (m ³)	Time-Peak (mins)
15 min Summer	122.992	0.0	40.2	19
30 min Summer	83.220	0.0	54.5	33
60 min Summer	53.779	0.0	70.4	62
120 min Summer	33.549	0.0	87.9	122
180 min Summer	25.065	0.0	98.4	182
240 min Summer	20.227	0.0	106.0	240
360 min Summer	14.926	0.0	117.3	328
480 min Summer	12.021	0.0	126.0	386
600 min Summer	10.154	0.0	133.0	452
720 min Summer	8.841	0.0	139.0	518
960 min Summer	7.098	0.0	148.8	656
1440 min Summer	5.199	0.0	163.5	936
2160 min Summer	3.799	0.0	179.2	1344
2880 min Summer	3.037	0.0	190.9	1756
4320 min Summer	2.210	0.0	208.5	2548
5760 min Summer	1.762	0.0	221.5	3288
7200 min Summer	1.479	0.0	232.4	3888
8640 min Summer	1.282	0.0	241.8	4504
10080 min Summer	1.136	0.0	250.0	5240
15 min Winter	122.992	0.0	40.2	18

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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (1/s)	Max Control (1/s)	Max Σ Outflow (1/s)	Max Volume (m³)	Status
30 min Winter	157.507	0.907	0.0	1.6	1.6	51.7	O K
60 min Winter	157.738	1.138	0.0	1.8	1.8	64.8	O K
120 min Winter	157.943	1.343	0.0	1.9	1.9	76.6	O K
180 min Winter	158.028	1.428	0.0	2.0	2.0	81.4	O K
240 min Winter	158.059	1.459	0.0	2.0	2.0	83.1	O K
360 min Winter	158.063	1.463	0.0	2.0	2.0	83.4	O K
480 min Winter	158.034	1.434	0.0	2.0	2.0	81.7	O K
600 min Winter	158.006	1.406	0.0	2.0	2.0	80.2	O K
720 min Winter	157.973	1.373	0.0	2.0	2.0	78.2	O K
960 min Winter	157.900	1.300	0.0	1.9	1.9	74.1	O K
1440 min Winter	157.752	1.152	0.0	1.8	1.8	65.7	O K
2160 min Winter	157.542	0.942	0.0	1.7	1.7	53.7	O K
2880 min Winter	157.352	0.752	0.0	1.6	1.6	42.9	O K
4320 min Winter	156.923	0.323	0.0	1.6	1.6	18.4	O K
5760 min Winter	156.718	0.118	0.0	1.5	1.5	6.7	O K
7200 min Winter	156.648	0.048	0.0	1.3	1.3	2.7	O K
8640 min Winter	156.627	0.027	0.0	1.2	1.2	1.5	O K
10080 min Winter	156.617	0.017	0.0	1.0	1.0	1.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
30 min Winter	83.220	0.0	54.5	33
60 min Winter	53.779	0.0	70.4	62
120 min Winter	33.549	0.0	87.9	120
180 min Winter	25.065	0.0	98.5	178
240 min Winter	20.227	0.0	106.0	234
360 min Winter	14.926	0.0	117.3	342
480 min Winter	12.021	0.0	126.0	396
600 min Winter	10.154	0.0	133.1	468
720 min Winter	8.841	0.0	139.0	544
960 min Winter	7.098	0.0	148.8	702
1440 min Winter	5.199	0.0	163.4	998
2160 min Winter	3.799	0.0	179.1	1444
2880 min Winter	3.037	0.0	190.9	1872
4320 min Winter	2.210	0.0	208.5	2552
5760 min Winter	1.762	0.0	221.6	3120
7200 min Winter	1.479	0.0	232.4	3744
8640 min Winter	1.282	0.0	241.8	4408
10080 min Winter	1.136	0.0	250.0	5144