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

Storm Duration (mins)	Maximum Control (l/s)	Maximum Overflow (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Overflow Volume (m^3)	Maximum Volume (m^3)	Status
15 Summer	4.2	0.0	4.2	101.9098	0.9398	0.0	2.4	O K
30 Summer	4.7	0.0	4.7	102.1228	1.1528	0.0	2.9	O K
60 Summer	4.6	0.0	4.6	102.0808	1.1108	0.0	2.8	O K
120 Summer	4.4	0.0	4.4	101.9678	0.9978	0.0	2.5	O K
180 Summer	3.8	0.0	3.8	101.7448	0.7748	0.0	2.0	O K
240 Summer	3.4	0.0	3.4	101.5903	0.6203	0.0	1.6	O K
360 Summer	2.8	0.0	2.8	101.3997	0.4297	0.0	1.1	O K
480 Summer	2.4	0.0	2.4	101.2872	0.3172	0.0	0.8	O K
600 Summer	2.1	0.0	2.1	101.2203	0.2502	0.0	0.6	O K
720 Summer	1.9	0.0	1.9	101.1712	0.2012	0.0	0.5	O K
960 Summer	1.5	0.0	1.5	101.1148	0.1448	0.0	0.4	O K
1440 Summer	1.1	0.0	1.1	101.0618	0.0918	0.0	0.2	O K
2160 Summer	0.9	0.0	0.9	101.0358	0.0658	0.0	0.2	O K
2880 Summer	0.7	0.0	0.7	101.0267	0.0568	0.0	0.1	O K
4320 Summer	0.5	0.0	0.5	101.0168	0.0467	0.0	0.1	O K
5760 Summer	0.4	0.0	0.4	101.0113	0.0412	0.0	0.1	O K
7200 Summer	0.3	0.0	0.3	101.0062	0.0363	0.0	0.1	O K
8640 Summer	0.3	0.0	0.3	101.0038	0.0337	0.0	0.1	O K
10080 Summer	0.3	0.0	0.3	101.0013	0.0312	0.0	0.1	O K
15 Winter	4.8	0.0	4.8	102.1538	1.1838	0.0	3.0	O K
30 Winter	5.0	0.0	5.0	102.2643	1.2942	0.0	3.3	O K
60 Winter	5.0	0.0	5.0	102.2483	1.2782	0.0	3.3	O K
120 Winter	4.1	0.0	4.1	101.8473	0.8773	0.0	2.2	O K
180 Winter	3.4	0.0	3.4	101.5848	0.6148	0.0	1.6	O K
240 Winter	2.9	0.0	2.9	101.4222	0.4522	0.0	1.2	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	89.23	13
30 Summer	61.54	21
60 Summer	40.51	38
120 Summer	25.63	70
180 Summer	19.23	102
240 Summer	15.63	130
360 Summer	11.65	190
480 Summer	9.44	250
600 Summer	8.01	310
720 Summer	7.00	370
960 Summer	5.65	488
1440 Summer	4.17	734
2160 Summer	3.07	1076
2880 Summer	2.46	1448
4320 Summer	1.81	2156
5760 Summer	1.45	2872
7200 Summer	1.23	3656
8640 Summer	1.07	4360
10080 Summer	0.95	5112
15 Winter	89.23	14
30 Winter	61.54	23
60 Winter	40.51	42
120 Winter	25.63	72
180 Winter	19.23	104
240 Winter	15.63	132

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

Storm Duration (mins)	Maximum Control (l/s)	Maximum Overflow (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Overflow Volume (m³)	Maximum Volume (m³)	Status
360 Winter	2.2	0.0	2.2	101.2513	0.2812	0.0	0.7	O K
480 Winter	1.9	0.0	1.9	101.1693	0.1992	0.0	0.5	O K
600 Winter	1.6	0.0	1.6	101.1217	0.1518	0.0	0.4	O K
720 Winter	1.4	0.0	1.4	101.0923	0.1223	0.0	0.3	O K
960 Winter	1.1	0.0	1.1	101.0592	0.0893	0.0	0.2	O K
1440 Winter	0.8	0.0	0.8	101.0348	0.0648	0.0	0.2	O K
2160 Winter	0.6	0.0	0.6	101.0228	0.0528	0.0	0.1	O K
2880 Winter	0.5	0.0	0.5	101.0168	0.0467	0.0	0.1	O K
4320 Winter	0.4	0.0	0.4	101.0083	0.0383	0.0	0.1	O K
5760 Winter	0.3	0.0	0.3	101.0028	0.0328	0.0	0.1	O K
7200 Winter	0.3	0.0	0.3	100.9997	0.0297	0.0	0.1	O K
8640 Winter	0.2	0.0	0.2	100.9977	0.0278	0.0	0.1	O K
10080 Winter	0.2	0.0	0.2	100.9967	0.0268	0.0	0.1	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
360 Winter	11.65	192
480 Winter	9.44	252
600 Winter	8.01	310
720 Winter	7.00	374
960 Winter	5.65	490
1440 Winter	4.17	718
2160 Winter	3.07	1112
2880 Winter	2.46	1448
4320 Winter	1.81	2196
5760 Winter	1.45	2864
7200 Winter	1.23	3496
8640 Winter	1.07	4288
10080 Winter	0.95	5040

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Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.300	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+40
Cv (Winter)	0.840		

Pipe Network

Volume in Pipe Network (m^3)	1	Dia of Outfall Pipe (m)	0.100
Slope of Outfall Pipe (1:x)	60.0	Roughness of Outfall Pipe	0.600

Time / Area Diagram

Total Area (ha) = 0.024

Time from:	(mins) to:	Area (ha)
0	4	0.024

Tank/Pond Details

Invert Level (m) 100.970 Ground Level (m) 102.790

Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.00	2.5	0.50	2.6	1.00	2.5	1.50	2.6	2.00	2.5	2.50	2.6
0.10	2.6	0.60	2.5	1.10	2.6	1.60	2.5	2.10	2.6		
0.20	2.5	0.70	2.6	1.20	2.5	1.70	2.6	2.20	2.5		
0.30	2.6	0.80	2.5	1.30	2.6	1.80	2.5	2.30	2.6		
0.40	2.5	0.90	2.6	1.40	2.5	1.90	2.6	2.40	2.5		

Orifice Outflow Control

Diameter (m) 0.050 Invert Level (m) 100.970
Discharge Coefficient 0.510

Pipe Overflow Control

Pipe Diameter (m) 0.100 Entry Loss Coef 0.500
Slope (1:x) 1.0 Coef of Contraction 0.600
Length (m) 1.350 Invert Level (m) 102.260
Roughness (mm) 0.600

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