## Summary of Results for 10 year Return Period (+50%)

Half Drain Time : 205 minutes.

| Storm Event | Max Level (m) | Max Depth (m) | Max Infiltration (l/s) | Max Volume (m³) | Status |
|---|---|---|---|---|---|
| 15 min Summer | 23.903 | 0.403 | 0.7 | 9.3 | O K |
| 30 min Summer | 24.014 | 0.514 | 0.7 | 11.9 | O K |
| 60 min Summer | 24.115 | 0.615 | 0.8 | 14.3 | O K |
| 120 min Summer | 24.184 | 0.684 | 0.9 | 15.9 | O K |
| 180 min Summer | 24.201 | 0.701 | 0.9 | 16.4 | O K |
| 240 min Summer | 24.207 | 0.707 | 0.9 | 16.5 | O K |
| 360 min Summer | 24.203 | 0.703 | 0.9 | 16.4 | O K |
| 480 min Summer | 24.189 | 0.689 | 0.9 | 16.1 | O K |
| 600 min Summer | 24.171 | 0.671 | 0.9 | 15.7 | O K |
| 720 min Summer | 24.153 | 0.653 | 0.8 | 15.2 | O K |
| 960 min Summer | 24.116 | 0.616 | 0.8 | 14.3 | O K |
| 1440 min Summer | 24.047 | 0.547 | 0.8 | 12.7 | O K |
| 2160 min Summer | 23.958 | 0.458 | 0.7 | 10.6 | O K |
| 2880 min Summer | 23.885 | 0.385 | 0.6 | 8.9 | O K |
| 4320 min Summer | 23.775 | 0.275 | 0.6 | 6.2 | O K |
| 5760 min Summer | 23.695 | 0.195 | 0.5 | 4.3 | O K |
| 7200 min Summer | 23.638 | 0.138 | 0.5 | 3.0 | O K |
| 8640 min Summer | 23.596 | 0.096 | 0.4 | 2.0 | O K |
| 10080 min Summer | 23.567 | 0.067 | 0.4 | 1.3 | O K |
| 15 min Winter | 23.952 | 0.452 | 0.7 | 10.4 | O K |
| 30 min Winter | 24.078 | 0.578 | 0.8 | 13.4 | O K |
| 60 min Winter | 24.195 | 0.695 | 0.9 | 16.2 | O K |
| 120 min Winter | 24.281 | 0.781 | 0.9 | 18.3 | O K |
| 180 min Winter | 24.303 | 0.803 | 1.0 | 18.8 | O K |
| 240 min Winter | 24.307 | 0.807 | 1.0 | 18.9 | O K |
| 360 min Winter | 24.299 | 0.799 | 1.0 | 18.7 | O K |
| 480 min Winter | 24.277 | 0.777 | 0.9 | 18.2 | O K |
| 600 min Winter | 24.248 | 0.748 | 0.9 | 17.5 | O K |
| 720 min Winter | 24.218 | 0.718 | 0.9 | 16.8 | O K |
| 960 min Winter | 24.160 | 0.660 | 0.9 | 15.4 | O K |
| 1440 min Winter | 24.056 | 0.556 | 0.8 | 12.9 | O K |
| 2160 min Winter | 23.931 | 0.431 | 0.7 | 9.9 | O K |
| 2880 min Winter | 23.835 | 0.335 | 0.6 | 7.6 | O K |
| 4320 min Winter | 23.697 | 0.197 | 0.5 | 4.4 | O K |
| 5760 min Winter | 23.608 | 0.108 | 0.4 | 2.3 | O K |
| 7200 min Winter | 23.553 | 0.053 | 0.4 | 1.0 | O K |
| 8640 min Winter | 23.545 | 0.045 | 0.3 | 0.8 | O K |
| 10080 min Winter | 23.540 | 0.040 | 0.3 | 0.7 | O K |

| Storm Event | Rain (mm/hr) | Flooded Volume (m³) | Time-Peak (mins) |
|---|---|---|---|
| 15 min Summer | 82.824 | 0.0 | 18 |
| 30 min Summer | 54.698 | 0.0 | 33 |
| 60 min Summer | 34.733 | 0.0 | 62 |
| 120 min Summer | 21.518 | 0.0 | 120 |
| 180 min Summer | 16.130 | 0.0 | 152 |
| 240 min Summer | 13.106 | 0.0 | 184 |
| 360 min Summer | 9.767 | 0.0 | 252 |
| 480 min Summer | 7.922 | 0.0 | 322 |
| 600 min Summer | 6.730 | 0.0 | 390 |
| 720 min Summer | 5.890 | 0.0 | 460 |
| 960 min Summer | 4.770 | 0.0 | 596 |
| 1440 min Summer | 3.540 | 0.0 | 866 |
| 2160 min Summer | 2.625 | 0.0 | 1252 |
| 2880 min Summer | 2.123 | 0.0 | 1616 |
| 4320 min Summer | 1.572 | 0.0 | 2376 |
| 5760 min Summer | 1.270 | 0.0 | 3064 |
| 7200 min Summer | 1.076 | 0.0 | 3816 |
| 8640 min Summer | 0.940 | 0.0 | 4496 |
| 10080 min Summer | 0.839 | 0.0 | 5152 |
| 15 min Winter | 82.824 | 0.0 | 18 |
| 30 min Winter | 54.698 | 0.0 | 32 |
| 60 min Winter | 34.733 | 0.0 | 60 |
| 120 min Winter | 21.518 | 0.0 | 116 |
| 180 min Winter | 16.130 | 0.0 | 170 |
| 240 min Winter | 13.106 | 0.0 | 192 |
| 360 min Winter | 9.767 | 0.0 | 270 |
| 480 min Winter | 7.922 | 0.0 | 346 |
| 600 min Winter | 6.730 | 0.0 | 422 |
| 720 min Winter | 5.890 | 0.0 | 494 |
| 960 min Winter | 4.770 | 0.0 | 638 |
| 1440 min Winter | 3.540 | 0.0 | 912 |
| 2160 min Winter | 2.625 | 0.0 | 1316 |
| 2880 min Winter | 2.123 | 0.0 | 1700 |
| 4320 min Winter | 1.572 | 0.0 | 2424 |
| 5760 min Winter | 1.270 | 0.0 | 3120 |
| 7200 min Winter | 1.076 | 0.0 | 3744 |
| 8640 min Winter | 0.940 | 0.0 | 4408 |
| 10080 min Winter | 0.839 | 0.0 | 5120 |

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## Rainfall Details

| | | | | | |
|---|---|---|---|---|---|
| Rainfall Model | FSR | Ratio R | 0.348 | Cv (Winter) | 0.840 |
| Return Period (years) | 10 | Summer Storms | Yes | Shortest Storm (mins) | 15 |
| Region | England and Wales | Winter Storms | Yes | Longest Storm (mins) | 10080 |
| M5-60 (mm) | 19.300 | Cv (Summer) | 0.750 | Climate Change % | +50 |

## Time Area Diagram

Total Area (ha) 0.063

| Time (mins) From: | To: | Area (ha) |
|---|---|---|
| 0 | 4 | 0.063 |

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## Model Details

Storage is Online Cover Level (m) 25.850

## Trench Soakaway Structure

| | | | | | |
|---|---|---|---|---|---|
| Infiltration Coefficient Base (m/hr) | 0.52200 | Invert Level (m) | 23.500 | Cap Volume Depth (m) | 1.600 |
| Infiltration Coefficient Side (m/hr) | 0.52200 | Trench Width (m) | 1.0 | Cap Infiltration Depth (m) | 1.600 |
| Safety Factor | 10.0 | Trench Length (m) | 25.0 | | |
| Porosity | 0.95 | Slope (1:X) | 1000.0 | | |

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