

### Design Settings

|                       |                   |                                      |               |
|-----------------------|-------------------|--------------------------------------|---------------|
| Rainfall Methodology  | FSR               | Maximum Time of Concentration (mins) | 30.00         |
| Return Period (years) | 100               | Maximum Rainfall (mm/hr)             | 50.0          |
| Additional Flow (%)   | 40                | Minimum Velocity (m/s)               | 1.00          |
| FSR Region            | England and Wales | Connection Type                      | Level Soffits |
| M5-60 (mm)            | 17.000            | 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)  | 5.00              | Enforce best practice design rules   | x             |

### Nodes

| Name                       | Area<br>(ha) | T of E<br>(mins) | Cover<br>Level<br>(m) | Diameter<br>(mm) | Easting<br>(m) | Northing<br>(m) | Depth<br>(m) |
|----------------------------|--------------|------------------|-----------------------|------------------|----------------|-----------------|--------------|
| S6                         | 0.019        | 5.00             | 153.278               | 1350             | 400884.708     | 340393.871      | 1.172        |
| S4                         | 0.014        | 5.00             | 154.647               | 1350             | 400899.275     | 340412.335      | 1.428        |
| S2                         | 0.015        | 5.00             | 155.334               | 1350             | 400909.372     | 340411.415      | 1.330        |
| S1                         | 0.030        | 5.00             | 156.559               | 1200             | 400925.489     | 340404.111      | 2.359        |
| S5                         | 0.015        | 5.00             | 153.954               | 1350             | 400890.488     | 340405.728      | 1.186        |
| INFILTRATION BASIN 2 INLET |              |                  | 154.055               | 1200             | 400893.752     | 340389.398      | 2.957        |
| S43                        | 0.030        | 5.00             | 158.072               | 1200             | 400942.377     | 340389.527      | 2.447        |
| S161                       | 0.029        | 5.00             | 155.372               | 1200             | 400905.477     | 340419.180      | 1.372        |
| S162                       | 0.028        | 5.00             | 156.786               | 1200             | 400910.113     | 340439.015      | 1.350        |
| S163                       | 0.014        | 5.00             | 158.652               | 1200             | 400918.835     | 340464.447      | 1.350        |
| S164                       | 0.015        | 5.00             | 160.349               | 1200             | 400922.430     | 340488.547      | 1.350        |
| S165                       | 0.027        | 5.00             | 161.624               | 1200             | 400930.419     | 340505.524      | 1.350        |
| S166                       | 0.000        |                  | 163.637               | 1200             | 400952.412     | 340528.957      | 2.187        |
| S167                       | 0.009        | 5.00             | 163.489               | 1200             | 400962.974     | 340519.623      | 1.189        |
| S168                       | 0.009        | 5.00             | 162.886               | 1200             | 400944.528     | 340536.730      | 0.986        |
| INFILTRATION BASIN 2       |              |                  | 154.222               | 1200             |                |                 | 3.174        |

### Links

| Name   | US<br>Node | DS<br>Node | Length<br>(m) | ks (mm) /<br>n | US IL<br>(m) | DS IL<br>(m) | Fall<br>(m) | Slope<br>(1:X) | Dia<br>(mm) | T of C<br>(mins) | Rain<br>(mm/hr) |
|--------|------------|------------|---------------|----------------|--------------|--------------|-------------|----------------|-------------|------------------|-----------------|
| 12.000 | S43        | S1         | 22.314        | 0.600          | 155.625      | 154.200      | 1.425       | 15.7           | 225         | 5.11             | 50.0            |
| 12.001 | S1         | S2         | 17.695        | 0.600          | 154.200      | 154.004      | 0.196       | 90.3           | 225         | 5.33             | 50.0            |
| 12.002 | S2         | S4         | 10.139        | 0.600          | 154.004      | 153.219      | 0.785       | 12.9           | 225         | 5.37             | 50.0            |
| 11.000 | S167       | S166       | 14.096        | 0.600          | 162.300      | 161.450      | 0.850       | 16.6           | 225         | 5.07             | 50.0            |
| 10.000 | S168       | S166       | 11.071        | 0.600          | 161.900      | 161.450      | 0.450       | 24.6           | 225         | 5.07             | 50.0            |
| 10.001 | S166       | S165       | 32.138        | 0.600          | 161.450      | 160.274      | 1.176       | 27.3           | 225         | 5.29             | 50.0            |
| 10.002 | S165       | S164       | 18.763        | 0.600          | 160.274      | 158.999      | 1.275       | 14.7           | 225         | 5.38             | 50.0            |
| 10.003 | S164       | S163       | 24.367        | 0.600          | 158.999      | 157.302      | 1.697       | 14.4           | 225         | 5.49             | 50.0            |

| Name   | Vel<br>(m/s) | Cap<br>(l/s) | Flow<br>(l/s) | US<br>Depth<br>(m) | DS<br>Depth<br>(m) | Σ Area<br>(ha) | Σ Add<br>Inflow<br>(l/s) | Pro<br>Depth<br>(mm) | Pro<br>Velocity<br>(m/s) |
|--------|--------------|--------------|---------------|--------------------|--------------------|----------------|--------------------------|----------------------|--------------------------|
| 12.000 | 3.323        | 132.1        | 5.7           | 2.222              | 2.134              | 0.030          | 0.0                      | 31                   | 1.660                    |
| 12.001 | 1.376        | 54.7         | 11.4          | 2.134              | 1.105              | 0.060          | 0.0                      | 69                   | 1.088                    |
| 12.002 | 3.660        | 145.5        | 14.2          | 1.105              | 1.203              | 0.075          | 0.0                      | 47                   | 2.340                    |
| 11.000 | 3.229        | 128.4        | 1.7           | 0.964              | 1.962              | 0.009          | 0.0                      | 18                   | 1.135                    |
| 10.000 | 2.648        | 105.3        | 1.7           | 0.761              | 1.962              | 0.009          | 0.0                      | 20                   | 0.988                    |
| 10.001 | 2.512        | 99.9         | 3.4           | 1.962              | 1.125              | 0.018          | 0.0                      | 29                   | 1.186                    |
| 10.002 | 3.428        | 136.3        | 8.5           | 1.125              | 1.125              | 0.045          | 0.0                      | 38                   | 1.939                    |
| 10.003 | 3.471        | 138.0        | 11.4          | 1.125              | 1.125              | 0.060          | 0.0                      | 44                   | 2.120                    |

### Links

| Name   | US Node | DS Node                    | Length (m) | ks (mm) / n | US IL (m) | DS IL (m) | Fall (m) | Slope (1:X) | Dia (mm) | T of C (mins) | Rain (mm/hr) |
|--------|---------|----------------------------|------------|-------------|-----------|-----------|----------|-------------|----------|---------------|--------------|
| 10.004 | S163    | S162                       | 26.886     | 0.600       | 157.302   | 155.436   | 1.866    | 14.4        | 225      | 5.62          | 50.0         |
| 10.005 | S162    | S161                       | 20.369     | 0.600       | 155.436   | 154.000   | 1.436    | 14.2        | 225      | 5.72          | 50.0         |
| 10.006 | S161    | S4                         | 9.237      | 0.600       | 154.000   | 153.294   | 0.706    | 13.1        | 225      | 5.76          | 50.0         |
| 10.007 | S4      | S5                         | 10.994     | 0.600       | 153.219   | 152.768   | 0.451    | 24.4        | 225      | 5.83          | 50.0         |
| 10.008 | S5      | S6                         | 13.190     | 0.600       | 152.768   | 152.106   | 0.662    | 19.9        | 225      | 5.91          | 50.0         |
| 10.009 | S6      | INFILTRATION BASIN 2 INLET | 10.089     | 0.600       | 152.106   | 152.048   | 0.058    | 173.9       | 225      | 6.08          | 50.0         |

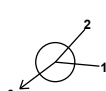
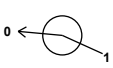
| Name   | Vel (m/s) | Cap (l/s) | Flow (l/s) | US Depth (m) | DS Depth (m) | Σ Area (ha) | Σ Add Inflow (l/s) | Pro Depth (mm) | Pro Velocity (m/s) |
|--------|-----------|-----------|------------|--------------|--------------|-------------|--------------------|----------------|--------------------|
| 10.004 | 3.465     | 137.8     | 14.0       | 1.125        | 1.125        | 0.074       | 0.0                | 48             | 2.239              |
| 10.005 | 3.492     | 138.8     | 19.4       | 1.125        | 1.147        | 0.102       | 0.0                | 57             | 2.484              |
| 10.006 | 3.637     | 144.6     | 24.9       | 1.147        | 1.128        | 0.131       | 0.0                | 63             | 2.738              |
| 10.007 | 2.661     | 105.8     | 41.7       | 1.203        | 0.961        | 0.220       | 0.0                | 98             | 2.507              |
| 10.008 | 2.944     | 117.1     | 44.6       | 0.961        | 0.947        | 0.235       | 0.0                | 96             | 2.751              |
| 10.009 | 0.988     | 39.3      | 48.2       | 0.947        | 1.782        | 0.254       | 0.0                | 225            | 1.006              |

### Pipeline Schedule

| Link   | Length (m) | Slope (1:X) | Dia (mm) | Link Type | US CL (m) | US IL (m) | US Depth (m) | DS CL (m) | DS IL (m) | DS Depth (m) |
|--------|------------|-------------|----------|-----------|-----------|-----------|--------------|-----------|-----------|--------------|
| 12.000 | 22.314     | 15.7        | 225      | Circular  | 158.072   | 155.625   | 2.222        | 156.559   | 154.200   | 2.134        |
| 12.001 | 17.695     | 90.3        | 225      | Circular  | 156.559   | 154.200   | 2.134        | 155.334   | 154.004   | 1.105        |
| 12.002 | 10.139     | 12.9        | 225      | Circular  | 155.334   | 154.004   | 1.105        | 154.647   | 153.219   | 1.203        |
| 11.000 | 14.096     | 16.6        | 225      | Circular  | 163.489   | 162.300   | 0.964        | 163.637   | 161.450   | 1.962        |
| 10.000 | 11.071     | 24.6        | 225      | Circular  | 162.886   | 161.900   | 0.761        | 163.637   | 161.450   | 1.962        |
| 10.001 | 32.138     | 27.3        | 225      | Circular  | 163.637   | 161.450   | 1.962        | 161.624   | 160.274   | 1.125        |
| 10.002 | 18.763     | 14.7        | 225      | Circular  | 161.624   | 160.274   | 1.125        | 160.349   | 158.999   | 1.125        |
| 10.003 | 24.367     | 14.4        | 225      | Circular  | 160.349   | 158.999   | 1.125        | 158.652   | 157.302   | 1.125        |
| 10.004 | 26.886     | 14.4        | 225      | Circular  | 158.652   | 157.302   | 1.125        | 156.786   | 155.436   | 1.125        |
| 10.005 | 20.369     | 14.2        | 225      | Circular  | 156.786   | 155.436   | 1.125        | 155.372   | 154.000   | 1.147        |
| 10.006 | 9.237      | 13.1        | 225      | Circular  | 155.372   | 154.000   | 1.147        | 154.647   | 153.294   | 1.128        |
| 10.007 | 10.994     | 24.4        | 225      | Circular  | 154.647   | 153.219   | 1.203        | 153.954   | 152.768   | 0.961        |
| 10.008 | 13.190     | 19.9        | 225      | Circular  | 153.954   | 152.768   | 0.961        | 153.278   | 152.106   | 0.947        |
| 10.009 | 10.089     | 173.9       | 225      | Circular  | 153.278   | 152.106   | 0.947        | 154.055   | 152.048   | 1.782        |

| Link   | US Node | Dia (mm) | Node Type | MH Type   | DS Node                    | Dia (mm) | Node Type | MH Type   |
|--------|---------|----------|-----------|-----------|----------------------------|----------|-----------|-----------|
| 12.000 | S43     | 1200     | Manhole   | Adoptable | S1                         | 1200     | Manhole   | Adoptable |
| 12.001 | S1      | 1200     | Manhole   | Adoptable | S2                         | 1350     | Manhole   | Adoptable |
| 12.002 | S2      | 1350     | Manhole   | Adoptable | S4                         | 1350     | Manhole   | Adoptable |
| 11.000 | S167    | 1200     | Manhole   | Adoptable | S166                       | 1200     | Manhole   | Adoptable |
| 10.000 | S168    | 1200     | Manhole   | Adoptable | S166                       | 1200     | Manhole   | Adoptable |
| 10.001 | S166    | 1200     | Manhole   | Adoptable | S165                       | 1200     | Manhole   | Adoptable |
| 10.002 | S165    | 1200     | Manhole   | Adoptable | S164                       | 1200     | Manhole   | Adoptable |
| 10.003 | S164    | 1200     | Manhole   | Adoptable | S163                       | 1200     | Manhole   | Adoptable |
| 10.004 | S163    | 1200     | Manhole   | Adoptable | S162                       | 1200     | Manhole   | Adoptable |
| 10.005 | S162    | 1200     | Manhole   | Adoptable | S161                       | 1200     | Manhole   | Adoptable |
| 10.006 | S161    | 1200     | Manhole   | Adoptable | S4                         | 1350     | Manhole   | Adoptable |
| 10.007 | S4      | 1350     | Manhole   | Adoptable | S5                         | 1350     | Manhole   | Adoptable |
| 10.008 | S5      | 1350     | Manhole   | Adoptable | S6                         | 1350     | Manhole   | Adoptable |
| 10.009 | S6      | 1350     | Manhole   | Adoptable | INFILTRATION BASIN 2 INLET | 1200     | Manhole   | Adoptable |

### Manhole Schedule

| Node                       | Easting<br>(m) | Northing<br>(m) | CL<br>(m) | Depth<br>(m) | Dia<br>(mm) | Connections                                                                           | Link   | IL<br>(m) | Dia<br>(mm) |     |
|----------------------------|----------------|-----------------|-----------|--------------|-------------|---------------------------------------------------------------------------------------|--------|-----------|-------------|-----|
| S6                         | 400884.708     | 340393.871      | 153.278   | 1.172        | 1350        |    | 1      | 10.008    | 152.106     | 225 |
|                            |                |                 |           |              |             | 0                                                                                     | 10.009 | 152.106   | 225         |     |
| S4                         | 400899.275     | 340412.335      | 154.647   | 1.428        | 1350        |    | 1      | 12.002    | 153.219     | 225 |
|                            |                |                 |           |              |             | 2                                                                                     | 10.006 | 153.294   | 225         |     |
| S2                         | 400909.372     | 340411.415      | 155.334   | 1.330        | 1350        |    | 1      | 12.001    | 154.004     | 225 |
|                            |                |                 |           |              |             | 0                                                                                     | 12.002 | 154.004   | 225         |     |
| S1                         | 400925.489     | 340404.111      | 156.559   | 2.359        | 1200        |    | 1      | 12.000    | 154.200     | 225 |
|                            |                |                 |           |              |             | 0                                                                                     | 12.001 | 154.200   | 225         |     |
| S5                         | 400890.488     | 340405.728      | 153.954   | 1.186        | 1350        |    | 1      | 10.007    | 152.768     | 225 |
|                            |                |                 |           |              |             | 0                                                                                     | 10.008 | 152.768   | 225         |     |
| INFILTRATION BASIN 2 INLET | 400893.752     | 340389.398      | 154.055   | 2.957        | 1200        |  | 1      | 10.009    | 152.048     | 225 |
| S43                        | 400942.377     | 340389.527      | 158.072   | 2.447        | 1200        |  | 0      | 12.000    | 155.625     | 225 |
| S161                       | 400905.477     | 340419.180      | 155.372   | 1.372        | 1200        |  | 1      | 10.005    | 154.000     | 225 |
|                            |                |                 |           |              |             | 0                                                                                     | 10.006 | 154.000   | 225         |     |
| S162                       | 400910.113     | 340439.015      | 156.786   | 1.350        | 1200        |  | 1      | 10.004    | 155.436     | 225 |
|                            |                |                 |           |              |             | 0                                                                                     | 10.005 | 155.436   | 225         |     |
| S163                       | 400918.835     | 340464.447      | 158.652   | 1.350        | 1200        |  | 1      | 10.003    | 157.302     | 225 |
|                            |                |                 |           |              |             | 0                                                                                     | 10.004 | 157.302   | 225         |     |
| S164                       | 400922.430     | 340488.547      | 160.349   | 1.350        | 1200        |  | 1      | 10.002    | 158.999     | 225 |
|                            |                |                 |           |              |             | 0                                                                                     | 10.003 | 158.999   | 225         |     |
| S165                       | 400930.419     | 340505.524      | 161.624   | 1.350        | 1200        |  | 1      | 10.001    | 160.274     | 225 |
|                            |                |                 |           |              |             | 0                                                                                     | 10.002 | 160.274   | 225         |     |
| S166                       | 400952.412     | 340528.957      | 163.637   | 2.187        | 1200        |  | 1      | 11.000    | 161.450     | 225 |
|                            |                |                 |           |              |             | 2                                                                                     | 10.000 | 161.450   | 225         |     |
|                            |                |                 |           |              |             | 0                                                                                     | 10.001 | 161.450   | 225         |     |

### Manhole Schedule

| Node                 | Easting<br>(m) | Northing<br>(m) | CL<br>(m) | Depth<br>(m) | Dia<br>(mm) | Connections                                                                         | Link | IL<br>(m) | Dia<br>(mm) |     |
|----------------------|----------------|-----------------|-----------|--------------|-------------|-------------------------------------------------------------------------------------|------|-----------|-------------|-----|
| S167                 | 400962.974     | 340519.623      | 163.489   | 1.189        | 1200        |  | 0    | 11.000    | 162.300     | 225 |
| S168                 | 400944.528     | 340536.730      | 162.886   | 0.986        | 1200        |  | 0    | 10.000    | 161.900     | 225 |
| INFILTRATION BASIN 2 |                |                 | 154.222   | 3.174        | 1200        |  |      |           |             |     |

### Simulation Settings

|                      |                   |                            |        |
|----------------------|-------------------|----------------------------|--------|
| Rainfall Methodology | FSR               | Analysis Speed             | Normal |
| Rainfall Events      | Singular          | Skip Steady State          | x      |
| FSR Region           | England and Wales | Drain Down Time (mins)     | 1440   |
| M5-60 (mm)           | 17.000            | Additional Storage (m³/ha) | 0.0    |
| Ratio-R              | 0.400             | Starting Level (m)         |        |
| Summer CV            | 0.750             | Check Discharge Rate(s)    | x      |
| Winter CV            | 0.840             | Check Discharge Volume     | x      |

### Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

| Return Period (years) | Climate Change (CC %) | Additional Area (A %) | Additional Flow (Q %) |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 0                     | 0                     | 0                     |
| 30                    | 0                     | 0                     | 0                     |
| 100                   | 0                     | 0                     | 0                     |
| 100                   | 40                    | 0                     | 0                     |
| 1000                  | 0                     | 0                     | 0                     |

### Node INFILTRATION BASIN 2 Flow through Pond Storage Structure

|                             |         |                           |         |                          |        |
|-----------------------------|---------|---------------------------|---------|--------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.07164 | Porosity                  | 1.00    | Main Channel Length (m)  | 10.000 |
| Side Inf Coefficient (m/hr) | 0.07164 | Invert Level (m)          | 151.048 | Main Channel Slope (1:X) | 200.0  |
| Safety Factor               | 10.0    | Time to half empty (mins) | 450     | Main Channel n           | 0.017  |

### Inlets

#### INFILTRATION BASIN 2 INLET

| Depth (m) | Area (m²) | Inf Area (m²) | Depth (m) | Area (m²) | Inf Area (m²) |
|-----------|-----------|---------------|-----------|-----------|---------------|
| 0.000     | 10.0      | 10.0          | 3.174     | 401.6     | 401.2         |

**Results for 1 year Critical Storm Duration. Lowest mass balance: 54.91%**

| Node Event        |                            | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|----------------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 15 minute winter  | S6                         |         | 11          | 152.267   | 0.160     | 29.4         | 0.2297        | 0.0000     | OK     |
| 15 minute winter  | S4                         |         | 11          | 153.300   | 0.081     | 25.4         | 0.1164        | 0.0000     | OK     |
| 15 minute winter  | S2                         |         | 10          | 154.041   | 0.037     | 8.8          | 0.0535        | 0.0000     | OK     |
| 15 minute winter  | S1                         |         | 10          | 154.259   | 0.059     | 7.2          | 0.0664        | 0.0000     | OK     |
| 15 minute winter  | S5                         |         | 11          | 152.842   | 0.074     | 27.2         | 0.1053        | 0.0000     | OK     |
| 720 minute winter | INFILTRATION BASIN 2 INLET |         | 690         | 151.792   | 0.694     | 2.9          | 0.7852        | 0.0000     | OK     |
| 15 minute winter  | S43                        |         | 10          | 155.651   | 0.025     | 3.6          | 0.0288        | 0.0000     | OK     |
| 15 minute winter  | S161                       |         | 11          | 154.052   | 0.052     | 15.0         | 0.0587        | 0.0000     | OK     |
| 15 minute winter  | S162                       |         | 11          | 155.480   | 0.044     | 11.7         | 0.0498        | 0.0000     | OK     |
| 15 minute winter  | S163                       |         | 11          | 157.340   | 0.038     | 8.5          | 0.0429        | 0.0000     | OK     |
| 15 minute winter  | S164                       |         | 11          | 159.033   | 0.034     | 6.9          | 0.0386        | 0.0000     | OK     |
| 15 minute winter  | S165                       |         | 10          | 160.304   | 0.030     | 5.3          | 0.0338        | 0.0000     | OK     |
| 15 minute winter  | S166                       |         | 11          | 161.473   | 0.023     | 2.2          | 0.0255        | 0.0000     | OK     |
| 15 minute winter  | S167                       |         | 10          | 162.315   | 0.015     | 1.1          | 0.0168        | 0.0000     | OK     |
| 15 minute winter  | S168                       |         | 10          | 161.916   | 0.016     | 1.1          | 0.0183        | 0.0000     | OK     |
| 720 minute winter | INFILTRATION BASIN 2       |         | 690         | 151.792   | 0.744     | 1.5          | 0.8417        | 0.0000     | OK     |

| Link Event (Upstream Depth) | US Node                    | Link              | DS Node                    | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) |
|-----------------------------|----------------------------|-------------------|----------------------------|---------------|----------------|----------|---------------|
| 15 minute winter            | S6                         | 10.009            | INFILTRATION BASIN 2 INLET | 29.5          | 1.033          | 0.750    | 0.2877        |
| 15 minute winter            | S4                         | 10.007            | S5                         | 25.5          | 2.111          | 0.241    | 0.1330        |
| 15 minute winter            | S2                         | 12.002            | S4                         | 8.7           | 1.056          | 0.060    | 0.0873        |
| 15 minute winter            | S1                         | 12.001            | S2                         | 7.0           | 1.136          | 0.128    | 0.1109        |
| 15 minute winter            | S5                         | 10.008            | S6                         | 27.3          | 1.323          | 0.233    | 0.2741        |
| 720 minute winter           | INFILTRATION BASIN 2 INLET | Flow through Pond | INFILTRATION BASIN 2       | 1.5           | 0.017          | 0.000    | 39.2831       |
| 15 minute winter            | S43                        | 12.000            | S1                         | 3.6           | 0.697          | 0.027    | 0.1192        |
| 15 minute winter            | S161                       | 10.006            | S4                         | 15.1          | 2.278          | 0.104    | 0.0612        |
| 15 minute winter            | S162                       | 10.005            | S161                       | 11.7          | 1.899          | 0.084    | 0.1260        |
| 15 minute winter            | S163                       | 10.004            | S162                       | 8.6           | 1.738          | 0.062    | 0.1328        |
| 15 minute winter            | S164                       | 10.003            | S163                       | 6.9           | 1.689          | 0.050    | 0.0998        |
| 15 minute winter            | S165                       | 10.002            | S164                       | 5.2           | 1.499          | 0.038    | 0.0646        |
| 15 minute winter            | S166                       | 10.001            | S165                       | 2.1           | 0.816          | 0.021    | 0.0831        |
| 15 minute winter            | S167                       | 11.000            | S166                       | 1.1           | 0.697          | 0.008    | 0.0221        |
| 15 minute winter            | S168                       | 10.000            | S166                       | 1.1           | 0.663          | 0.010    | 0.0182        |
| 720 minute winter           | INFILTRATION BASIN 2       | Infiltration      |                            | 0.2           |                |          |               |

**Results for 30 year Critical Storm Duration. Lowest mass balance: 54.91%**

| Node Event         |                            | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|----------------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute winter   | S6                         |         | 11          | 152.543   | 0.437     | 71.7         | 0.6248        | 0.0000     | SURCHARGED |
| 15 minute winter   | S4                         |         | 10          | 153.358   | 0.139     | 62.3         | 0.1994        | 0.0000     | OK         |
| 15 minute winter   | S2                         |         | 10          | 154.062   | 0.058     | 21.5         | 0.0830        | 0.0000     | OK         |
| 15 minute winter   | S1                         |         | 10          | 154.294   | 0.094     | 17.3         | 0.1063        | 0.0000     | OK         |
| 15 minute winter   | S5                         |         | 11          | 152.918   | 0.150     | 66.3         | 0.2152        | 0.0000     | OK         |
| 1440 minute winter | INFILTRATION BASIN 2 INLET |         | 1410        | 152.249   | 1.151     | 3.5          | 1.3013        | 0.0000     | OK         |
| 15 minute winter   | S43                        |         | 10          | 155.664   | 0.039     | 8.7          | 0.0440        | 0.0000     | OK         |
| 15 minute winter   | S161                       |         | 10          | 154.086   | 0.085     | 37.2         | 0.0967        | 0.0000     | OK         |
| 15 minute winter   | S162                       |         | 10          | 155.505   | 0.069     | 29.1         | 0.0785        | 0.0000     | OK         |
| 15 minute winter   | S163                       |         | 10          | 157.361   | 0.059     | 21.2         | 0.0669        | 0.0000     | OK         |
| 15 minute winter   | S164                       |         | 10          | 159.053   | 0.054     | 17.2         | 0.0606        | 0.0000     | OK         |
| 15 minute winter   | S165                       |         | 10          | 160.321   | 0.047     | 13.0         | 0.0526        | 0.0000     | OK         |
| 15 minute winter   | S166                       |         | 10          | 161.485   | 0.034     | 5.2          | 0.0390        | 0.0000     | OK         |
| 15 minute winter   | S167                       |         | 10          | 162.322   | 0.022     | 2.6          | 0.0251        | 0.0000     | OK         |
| 15 minute winter   | S168                       |         | 10          | 161.924   | 0.024     | 2.6          | 0.0276        | 0.0000     | OK         |
| 1440 minute winter | INFILTRATION BASIN 2       |         | 1410        | 152.249   | 1.201     | 2.5          | 1.3579        | 0.0000     | OK         |

| Link Event (Upstream Depth) | US Node                    | Link              | DS Node                    | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) |
|-----------------------------|----------------------------|-------------------|----------------------------|---------------|----------------|----------|---------------|
| 15 minute winter            | S6                         | 10.009            | INFILTRATION BASIN 2 INLET | 72.1          | 1.814          | 1.836    | 0.3955        |
| 15 minute winter            | S4                         | 10.007            | S5                         | 62.0          | 2.408          | 0.586    | 0.2952        |
| 15 minute winter            | S2                         | 12.002            | S4                         | 21.3          | 1.274          | 0.147    | 0.1719        |
| 15 minute winter            | S1                         | 12.001            | S2                         | 17.1          | 1.448          | 0.312    | 0.2109        |
| 15 minute winter            | S5                         | 10.008            | S6                         | 66.5          | 1.789          | 0.568    | 0.4482        |
| 1440 minute winter          | INFILTRATION BASIN 2 INLET | Flow through Pond | INFILTRATION BASIN 2       | 2.5           | 0.020          | 0.000    | 97.2293       |
| 15 minute winter            | S43                        | 12.000            | S1                         | 8.6           | 0.883          | 0.065    | 0.2262        |
| 15 minute winter            | S161                       | 10.006            | S4                         | 36.9          | 2.860          | 0.255    | 0.1194        |
| 15 minute winter            | S162                       | 10.005            | S161                       | 28.8          | 2.387          | 0.208    | 0.2463        |
| 15 minute winter            | S163                       | 10.004            | S162                       | 20.9          | 2.244          | 0.152    | 0.2512        |
| 15 minute winter            | S164                       | 10.003            | S163                       | 17.1          | 2.202          | 0.124    | 0.1892        |
| 15 minute winter            | S165                       | 10.002            | S164                       | 12.8          | 1.959          | 0.094    | 0.1233        |
| 15 minute winter            | S166                       | 10.001            | S165                       | 5.1           | 1.061          | 0.051    | 0.1563        |
| 15 minute winter            | S167                       | 11.000            | S166                       | 2.6           | 0.902          | 0.020    | 0.0411        |
| 15 minute winter            | S168                       | 10.000            | S166                       | 2.6           | 0.852          | 0.025    | 0.0339        |
| 1440 minute winter          | INFILTRATION BASIN 2       | Infiltration      |                            | 0.3           |                |          |               |

**Results for 100 year Critical Storm Duration. Lowest mass balance: 54.91%**

| Node Event         |                            | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|----------------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute winter   | S6                         |         | 11          | 152.684   | 0.578     | 88.6         | 0.8266        | 0.0000     | SURCHARGED |
| 15 minute winter   | S4                         |         | 11          | 153.490   | 0.271     | 81.3         | 0.3879        | 0.0000     | SURCHARGED |
| 15 minute winter   | S2                         |         | 10          | 154.070   | 0.066     | 27.8         | 0.0947        | 0.0000     | OK         |
| 15 minute winter   | S1                         |         | 10          | 154.309   | 0.109     | 22.5         | 0.1233        | 0.0000     | OK         |
| 15 minute winter   | S5                         |         | 11          | 153.137   | 0.369     | 83.0         | 0.5275        | 0.0000     | SURCHARGED |
| 1440 minute winter | INFILTRATION BASIN 2 INLET |         | 1410        | 152.434   | 1.336     | 4.5          | 1.5108        | 0.0000     | OK         |
| 15 minute winter   | S43                        |         | 10          | 155.669   | 0.044     | 11.3         | 0.0500        | 0.0000     | OK         |
| 15 minute winter   | S161                       |         | 10          | 154.097   | 0.097     | 48.0         | 0.1099        | 0.0000     | OK         |
| 15 minute winter   | S162                       |         | 11          | 155.517   | 0.081     | 37.5         | 0.0915        | 0.0000     | OK         |
| 15 minute winter   | S163                       |         | 10          | 157.369   | 0.067     | 27.2         | 0.0761        | 0.0000     | OK         |
| 15 minute winter   | S164                       |         | 10          | 159.060   | 0.061     | 22.1         | 0.0690        | 0.0000     | OK         |
| 15 minute winter   | S165                       |         | 10          | 160.327   | 0.053     | 16.7         | 0.0599        | 0.0000     | OK         |
| 15 minute winter   | S166                       |         | 10          | 161.489   | 0.039     | 6.8          | 0.0443        | 0.0000     | OK         |
| 15 minute winter   | S167                       |         | 10          | 162.325   | 0.025     | 3.4          | 0.0285        | 0.0000     | OK         |
| 15 minute winter   | S168                       |         | 10          | 161.928   | 0.028     | 3.4          | 0.0312        | 0.0000     | OK         |
| 1440 minute winter | INFILTRATION BASIN 2       |         | 1410        | 152.434   | 1.386     | 2.7          | 1.5674        | 0.0000     | OK         |

| Link Event         | US Node                    | Link              | DS Node                    | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) |
|--------------------|----------------------------|-------------------|----------------------------|---------------|----------------|----------|---------------|
| 5 minute winter    | S6                         | 10.009            | INFILTRATION BASIN 2 INLET | 88.1          | 2.215          | 2.242    | 0.397         |
| 5 minute winter    | S4                         | 10.007            | S5                         | 77.6          | 2.414          | 0.733    | 0.437         |
| 5 minute winter    | S2                         | 12.002            | S4                         | 27.6          | 1.314          | 0.190    | 0.250         |
| 5 minute winter    | S1                         | 12.001            | S2                         | 22.2          | 1.551          | 0.405    | 0.254         |
| 5 minute winter    | S5                         | 10.008            | S6                         | 81.9          | 2.059          | 0.700    | 0.524         |
| 1440 minute winter | INFILTRATION BASIN 2 INLET | Flow through Pond | INFILTRATION BASIN 2       | 2.7           | 0.021          | 0.000    | 128.095       |
| 5 minute winter    | S43                        | 12.000            | S1                         | 11.2          | 0.942          | 0.085    | 0.274         |
| 5 minute winter    | S161                       | 10.006            | S4                         | 48.4          | 2.945          | 0.335    | 0.236         |
| 5 minute winter    | S162                       | 10.005            | S161                       | 37.1          | 2.713          | 0.267    | 0.294         |
| 5 minute winter    | S163                       | 10.004            | S162                       | 27.0          | 2.403          | 0.196    | 0.305         |
| 5 minute winter    | S164                       | 10.003            | S163                       | 22.0          | 2.358          | 0.159    | 0.227         |
| 5 minute winter    | S165                       | 10.002            | S164                       | 16.5          | 2.098          | 0.121    | 0.148         |
| 5 minute winter    | S166                       | 10.001            | S165                       | 6.6           | 1.142          | 0.066    | 0.188         |
| 5 minute winter    | S167                       | 11.000            | S166                       | 3.4           | 0.973          | 0.026    | 0.049         |
| 5 minute winter    | S168                       | 10.000            | S166                       | 3.4           | 0.922          | 0.032    | 0.040         |
| 1440 minute winter | INFILTRATION BASIN 2       | Infiltration      |                            | 0.4           |                |          |               |

**Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 54.91%**

| Node Event         |                            | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|----------------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute winter   | S6                         |         | 12          | 152.940   | 0.834     | 111.7        | 1.1929        | 0.0000     | SURCHARGED |
| 15 minute winter   | S4                         |         | 12          | 154.224   | 1.005     | 104.7        | 1.4382        | 0.0000     | SURCHARGED |
| 15 minute winter   | S2                         |         | 12          | 154.281   | 0.277     | 39.3         | 0.3964        | 0.0000     | SURCHARGED |
| 15 minute winter   | S1                         |         | 10          | 154.332   | 0.132     | 31.5         | 0.1493        | 0.0000     | OK         |
| 15 minute winter   | S5                         |         | 12          | 153.666   | 0.898     | 103.8        | 1.2844        | 0.0000     | FLOOD RISK |
| 1440 minute winter | INFILTRATION BASIN 2 INLET |         | 2730        | 152.868   | 1.770     | 222.4        | 2.0017        | 0.0000     | OK         |
| 15 minute winter   | S43                        |         | 10          | 155.677   | 0.052     | 15.8         | 0.0591        | 0.0000     | OK         |
| 15 minute winter   | S161                       |         | 12          | 154.404   | 0.404     | 67.7         | 0.4572        | 0.0000     | SURCHARGED |
| 15 minute winter   | S162                       |         | 10          | 155.531   | 0.095     | 52.7         | 0.1078        | 0.0000     | OK         |
| 15 minute winter   | S163                       |         | 10          | 157.383   | 0.081     | 38.3         | 0.0914        | 0.0000     | OK         |
| 15 minute winter   | S164                       |         | 10          | 159.072   | 0.073     | 31.1         | 0.0828        | 0.0000     | OK         |
| 15 minute winter   | S165                       |         | 10          | 160.337   | 0.063     | 23.4         | 0.0715        | 0.0000     | OK         |
| 15 minute winter   | S166                       |         | 10          | 161.496   | 0.046     | 9.4          | 0.0521        | 0.0000     | OK         |
| 15 minute winter   | S167                       |         | 10          | 162.329   | 0.029     | 4.7          | 0.0332        | 0.0000     | OK         |
| 15 minute winter   | S168                       |         | 10          | 161.932   | 0.032     | 4.7          | 0.0365        | 0.0000     | OK         |
| 1440 minute winter | INFILTRATION BASIN 2       |         | 2820        | 152.857   | 1.809     | 482.8        | 2.0460        | 0.0000     | OK         |

| Link Event        | US Node                    | Link              | DS Node                    | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) |
|-------------------|----------------------------|-------------------|----------------------------|---------------|----------------|----------|---------------|
| 5 minute winter   | S6                         | 10.009            | INFILTRATION BASIN 2 INLET | 111.7         | 2.810          | 2.844    | 0.397         |
| 5 minute winter   | S4                         | 10.007            | S5                         | 97.6          | 2.454          | 0.922    | 0.437         |
| 5 minute winter   | S2                         | 12.002            | S4                         | 35.5          | 1.335          | 0.244    | 0.403         |
| 5 minute winter   | S1                         | 12.001            | S2                         | 31.4          | 1.638          | 0.573    | 0.528         |
| 5 minute winter   | S5                         | 10.008            | S6                         | 103.9         | 2.612          | 0.887    | 0.524         |
| 440 minute winter | INFILTRATION BASIN 2 INLET | Flow through Pond | INFILTRATION BASIN 2       | 473.3         | 0.023          | 0.002    | 214.980       |
| 5 minute winter   | S43                        | 12.000            | S1                         | 15.7          | 1.029          | 0.119    | 0.347         |
| 5 minute winter   | S161                       | 10.006            | S4                         | 62.8          | 2.939          | 0.435    | 0.367         |
| 5 minute winter   | S162                       | 10.005            | S161                       | 52.4          | 2.742          | 0.377    | 0.566         |
| 5 minute winter   | S163                       | 10.004            | S162                       | 38.0          | 2.644          | 0.276    | 0.387         |
| 5 minute winter   | S164                       | 10.003            | S163                       | 30.9          | 2.580          | 0.224    | 0.292         |
| 5 minute winter   | S165                       | 10.002            | S164                       | 23.3          | 2.293          | 0.171    | 0.190         |
| 5 minute winter   | S166                       | 10.001            | S165                       | 9.2           | 1.250          | 0.093    | 0.240         |
| 5 minute winter   | S167                       | 11.000            | S166                       | 4.7           | 1.070          | 0.036    | 0.062         |
| 5 minute winter   | S168                       | 10.000            | S166                       | 4.7           | 1.014          | 0.044    | 0.051         |
| 440 minute winter | INFILTRATION BASIN 2       | Infiltration      |                            | 0.5           |                |          |               |

**Results for 1000 year Critical Storm Duration. Lowest mass balance: 54.91%**

| Node Event         |                            | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|----------------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute winter   | S6                         |         | 12          | 153.057   | 0.951     | 121.3        | 1.3615        | 0.0000     | FLOOD RISK |
| 15 minute winter   | S4                         |         | 12          | 154.564   | 1.345     | 108.8        | 1.9242        | 0.0000     | FLOOD RISK |
| 15 minute winter   | S2                         |         | 12          | 154.626   | 0.622     | 46.0         | 0.8900        | 0.0000     | SURCHARGED |
| 15 minute winter   | S1                         |         | 12          | 154.688   | 0.488     | 36.5         | 0.5520        | 0.0000     | SURCHARGED |
| 15 minute winter   | S5                         |         | 12          | 153.906   | 1.138     | 113.0        | 1.6279        | 0.0000     | FLOOD RISK |
| 1440 minute winter | INFILTRATION BASIN 2 INLET |         | 1470        | 152.960   | 1.862     | 317.0        | 2.1062        | 0.0000     | OK         |
| 15 minute winter   | S43                        |         | 10          | 155.681   | 0.056     | 18.3         | 0.0637        | 0.0000     | OK         |
| 15 minute winter   | S161                       |         | 12          | 154.793   | 0.793     | 78.6         | 0.8969        | 0.0000     | SURCHARGED |
| 15 minute winter   | S162                       |         | 11          | 155.544   | 0.108     | 61.3         | 0.1222        | 0.0000     | OK         |
| 15 minute winter   | S163                       |         | 10          | 157.390   | 0.088     | 44.6         | 0.0994        | 0.0000     | OK         |
| 15 minute winter   | S164                       |         | 10          | 159.078   | 0.079     | 36.2         | 0.0899        | 0.0000     | OK         |
| 15 minute winter   | S165                       |         | 10          | 160.343   | 0.069     | 27.3         | 0.0775        | 0.0000     | OK         |
| 15 minute winter   | S166                       |         | 10          | 161.500   | 0.050     | 10.9         | 0.0563        | 0.0000     | OK         |
| 15 minute winter   | S167                       |         | 10          | 162.332   | 0.032     | 5.5          | 0.0358        | 0.0000     | OK         |
| 15 minute winter   | S168                       |         | 10          | 161.935   | 0.035     | 5.5          | 0.0394        | 0.0000     | OK         |
| 1440 minute winter | INFILTRATION BASIN 2       |         | 1440        | 152.962   | 1.914     | 656.0        | 2.1647        | 0.0000     | OK         |

| Link Event        | US Node                    | Link              | DS Node                    | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) |
|-------------------|----------------------------|-------------------|----------------------------|---------------|----------------|----------|---------------|
| 5 minute winter   | S6                         | 10.009            | INFILTRATION BASIN 2 INLET | 121.0         | 3.043          | 3.080    | 0.397         |
| 5 minute winter   | S4                         | 10.007            | S5                         | 105.8         | 2.661          | 1.000    | 0.437         |
| 5 minute winter   | S2                         | 12.002            | S4                         | 37.8          | 1.308          | 0.259    | 0.403         |
| 5 minute winter   | S1                         | 12.001            | S2                         | 36.8          | 1.602          | 0.673    | 0.703         |
| 5 minute winter   | S5                         | 10.008            | S6                         | 112.2         | 2.822          | 0.958    | 0.524         |
| 440 minute winter | INFILTRATION BASIN 2 INLET | Flow through Pond | INFILTRATION BASIN 2       | 656.0         | 0.035          | 0.003    | 237.540       |
| 5 minute winter   | S43                        | 12.000            | S1                         | 18.2          | 1.079          | 0.138    | 0.527         |
| 5 minute winter   | S161                       | 10.006            | S4                         | 70.8          | 2.884          | 0.490    | 0.367         |
| 5 minute winter   | S162                       | 10.005            | S161                       | 60.9          | 2.668          | 0.439    | 0.596         |
| 5 minute winter   | S163                       | 10.004            | S162                       | 44.2          | 2.745          | 0.321    | 0.441         |
| 5 minute winter   | S164                       | 10.003            | S163                       | 36.0          | 2.679          | 0.261    | 0.327         |
| 5 minute winter   | S165                       | 10.002            | S164                       | 27.0          | 2.382          | 0.198    | 0.213         |
| 5 minute winter   | S166                       | 10.001            | S165                       | 10.8          | 1.302          | 0.108    | 0.268         |
| 5 minute winter   | S167                       | 11.000            | S166                       | 5.5           | 1.121          | 0.043    | 0.069         |
| 5 minute winter   | S168                       | 10.000            | S166                       | 5.5           | 1.060          | 0.052    | 0.057         |
| 440 minute winter | INFILTRATION BASIN 2       | Infiltration      |                            | 0.5           |                |          |               |