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| Lancaster Court<br>Fareham<br>Hampshire, PO15 5TU         | 1:100+40%CC PLOT 8-10<br>SIDE INFILTRATION ONLY<br>INFILTRATION CRATES |  |
| Date 28/10/2021 09:12<br>File 108.5009 - PLOT 8,9&10.SRCX | Designed by RD<br>Checked by RW                                        |                                                                                     |
| Innovyze                                                  | Source Control 2020.1.3                                                |                                                                                     |

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

Half Drain Time : 506 minutes.

| Storm Event      | Max Level (m) | Max Depth (m) | Max Infiltration (l/s) | Max Volume (m <sup>3</sup> ) | Status |
|------------------|---------------|---------------|------------------------|------------------------------|--------|
| 15 min Summer    | 15.354        | 0.309         | 0.1                    | 4.4                          | O K    |
| 30 min Summer    | 15.462        | 0.417         | 0.1                    | 5.9                          | O K    |
| 60 min Summer    | 15.576        | 0.531         | 0.2                    | 7.6                          | O K    |
| 120 min Summer   | 15.685        | 0.640         | 0.2                    | 9.1                          | O K    |
| 180 min Summer   | 15.734        | 0.689         | 0.2                    | 9.8                          | O K    |
| 240 min Summer   | 15.758        | 0.713         | 0.2                    | 10.2                         | O K    |
| 360 min Summer   | 15.781        | 0.736         | 0.2                    | 10.5                         | O K    |
| 480 min Summer   | 15.795        | 0.750         | 0.2                    | 10.7                         | O K    |
| 600 min Summer   | 15.804        | 0.759         | 0.3                    | 10.8                         | O K    |
| 720 min Summer   | 15.808        | 0.763         | 0.3                    | 10.9                         | O K    |
| 960 min Summer   | 15.809        | 0.764         | 0.3                    | 10.9                         | O K    |
| 1440 min Summer  | 15.792        | 0.747         | 0.2                    | 10.6                         | O K    |
| 2160 min Summer  | 15.753        | 0.708         | 0.2                    | 10.1                         | O K    |
| 2880 min Summer  | 15.711        | 0.666         | 0.2                    | 9.5                          | O K    |
| 4320 min Summer  | 15.637        | 0.592         | 0.2                    | 8.4                          | O K    |
| 5760 min Summer  | 15.578        | 0.533         | 0.2                    | 7.6                          | O K    |
| 7200 min Summer  | 15.532        | 0.487         | 0.2                    | 6.9                          | O K    |
| 8640 min Summer  | 15.494        | 0.449         | 0.1                    | 6.4                          | O K    |
| 10080 min Summer | 15.463        | 0.418         | 0.1                    | 6.0                          | O K    |
| 15 min Winter    | 15.391        | 0.346         | 0.1                    | 4.9                          | O K    |
| 30 min Winter    | 15.512        | 0.467         | 0.2                    | 6.7                          | O K    |
| 60 min Winter    | 15.641        | 0.596         | 0.2                    | 8.5                          | O K    |
| 120 min Winter   | 15.763        | 0.718         | 0.2                    | 10.2                         | O K    |
| 180 min Winter   | 15.820        | 0.775         | 0.3                    | 11.0                         | O K    |

| Storm Event      | Rain (mm/hr) | Flooded Volume (m <sup>3</sup> ) | Time-Peak (mins) |
|------------------|--------------|----------------------------------|------------------|
| 15 min Summer    | 125.250      | 0.0                              | 19               |
| 30 min Summer    | 85.368       | 0.0                              | 34               |
| 60 min Summer    | 55.544       | 0.0                              | 64               |
| 120 min Summer   | 34.816       | 0.0                              | 122              |
| 180 min Summer   | 26.038       | 0.0                              | 182              |
| 240 min Summer   | 21.042       | 0.0                              | 240              |
| 360 min Summer   | 15.601       | 0.0                              | 312              |
| 480 min Summer   | 12.593       | 0.0                              | 372              |
| 600 min Summer   | 10.656       | 0.0                              | 434              |
| 720 min Summer   | 9.290        | 0.0                              | 500              |
| 960 min Summer   | 7.475        | 0.0                              | 636              |
| 1440 min Summer  | 5.489        | 0.0                              | 910              |
| 2160 min Summer  | 4.021        | 0.0                              | 1316             |
| 2880 min Summer  | 3.220        | 0.0                              | 1704             |
| 4320 min Summer  | 2.348        | 0.0                              | 2468             |
| 5760 min Summer  | 1.878        | 0.0                              | 3232             |
| 7200 min Summer  | 1.581        | 0.0                              | 3968             |
| 8640 min Summer  | 1.373        | 0.0                              | 4680             |
| 10080 min Summer | 1.219        | 0.0                              | 5448             |
| 15 min Winter    | 125.250      | 0.0                              | 19               |
| 30 min Winter    | 85.368       | 0.0                              | 33               |
| 60 min Winter    | 55.544       | 0.0                              | 62               |
| 120 min Winter   | 34.816       | 0.0                              | 120              |
| 180 min Winter   | 26.038       | 0.0                              | 176              |

|                                                           |                                                                        |                                                                                     |
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| Innovyze                                                  | Source Control 2020.1.3                                                |                                                                                     |

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

| Storm Event      | Max Level (m) | Max Depth (m) | Max Infiltration (l/s) | Max Volume (m³) | Status |
|------------------|---------------|---------------|------------------------|-----------------|--------|
| 240 min Winter   | 15.889        | 0.844         | 0.3                    | 11.4            | O K    |
| 360 min Winter   | 16.307        | 1.262         | 0.3                    | 11.9            | O K    |
| 480 min Winter   | 16.462        | 1.417         | 0.3                    | 12.0            | O K    |
| 600 min Winter   | 16.563        | 1.518         | 0.3                    | 12.1            | O K    |
| 720 min Winter   | 16.575        | 1.530         | 0.3                    | 12.1            | O K    |
| 960 min Winter   | 16.432        | 1.387         | 0.3                    | 12.0            | O K    |
| 1440 min Winter  | 15.858        | 0.813         | 0.3                    | 11.4            | O K    |
| 2160 min Winter  | 15.781        | 0.736         | 0.2                    | 10.5            | O K    |
| 2880 min Winter  | 15.720        | 0.675         | 0.2                    | 9.6             | O K    |
| 4320 min Winter  | 15.620        | 0.575         | 0.2                    | 8.2             | O K    |
| 5760 min Winter  | 15.546        | 0.501         | 0.2                    | 7.1             | O K    |
| 7200 min Winter  | 15.490        | 0.445         | 0.1                    | 6.3             | O K    |
| 8640 min Winter  | 15.446        | 0.401         | 0.1                    | 5.7             | O K    |
| 10080 min Winter | 15.410        | 0.365         | 0.1                    | 5.2             | O K    |

| Storm Event      | Rain (mm/hr) | Flooded Volume (m³) | Time-Peak (mins) |
|------------------|--------------|---------------------|------------------|
| 240 min Winter   | 21.042       | 0.0                 | 232              |
| 360 min Winter   | 15.601       | 0.0                 | 340              |
| 480 min Winter   | 12.593       | 0.0                 | 388              |
| 600 min Winter   | 10.656       | 0.0                 | 462              |
| 720 min Winter   | 9.290        | 0.0                 | 540              |
| 960 min Winter   | 7.475        | 0.0                 | 692              |
| 1440 min Winter  | 5.489        | 0.0                 | 980              |
| 2160 min Winter  | 4.021        | 0.0                 | 1404             |
| 2880 min Winter  | 3.220        | 0.0                 | 1812             |
| 4320 min Winter  | 2.348        | 0.0                 | 2592             |
| 5760 min Winter  | 1.878        | 0.0                 | 3352             |
| 7200 min Winter  | 1.581        | 0.0                 | 4112             |
| 8640 min Winter  | 1.373        | 0.0                 | 4848             |
| 10080 min Winter | 1.219        | 0.0                 | 5552             |

|                                                           |                                                                        |                                                                                     |
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| Innovyze                                                  | Source Control 2020.1.3                                                |                                                                                     |

#### Rainfall Details

|                       |                   |                       |       |
|-----------------------|-------------------|-----------------------|-------|
| Rainfall Model        | FSR               | Winter Storms         | Yes   |
| Return Period (years) | 100               | Cv (Summer)           | 0.750 |
| Region                | England and Wales | Cv (Winter)           | 0.840 |
| M5-60 (mm)            | 19.600            | Shortest Storm (mins) | 15    |
| Ratio R               | 0.322             | Longest Storm (mins)  | 10080 |
| Summer Storms         | Yes               | Climate Change %      | +40   |

#### Time Area Diagram

Total Area (ha) 0.019

**Time (mins) Area**  
**From: To: (ha)**

0 4 0.019

|                                                           |                                                                        |                                                                                     |
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Model Details

Storage is Online Cover Level (m) 16.900

Cellular Storage Structure

Invert Level (m) 15.045 Safety Factor 4.0  
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95  
Infiltration Coefficient Side (m/hr) 0.30852

| Depth (m) | Area (m <sup>2</sup> ) | Inf. Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf. Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf. Area (m <sup>2</sup> ) |
|-----------|------------------------|-----------------------------|-----------|------------------------|-----------------------------|-----------|------------------------|-----------------------------|
| 0.000     | 15.0                   | 15.0                        | 0.800     | 15.0                   | 27.4                        | 0.801     | 0.0                    | 27.4                        |