

### Design Settings

|                                      |        |                                    |               |
|--------------------------------------|--------|------------------------------------|---------------|
| Rainfall Methodology                 | FEH-22 | Minimum Velocity (m/s)             | 1.00          |
| Return Period (years)                | 2      | Connection Type                    | Level Soffits |
| Additional Flow (%)                  | 0      | Minimum Backdrop Height (m)        | 0.200         |
| CV                                   | 1.000  | Preferred Cover Depth (m)          | 1.200         |
| Time of Entry (mins)                 | 4.00   | Include Intermediate Ground        | ✓             |
| Maximum Time of Concentration (mins) | 30.00  | Enforce best practice design rules | x             |
| Maximum Rainfall (mm/hr)             | 50.0   |                                    |               |

### 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) |
|-----------|--------------|------------------|-----------------------|------------------|----------------|-----------------|--------------|
| S1        | 0.009        | 4.00             | 75.650                | 450              | 531296.748     | 139381.404      | 0.662        |
| S2        |              |                  | 75.700                | 600              | 531301.121     | 139384.887      | 1.425        |
| S3        | 0.008        | 4.00             | 75.650                | 450              | 531302.378     | 139392.401      | 1.375        |
| SA1       | 0.000        |                  | 75.650                | 450              | 531302.491     | 139389.329      | 1.405        |
| S4        | 0.020        | 4.00             | 76.450                | 450              | 531339.322     | 139400.828      | 0.675        |
| S5        | 0.001        | 4.00             | 76.600                | 450              | 531320.350     | 139400.236      | 1.086        |
| S6        | 0.020        | 4.00             | 76.600                | 450              | 531311.714     | 139399.895      | 1.000        |
| S7        |              | 4.00             | 76.400                | 450              | 531304.381     | 139399.580      | 0.600        |
| S8        |              |                  | 76.500                | 900              | 531319.567     | 139407.840      | 1.062        |
| SA2       | 0.000        |                  | 76.400                | 450              | 531312.919     | 139407.906      | 1.050        |
| 1         |              |                  | 75.650                | 150              | 531302.179     | 139389.351      | 1.395        |
| Carpark 1 | 0.010        |                  | 76.400                |                  | 531306.910     | 139405.435      | 0.500        |

### 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) |
|-------|------------|------------|---------------|----------------|--------------|--------------|-------------|----------------|-------------|------------------|-----------------|
| 3.000 | S1         | S2         | 5.591         | 0.600          | 74.988       | 74.275       | 0.713       | 7.8            | 100         | 4.03             | 50.0            |
| 3.001 | S2         | 1          | 1.900         | 0.600          | 74.275       | 74.255       | 0.020       | 95.0           | 100         | 4.07             | 50.0            |
| 4.000 | S3         | 1          | 1.000         | 0.600          | 74.275       | 74.265       | 0.010       | 100.0          | 100         | 4.02             | 50.0            |
| 1.000 | S4         | S5         | 18.981        | 0.600          | 75.775       | 75.514       | 0.261       | 72.7           | 150         | 4.27             | 50.0            |
| 2.000 | S7         | S6         | 7.340         | 0.600          | 75.800       | 75.600       | 0.200       | 36.7           | 150         | 4.07             | 50.0            |
| 2.001 | S6         | S5         | 8.643         | 0.600          | 75.600       | 75.514       | 0.086       | 100.0          | 150         | 4.22             | 50.0            |
| 1.001 | S5         | S8         | 7.644         | 0.600          | 75.514       | 75.438       | 0.076       | 100.6          | 150         | 4.40             | 50.0            |
| 1.002 | S8         | SA2        | 1.000         | 0.600          | 75.438       | 75.350       | 0.088       | 11.4           | 150         | 4.40             | 50.0            |
| 3.002 | 1          | SA1        | 1.000         | 0.600          | 74.255       | 74.245       | 0.010       | 100.0          | 100         | 4.10             | 50.0            |

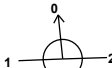
| Name  | Vel<br>(m/s) | Cap<br>(l/s) | Flow<br>(l/s) | US<br>Depth<br>(m) | DS<br>Depth<br>(m) | Σ Area<br>(ha) | Σ Add<br>Inflow<br>(l/s) | Pro<br>Depth<br>(mm) | Pro<br>Velocity<br>(m/s) |
|-------|--------------|--------------|---------------|--------------------|--------------------|----------------|--------------------------|----------------------|--------------------------|
| 3.000 | 2.778        | 21.8         | 1.6           | 0.562              | 1.325              | 0.009          | 0.0                      | 18                   | 1.618                    |
| 3.001 | 0.789        | 6.2          | 1.6           | 1.325              | 1.295              | 0.009          | 0.0                      | 35                   | 0.662                    |
| 4.000 | 0.769        | 6.0          | 1.4           | 1.275              | 1.285              | 0.008          | 0.0                      | 33                   | 0.629                    |
| 1.000 | 1.180        | 20.9         | 3.6           | 0.525              | 0.936              | 0.020          | 0.0                      | 42                   | 0.890                    |
| 2.000 | 1.667        | 29.4         | 0.0           | 0.450              | 0.850              | 0.000          | 0.0                      | 0                    | 0.000                    |
| 2.001 | 1.005        | 17.8         | 3.6           | 0.850              | 0.936              | 0.020          | 0.0                      | 46                   | 0.791                    |
| 1.001 | 1.002        | 17.7         | 7.4           | 0.936              | 0.912              | 0.041          | 0.0                      | 68                   | 0.958                    |
| 1.002 | 3.005        | 53.1         | 7.4           | 0.912              | 0.900              | 0.041          | 0.0                      | 38                   | 2.127                    |
| 3.002 | 0.769        | 6.0          | 3.1           | 1.295              | 1.305              | 0.017          | 0.0                      | 50                   | 0.771                    |

### Pipeline Schedule

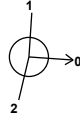
| Link  | Length (m) | Slope (1:X) | Dia (mm) | Link Type | US CL (m) | US IL (m) | US Depth (m) | DS CL (m) | DS IL (m) | DS Depth (m) |
|-------|------------|-------------|----------|-----------|-----------|-----------|--------------|-----------|-----------|--------------|
| 3.000 | 5.591      | 7.8         | 100      | Circular  | 75.650    | 74.988    | 0.562        | 75.700    | 74.275    | 1.325        |
| 3.001 | 1.900      | 95.0        | 100      | Circular  | 75.700    | 74.275    | 1.325        | 75.650    | 74.255    | 1.295        |
| 4.000 | 1.000      | 100.0       | 100      | Circular  | 75.650    | 74.275    | 1.275        | 75.650    | 74.265    | 1.285        |
| 1.000 | 18.981     | 72.7        | 150      | Circular  | 76.450    | 75.775    | 0.525        | 76.600    | 75.514    | 0.936        |
| 2.000 | 7.340      | 36.7        | 150      | Circular  | 76.400    | 75.800    | 0.450        | 76.600    | 75.600    | 0.850        |
| 2.001 | 8.643      | 100.0       | 150      | Circular  | 76.600    | 75.600    | 0.850        | 76.600    | 75.514    | 0.936        |
| 1.001 | 7.644      | 100.6       | 150      | Circular  | 76.600    | 75.514    | 0.936        | 76.500    | 75.438    | 0.912        |
| 1.002 | 1.000      | 11.4        | 150      | Circular  | 76.500    | 75.438    | 0.912        | 76.400    | 75.350    | 0.900        |
| 3.002 | 1.000      | 100.0       | 100      | Circular  | 75.650    | 74.255    | 1.295        | 75.650    | 74.245    | 1.305        |

| Link  | US Node | Dia (mm) | Node Type | MH Type   | DS Node | Dia (mm) | Node Type | MH Type   |
|-------|---------|----------|-----------|-----------|---------|----------|-----------|-----------|
| 3.000 | S1      | 450      | Manhole   | Adoptable | S2      | 600      | Manhole   | Adoptable |
| 3.001 | S2      | 600      | Manhole   | Adoptable | 1       | 150      | Manhole   | Adoptable |
| 4.000 | S3      | 450      | Manhole   | Adoptable | 1       | 150      | Manhole   | Adoptable |
| 1.000 | S4      | 450      | Manhole   | Adoptable | S5      | 450      | Manhole   | Adoptable |
| 2.000 | S7      | 450      | Manhole   | Adoptable | S6      | 450      | Manhole   | Adoptable |
| 2.001 | S6      | 450      | Manhole   | Adoptable | S5      | 450      | Manhole   | Adoptable |
| 1.001 | S5      | 450      | Manhole   | Adoptable | S8      | 900      | Manhole   | Adoptable |
| 1.002 | S8      | 900      | Manhole   | Adoptable | SA2     | 450      | Manhole   | Adoptable |
| 3.002 | 1       | 150      | Manhole   | Adoptable | SA1     | 450      | Manhole   | Adoptable |

### Manhole Schedule

| Node | Easting (m) | Northing (m) | CL (m) | Depth (m) | Dia (mm) | Connections                                                                          | Link  | IL (m) | Dia (mm) |
|------|-------------|--------------|--------|-----------|----------|--------------------------------------------------------------------------------------|-------|--------|----------|
| S1   | 531296.748  | 139381.404   | 75.650 | 0.662     | 450      |  |       |        |          |
|      |             |              |        |           |          | 0                                                                                    | 3.000 | 74.988 | 100      |
| S2   | 531301.121  | 139384.887   | 75.700 | 1.425     | 600      |  | 1     | 3.000  | 74.275   |
|      |             |              |        |           |          | 0                                                                                    | 3.001 | 74.275 | 100      |
| S3   | 531302.378  | 139392.401   | 75.650 | 1.375     | 450      |  | 0     | 4.000  | 74.275   |
| SA1  | 531302.491  | 139389.329   | 75.650 | 1.405     | 450      |  | 1     | 3.002  | 74.245   |
| S4   | 531339.322  | 139400.828   | 76.450 | 0.675     | 450      |  | 0     | 1.000  | 75.775   |
| S5   | 531320.350  | 139400.236   | 76.600 | 1.086     | 450      |  | 1     | 2.001  | 75.514   |
|      |             |              |        |           |          | 2                                                                                    | 1.000 | 75.514 | 150      |
|      |             |              |        |           |          | 0                                                                                    | 1.001 | 75.514 | 150      |

### Manhole Schedule

| Node      | Easting (m) | Northing (m) | CL (m) | Depth (m) | Dia (mm) | Connections                                                                                  | Link  | IL (m) | Dia (mm) |
|-----------|-------------|--------------|--------|-----------|----------|----------------------------------------------------------------------------------------------|-------|--------|----------|
| S6        | 531311.714  | 139399.895   | 76.600 | 1.000     | 450      | 1 → 0<br>  | 2.000 | 75.600 | 150      |
| S7        | 531304.381  | 139399.580   | 76.400 | 0.600     | 450      | 0 → 0<br>  | 2.001 | 75.600 | 150      |
| S8        | 531319.567  | 139407.840   | 76.500 | 1.062     | 900      | 1 → 0<br>  | 1.001 | 75.438 | 150      |
| SA2       | 531312.919  | 139407.906   | 76.400 | 1.050     | 450      | 0 → 1<br>  | 1.002 | 75.438 | 150      |
| 1         | 531302.179  | 139389.351   | 75.650 | 1.395     | 150      | 1 → 2<br> | 4.000 | 74.265 | 100      |
| Carpark 1 | 531306.910  | 139405.435   | 76.400 | 0.500     |          | 2 → 0<br> | 3.001 | 74.255 | 100      |
|           |             |              |        |           |          | 0<br>    | 3.002 | 74.255 | 100      |

### Simulation Settings

|                      |        |                        |        |                            |     |
|----------------------|--------|------------------------|--------|----------------------------|-----|
| Rainfall Methodology | FEH-22 | Analysis Speed         | Normal | Additional Storage (m³/ha) | 0.0 |
| Summer CV            | 1.000  | Skip Steady State      | x      | Check Discharge Rate(s)    | x   |
| Winter CV            | 1.000  | Drain Down Time (mins) | 240    | 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 %) |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 10                    | 0                     | 0                     | 0                     |
| 30                    | 0                     | 0                     | 0                     |
| 30                    | 40                    | 0                     | 0                     |
| 100                   | 0                     | 0                     | 0                     |
| 100                   | 45                    | 0                     | 0                     |

### Node SA1 Soakaway Storage Structure

|                             |         |                           |        |                 |       |
|-----------------------------|---------|---------------------------|--------|-----------------|-------|
| Base Inf Coefficient (m/hr) | 0.16200 | Invert Level (m)          | 74.220 | Depth (m)       | 0.400 |
| Side Inf Coefficient (m/hr) | 0.16200 | Time to half empty (mins) | 117    | Inf Depth (m)   |       |
| Safety Factor               | 2.0     | Pit Width (m)             | 6.000  | Number Required | 1     |
| Porosity                    | 0.95    | Pit Length (m)            | 3.000  |                 |       |

### Node SA2 Soakaway Storage Structure

|                             |         |                           |        |                 |       |
|-----------------------------|---------|---------------------------|--------|-----------------|-------|
| Base Inf Coefficient (m/hr) | 0.16200 | Invert Level (m)          | 75.350 | Depth (m)       | 0.400 |
| Side Inf Coefficient (m/hr) | 0.16200 | Time to half empty (mins) | 125    | Inf Depth (m)   |       |
| Safety Factor               | 2.0     | Pit Width (m)             | 12.000 | Number Required | 1     |
| Porosity                    | 0.95    | Pit Length (m)            | 4.500  |                 |       |

### Node Carpark 1 Carpark Storage Structure

|                             |         |                           |        |               |       |
|-----------------------------|---------|---------------------------|--------|---------------|-------|
| Base Inf Coefficient (m/hr) | 0.16200 | Invert Level (m)          | 75.900 | Slope (1:X)   | 30.0  |
| Side Inf Coefficient (m/hr) | 0.16200 | Time to half empty (mins) | 19     | Depth (m)     | 0.300 |
| Safety Factor               | 2.0     | Width (m)                 | 10.000 | Inf Depth (m) |       |
| Porosity                    | 0.30    | Length (m)                | 10.000 |               |       |

### Approval Settings

|                             |         |                                     |       |
|-----------------------------|---------|-------------------------------------|-------|
| Node Size                   | ✓       | Minimum Full Bore Velocity (m/s)    |       |
| Node Losses                 | ✓       | Maximum Full Bore Velocity (m/s)    | 3.000 |
| Link Size                   | ✓       | Proportional Velocity               | ✓     |
| Minimum Diameter (mm)       | 150     | Return Period (years)               |       |
| Link Length                 | ✓       | Minimum Proportional Velocity (m/s) | 0.750 |
| Maximum Length (m)          | 100.000 | Maximum Proportional Velocity (m/s) | 3.000 |
| Coordinates                 | ✓       | Surcharged Depth                    | ✓     |
| Accuracy (m)                | 1.000   | Return Period (years)               |       |
| Crossings                   | ✓       | Maximum Surcharged Depth (m)        | 0.100 |
| Cover Depth                 | ✓       | Flooding                            | ✓     |
| Minimum Cover Depth (m)     |         | Return Period (years)               | 30    |
| Maximum Cover Depth (m)     | 3.000   | Time to Half Empty                  | x     |
| Backdrops                   | ✓       | Discharge Rates                     | ✓     |
| Minimum Backdrop Height (m) |         | Discharge Volume                    | ✓     |
| Maximum Backdrop Height (m) | 1.500   | 100 year 360 minute (m³)            |       |
| Full Bore Velocity          | ✓       |                                     |       |

**Results for 10 year Critical Storm Duration. Lowest mass balance: 99.64%**

| Node Event        | US Node   | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|-----------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute summer  | S1        | 10          | 75.016    | 0.028     | 3.6          | 0.0044        | 0.0000     | OK         |
| 120 minute summer | S2        | 86          | 74.392    | 0.117     | 1.5          | 0.0330        | 0.0000     | SURCHARGED |
| 120 minute summer | S3        | 84          | 74.392    | 0.117     | 1.4          | 0.0185        | 0.0000     | SURCHARGED |
| 120 minute summer | SA1       | 86          | 74.391    | 0.146     | 2.5          | 2.9524        | 0.0000     | OK         |
| 15 minute summer  | S4        | 10          | 75.839    | 0.064     | 8.0          | 0.0102        | 0.0000     | OK         |
| 15 minute summer  | S5        | 10          | 75.636    | 0.122     | 16.4         | 0.0195        | 0.0000     | OK         |
| 15 minute summer  | S6        | 10          | 75.673    | 0.073     | 8.0          | 0.0116        | 0.0000     | OK         |
| 15 minute summer  | S7        | 1           | 75.800    | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 15 minute summer  | S8        | 9           | 75.524    | 0.086     | 16.4         | 0.0546        | 0.0000     | OK         |
| 120 minute summer | SA2       | 86          | 75.497    | 0.147     | 6.8          | 7.5430        | 0.0000     | OK         |
| 120 minute summer | 1         | 86          | 74.391    | 0.136     | 2.6          | 0.0025        | 0.0000     | SURCHARGED |
| 30 minute summer  | Carpark 1 | 22          | 76.060    | 0.160     | 3.5          | 1.0451        | 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 summer            | S1        | 3.000        | S2      | 3.6           | 1.204          | 0.165    | 0.0265        |
| 120 minute summer           | S2        | 3.001        | 1       | 1.3           | 0.376          | 0.217    | 0.0149        |
| 120 minute summer           | S3        | 4.000        | 1       | 1.3           | 0.408          | 0.214    | 0.0078        |
| 120 minute summer           | SA1       | Infiltration |         | 0.5           |                |          |               |
| 15 minute summer            | S4        | 1.000        | S5      | 8.0           | 0.710          | 0.384    | 0.2144        |
| 15 minute summer            | S5        | 1.001        | S8      | 16.4          | 1.257          | 0.926    | 0.0986        |
| 15 minute summer            | S6        | 2.001        | S5      | 8.0           | 0.668          | 0.451    | 0.1031        |
| 15 minute summer            | S7        | 2.000        | S6      | 0.0           | 0.000          | 0.000    | 0.0311        |
| 15 minute summer            | S8        | 1.002        | SA2     | 16.5          | 2.221          | 0.310    | 0.0088        |
| 120 minute summer           | SA2       | Infiltration |         | 1.3           |                |          |               |
| 120 minute summer           | 1         | 3.002        | SA1     | 2.5           | 0.597          | 0.415    | 0.0078        |
| 30 minute summer            | Carpark 1 | Infiltration |         | 1.1           |                |          |               |

**Results for 30 year Critical Storm Duration. Lowest mass balance: 99.64%**

| Node Event        | US Node   | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|-----------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute summer  | S1        | 10          | 75.020    | 0.032     | 4.7          | 0.0050        | 0.0000     | OK         |
| 60 minute summer  | S2        | 58          | 74.453    | 0.178     | 3.1          | 0.0503        | 0.0000     | SURCHARGED |
| 60 minute summer  | S3        | 60          | 74.454    | 0.179     | 2.7          | 0.0284        | 0.0000     | SURCHARGED |
| 60 minute summer  | SA1       | 60          | 74.451    | 0.206     | 4.9          | 3.9893        | 0.0000     | OK         |
| 15 minute summer  | S4        | 10          | 75.850    | 0.075     | 10.5         | 0.0119        | 0.0000     | OK         |
| 15 minute summer  | S5        | 10          | 75.692    | 0.178     | 20.7         | 0.0283        | 0.0000     | SURCHARGED |
| 15 minute summer  | S6        | 10          | 75.718    | 0.118     | 10.5         | 0.0187        | 0.0000     | OK         |
| 15 minute summer  | S7        | 1           | 75.800    | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 120 minute summer | S8        | 90          | 75.552    | 0.114     | 8.8          | 0.0727        | 0.0000     | OK         |
| 120 minute summer | SA2       | 90          | 75.552    | 0.202     | 8.8          | 10.4100       | 0.0000     | OK         |
| 60 minute summer  | 1         | 61          | 74.452    | 0.197     | 5.1          | 0.0035        | 0.0000     | SURCHARGED |
| 30 minute summer  | Carpark 1 | 22          | 76.090    | 0.190     | 4.6          | 1.4823        | 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 summer            | S1        | 3.000        | S2      | 4.7           | 1.194          | 0.215    | 0.0278        |
| 60 minute summer            | S2        | 3.001        | 1       | 2.7           | 0.423          | 0.442    | 0.0149        |
| 60 minute summer            | S3        | 4.000        | 1       | 2.4           | 0.426          | 0.404    | 0.0078        |
| 60 minute summer            | SA1       | Infiltration |         | 0.5           |                |          |               |
| 15 minute summer            | S4        | 1.000        | S5      | 10.5          | 0.747          | 0.503    | 0.2508        |
| 15 minute summer            | S5        | 1.001        | S8      | 20.1          | 1.239          | 1.137    | 0.1136        |
| 15 minute summer            | S6        | 2.001        | S5      | 9.9           | 0.688          | 0.559    | 0.1402        |
| 15 minute summer            | S7        | 2.000        | S6      | 0.0           | 0.000          | 0.000    | 0.0545        |
| 120 minute summer           | S8        | 1.002        | SA2     | 8.8           | 1.378          | 0.166    | 0.0160        |
| 120 minute summer           | SA2       | Infiltration |         | 1.4           |                |          |               |
| 60 minute summer            | 1         | 3.002        | SA1     | 4.9           | 0.729          | 0.809    | 0.0078        |
| 30 minute summer            | Carpark 1 | Infiltration |         | 1.4           |                |          |               |

**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.64%**

| Node Event        | US Node   | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|-----------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute summer  | S1        | 10          | 75.026    | 0.038     | 6.6          | 0.0060        | 0.0000     | OK         |
| 120 minute winter | S2        | 114         | 74.576    | 0.301     | 1.8          | 0.0851        | 0.0000     | SURCHARGED |
| 120 minute winter | S3        | 114         | 74.576    | 0.301     | 1.6          | 0.0478        | 0.0000     | SURCHARGED |
| 120 minute winter | SA1       | 114         | 74.575    | 0.330     | 3.0          | 6.1294        | 0.0000     | OK         |
| 15 minute summer  | S4        | 11          | 75.922    | 0.147     | 14.7         | 0.0234        | 0.0000     | OK         |
| 15 minute summer  | S5        | 11          | 75.807    | 0.293     | 26.9         | 0.0466        | 0.0000     | SURCHARGED |
| 15 minute summer  | S6        | 11          | 75.870    | 0.270     | 14.7         | 0.0429        | 0.0000     | SURCHARGED |
| 15 minute summer  | S7        | 11          | 75.872    | 0.072     | 1.1          | 0.0114        | 0.0000     | OK         |
| 120 minute summer | S8        | 98          | 75.650    | 0.212     | 12.3         | 0.1349        | 0.0000     | SURCHARGED |
| 120 minute summer | SA2       | 98          | 75.650    | 0.300     | 12.0         | 15.4328       | 0.0000     | OK         |
| 120 minute winter | 1         | 114         | 74.576    | 0.321     | 3.1          | 0.0058        | 0.0000     | SURCHARGED |
| 30 minute summer  | Carpark 1 | 23          | 76.132    | 0.232     | 6.5          | 2.1897        | 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 summer            | S1        | 3.000        | S2      | 6.6           | 1.233          | 0.303    | 0.0295        |
| 120 minute winter           | S2        | 3.001        | 1       | 1.6           | 0.360          | 0.264    | 0.0149        |
| 120 minute winter           | S3        | 4.000        | 1       | 1.5           | 0.409          | 0.243    | 0.0078        |
| 120 minute winter           | SA1       | Infiltration |         | 0.5           |                |          |               |
| 15 minute summer            | S4        | 1.000        | S5      | 13.4          | 0.828          | 0.643    | 0.3334        |
| 15 minute summer            | S5        | 1.001        | S8      | 26.7          | 1.528          | 1.510    | 0.1300        |
| 15 minute summer            | S6        | 2.001        | S5      | 12.9          | 0.734          | 0.728    | 0.1522        |
| 15 minute summer            | S7        | 2.000        | S6      | 1.1           | 0.101          | 0.039    | 0.0951        |
| 120 minute summer           | S8        | 1.002        | SA2     | 12.0          | 1.495          | 0.226    | 0.0176        |
| 120 minute summer           | SA2       | Infiltration |         | 1.4           |                |          |               |
| 120 minute winter           | 1         | 3.002        | SA1     | 3.0           | 0.570          | 0.489    | 0.0078        |
| 30 minute summer            | Carpark 1 | Infiltration |         | 1.7           |                |          |               |

**Results for 100 year Critical Storm Duration. Lowest mass balance: 99.64%**

| Node Event        | US Node   | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|-----------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute summer  | S1        | 10          | 75.024    | 0.036     | 6.0          | 0.0057        | 0.0000     | OK         |
| 120 minute winter | S2        | 112         | 74.531    | 0.256     | 1.6          | 0.0725        | 0.0000     | SURCHARGED |
| 120 minute winter | S3        | 112         | 74.531    | 0.256     | 1.5          | 0.0407        | 0.0000     | SURCHARGED |
| 120 minute winter | SA1       | 112         | 74.531    | 0.286     | 2.7          | 5.3595        | 0.0000     | OK         |
| 15 minute summer  | S4        | 10          | 75.872    | 0.097     | 13.3         | 0.0154        | 0.0000     | OK         |
| 15 minute summer  | S5        | 11          | 75.774    | 0.260     | 25.1         | 0.0413        | 0.0000     | SURCHARGED |
| 15 minute summer  | S6        | 11          | 75.827    | 0.227     | 13.3         | 0.0361        | 0.0000     | SURCHARGED |
| 15 minute summer  | S7        | 11          | 75.829    | 0.029     | 1.1          | 0.0046        | 0.0000     | OK         |
| 60 minute winter  | S8        | 60          | 75.620    | 0.182     | 12.5         | 0.1160        | 0.0000     | SURCHARGED |
| 60 minute winter  | SA2       | 60          | 75.620    | 0.270     | 12.5         | 13.9050       | 0.0000     | OK         |
| 120 minute winter | 1         | 112         | 74.531    | 0.276     | 2.8          | 0.0050        | 0.0000     | SURCHARGED |
| 30 minute summer  | Carpark 1 | 23          | 76.120    | 0.220     | 5.9          | 1.9816        | 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 summer            | S1        | 3.000        | S2      | 6.0           | 1.233          | 0.275    | 0.0289        |
| 120 minute winter           | S2        | 3.001        | 1       | 1.5           | 0.359          | 0.236    | 0.0149        |
| 120 minute winter           | S3        | 4.000        | 1       | 1.4           | 0.409          | 0.227    | 0.0078        |
| 120 minute winter           | SA1       | Infiltration |         | 0.5           |                |          |               |
| 15 minute summer            | S4        | 1.000        | S5      | 12.9          | 0.824          | 0.620    | 0.2809        |
| 15 minute summer            | S5        | 1.001        | S8      | 24.8          | 1.451          | 1.404    | 0.1241        |
| 15 minute summer            | S6        | 2.001        | S5      | 12.0          | 0.705          | 0.674    | 0.1522        |
| 15 minute summer            | S7        | 2.000        | S6      | -1.1          | -0.095         | -0.038   | 0.0733        |
| 60 minute winter            | S8        | 1.002        | SA2     | 12.5          | 1.678          | 0.236    | 0.0176        |
| 60 minute winter            | SA2       | Infiltration |         | 1.4           |                |          |               |
| 120 minute winter           | 1         | 3.002        | SA1     | 2.7           | 0.564          | 0.445    | 0.0078        |
| 30 minute summer            | Carpark 1 | Infiltration |         | 1.6           |                |          |               |

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.64%**

| Node Event        | US Node   | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|-----------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 120 minute winter | S1        | 116         | 75.034    | 0.046     | 2.4          | 0.0073        | 0.0000     | OK         |
| 120 minute winter | S2        | 116         | 75.035    | 0.760     | 2.4          | 0.2151        | 0.0000     | SURCHARGED |
| 120 minute winter | S3        | 116         | 75.035    | 0.760     | 2.1          | 0.1208        | 0.0000     | SURCHARGED |
| 120 minute winter | SA1       | 116         | 75.033    | 0.788     | 3.9          | 6.9740        | 0.0000     | OK         |
| 15 minute summer  | S4        | 11          | 76.191    | 0.416     | 19.2         | 0.0662        | 0.0000     | FLOOD RISK |
| 15 minute summer  | S5        | 11          | 75.996    | 0.482     | 34.0         | 0.0767        | 0.0000     | SURCHARGED |
| 15 minute summer  | S6        | 11          | 76.090    | 0.490     | 19.2         | 0.0779        | 0.0000     | SURCHARGED |
| 15 minute summer  | S7        | 11          | 76.091    | 0.291     | 2.9          | 0.0463        | 0.0000     | SURCHARGED |
| 120 minute winter | S8        | 114         | 75.872    | 0.434     | 10.6         | 0.2761        | 0.0000     | SURCHARGED |
| 120 minute winter | SA2       | 116         | 75.868    | 0.518     | 10.3         | 20.6279       | 0.0000     | OK         |
| 120 minute winter | 1         | 116         | 75.034    | 0.779     | 4.1          | 0.0140        | 0.0000     | SURCHARGED |
| 60 minute summer  | Carpark 1 | 40          | 76.178    | 0.278     | 6.3          | 3.1362        | 0.0000     | OK         |

| Link Event (Upstream Depth) | US Node   | Link         | DS Node | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) |
|-----------------------------|-----------|--------------|---------|---------------|----------------|----------|---------------|
| 120 minute winter           | S1        | 3.000        | S2      | 2.4           | 0.744          | 0.110    | 0.0316        |
| 120 minute winter           | S2        | 3.001        | 1       | 2.2           | 0.352          | 0.352    | 0.0149        |
| 120 minute winter           | S3        | 4.000        | 1       | 1.9           | 0.411          | 0.315    | 0.0078        |
| 120 minute winter           | SA1       | Infiltration |         | 0.6           |                |          |               |
| 15 minute summer            | S4        | 1.000        | S5      | 17.4          | 0.988          | 0.834    | 0.3342        |
| 15 minute summer            | S5        | 1.001        | S8      | 33.0          | 1.872          | 1.862    | 0.1346        |
| 15 minute summer            | S6        | 2.001        | S5      | 15.7          | 0.894          | 0.886    | 0.1522        |
| 15 minute summer            | S7        | 2.000        | S6      | 3.4           | 0.227          | 0.115    | 0.1292        |
| 120 minute winter           | S8        | 1.002        | SA2     | 10.3          | 1.986          | 0.195    | 0.0176        |
| 120 minute winter           | SA2       | Infiltration |         | 1.5           |                |          |               |
| 120 minute winter           | 1         | 3.002        | SA1     | 3.9           | 0.552          | 0.644    | 0.0078        |
| 60 minute summer            | Carpark 1 | Infiltration |         | 2.0           |                |          |               |