

### Design Settings

|                       |                   |                                      |               |
|-----------------------|-------------------|--------------------------------------|---------------|
| Rainfall Methodology  | FSR               | Maximum Time of Concentration (mins) | 30.00         |
| Return Period (years) | 100               | Maximum Rainfall (mm/hr)             | 50.0          |
| Additional Flow (%)   | 0                 | Minimum Velocity (m/s)               | 1.00          |
| FSR Region            | England and Wales | Connection Type                      | Level Soffits |
| M5-60 (mm)            | 20.000            | Minimum Backdrop Height (m)          | 0.200         |
| Ratio-R               | 0.400             | Preferred Cover Depth (m)            | 1.200         |
| CV                    | 0.750             | Include Intermediate Ground          | ✓             |
| Time of Entry (mins)  | 4.00              | Enforce best practice design rules   | ✓             |

### Nodes

| Name | Area<br>(ha) | T of E<br>(mins) | Cover<br>Level<br>(m) | Easting<br>(m) | Northing<br>(m) | Depth<br>(m) |
|------|--------------|------------------|-----------------------|----------------|-----------------|--------------|
| MH1  | 0.025        | 4.00             | 10.000                | 100.000        | 100.000         | 0.361        |

### Simulation Settings

|                      |                   |                            |        |
|----------------------|-------------------|----------------------------|--------|
| Rainfall Methodology | FSR               | Analysis Speed             | Normal |
| FSR Region           | England and Wales | Skip Steady State          | x      |
| M5-60 (mm)           | 20.000            | Drain Down Time (mins)     | 240    |
| Ratio-R              | 0.400             | Additional Storage (m³/ha) | 0.0    |
| Summer CV            | 0.750             | Check Discharge Rate(s)    | x      |
| Winter CV            | 0.840             | Check Discharge Volume     | x      |

### Storm Durations

|    |     |     |     |     |      |      |      |      |       |
|----|-----|-----|-----|-----|------|------|------|------|-------|
| 15 | 60  | 180 | 360 | 600 | 960  | 2160 | 4320 | 7200 | 10080 |
| 30 | 120 | 240 | 480 | 720 | 1440 | 2880 | 5760 | 8640 |       |

| Return Period<br>(years) | Climate Change<br>(CC %) | Additional Area<br>(A %) | Additional Flow<br>(Q %) |
|--------------------------|--------------------------|--------------------------|--------------------------|
| 100                      | 45                       | 0                        | 0                        |

### Node MH1 Depth/Area Storage Structure

|                             |         |               |      |                           |       |
|-----------------------------|---------|---------------|------|---------------------------|-------|
| Base Inf Coefficient (m/hr) | 0.00396 | Safety Factor | 2.0  | Invert Level (m)          | 9.639 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 0.95 | Time to half empty (mins) | 1439  |

| Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) | Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) | Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) |
|--------------|--------------|------------------|--------------|--------------|------------------|--------------|--------------|------------------|
| 0.000        | 75.0         | 75.0             | 0.360        | 75.0         | 75.0             | 0.361        | 0.0          | 75.0             |

**Results for 100 year +45% CC 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 15 minute summer | MH1        | 19             | 9.732        | 0.093        | 17.2            | 6.6505           | 0.0000        | OK     |

| Link Event       | US<br>Node | Link         | Outflow<br>(l/s) |
|------------------|------------|--------------|------------------|
| 15 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

| Node Event       | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 15 minute winter | MH1     | 19           | 9.744         | 0.105     | 17.2         | 7.4563        | 0.0000     | OK     |
| Link Event       | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 15 minute winter | MH1     | Infiltration | 0.0           |           |              |               |            |        |

**Results for 100 year +45% CC 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%**

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 30 minute summer | MH1        | 34             | 9.762        | 0.123        | 15.1            | 8.7483           | 0.0000        | OK     |

| Link Event       | US<br>Node | Link         | Outflow<br>(l/s) |
|------------------|------------|--------------|------------------|
| 30 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%**

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 30 minute winter | MH1        | 34             | 9.777        | 0.138        | 13.0            | 9.8018           | 0.0000        | OK     |

| Link Event       | US<br>Node | Link         | Outflow<br>(l/s) |
|------------------|------------|--------------|------------------|
| 30 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%**

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 60 minute summer | MH1        | 64             | 9.792        | 0.153        | 10.8            | 10.8903          | 0.0000        | OK     |

| Link Event       | US<br>Node | Link         | Outflow<br>(l/s) |
|------------------|------------|--------------|------------------|
| 60 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%**

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 60 minute winter | MH1        | 64             | 9.811        | 0.172        | 8.5             | 12.2389          | 0.0000        | OK     |

| Link Event       | US<br>Node | Link         | Outflow<br>(l/s) |
|------------------|------------|--------------|------------------|
| 60 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m <sup>3</sup> ) | Flood<br>(m <sup>3</sup> ) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|-------------------------------|----------------------------|--------|
| 120 minute summer | MH1        | 124            | 9.822        | 0.183        | 7.0             | 13.0602                       | 0.0000                     | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 120 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m <sup>3</sup> ) | Flood<br>(m <sup>3</sup> ) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|-------------------------------|----------------------------|--------|
| 120 minute winter | MH1        | 124            | 9.845        | 0.206        | 5.2             | 14.6597                       | 0.0000                     | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 120 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%**

| Node Event        | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 180 minute summer | MH1     | 184          | 9.839         | 0.200     | 5.3          | 14.2392       | 0.0000     | OK     |
| Link Event        | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 180 minute summer | MH1     | Infiltration | 0.0           |           |              |               |            |        |

**Results for 100 year +45% CC 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m <sup>3</sup> ) | Flood<br>(m <sup>3</sup> ) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|-------------------------------|----------------------------|--------|
| 180 minute winter | MH1        | 184            | 9.866        | 0.227        | 3.8             | 16.1567                       | 0.0000                     | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 180 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%**

| Node Event        | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 240 minute summer | MH1     | 244          | 9.852         | 0.213     | 4.1          | 15.2037       | 0.0000     | OK     |
| Link Event        | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 240 minute summer | MH1     | Infiltration | 0.0           |           |              |               |            |        |

**Results for 100 year +45% CC 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m <sup>3</sup> ) | Flood<br>(m <sup>3</sup> ) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|-------------------------------|----------------------------|--------|
| 240 minute winter | MH1        | 244            | 9.875        | 0.236        | 3.0             | 16.8106                       | 0.0000                     | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 240 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 360 minute summer | MH1        | 368            | 9.868        | 0.229        | 3.1             | 16.2895          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 360 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m <sup>3</sup> ) | Flood<br>(m <sup>3</sup> ) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|-------------------------------|----------------------------|--------|
| 360 minute winter | MH1        | 368            | 9.896        | 0.257        | 2.2             | 18.2840                       | 0.0000                     | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 360 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 480 minute summer | MH1        | 488            | 9.878        | 0.239        | 2.4             | 17.0022          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 480 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m <sup>3</sup> ) | Flood<br>(m <sup>3</sup> ) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|-------------------------------|----------------------------|--------|
| 480 minute winter | MH1        | 480            | 9.908        | 0.269        | 1.8             | 19.1504                       | 0.0000                     | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 480 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 600 minute summer | MH1        | 615            | 9.887        | 0.248        | 1.9             | 17.6614          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 600 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m <sup>3</sup> ) | Flood<br>(m <sup>3</sup> ) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|-------------------------------|----------------------------|--------|
| 600 minute winter | MH1        | 615            | 9.925        | 0.286        | 1.5             | 20.3545                       | 0.0000                     | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 600 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 720 minute summer | MH1        | 735            | 9.899        | 0.260        | 1.7             | 18.5292          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 720 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m <sup>3</sup> ) | Flood<br>(m <sup>3</sup> ) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|-------------------------------|----------------------------|--------|
| 720 minute winter | MH1        | 720            | 9.930        | 0.291        | 1.3             | 20.7678                       | 0.0000                     | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 720 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 960 minute summer | MH1        | 975            | 9.901        | 0.262        | 1.4             | 18.6479          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 960 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 960 minute winter | MH1        | 960            | 9.941        | 0.302        | 1.0             | 21.5170          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 960 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 1440 minute summer | MH1        | 1470           | 9.917        | 0.278        | 1.0             | 19.7845          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 1440 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 1440 minute winter | MH1        | 1440           | 9.949        | 0.310        | 0.7             | 22.0642          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 1440 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 2160 minute summer | MH1        | 2220           | 9.928        | 0.289        | 0.7             | 20.5592          | 0.0000        | OK     |

  

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 2160 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 2160 minute winter. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 2160 minute winter | MH1        | 2160           | 9.953        | 0.314        | 0.5             | 22.3652          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 2160 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 2880 minute summer. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 2880 minute summer | MH1        | 2880           | 9.969        | 0.330        | 0.6             | 23.5137          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 2880 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 2880 minute winter. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 2880 minute winter | MH1        | 2820           | 9.973        | 0.334        | 0.4             | 23.8068          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 2880 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 4320 minute summer. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 4320 minute summer | MH1        | 3480           | 9.927        | 0.288        | 0.4             | 20.5041          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 4320 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 4320 minute winter. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 4320 minute winter | MH1        | 4020           | 9.991        | 0.352        | 0.3             | 25.0473          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 4320 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 5760 minute summer. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 5760 minute summer | MH1     | 4200         | 9.907         | 0.268     | 0.3          | 19.0621       | 0.0000     | OK     |
| Link Event         | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 5760 minute summer | MH1     | Infiltration | 0.0           |           |              |               |            |        |

**Results for 100 year +45% CC 5760 minute winter. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 5760 minute winter | MH1        | 4560           | 9.932        | 0.293        | 0.2             | 20.8929          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 5760 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 7200 minute summer. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 7200 minute summer | MH1        | 5040           | 9.898            | 0.259        | 0.3             | 18.4738          | 0.0000        | OK     |
| Link Event         | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 7200 minute summer | MH1        | Infiltration   | 0.0              |              |                 |                  |               |        |

**Results for 100 year +45% CC 7200 minute winter. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 7200 minute winter | MH1        | 5460           | 9.940        | 0.301        | 0.2             | 21.4473          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 7200 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 8640 minute summer. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m <sup>3</sup> ) | Flood<br>(m <sup>3</sup> ) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|-------------------------------|----------------------------|--------|
| 8640 minute summer | MH1        | 5820           | 9.874        | 0.235        | 0.2             | 16.7386                       | 0.0000                     | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 8640 minute summer | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 8640 minute winter. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 8640 minute winter | MH1        | 6360           | 9.938        | 0.299        | 0.2             | 21.2817          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 8640 minute winter | MH1        | Infiltration | 0.0              |

**Results for 100 year +45% CC 10080 minute summer. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event          | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|---------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 10080 minute summer | MH1        | 6600           | 9.870            | 0.231        | 0.2             | 16.4434          | 0.0000        | OK     |
| Link Event          | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 10080 minute summer | MH1        | Infiltration   | 0.0              |              |                 |                  |               |        |

**Results for 100 year +45% CC 10080 minute winter. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event          | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m <sup>3</sup> ) | Flood<br>(m <sup>3</sup> ) | Status |
|---------------------|------------|----------------|--------------|--------------|-----------------|-------------------------------|----------------------------|--------|
| 10080 minute winter | MH1        | 7260           | 9.885        | 0.246        | 0.2             | 17.5162                       | 0.0000                     | OK     |

| Link Event          | US<br>Node | Link         | Outflow<br>(l/s) |
|---------------------|------------|--------------|------------------|
| 10080 minute winter | MH1        | Infiltration | 0.0              |



Design Settings

|                       |                   |                                      |               |
|-----------------------|-------------------|--------------------------------------|---------------|
| Rainfall Methodology  | FSR               | Maximum Time of Concentration (mins) | 30.00         |
| Return Period (years) | 100               | Maximum Rainfall (mm/hr)             | 50.0          |
| Additional Flow (%)   | 0                 | Minimum Velocity (m/s)               | 1.00          |
| FSR Region            | England and Wales | Connection Type                      | Level Soffits |
| M5-60 (mm)            | 20.000            | Minimum Backdrop Height (m)          | 0.200         |
| Ratio-R               | 0.400             | Preferred Cover Depth (m)            | 1.200         |
| CV                    | 0.750             | Include Intermediate Ground          | ✓             |
| Time of Entry (mins)  | 4.00              | Enforce best practice design rules   | ✓             |

Nodes

| Name | Area<br>(ha) | T of E<br>(mins) | Cover<br>Level<br>(m) | Easting<br>(m) | Northing<br>(m) | Depth<br>(m) |
|------|--------------|------------------|-----------------------|----------------|-----------------|--------------|
| MH1  | 0.037        | 4.00             | 10.000                | 100.000        | 100.000         | 0.361        |

Simulation Settings

|                      |                   |                            |        |
|----------------------|-------------------|----------------------------|--------|
| Rainfall Methodology | FSR               | Analysis Speed             | Normal |
| FSR Region           | England and Wales | Skip Steady State          | x      |
| M5-60 (mm)           | 20.000            | Drain Down Time (mins)     | 240    |
| Ratio-R              | 0.400             | Additional Storage (m³/ha) | 0.0    |
| Summer CV            | 0.750             | Check Discharge Rate(s)    | x      |
| Winter CV            | 0.840             | Check Discharge Volume     | x      |

Storm Durations

|    |     |     |     |     |      |      |      |      |       |
|----|-----|-----|-----|-----|------|------|------|------|-------|
| 15 | 60  | 180 | 360 | 600 | 960  | 2160 | 4320 | 7200 | 10080 |
| 30 | 120 | 240 | 480 | 720 | 1440 | 2880 | 5760 | 8640 |       |

| Return Period<br>(years) | Climate Change<br>(CC %) | Additional Area<br>(A %) | Additional Flow<br>(Q %) |
|--------------------------|--------------------------|--------------------------|--------------------------|
| 100                      | 45                       | 0                        | 0                        |

Node MH1 Depth/Area Storage Structure

|                             |         |               |      |                           |       |
|-----------------------------|---------|---------------|------|---------------------------|-------|
| Base Inf Coefficient (m/hr) | 0.00396 | Safety Factor | 2.0  | Invert Level (m)          | 9.639 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 0.95 | Time to half empty (mins) | 1439  |

| Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) | Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) | Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) |
|--------------|--------------|------------------|--------------|--------------|------------------|--------------|--------------|------------------|
| 0.000        | 107.0        | 107.0            | 0.360        | 107.0        | 107.0            | 0.361        | 0.0          | 107.0            |



**Results for 100 year +45% CC 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 15 minute summer | MH1        | 19             | 9.736            | 0.097        | 25.5            | 9.8452           | 0.0000        | OK     |
| Link Event       | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 15 minute summer | MH1        | Infiltration   | 0.1              |              |                 |                  |               |        |



Results for 100 year +45% CC 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 15 minute winter | MH1        | 19             | 9.748        | 0.109        | 25.5            | 11.0613          | 0.0000        | OK     |

| Link Event       | US<br>Node | Link         | Outflow<br>(l/s) |
|------------------|------------|--------------|------------------|
| 15 minute winter | MH1        | Infiltration | 0.1              |



Results for 100 year +45% CC 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 30 minute summer | MH1        | 34             | 9.766            | 0.127        | 22.3            | 12.9542          | 0.0000        | OK     |
| Link Event       | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 30 minute summer | MH1        | Infiltration   | 0.1              |              |                 |                  |               |        |



Results for 100 year +45% CC 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

| Node Event       | US Node | Peak (mins) | Level (m) | Depth (m)    | Inflow (l/s)  | Node Vol (m³) | Flood (m³) | Status |
|------------------|---------|-------------|-----------|--------------|---------------|---------------|------------|--------|
| 30 minute winter | MH1     | 34          | 9.782     | 0.143        | 19.3          | 14.5315       | 0.0000     | OK     |
| Link Event       |         | US Node     |           | Link         | Outflow (l/s) |               |            |        |
| 30 minute winter |         | MH1         |           | Infiltration | 0.1           |               |            |        |



**Results for 100 year +45% CC 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%**

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s)  | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|------------------|------------|----------------|--------------|--------------|------------------|------------------|---------------|--------|
| 60 minute summer | MH1        | 64             | 9.798        | 0.159        | 16.0             | 16.1161          | 0.0000        | OK     |
| Link Event       |            | US<br>Node     |              | Link         | Outflow<br>(l/s) |                  |               |        |
| 60 minute summer |            | MH1            |              | Infiltration | 0.1              |                  |               |        |



Results for 100 year +45% CC 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

| Node Event       | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 60 minute winter | MH1     | 63           | 9.817         | 0.178     | 12.6         | 18.0752       | 0.0000     | OK     |
| Link Event       | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 60 minute winter | MH1     | Infiltration | 0.1           |           |              |               |            |        |

Results for 100 year +45% CC 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 120 minute summer | MH1     | 124         | 9.829     | 0.190     | 10.3         | 19.3521       | 0.0000     | OK     |

| Link Event        | US Node | Link         | Outflow (l/s) |
|-------------------|---------|--------------|---------------|
| 120 minute summer | MH1     | Infiltration | 0.1           |

Results for 100 year +45% CC 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 120 minute winter | MH1     | 122          | 9.853         | 0.214     | 7.7          | 21.7110       | 0.0000     | OK     |
| Link Event        | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 120 minute winter | MH1     | Infiltration | 0.1           |           |              |               |            |        |



Results for 100 year +45% CC 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 180 minute summer | MH1        | 184            | 9.846        | 0.207        | 7.8             | 21.0399          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 180 minute summer | MH1        | Infiltration | 0.1              |

Results for 100 year +45% CC 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 180 minute winter | MH1     | 184          | 9.873         | 0.234     | 5.7          | 23.7932       | 0.0000     | OK     |
| Link Event        | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 180 minute winter | MH1     | Infiltration | 0.1           |           |              |               |            |        |



Results for 100 year +45% CC 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 240 minute summer | MH1        | 244            | 9.860        | 0.221        | 6.1             | 22.4339          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 240 minute summer | MH1        | Infiltration | 0.1              |



Results for 100 year +45% CC 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 240 minute winter | MH1     | 240          | 9.887         | 0.248     | 4.5          | 25.1971       | 0.0000     | OK     |
| Link Event        | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 240 minute winter | MH1     | Infiltration | 0.1           |           |              |               |            |        |



Results for 100 year +45% CC 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 360 minute summer | MH1     | 368         | 9.875     | 0.236     | 4.5          | 24.0303       | 0.0000     | OK     |

| Link Event        | US Node | Link         | Outflow (l/s) |
|-------------------|---------|--------------|---------------|
| 360 minute summer | MH1     | Infiltration | 0.1           |

Results for 100 year +45% CC 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 360 minute winter | MH1        | 360            | 9.906            | 0.267        | 3.3             | 27.1429          | 0.0000        | OK     |
| Link Event        | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 360 minute winter | MH1        | Infiltration   | 0.1              |              |                 |                  |               |        |



**Results for 100 year +45% CC 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 480 minute summer | MH1        | 488            | 9.885        | 0.246        | 3.5             | 25.0159          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 480 minute summer | MH1        | Infiltration | 0.1              |



Results for 100 year +45% CC 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 480 minute winter | MH1        | 480            | 9.921            | 0.282        | 2.6             | 28.6631          | 0.0000        | OK     |
| Link Event        | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 480 minute winter | MH1        | Infiltration   | 0.1              |              |                 |                  |               |        |



Results for 100 year +45% CC 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 600 minute summer | MH1     | 615         | 9.897     | 0.258     | 2.8          | 26.2726       | 0.0000     | OK     |

| Link Event        | US Node | Link         | Outflow (l/s) |
|-------------------|---------|--------------|---------------|
| 600 minute summer | MH1     | Infiltration | 0.1           |



**Results for 100 year +45% CC 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 600 minute winter | MH1        | 600            | 9.932            | 0.293        | 2.2             | 29.7530          | 0.0000        | OK     |
| Link Event        | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 600 minute winter | MH1        | Infiltration   | 0.1              |              |                 |                  |               |        |

Results for 100 year +45% CC 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 720 minute summer | MH1        | 735            | 9.900        | 0.261        | 2.5             | 26.5402          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 720 minute summer | MH1        | Infiltration | 0.1              |



**Results for 100 year +45% CC 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 720 minute winter | MH1        | 720            | 9.937            | 0.298        | 1.9             | 30.3055          | 0.0000        | OK     |
| Link Event        | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 720 minute winter | MH1        | Infiltration   | 0.1              |              |                 |                  |               |        |



**Results for 100 year +45% CC 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 960 minute summer | MH1        | 975            | 9.916        | 0.277        | 2.0             | 28.1710          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 960 minute summer | MH1        | Infiltration | 0.1              |

**Results for 100 year +45% CC 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 960 minute winter | MH1        | 945            | 9.954            | 0.315        | 1.5             | 32.0215          | 0.0000        | OK     |
| Link Event        | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 960 minute winter | MH1        | Infiltration   | 0.1              |              |                 |                  |               |        |

Results for 100 year +45% CC 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

| Node Event         | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 1440 minute summer | MH1     | 1440         | 9.921         | 0.282     | 1.4          | 28.6563       | 0.0000     | OK     |
| Link Event         | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 1440 minute summer | MH1     | Infiltration | 0.1           |           |              |               |            |        |

**Results for 100 year +45% CC 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 1440 minute winter | MH1        | 1410           | 9.967        | 0.328        | 1.1             | 33.3468          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 1440 minute winter | MH1        | Infiltration | 0.1              |



Results for 100 year +45% CC 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 2160 minute summer | MH1     | 2160         | 9.932         | 0.293     | 1.0          | 29.7439       | 0.0000     | OK     |
| Link Event         | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 2160 minute summer | MH1     | Infiltration | 0.1           |           |              |               |            |        |



**Results for 100 year +45% CC 2160 minute winter. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 2160 minute winter | MH1        | 2100           | 9.970        | 0.331        | 0.8             | 33.6532          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 2160 minute winter | MH1        | Infiltration | 0.1              |



Results for 100 year +45% CC 2880 minute summer. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 2880 minute summer | MH1     | 2880         | 9.938         | 0.299     | 0.8          | 30.3640       | 0.0000     | OK     |
| Link Event         | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 2880 minute summer | MH1     | Infiltration | 0.1           |           |              |               |            |        |

**Results for 100 year +45% CC 2880 minute winter. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 2880 minute winter | MH1        | 2820           | 9.977        | 0.338        | 0.6             | 34.3199          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 2880 minute winter | MH1        | Infiltration | 0.1              |

Results for 100 year +45% CC 4320 minute summer. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 4320 minute summer | MH1        | 4320           | 9.952            | 0.313        | 0.6             | 31.8530          | 0.0000        | OK     |
| Link Event         | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 4320 minute summer | MH1        | Infiltration   | 0.1              |              |                 |                  |               |        |

Results for 100 year +45% CC 4320 minute winter. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 4320 minute winter | MH1        | 4140           | 9.972        | 0.333        | 0.4             | 33.8955          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 4320 minute winter | MH1        | Infiltration | 0.1              |

Results for 100 year +45% CC 5760 minute summer. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 5760 minute summer | MH1        | 4920           | 9.933        | 0.294        | 0.5             | 29.8961          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 5760 minute summer | MH1        | Infiltration | 0.1              |

**Results for 100 year +45% CC 5760 minute winter. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 5760 minute winter | MH1        | 5460           | 9.980        | 0.341        | 0.4             | 34.7129          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 5760 minute winter | MH1        | Infiltration | 0.1              |

Results for 100 year +45% CC 7200 minute summer. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 7200 minute summer | MH1        | 5640           | 9.919            | 0.280        | 0.4             | 28.4554          | 0.0000        | OK     |
| Link Event         | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 7200 minute summer | MH1        | Infiltration   | 0.1              |              |                 |                  |               |        |

Results for 100 year +45% CC 7200 minute winter. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 7200 minute winter | MH1        | 6600           | 9.994        | 0.355        | 0.3             | 36.0593          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 7200 minute winter | MH1        | Infiltration | 0.1              |



Results for 100 year +45% CC 8640 minute summer. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 8640 minute summer | MH1     | 6360         | 9.905         | 0.266     | 0.4          | 27.0116       | 0.0000     | OK     |
| Link Event         | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 8640 minute summer | MH1     | Infiltration | 0.1           |           |              |               |            |        |

Results for 100 year +45% CC 8640 minute winter. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 8640 minute winter | MH1        | 6840           | 9.935        | 0.296        | 0.3             | 30.0977          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 8640 minute winter | MH1        | Infiltration | 0.1              |



**Results for 100 year +45% CC 10080 minute summer. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event          | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|---------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 10080 minute summer | MH1        | 7140           | 9.894        | 0.255        | 0.3             | 25.8707          | 0.0000        | OK     |

| Link Event          | US<br>Node | Link         | Outflow<br>(l/s) |
|---------------------|------------|--------------|------------------|
| 10080 minute summer | MH1        | Infiltration | 0.1              |



**Results for 100 year +45% CC 10080 minute winter. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event          | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|---------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 10080 minute winter | MH1        | 7740           | 9.923        | 0.284        | 0.2             | 28.8233          | 0.0000        | OK     |

| Link Event          | US<br>Node | Link         | Outflow<br>(l/s) |
|---------------------|------------|--------------|------------------|
| 10080 minute winter | MH1        | Infiltration | 0.1              |



Design Settings

|                       |                   |                                      |               |
|-----------------------|-------------------|--------------------------------------|---------------|
| Rainfall Methodology  | FSR               | Maximum Time of Concentration (mins) | 30.00         |
| Return Period (years) | 100               | Maximum Rainfall (mm/hr)             | 50.0          |
| Additional Flow (%)   | 0                 | Minimum Velocity (m/s)               | 1.00          |
| FSR Region            | England and Wales | Connection Type                      | Level Soffits |
| M5-60 (mm)            | 20.000            | Minimum Backdrop Height (m)          | 0.200         |
| Ratio-R               | 0.400             | Preferred Cover Depth (m)            | 1.200         |
| CV                    | 0.750             | Include Intermediate Ground          | ✓             |
| Time of Entry (mins)  | 4.00              | Enforce best practice design rules   | ✓             |

Nodes

| Name | Area<br>(ha) | T of E<br>(mins) | Cover<br>Level<br>(m) | Easting<br>(m) | Northing<br>(m) | Depth<br>(m) |
|------|--------------|------------------|-----------------------|----------------|-----------------|--------------|
| MH1  | 0.015        | 4.00             | 10.000                | 100.000        | 100.000         | 0.361        |

Simulation Settings

|                      |                   |                            |        |
|----------------------|-------------------|----------------------------|--------|
| Rainfall Methodology | FSR               | Analysis Speed             | Normal |
| FSR Region           | England and Wales | Skip Steady State          | x      |
| M5-60 (mm)           | 20.000            | Drain Down Time (mins)     | 240    |
| Ratio-R              | 0.400             | Additional Storage (m³/ha) | 0.0    |
| Summer CV            | 0.750             | Check Discharge Rate(s)    | x      |
| Winter CV            | 0.840             | Check Discharge Volume     | x      |

Storm Durations

|    |     |     |     |     |      |      |      |      |       |
|----|-----|-----|-----|-----|------|------|------|------|-------|
| 15 | 60  | 180 | 360 | 600 | 960  | 2160 | 4320 | 7200 | 10080 |
| 30 | 120 | 240 | 480 | 720 | 1440 | 2880 | 5760 | 8640 |       |

| Return Period<br>(years) | Climate Change<br>(CC %) | Additional Area<br>(A %) | Additional Flow<br>(Q %) |
|--------------------------|--------------------------|--------------------------|--------------------------|
| 100                      | 45                       | 0                        | 0                        |

Node MH1 Depth/Area Storage Structure

|                             |         |               |      |                           |       |
|-----------------------------|---------|---------------|------|---------------------------|-------|
| Base Inf Coefficient (m/hr) | 0.00396 | Safety Factor | 2.0  | Invert Level (m)          | 9.639 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 0.95 | Time to half empty (mins) | 1439  |

| Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) | Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) | Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) |
|--------------|--------------|------------------|--------------|--------------|------------------|--------------|--------------|------------------|
| 0.000        | 45.0         | 45.0             | 0.360        | 45.0         | 45.0             | 0.361        | 0.0          | 45.0             |



**Results for 100 year +45% CC 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 15 minute summer | MH1        | 19             | 9.732            | 0.093        | 10.3            | 3.9913           | 0.0000        | OK     |
| Link Event       | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 15 minute summer | MH1        | Infiltration   | 0.0              |              |                 |                  |               |        |

Results for 100 year +45% CC 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

| Node Event       | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 15 minute winter | MH1     | 19          | 9.743     | 0.104     | 10.3         | 4.4615        | 0.0000     | OK     |

| Link Event       | US Node | Link         | Outflow (l/s) |
|------------------|---------|--------------|---------------|
| 15 minute winter | MH1     | Infiltration | 0.0           |



Results for 100 year +45% CC 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 30 minute summer | MH1        | 34             | 9.761            | 0.122        | 9.0             | 5.2292           | 0.0000        | OK     |
| Link Event       | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 30 minute summer | MH1        | Infiltration   | 0.0              |              |                 |                  |               |        |



Results for 100 year +45% CC 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

| Node Event       | US Node | Peak (mins) | Level (m) | Depth (m)    | Inflow (l/s)  | Node Vol (m³) | Flood (m³) | Status |
|------------------|---------|-------------|-----------|--------------|---------------|---------------|------------|--------|
| 30 minute winter | MH1     | 34          | 9.777     | 0.138        | 7.8           | 5.8907        | 0.0000     | OK     |
| Link Event       |         | US Node     |           | Link         | Outflow (l/s) |               |            |        |
| 30 minute winter |         | MH1         |           | Infiltration | 0.0           |               |            |        |

Results for 100 year +45% CC 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

| Node Event       | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 60 minute summer | MH1     | 64           | 9.792         | 0.153     | 6.5          | 6.5254        | 0.0000     | OK     |
| Link Event       | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 60 minute summer | MH1     | Infiltration | 0.0           |           |              |               |            |        |

Results for 100 year +45% CC 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

| Node Event       | US Node | Peak (mins) | Level (m) | Depth (m)    | Inflow (l/s)  | Node Vol (m³) | Flood (m³) | Status |
|------------------|---------|-------------|-----------|--------------|---------------|---------------|------------|--------|
| 60 minute winter | MH1     | 63          | 9.811     | 0.172        | 5.1           | 7.3669        | 0.0000     | OK     |
| Link Event       |         | US Node     |           | Link         | Outflow (l/s) |               |            |        |
| 60 minute winter |         | MH1         |           | Infiltration | 0.0           |               |            |        |



**Results for 100 year +45% CC 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%**

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 120 minute summer | MH1     | 124         | 9.823     | 0.184     | 4.2          | 7.8469        | 0.0000     | OK     |

| Link Event        | US Node | Link         | Outflow (l/s) |
|-------------------|---------|--------------|---------------|
| 120 minute summer | MH1     | Infiltration | 0.0           |



Results for 100 year +45% CC 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 120 minute winter | MH1        | 122            | 9.847            | 0.208        | 3.1             | 8.8766           | 0.0000        | OK     |
| Link Event        | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 120 minute winter | MH1        | Infiltration   | 0.0              |              |                 |                  |               |        |

Results for 100 year +45% CC 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 180 minute summer | MH1        | 184            | 9.838        | 0.199        | 3.2             | 8.4995           | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 180 minute summer | MH1        | Infiltration | 0.0              |



Results for 100 year +45% CC 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 180 minute winter | MH1        | 184            | 9.865            | 0.226        | 2.3             | 9.6440           | 0.0000        | OK     |
| Link Event        | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 180 minute winter | MH1        | Infiltration   | 0.0              |              |                 |                  |               |        |

Results for 100 year +45% CC 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 240 minute summer | MH1     | 244         | 9.851     | 0.212     | 2.5          | 9.0675        | 0.0000     | OK     |

| Link Event        | US Node | Link         | Outflow (l/s) |
|-------------------|---------|--------------|---------------|
| 240 minute summer | MH1     | Infiltration | 0.0           |



Results for 100 year +45% CC 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 240 minute winter | MH1     | 244          | 9.874         | 0.235     | 1.8          | 10.0299       | 0.0000     | OK     |
| Link Event        | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 240 minute winter | MH1     | Infiltration | 0.0           |           |              |               |            |        |



Results for 100 year +45% CC 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 360 minute summer | MH1        | 368            | 9.873        | 0.234        | 1.8             | 9.9972           | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 360 minute summer | MH1        | Infiltration | 0.0              |

Results for 100 year +45% CC 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 360 minute winter | MH1        | 360            | 9.889            | 0.250        | 1.3             | 10.6802          | 0.0000        | OK     |
| Link Event        | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 360 minute winter | MH1        | Infiltration   | 0.0              |              |                 |                  |               |        |

Results for 100 year +45% CC 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 480 minute summer | MH1     | 488         | 9.875     | 0.236     | 1.4          | 10.0871       | 0.0000     | OK     |

| Link Event        | US Node | Link         | Outflow (l/s) |
|-------------------|---------|--------------|---------------|
| 480 minute summer | MH1     | Infiltration | 0.0           |

Results for 100 year +45% CC 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 480 minute winter | MH1        | 480            | 9.911            | 0.272        | 1.1             | 11.6286          | 0.0000        | OK     |
| Link Event        | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 480 minute winter | MH1        | Infiltration   | 0.0              |              |                 |                  |               |        |

Results for 100 year +45% CC 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 600 minute summer | MH1     | 615         | 9.879     | 0.240     | 1.2          | 10.2488       | 0.0000     | OK     |

| Link Event        | US Node | Link         | Outflow (l/s) |
|-------------------|---------|--------------|---------------|
| 600 minute summer | MH1     | Infiltration | 0.0           |

Results for 100 year +45% CC 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m)    | Inflow (l/s)  | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|-------------|-----------|--------------|---------------|---------------|------------|--------|
| 600 minute winter | MH1     | 600         | 9.926     | 0.287        | 0.9           | 12.2500       | 0.0000     | OK     |
| Link Event        |         | US Node     |           | Link         | Outflow (l/s) |               |            |        |
| 600 minute winter |         | MH1         |           | Infiltration | 0.0           |               |            |        |

Results for 100 year +45% CC 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 720 minute summer | MH1     | 735         | 9.892     | 0.253     | 1.0          | 10.8152       | 0.0000     | OK     |

| Link Event        | US Node | Link         | Outflow (l/s) |
|-------------------|---------|--------------|---------------|
| 720 minute summer | MH1     | Infiltration | 0.0           |

**Results for 100 year +45% CC 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 720 minute winter | MH1        | 720            | 9.919            | 0.280        | 0.8             | 11.9519          | 0.0000        | OK     |
| Link Event        | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 720 minute winter | MH1        | Infiltration   | 0.0              |              |                 |                  |               |        |

**Results for 100 year +45% CC 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 960 minute summer | MH1        | 975            | 9.901        | 0.262        | 0.8             | 11.2153          | 0.0000        | OK     |

| Link Event        | US<br>Node | Link         | Outflow<br>(l/s) |
|-------------------|------------|--------------|------------------|
| 960 minute summer | MH1        | Infiltration | 0.0              |

Results for 100 year +45% CC 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 960 minute winter | MH1        | 945            | 9.933            | 0.294        | 0.6             | 12.5739          | 0.0000        | OK     |
| Link Event        | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 960 minute winter | MH1        | Infiltration   | 0.0              |              |                 |                  |               |        |

Results for 100 year +45% CC 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

| Node Event         | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 1440 minute summer | MH1     | 1470         | 9.947         | 0.308     | 0.6          | 13.1628       | 0.0000     | OK     |
| Link Event         | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 1440 minute summer | MH1     | Infiltration | 0.0           |           |              |               |            |        |

**Results for 100 year +45% CC 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 1440 minute winter | MH1        | 1410           | 9.961        | 0.322        | 0.4             | 13.7677          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 1440 minute winter | MH1        | Infiltration | 0.0              |

Results for 100 year +45% CC 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 2160 minute summer | MH1     | 1800        | 9.902     | 0.263     | 0.4          | 11.2272       | 0.0000     | OK     |

| Link Event         | US Node | Link         | Outflow (l/s) |
|--------------------|---------|--------------|---------------|
| 2160 minute summer | MH1     | Infiltration | 0.0           |



Results for 100 year +45% CC 2160 minute winter. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 2160 minute winter | MH1        | 2100           | 9.998        | 0.359        | 0.3             | 15.3672          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 2160 minute winter | MH1        | Infiltration | 0.0              |



Results for 100 year +45% CC 2880 minute summer. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 2880 minute summer | MH1     | 2160         | 9.902         | 0.263     | 0.3          | 11.2244       | 0.0000     | OK     |
| Link Event         | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 2880 minute summer | MH1     | Infiltration | 0.0           |           |              |               |            |        |

**Results for 100 year +45% CC 2880 minute winter. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s)  | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|------------------|------------------|---------------|--------|
| 2880 minute winter | MH1        | 2340           | 9.940        | 0.301        | 0.3              | 12.8472          | 0.0000        | OK     |
| Link Event         |            | US<br>Node     |              | Link         | Outflow<br>(l/s) |                  |               |        |
| 2880 minute winter |            | MH1            |              | Infiltration | 0.0              |                  |               |        |

Results for 100 year +45% CC 4320 minute summer. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 4320 minute summer | MH1     | 3000         | 9.893         | 0.254     | 0.2          | 10.8672       | 0.0000     | OK     |
| Link Event         | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 4320 minute summer | MH1     | Infiltration | 0.0           |           |              |               |            |        |

Results for 100 year +45% CC 4320 minute winter. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 4320 minute winter | MH1        | 3240           | 9.944        | 0.305        | 0.2             | 13.0272          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 4320 minute winter | MH1        | Infiltration | 0.0              |

Results for 100 year +45% CC 5760 minute summer. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 5760 minute summer | MH1     | 3780         | 9.889         | 0.250     | 0.2          | 10.6872       | 0.0000     | OK     |
| Link Event         | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 5760 minute summer | MH1     | Infiltration | 0.0           |           |              |               |            |        |

**Results for 100 year +45% CC 5760 minute winter. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 5760 minute winter | MH1        | 4140           | 9.897        | 0.258        | 0.1             | 11.0472          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 5760 minute winter | MH1        | Infiltration | 0.0              |

Results for 100 year +45% CC 7200 minute summer. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 7200 minute summer | MH1     | 4560         | 9.868         | 0.229     | 0.2          | 9.7872        | 0.0000     | OK     |
| Link Event         | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 7200 minute summer | MH1     | Infiltration | 0.0           |           |              |               |            |        |

**Results for 100 year +45% CC 7200 minute winter. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%**

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 7200 minute winter | MH1        | 4980           | 9.923        | 0.284        | 0.1             | 12.1272          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 7200 minute winter | MH1        | Infiltration | 0.0              |

Results for 100 year +45% CC 8640 minute summer. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US Node | Peak (mins)  | Level (m)     | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|--------------|---------------|-----------|--------------|---------------|------------|--------|
| 8640 minute summer | MH1     | 5340         | 9.847         | 0.208     | 0.1          | 8.8872        | 0.0000     | OK     |
| Link Event         | US Node | Link         | Outflow (l/s) |           |              |               |            |        |
| 8640 minute summer | MH1     | Infiltration | 0.0           |           |              |               |            |        |

Results for 100 year +45% CC 8640 minute winter. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event         | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|--------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 8640 minute winter | MH1        | 5760           | 9.935        | 0.296        | 0.1             | 12.6672          | 0.0000        | OK     |

| Link Event         | US<br>Node | Link         | Outflow<br>(l/s) |
|--------------------|------------|--------------|------------------|
| 8640 minute winter | MH1        | Infiltration | 0.0              |

Results for 100 year +45% CC 10080 minute summer. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event          | US<br>Node | Peak<br>(mins) | Level<br>(m)     | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|---------------------|------------|----------------|------------------|--------------|-----------------|------------------|---------------|--------|
| 10080 minute summer | MH1        | 6120           | 9.860            | 0.221        | 0.1             | 9.4272           | 0.0000        | OK     |
| Link Event          | US<br>Node | Link           | Outflow<br>(l/s) |              |                 |                  |               |        |
| 10080 minute summer | MH1        | Infiltration   | 0.0              |              |                 |                  |               |        |

Results for 100 year +45% CC 10080 minute winter. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

| Node Event          | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|---------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 10080 minute winter | MH1        | 6600           | 9.961        | 0.322        | 0.1             | 13.7472          | 0.0000        | OK     |

| Link Event          | US<br>Node | Link         | Outflow<br>(l/s) |
|---------------------|------------|--------------|------------------|
| 10080 minute winter | MH1        | Infiltration | 0.0              |