

| Summary of Results for 100 year Return Period (+45%) |               |                     |                        |                   |                     |                 |        |
|------------------------------------------------------|---------------|---------------------|------------------------|-------------------|---------------------|-----------------|--------|
| Half Drain Time : 1241 minutes.                      |               |                     |                        |                   |                     |                 |        |
| Storm Event                                          | Max Level (m) | Max Depth (m)       | Max Infiltration (l/s) | Max Control (l/s) | Max Σ Outflow (l/s) | Max Volume (m³) | Status |
| 15 min Summer                                        | 36.740        | 0.740               | 0.0                    | 2.0               | 2.0                 | 112.5           | O K    |
| 30 min Summer                                        | 36.988        | 0.988               | 0.0                    | 2.0               | 2.0                 | 150.2           | O K    |
| 60 min Summer                                        | 37.253        | 1.253               | 0.0                    | 2.0               | 2.0                 | 190.5           | O K    |
| 120 min Summer                                       | 37.409        | 1.409               | 0.0                    | 2.0               | 2.0                 | 214.1           | O K    |
| 180 min Summer                                       | 37.494        | 1.494               | 0.0                    | 2.0               | 2.0                 | 227.1           | O K    |
| 240 min Summer                                       | 37.550        | 1.550               | 0.0                    | 2.0               | 2.0                 | 235.5           | O K    |
| 360 min Summer                                       | 37.615        | 1.615               | 0.0                    | 2.0               | 2.0                 | 245.4           | O K    |
| 480 min Summer                                       | 37.644        | 1.644               | 0.0                    | 2.0               | 2.0                 | 249.9           | O K    |
| 600 min Summer                                       | 37.653        | 1.653               | 0.0                    | 2.0               | 2.0                 | 251.3           | O K    |
| 720 min Summer                                       | 37.649        | 1.649               | 0.0                    | 2.0               | 2.0                 | 250.7           | O K    |
| 960 min Summer                                       | 37.616        | 1.616               | 0.0                    | 2.0               | 2.0                 | 245.7           | O K    |
| 1440 min Summer                                      | 37.544        | 1.544               | 0.0                    | 2.0               | 2.0                 | 234.6           | O K    |
| 2160 min Summer                                      | 37.471        | 1.471               | 0.0                    | 2.0               | 2.0                 | 223.5           | O K    |
| 2880 min Summer                                      | 37.413        | 1.413               | 0.0                    | 2.0               | 2.0                 | 214.8           | O K    |
| 4320 min Summer                                      | 37.311        | 1.311               | 0.0                    | 2.0               | 2.0                 | 199.3           | O K    |
| 5760 min Summer                                      | 37.223        | 1.223               | 0.0                    | 2.0               | 2.0                 | 185.9           | O K    |
| 7200 min Summer                                      | 37.151        | 1.151               | 0.0                    | 2.0               | 2.0                 | 175.0           | O K    |
| 8640 min Summer                                      | 37.092        | 1.092               | 0.0                    | 2.0               | 2.0                 | 165.9           | O K    |
| 10080 min Summer                                     | 37.042        | 1.042               | 0.0                    | 2.0               | 2.0                 | 158.3           | O K    |
| 15 min Winter                                        | 36.831        | 0.831               | 0.0                    | 2.0               | 2.0                 | 126.4           | O K    |
| 30 min Winter                                        | 37.111        | 1.111               | 0.0                    | 2.0               | 2.0                 | 168.9           | O K    |
| 60 min Winter                                        | 37.411        | 1.411               | 0.0                    | 2.0               | 2.0                 | 214.5           | O K    |
| 120 min Winter                                       | 37.592        | 1.592               | 0.0                    | 2.0               | 2.0                 | 242.0           | O K    |
| Storm Event                                          | Rain (mm/hr)  | Flooded Volume (m³) | Discharge Volume (m³)  | Time-Peak (mins)  |                     |                 |        |
| 15 min Summer                                        | 134.788       | 0.0                 | 115.2                  | 23                |                     |                 |        |
| 30 min Summer                                        | 90.480        | 0.0                 | 154.7                  | 37                |                     |                 |        |
| 60 min Summer                                        | 58.057        | 0.0                 | 198.5                  | 66                |                     |                 |        |
| 120 min Summer                                       | 33.516        | 0.0                 | 229.2                  | 126               |                     |                 |        |
| 180 min Summer                                       | 24.310        | 0.0                 | 249.4                  | 186               |                     |                 |        |
| 240 min Summer                                       | 19.370        | 0.0                 | 264.9                  | 244               |                     |                 |        |
| 360 min Summer                                       | 14.090        | 0.0                 | 289.1                  | 364               |                     |                 |        |
| 480 min Summer                                       | 11.253        | 0.0                 | 307.8                  | 482               |                     |                 |        |
| 600 min Summer                                       | 9.461         | 0.0                 | 323.6                  | 602               |                     |                 |        |
| 720 min Summer                                       | 8.218         | 0.0                 | 337.2                  | 722               |                     |                 |        |
| 960 min Summer                                       | 6.595         | 0.0                 | 345.3                  | 960               |                     |                 |        |
| 1440 min Summer                                      | 4.849         | 0.0                 | 340.6                  | 1186              |                     |                 |        |
| 2160 min Summer                                      | 3.576         | 0.0                 | 440.3                  | 1560              |                     |                 |        |
| 2880 min Summer                                      | 2.895         | 0.0                 | 475.1                  | 1968              |                     |                 |        |
| 4320 min Summer                                      | 2.173         | 0.0                 | 534.8                  | 2808              |                     |                 |        |
| 5760 min Summer                                      | 1.792         | 0.0                 | 588.2                  | 3632              |                     |                 |        |
| 7200 min Summer                                      | 1.561         | 0.0                 | 640.9                  | 4464              |                     |                 |        |
| 8640 min Summer                                      | 1.405         | 0.0                 | 691.4                  | 5272              |                     |                 |        |
| 10080 min Summer                                     | 1.292         | 0.0                 | 742.3                  | 6048              |                     |                 |        |
| 15 min Winter                                        | 134.788       | 0.0                 | 129.0                  | 22                |                     |                 |        |
| 30 min Winter                                        | 90.480        | 0.0                 | 172.8                  | 37                |                     |                 |        |
| 60 min Winter                                        | 58.057        | 0.0                 | 222.5                  | 66                |                     |                 |        |
| 120 min Winter                                       | 33.516        | 0.0                 | 256.6                  | 124               |                     |                 |        |

|                                                      |                                                                                         |                                                                                    |
|------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Calcinotto                                           |                                                                                         | Page 2                                                                             |
| Jonsen House<br>43 Commercial Road<br>Poole BH14 0HU | 114290-CAL-XX-XX-CA-D-006<br>Orchard Gate, Dibden Purlieu<br>Storage Estimate - 2.0 l/s |  |
| Date 31/08/2023 12:57                                | Designed by GEB                                                                         |                                                                                    |
| File 114290-CAL-XX-XX-CA-D-006 - Stora...            | Checked by GEB                                                                          |                                                                                    |
| XP Solutions                                         | Source Control 2020.1                                                                   |                                                                                    |

Summary of Results for 100 year Return Period (+45%)

| Storm Event      | Max Level<br>(m) | Max Depth<br>(m) | Max Infiltration<br>(l/s) | Max Control<br>(l/s) | Max E<br>(l/s) | Max Outflow<br>(l/s) | Max Volume<br>(m³) | Status |
|------------------|------------------|------------------|---------------------------|----------------------|----------------|----------------------|--------------------|--------|
| 180 min Winter   | 37.695           | 1.695            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 257.6              | O K    |
| 240 min Winter   | 37.764           | 1.764            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 268.1              | O K    |
| 360 min Winter   | 37.850           | 1.850            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 281.2              | O K    |
| 480 min Winter   | 37.897           | 1.897            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 288.3              | O K    |
| 600 min Winter   | 37.922           | 1.922            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 292.1              | O K    |
| 720 min Winter   | 37.932           | 1.932            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 293.7              | O K    |
| 960 min Winter   | 37.928           | 1.928            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 293.0              | O K    |
| 1440 min Winter  | 37.854           | 1.854            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 281.9              | O K    |
| 2160 min Winter  | 37.738           | 1.738            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 264.1              | O K    |
| 2880 min Winter  | 37.650           | 1.650            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 250.8              | O K    |
| 4320 min Winter  | 37.475           | 1.475            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 224.2              | O K    |
| 5760 min Winter  | 37.312           | 1.312            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 199.5              | O K    |
| 7200 min Winter  | 37.174           | 1.174            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 178.5              | O K    |
| 8640 min Winter  | 37.054           | 1.054            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 160.1              | O K    |
| 10080 min Winter | 36.947           | 0.947            | 0.0                       | 2.0                  | 2.0            | 2.0                  | 143.9              | O K    |

| Storm Event      | Rain<br>(mm/hr) | Flooded Volume<br>(m³) | Discharge Volume<br>(m³) | Time-Peak<br>(mins) |
|------------------|-----------------|------------------------|--------------------------|---------------------|
| 180 min Winter   | 24.310          | 0.0                    | 279.3                    | 182                 |
| 240 min Winter   | 19.370          | 0.0                    | 296.7                    | 242                 |
| 360 min Winter   | 14.090          | 0.0                    | 323.9                    | 358                 |
| 480 min Winter   | 11.253          | 0.0                    | 344.7                    | 474                 |
| 600 min Winter   | 9.461           | 0.0                    | 344.4                    | 590                 |
| 720 min Winter   | 8.218           | 0.0                    | 344.1                    | 704                 |
| 960 min Winter   | 6.595           | 0.0                    | 343.3                    | 928                 |
| 1440 min Winter  | 4.849           | 0.0                    | 340.8                    | 1354                |
| 2160 min Winter  | 3.576           | 0.0                    | 493.0                    | 1688                |
| 2880 min Winter  | 2.895           | 0.0                    | 532.2                    | 2140                |
| 4320 min Winter  | 2.173           | 0.0                    | 599.1                    | 3068                |
| 5760 min Winter  | 1.792           | 0.0                    | 658.9                    | 3928                |
| 7200 min Winter  | 1.561           | 0.0                    | 717.9                    | 4760                |
| 8640 min Winter  | 1.405           | 0.0                    | 775.0                    | 5624                |
| 10080 min Winter | 1.292           | 0.0                    | 831.2                    | 6448                |

Rainfall Details

|                       |                                 |                       |       |
|-----------------------|---------------------------------|-----------------------|-------|
| Rainfall Model        | FEH                             | Winter Storms         | Yes   |
| Return Period (years) | 100                             | Cv (Summer)           | 0.750 |
| FEH Rainfall Version  | 2013                            | Cv (Winter)           | 0.840 |
| Site Location         | GB 441283 106591 SU 41283 06591 | Shortest Storm (mins) | 15    |
| Data Type             | Point                           | Longest Storm (mins)  | 10080 |
| Summer Storms         | Yes                             | Climate Change %      | +45   |

Time Area Diagram

Total Area (ha) 0.456

| Time (mins)    | Area  | Time (mins)    | Area  |
|----------------|-------|----------------|-------|
| From: To: (ha) |       | From: To: (ha) |       |
| 0 4            | 0.256 | 4 8            | 0.200 |

Model Details

Storage is Online Cover Level (m) 39.300

Cellular Storage Structure

Invert Level (m) 36.000 Safety Factor 1.0  
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95  
Infiltration Coefficient Side (m/hr) 0.00000

| Depth (m) | Area (m²) | Inf. Area (m²) | Depth (m) | Area (m²) | Inf. Area (m²) | Depth (m) | Area (m²) | Inf. Area (m²) |
|-----------|-----------|----------------|-----------|-----------|----------------|-----------|-----------|----------------|
| 0.000     | 160.0     | 176.0          | 2.000     | 160.0     | 260.9          | 2.010     | 0.0       | 260.9          |

Level Controlled Pump Outflow Control

Invert Level (m) 35.950 Cut In Height (m) 0.050 Cut Out Height (m) 0.025

| Depth (m) | Outflow (l/s) | Depth (m) | Outflow (l/s) | Depth (m) | Outflow (l/s) |
|-----------|---------------|-----------|---------------|-----------|---------------|
| 0.050     | 2.0000        | 0.500     | 2.0000        | 2.000     | 2.0000        |
| 0.250     | 2.0000        | 1.000     | 2.0000        | 3.000     | 2.0000        |