

### Design Settings

|                       |        |                                      |               |                                    |       |
|-----------------------|--------|--------------------------------------|---------------|------------------------------------|-------|
| Rainfall Methodology  | FEH-22 | Maximum Time of Concentration (mins) | 30.00         | Preferred Cover Depth (m)          | 1.200 |
| Return Period (years) | 100    | Maximum Rainfall (mm/hr)             | 50.0          | Include Intermediate Ground        | ✓     |
| Additional Flow (%)   | 0      | Minimum Velocity (m/s)               | 1.00          | Enforce best practice design rules | x     |
| CV                    | 1.000  | Connection Type                      | Level Soffits |                                    |       |
| Time of Entry (mins)  | 5.00   | Minimum Backdrop Height (m)          | 0.500         |                                    |       |

### 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) | Invert<br>Level<br>(m) |
|-----------------|--------------|------------------|-----------------------|------------------|----------------|-----------------|--------------|------------------------|
| 1               | 0.057        | 5.00             | 6.100                 | 1200             | 489300.865     | 98892.266       | 1.050        | 5.050                  |
| 2               | 0.095        | 5.00             | 6.650                 | 1200             | 489270.423     | 98931.120       | 1.790        | 4.860                  |
| 3               | 0.044        | 5.00             | 6.400                 | 1200             | 489261.729     | 98924.034       | 1.647        | 4.753                  |
| 4               | 0.041        | 5.00             | 6.250                 | 1200             | 489212.883     | 98939.483       | 1.706        | 4.544                  |
| 5               | 0.022        | 5.00             | 6.050                 | 1200             | 489163.326     | 98938.847       | 1.671        | 4.379                  |
| 6               | 0.082        | 5.00             | 5.850                 | 1350             | 489112.473     | 98957.615       | 1.727        | 4.123                  |
| 7               | 0.005        | 5.00             | 5.350                 | 1350             | 489028.809     | 98973.382       | 1.511        | 3.839                  |
| 8               | 0.000        |                  | 5.100                 | 1350             | 488995.970     | 98976.802       | 1.371        | 3.729                  |
| BASIN 2 INLET 1 | 0.000        |                  | 4.863                 | 1350             | 488997.358     | 98991.593       | 1.363        | 3.500                  |
| 10              | 0.013        | 5.00             | 5.000                 | 1350             | 489086.492     | 99033.485       | 1.425        | 3.575                  |
| BASIN 1 INLET   | 0.000        |                  | 4.863                 | 1350             | 489083.296     | 99038.588       | 1.363        | 3.500                  |
| BASIN 1         | 0.143        | 5.00             | 4.863                 | 1350             | 489075.596     | 99037.942       | 1.363        | 3.500                  |
| BASIN 1 OUTLET  | 0.000        |                  | 4.863                 | 1350             | 489068.198     | 99033.134       | 1.363        | 3.500                  |
| BASIN 2 INLET 2 | 0.000        |                  | 4.863                 | 1350             | 489058.932     | 99028.628       | 1.363        | 3.500                  |
| BASIN 2         | 0.229        | 5.00             | 4.863                 | 1350             | 489042.128     | 99020.506       | 1.363        | 3.500                  |
| BASIN 2 OUTLET  | 0.000        |                  | 4.863                 | 1350             | 489039.379     | 99024.079       | 1.363        | 3.500                  |
| HYDROBRAKE      | 0.000        |                  | 4.863                 | 1200             | 489036.009     | 99028.460       | 1.432        | 3.431                  |
| OUTFALL         | 0.000        |                  | 3.800                 | 1200             | 489023.070     | 99044.890       | 1.300        | 2.500                  |
| PP1             | 0.042        | 5.00             | 6.250                 | 1200             | 489282.045     | 98901.248       | 0.660        | 5.590                  |
| PP2             | 0.085        | 5.00             | 6.300                 | 1200             | 489197.888     | 98907.105       | 0.680        | 5.620                  |
| PP3             | 0.110        | 5.00             | 5.850                 | 1200             | 489143.909     | 98899.606       | 0.680        | 5.170                  |
| PP4             | 0.078        | 5.00             | 5.350                 | 1200             | 489035.672     | 98935.307       | 0.660        | 4.690                  |
| PP5             | 0.056        | 5.00             | 5.350                 | 1200             | 489014.409     | 98950.612       | 0.725        | 4.625                  |
| PP6             | 0.048        | 5.00             | 5.850                 | 1200             | 489130.117     | 98960.388       | 0.660        | 5.190                  |

### 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) | Invert<br>Level<br>(m) |
|------|--------------|------------------|-----------------------|------------------|----------------|-----------------|--------------|------------------------|
| PP7  | 0.266        | 5.00             | 5.000                 | 1200             | 489087.613     | 99031.019       | 0.660        | 4.340                  |
| PPD1 | 0.085        | 5.00             | 6.250                 | 1200             | 489267.475     | 98895.459       | 0.350        | 5.900                  |
| PPD2 | 0.107        | 5.00             | 6.300                 | 1200             | 489169.274     | 98886.458       | 0.350        | 5.950                  |
| PPD3 | 0.061        | 5.00             | 6.400                 | 1200             | 489226.793     | 98919.023       | 0.340        | 6.060                  |
| PPD4 | 0.143        | 5.00             | 6.050                 | 1200             | 489141.378     | 98926.948       | 0.340        | 5.710                  |
| PPD5 | 0.008        | 5.00             | 5.850                 | 1200             | 489052.267     | 98950.695       | 0.350        | 5.500                  |
| PPD6 | 0.103        | 5.00             | 5.850                 | 1200             | 489131.782     | 98966.703       | 0.350        | 5.500                  |
| PPD7 | 0.053        | 5.00             | 5.850                 | 1200             | 489103.419     | 98968.901       | 0.340        | 5.510                  |
| PPD8 | 0.447        | 5.00             | 5.000                 | 1200             | 489091.001     | 99027.454       | 0.340        | 4.660                  |

### 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) |
|-------|------------|------------|---------------|----------------|--------------|--------------|-------------|----------------|-------------|------------------|-----------------|
| 1.002 | 1          | 3          | 50.407        | 0.600          | 5.050        | 4.753        | 0.297       | 170.0          | 300         | 6.13             | 50.0            |
| 3.000 | 2          | 3          | 11.216        | 0.600          | 4.860        | 4.774        | 0.086       | 130.0          | 150         | 5.21             | 50.0            |
| 1.003 | 3          | 4          | 51.231        | 0.600          | 4.753        | 4.544        | 0.209       | 245.0          | 300         | 6.99             | 50.0            |
| 1.004 | 4          | 5          | 49.561        | 0.600          | 4.544        | 4.379        | 0.165       | 300.4          | 300         | 7.91             | 50.0            |
| 1.005 | 5          | 6          | 54.206        | 0.600          | 4.379        | 4.198        | 0.181       | 299.5          | 300         | 8.91             | 50.0            |
| 1.006 | 6          | 7          | 85.137        | 0.600          | 4.123        | 3.839        | 0.284       | 299.8          | 375         | 10.27            | 50.0            |
| 1.007 | 7          | 8          | 33.017        | 0.600          | 3.839        | 3.729        | 0.110       | 300.2          | 375         | 10.80            | 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) |
|-------|--------------|--------------|---------------|--------------------|--------------------|----------------|--------------------------|----------------------|--------------------------|
| 1.002 | 1.203        | 85.0         | 33.2          | 0.750              | 1.347              | 0.184          | 0.0                      | 130                  | 1.132                    |
| 3.000 | 0.880        | 15.5         | 17.2          | 1.640              | 1.476              | 0.095          | 0.0                      | 150                  | 0.896                    |
| 1.003 | 1.000        | 70.7         | 69.4          | 1.347              | 1.406              | 0.384          | 0.0                      | 242                  | 1.133                    |
| 1.004 | 0.902        | 63.7         | 111.5         | 1.406              | 1.371              | 0.617          | 0.0                      | 300                  | 0.913                    |
| 1.005 | 0.903        | 63.8         | 168.6         | 1.371              | 1.352              | 0.933          | 0.0                      | 300                  | 0.915                    |
| 1.006 | 1.041        | 115.0        | 212.9         | 1.352              | 1.136              | 1.178          | 0.0                      | 375                  | 1.054                    |
| 1.007 | 1.040        | 114.9        | 239.4         | 1.136              | 0.996              | 1.325          | 0.0                      | 375                  | 1.054                    |

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) |
|--------|-----------------|-----------------|------------|-------------|-----------|-----------|----------|-------------|----------|---------------|--------------|
| 1.008  | 8               | BASIN 2 INLET 1 | 14.856     | 0.600       | 3.729     | 3.500     | 0.229    | 64.9        | 375      | 10.91         | 50.0         |
| 1.009  | BASIN 2 INLET 1 | BASIN 2         | 53.295     | 0.600       | 3.500     | 3.500     | 0.000    | 0.0         | 375      | 11.80         | 50.0         |
| 12.002 | 10              | BASIN 1 INLET   | 6.021      | 0.600       | 3.575     | 3.500     | 0.075    | 80.3        | 375      | 5.09          | 50.0         |
| 12.003 | BASIN 1 INLET   | BASIN 1         | 7.727      | 0.600       | 3.500     | 3.500     | 0.000    | 0.0         | 375      | 5.22          | 50.0         |
| 12.004 | BASIN 1         | BASIN 1 OUTLET  | 8.823      | 0.600       | 3.500     | 3.500     | 0.000    | 0.0         | 375      | 5.37          | 50.0         |
| 12.005 | BASIN 1 OUTLET  | BASIN 2 INLET 2 | 10.304     | 0.600       | 3.500     | 3.500     | 0.000    | 0.0         | 375      | 5.54          | 50.0         |
| 12.006 | BASIN 2 INLET 2 | BASIN 2         | 18.664     | 0.600       | 3.500     | 3.500     | 0.000    | 0.0         | 375      | 5.85          | 50.0         |
| 1.010  | BASIN 2         | BASIN 2 OUTLET  | 4.508      | 0.600       | 3.500     | 3.500     | 0.000    | 0.0         | 375      | 11.87         | 50.0         |
| 1.011  | BASIN 2 OUTLET  | HYDROBRAKE      | 5.527      | 0.600       | 3.500     | 3.431     | 0.069    | 80.0        | 300      | 11.92         | 50.0         |
| 1.012  | HYDROBRAKE      | OUTFALL         | 20.913     | 0.600       | 3.431     | 2.500     | 0.931    | 22.5        | 150      | 12.09         | 50.0         |
| 1.000  | PPD1            | PP1             | 15.678     | 0.600       | 5.900     | 5.590     | 0.310    | 50.6        | 150      | 5.18          | 50.0         |
| 1.001  | PP1             | 1               | 20.854     | 0.600       | 5.590     | 5.200     | 0.390    | 53.5        | 150      | 5.44          | 50.0         |
| 4.000  | PPD2            | PP2             | 35.285     | 0.600       | 5.950     | 5.620     | 0.330    | 106.9       | 150      | 5.61          | 50.0         |
| 4.001  | PP2             | 4               | 35.682     | 0.600       | 5.620     | 4.694     | 0.926    | 38.5        | 150      | 5.97          | 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) |
|--------|-----------|-----------|------------|--------------|--------------|-------------|--------------------|----------------|--------------------|
| 1.008  | 2.252     | 248.8     | 239.4      | 0.996        | 0.988        | 1.325       | 0.0                | 298            | 2.548              |
| 1.009  | 1.000     | 110.4     | 239.4      | 0.988        | 0.988        | 1.325       | 0.0                | 375            | 0.000              |
| 12.002 | 2.023     | 223.5     | 131.2      | 1.050        | 0.988        | 0.726       | 0.0                | 207            | 2.101              |
| 12.003 | 1.000     | 110.4     | 131.2      | 0.988        | 0.988        | 0.726       | 0.0                | 375            | 0.000              |
| 12.004 | 1.000     | 110.4     | 157.0      | 0.988        | 0.988        | 0.869       | 0.0                | 375            | 0.000              |
| 12.005 | 1.000     | 110.4     | 157.0      | 0.988        | 0.988        | 0.869       | 0.0                | 375            | 0.000              |
| 12.006 | 1.000     | 110.4     | 157.0      | 0.988        | 0.988        | 0.869       | 0.0                | 375            | 0.000              |
| 1.010  | 1.000     | 110.4     | 437.8      | 0.988        | 0.988        | 2.423       | 0.0                | 375            | 0.000              |
| 1.011  | 1.759     | 124.3     | 437.8      | 1.063        | 1.132        | 2.423       | 0.0                | 300            | 1.782              |
| 1.012  | 2.134     | 37.7      | 437.8      | 1.282        | 1.150        | 2.423       | 0.0                | 150            | 2.173              |
| 1.000  | 1.418     | 25.1      | 15.4       | 0.200        | 0.510        | 0.085       | 0.0                | 85             | 1.486              |
| 1.001  | 1.378     | 24.4      | 22.9       | 0.510        | 0.750        | 0.127       | 0.0                | 116            | 1.563              |
| 4.000  | 0.971     | 17.2      | 19.3       | 0.200        | 0.530        | 0.107       | 0.0                | 150            | 0.989              |
| 4.001  | 1.626     | 28.7      | 34.7       | 0.530        | 1.406        | 0.192       | 0.0                | 150            | 1.656              |

### 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) |
|--------|---------|---------|------------|-------------|-----------|-----------|----------|-------------|----------|---------------|--------------|
| 2.000  | PPD3    | 3       | 35.294     | 0.600       | 6.060     | 4.903     | 1.157    | 30.5        | 150      | 5.32          | 50.0         |
| 7.000  | PP3     | 6       | 65.979     | 0.600       | 5.170     | 4.348     | 0.822    | 80.3        | 150      | 5.98          | 50.0         |
| 6.000  | PPD4    | 5       | 24.966     | 0.600       | 5.710     | 4.529     | 1.181    | 21.1        | 150      | 5.19          | 50.0         |
| 9.000  | PP4     | 7       | 38.689     | 0.600       | 4.690     | 4.064     | 0.626    | 61.8        | 150      | 5.50          | 50.0         |
| 10.000 | PPD5    | 7       | 32.634     | 0.600       | 5.500     | 4.064     | 1.436    | 22.7        | 150      | 5.26          | 50.0         |
| 11.000 | PP5     | 7       | 26.941     | 0.600       | 4.625     | 4.064     | 0.561    | 48.0        | 150      | 5.31          | 50.0         |
| 5.000  | PPD6    | PP6     | 6.531      | 0.600       | 5.500     | 5.190     | 0.310    | 21.1        | 150      | 5.05          | 50.0         |
| 5.001  | PP6     | 5       | 39.583     | 0.600       | 5.190     | 4.529     | 0.661    | 59.9        | 150      | 5.56          | 50.0         |
| 8.000  | PPD7    | 6       | 14.469     | 0.600       | 5.510     | 4.348     | 1.162    | 12.5        | 150      | 5.08          | 50.0         |
| 12.000 | PPD8    | PP7     | 4.918      | 0.600       | 4.660     | 4.340     | 0.320    | 15.4        | 150      | 5.03          | 50.0         |
| 12.001 | PP7     | 10      | 2.709      | 0.600       | 4.340     | 3.800     | 0.540    | 5.0         | 150      | 5.04          | 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) |
|--------|-----------|-----------|------------|--------------|--------------|-------------|--------------------|----------------|--------------------|
| 2.000  | 1.829     | 32.3      | 11.0       | 0.190        | 1.347        | 0.061       | 0.0                | 60             | 1.654              |
| 7.000  | 1.123     | 19.8      | 19.9       | 0.530        | 1.352        | 0.110       | 0.0                | 123            | 1.276              |
| 6.000  | 2.200     | 38.9      | 25.8       | 0.190        | 1.371        | 0.143       | 0.0                | 89             | 2.349              |
| 9.000  | 1.281     | 22.6      | 14.1       | 0.510        | 1.136        | 0.078       | 0.0                | 86             | 1.350              |
| 10.000 | 2.121     | 37.5      | 1.4        | 0.200        | 1.136        | 0.008       | 0.0                | 20             | 1.028              |
| 11.000 | 1.455     | 25.7      | 10.1       | 0.575        | 1.136        | 0.056       | 0.0                | 65             | 1.370              |
| 5.000  | 2.204     | 38.9      | 18.6       | 0.200        | 0.510        | 0.103       | 0.0                | 73             | 2.178              |
| 5.001  | 1.302     | 23.0      | 27.3       | 0.510        | 1.371        | 0.151       | 0.0                | 150            | 1.326              |
| 8.000  | 2.870     | 50.7      | 9.6        | 0.190        | 1.352        | 0.053       | 0.0                | 44             | 2.218              |
| 12.000 | 2.582     | 45.6      | 80.8       | 0.190        | 0.510        | 0.447       | 0.0                | 150            | 2.630              |
| 12.001 | 4.530     | 80.0      | 128.8      | 0.510        | 1.050        | 0.713       | 0.0                | 150            | 4.614              |

### Simulation Settings

|                      |          |                   |        |                            |      |                         |   |
|----------------------|----------|-------------------|--------|----------------------------|------|-------------------------|---|
| Rainfall Methodology | FEH-22   | Winter CV         | 1.000  | Drain Down Time (mins)     | 1440 | Check Discharge Rate(s) | x |
| Rainfall Events      | Singular | Analysis Speed    | Normal | Additional Storage (m³/ha) | 0.0  | Check Discharge Volume  | x |
| Summer CV            | 1.000    | Skip Steady State | x      | Starting Level (m)         |      |                         |   |

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#### Node PP1 Carpark Storage Structure

|                             |         |                           |       |             |        |               |
|-----------------------------|---------|---------------------------|-------|-------------|--------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 4.800  | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 5.590 | Length (m)  | 86.460 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 38    | Slope (1:X) | 201.0  |               |

#### Node PP2 Carpark Storage Structure

|                             |         |                           |       |             |         |               |
|-----------------------------|---------|---------------------------|-------|-------------|---------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 5.630   | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 5.620 | Length (m)  | 136.590 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 44    | Slope (1:X) | 162.5   |               |

#### Node PP3 Carpark Storage Structure

|                             |         |                           |       |             |         |               |
|-----------------------------|---------|---------------------------|-------|-------------|---------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 5.600   | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 5.170 | Length (m)  | 149.930 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 28    | Slope (1:X) | 142.0   |               |

#### Node PP4 Carpark Storage Structure

|                             |         |                           |       |             |        |               |
|-----------------------------|---------|---------------------------|-------|-------------|--------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 4.060  | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 4.690 | Length (m)  | 62.560 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 22    | Slope (1:X) | 1000.0 |               |

#### Node PP5 Carpark Storage Structure

|                             |         |                           |       |             |        |               |
|-----------------------------|---------|---------------------------|-------|-------------|--------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 5.500  | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 4.625 | Length (m)  | 54.190 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 16    | Slope (1:X) | 235.0  |               |

#### Node PP6 Carpark Storage Structure

|                             |         |                           |       |             |         |               |
|-----------------------------|---------|---------------------------|-------|-------------|---------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 4.220   | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 5.190 | Length (m)  | 112.660 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 54    | Slope (1:X) | 215.0   |               |

#### Node PP7 Carpark Storage Structure

|                             |         |                           |       |             |         |               |
|-----------------------------|---------|---------------------------|-------|-------------|---------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 5.600   | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 4.340 | Length (m)  | 475.710 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 42    | Slope (1:X) | 670.5   |               |

#### Node PPD1 Carpark Storage Structure

|                             |         |                           |       |             |        |               |
|-----------------------------|---------|---------------------------|-------|-------------|--------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 21.440 | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 5.900 | Length (m)  | 10.900 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 34    | Slope (1:X) | 73.0   |               |

#### Node PPD2 Carpark Storage Structure

|                             |         |                           |       |             |        |               |
|-----------------------------|---------|---------------------------|-------|-------------|--------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 30.240 | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 5.950 | Length (m)  | 11.200 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 48    | Slope (1:X) | 75.0   |               |

#### Node PPD3 Carpark Storage Structure

|                             |         |                           |       |             |        |               |
|-----------------------------|---------|---------------------------|-------|-------------|--------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 17.970 | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 6.060 | Length (m)  | 12.540 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 14    | Slope (1:X) | 627.0  |               |

#### Node PPD4 Carpark Storage Structure

|                             |         |                           |       |             |        |               |
|-----------------------------|---------|---------------------------|-------|-------------|--------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 41.210 | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 5.710 | Length (m)  | 13.420 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 30    | Slope (1:X) | 268.0  |               |

#### Node PPD5 Carpark Storage Structure

|                             |         |                           |       |             |        |               |
|-----------------------------|---------|---------------------------|-------|-------------|--------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 5.920  | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 5.500 | Length (m)  | 14.070 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 16    | Slope (1:X) | 1000.0 |               |

#### Node PPD6 Carpark Storage Structure

|                             |         |                           |       |             |        |               |
|-----------------------------|---------|---------------------------|-------|-------------|--------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 29.590 | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 5.500 | Length (m)  | 14.420 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 50    | Slope (1:X) | 1000.0 |               |

#### Node PPD7 Carpark Storage Structure

|                             |         |                           |       |             |        |               |
|-----------------------------|---------|---------------------------|-------|-------------|--------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 0.30  | Width (m)   | 16.420 | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 5.510 | Length (m)  | 12.750 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 12    | Slope (1:X) | 425.0  |               |

#### Node PPD8 Carpark Storage Structure

|                             |         |                           |       |             |        |               |
|-----------------------------|---------|---------------------------|-------|-------------|--------|---------------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 1.00  | Width (m)   | 96.321 | Depth (m)     |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 4.660 | Length (m)  | 13.050 | Inf Depth (m) |
| Safety Factor               | 2.0     | Time to half empty (mins) | 72    | Slope (1:X) | 180.0  |               |

#### Node 1 Depth/Area Storage Structure

|                             |         |               |      |                           |       |
|-----------------------------|---------|---------------|------|---------------------------|-------|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0  | Invert Level (m)          | 5.050 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 1.00 | Time to half empty (mins) | 20    |

| Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) |
|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|
| 0.000     | 0.0                    | 0.0                        | 0.600     | 0.0                    | 0.0                        | 0.601     | 10.5                   | 0.0                        | 1.050     | 99.0                   | 0.0                        |

#### Node 3 Depth/Area Storage Structure

|                             |         |               |      |                           |       |
|-----------------------------|---------|---------------|------|---------------------------|-------|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0  | Invert Level (m)          | 4.753 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 1.00 | Time to half empty (mins) | 10    |

| Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) |
|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|
| 0.000     | 0.0                    | 0.0                        | 1.167     | 0.0                    | 0.0                        | 1.168     | 9.0                    | 0.0                        | 1.647     | 96.5                   | 0.0                        |

#### Node 4 Depth/Area Storage Structure

|                             |         |               |      |                           |       |
|-----------------------------|---------|---------------|------|---------------------------|-------|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0  | Invert Level (m)          | 4.544 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 1.00 | Time to half empty (mins) | 12    |

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 0.0                       | 0.0                           | 1.226        | 0.0                       | 0.0                           | 1.227        | 5.4                       | 0.0                           | 1.706        | 73.0                      | 0.0                           |

#### Node 5 Depth/Area Storage Structure

|                             |         |               |      |                           |       |
|-----------------------------|---------|---------------|------|---------------------------|-------|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0  | Invert Level (m)          | 4.379 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 1.00 | Time to half empty (mins) | 10    |

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 0.0                       | 0.0                           | 1.191        | 0.0                       | 0.0                           | 1.192        | 7.4                       | 0.0                           | 1.671        | 78.0                      | 0.0                           |

#### Node 6 Depth/Area Storage Structure

|                             |         |               |      |                           |       |
|-----------------------------|---------|---------------|------|---------------------------|-------|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0  | Invert Level (m)          | 4.123 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 1.00 | Time to half empty (mins) |       |

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 0.0                       | 0.0                           | 1.247        | 0.0                       | 0.0                           | 1.248        | 3.1                       | 0.0                           | 1.727        | 54.0                      | 0.0                           |

**Results for 2 year Critical Storm Duration. Lowest mass balance: 99.98%**

| Node Event        | US Node         | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|-----------------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 120 minute summer | 1               | 64          | 5.137     | 0.087     | 15.9         | 0.0978        | 0.0000     | OK     |
| 120 minute summer | 2               | 62          | 4.943     | 0.083     | 8.6          | 0.0943        | 0.0000     | OK     |
| 120 minute summer | 3               | 66          | 4.893     | 0.140     | 32.7         | 0.1586        | 0.0000     | OK     |
| 120 minute summer | 4               | 68          | 4.763     | 0.219     | 51.3         | 0.2480        | 0.0000     | OK     |
| 120 minute summer | 5               | 68          | 4.677     | 0.298     | 73.3         | 0.3372        | 0.0000     | OK     |
| 120 minute summer | 6               | 68          | 4.380     | 0.257     | 91.6         | 0.3671        | 0.0000     | OK     |
| 120 minute summer | 7               | 68          | 4.105     | 0.266     | 103.1        | 0.3804        | 0.0000     | OK     |
| 120 minute summer | 8               | 68          | 3.920     | 0.191     | 103.3        | 0.2738        | 0.0000     | OK     |
| 120 minute summer | BASIN 2 INLET 1 | 68          | 3.847     | 0.347     | 103.3        | 0.4968        | 0.0000     | OK     |
| 960 minute winter | 10              | 915         | 3.797     | 0.222     | 9.9          | 0.3179        | 0.0000     | OK     |
| 960 minute winter | BASIN 1 INLET   | 915         | 3.797     | 0.297     | 10.3         | 0.4252        | 0.0000     | OK     |
| 960 minute winter | BASIN 1         | 915         | 3.797     | 0.297     | 12.4         | 189.6032      | 0.0000     | OK     |
| 960 minute winter | BASIN 1 OUTLET  | 915         | 3.797     | 0.297     | 2.8          | 0.4252        | 0.0000     | OK     |
| 960 minute winter | BASIN 2 INLET 2 | 915         | 3.797     | 0.297     | 2.8          | 0.4251        | 0.0000     | OK     |
| 960 minute winter | BASIN 2         | 915         | 3.797     | 0.297     | 24.4         | 396.7602      | 0.0000     | OK     |

| Link Event<br>(Upstream Depth) | US Node         | Link   | DS Node         | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|-----------------|--------|-----------------|---------------|----------------|----------|---------------|--------------------|
| 120 minute summer              | 1               | 1.002  | 3               | 15.8          | 0.647          | 0.185    | 1.2371        |                    |
| 120 minute summer              | 2               | 3.000  | 3               | 8.6           | 0.697          | 0.554    | 0.1403        |                    |
| 120 minute summer              | 3               | 1.003  | 4               | 32.2          | 0.769          | 0.456    | 2.2201        |                    |
| 120 minute summer              | 4               | 1.004  | 5               | 50.3          | 0.835          | 0.789    | 3.1107        |                    |
| 120 minute summer              | 5               | 1.005  | 6               | 72.0          | 1.137          | 1.128    | 3.3297        |                    |
| 120 minute summer              | 6               | 1.006  | 7               | 91.5          | 1.117          | 0.796    | 6.9755        |                    |
| 120 minute summer              | 7               | 1.007  | 8               | 103.3         | 1.469          | 0.899    | 2.3117        |                    |
| 120 minute summer              | 8               | 1.008  | BASIN 2 INLET 1 | 103.3         | 1.220          | 0.415    | 1.2113        |                    |
| 120 minute summer              | BASIN 2 INLET 1 | 1.009  | BASIN 2         | 103.2         | 1.537          | 0.935    | 3.5988        |                    |
| 960 minute winter              | 10              | 12.002 | BASIN 1 INLET   | 10.3          | 0.446          | 0.046    | 0.4866        |                    |
| 960 minute winter              | BASIN 1 INLET   | 12.003 | BASIN 1         | 10.4          | 0.532          | 0.094    | 0.7238        |                    |
| 960 minute winter              | BASIN 1         | 12.004 | BASIN 1 OUTLET  | 2.8           | 0.119          | 0.026    | 0.8264        |                    |
| 960 minute winter              | BASIN 1 OUTLET  | 12.005 | BASIN 2 INLET 2 | 2.8           | 0.120          | 0.025    | 0.9651        |                    |
| 960 minute winter              | BASIN 2 INLET 2 | 12.006 | BASIN 2         | 2.7           | 0.124          | 0.024    | 1.7480        |                    |
| 960 minute winter              | BASIN 2         | 1.010  | BASIN 2 OUTLET  | 4.9           | 0.407          | 0.045    | 0.4221        |                    |

**Results for 2 year Critical Storm Duration. Lowest mass balance: 99.98%**

| Node Event        | US Node        | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|----------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 960 minute winter | BASIN 2 OUTLET | 915         | 3.797     | 0.297     | 4.9          | 0.4250        | 0.0000     | OK         |
| 960 minute winter | HYDROBRAKE     | 915         | 3.797     | 0.366     | 7.3          | 0.4137        | 0.0000     | SURCHARGED |
| 960 minute winter | OUTFALL        | 915         | 2.537     | 0.037     | 4.9          | 0.0000        | 0.0000     | OK         |
| 120 minute summer | PP1            | 66          | 5.663     | 0.073     | 11.2         | 0.8650        | 0.0000     | OK         |
| 120 minute summer | PP2            | 66          | 5.701     | 0.081     | 16.0         | 1.0012        | 0.0000     | OK         |
| 120 minute summer | PP3            | 64          | 5.244     | 0.074     | 10.0         | 0.7509        | 0.0000     | OK         |
| 120 minute summer | PP4            | 66          | 4.744     | 0.054     | 7.1          | 1.8176        | 0.0000     | OK         |
| 120 minute summer | PP5            | 64          | 4.670     | 0.045     | 5.1          | 0.4544        | 0.0000     | OK         |
| 120 minute summer | PP6            | 68          | 5.263     | 0.073     | 11.3         | 0.8160        | 0.0000     | OK         |
| 120 minute summer | PP7            | 66          | 4.431     | 0.091     | 37.2         | 4.7595        | 0.0000     | OK         |
| 120 minute summer | PPD1           | 64          | 5.956     | 0.056     | 7.7          | 0.8045        | 0.0000     | OK         |
| 120 minute summer | PPD2           | 66          | 6.026     | 0.076     | 9.7          | 2.0568        | 0.0000     | OK         |
| 120 minute summer | PPD3           | 68          | 6.099     | 0.039     | 5.5          | 1.9934        | 0.0000     | OK         |
| 120 minute summer | PPD4           | 68          | 5.763     | 0.053     | 12.9         | 4.7027        | 0.0000     | OK         |
| 120 minute summer | PPD5           | 68          | 5.514     | 0.014     | 0.7          | 0.1851        | 0.0000     | OK         |

| Link Event (Upstream Depth) | US Node        | Link   | DS Node    | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|-----------------------------|----------------|--------|------------|---------------|----------------|----------|---------------|--------------------|
| 960 minute winter           | BASIN 2 OUTLET | 1.011  | HYDROBRAKE | 7.3           | 0.421          | 0.059    | 0.3889        |                    |
| 960 minute winter           | HYDROBRAKE     | 1.012  | OUTFALL    | 4.9           | 1.461          | 0.131    | 0.0706        | 588.0              |
| 120 minute summer           | PP1            | 1.001  | 1          | 11.0          | 1.316          | 0.450    | 0.1737        |                    |
| 120 minute summer           | PP2            | 4.001  | 4          | 15.7          | 1.640          | 0.545    | 0.3406        |                    |
| 120 minute summer           | PP3            | 7.000  | 6          | 9.6           | 1.111          | 0.483    | 0.5692        |                    |
| 120 minute summer           | PP4            | 9.000  | 7          | 6.1           | 1.081          | 0.268    | 0.2175        |                    |
| 120 minute summer           | PP5            | 11.000 | 7          | 4.9           | 1.115          | 0.192    | 0.1195        |                    |
| 120 minute summer           | PP6            | 5.001  | 5          | 11.0          | 1.155          | 0.480    | 0.5162        |                    |
| 120 minute summer           | PP7            | 12.001 | 10         | 34.9          | 3.659          | 0.436    | 0.0258        |                    |
| 120 minute summer           | PPD1           | 1.000  | PP1        | 7.4           | 1.037          | 0.297    | 0.1134        |                    |
| 120 minute summer           | PPD2           | 4.000  | PP2        | 8.6           | 0.925          | 0.502    | 0.3293        |                    |
| 120 minute summer           | PPD3           | 2.000  | 3          | 4.6           | 1.293          | 0.143    | 0.1264        |                    |
| 120 minute summer           | PPD4           | 6.000  | 5          | 10.4          | 1.655          | 0.267    | 0.2887        |                    |
| 120 minute summer           | PPD5           | 10.000 | 7          | 0.6           | 0.770          | 0.017    | 0.0762        |                    |

**Results for 2 year Critical Storm Duration. Lowest mass balance: 99.98%**

| 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 summer | PPD6       | 68             | 5.544        | 0.044        | 9.3             | 4.7163           | 0.0000        | OK     |
| 120 minute summer | PPD7       | 66             | 5.541        | 0.031        | 4.8             | 1.0103           | 0.0000        | OK     |
| 120 minute summer | PPD8       | 76             | 4.726        | 0.066        | 40.4            | 37.9908          | 0.0000        | OK     |

  

| Link Event<br>(Upstream Depth) | US<br>Node | Link   | DS<br>Node | Outflow<br>(l/s) | Velocity<br>(m/s) | Flow/Cap | Link<br>Vol (m³) | Discharge<br>Vol (m³) |
|--------------------------------|------------|--------|------------|------------------|-------------------|----------|------------------|-----------------------|
| 120 minute summer              | PPD6       | 5.000  | PP6        | 7.4              | 1.165             | 0.191    | 0.0421           |                       |
| 120 minute summer              | PPD7       | 8.000  | 6          | 4.4              | 1.723             | 0.088    | 0.0375           |                       |
| 120 minute summer              | PPD8       | 12.000 | PP7        | 15.7             | 2.036             | 0.343    | 0.0445           |                       |

**Results for 10 year +40% CC Critical Storm Duration. Lowest mass balance: 99.85%**

| Node Event         | US Node         | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|-----------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 120 minute summer  | 1               | 70          | 5.824     | 0.774     | 27.0         | 5.6670        | 0.0000     | FLOOD RISK |
| 120 minute summer  | 2               | 66          | 5.963     | 1.103     | 21.0         | 1.2477        | 0.0000     | SURCHARGED |
| 120 minute summer  | 3               | 70          | 5.809     | 1.056     | 52.8         | 1.1948        | 0.0000     | SURCHARGED |
| 120 minute summer  | 4               | 70          | 5.696     | 1.152     | 71.0         | 1.3026        | 0.0000     | SURCHARGED |
| 120 minute summer  | 5               | 70          | 5.479     | 1.100     | 100.5        | 1.2436        | 0.0000     | SURCHARGED |
| 120 minute summer  | 6               | 66          | 5.015     | 0.892     | 133.7        | 1.2762        | 0.0000     | SURCHARGED |
| 120 minute summer  | 7               | 68          | 4.592     | 0.753     | 159.6        | 1.0782        | 0.0000     | SURCHARGED |
| 120 minute summer  | 8               | 68          | 4.326     | 0.597     | 159.2        | 0.8546        | 0.0000     | SURCHARGED |
| 120 minute summer  | BASIN 2 INLET 1 | 68          | 4.177     | 0.677     | 159.1        | 0.9691        | 0.0000     | SURCHARGED |
| 1440 minute winter | 10              | 1410        | 4.175     | 0.600     | 15.4         | 0.8587        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 1 INLET   | 1410        | 4.175     | 0.675     | 15.3         | 0.9660        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 1         | 1410        | 4.175     | 0.675     | 18.4         | 482.0956      | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 1 OUTLET  | 1410        | 4.175     | 0.675     | 5.0          | 0.9660        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 2 INLET 2 | 1410        | 4.175     | 0.675     | 5.4          | 0.9660        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 2         | 1410        | 4.175     | 0.675     | 50.9         | 972.9410      | 0.0000     | SURCHARGED |

| Link Event (Upstream Depth) | US Node         | Link   | DS Node         | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|-----------------------------|-----------------|--------|-----------------|---------------|----------------|----------|---------------|--------------------|
| 120 minute summer           | 1               | 1.002  | 3               | 30.2          | 0.679          | 0.355    | 3.5496        |                    |
| 120 minute summer           | 2               | 3.000  | 3               | 20.5          | 1.166          | 1.321    | 0.1975        |                    |
| 120 minute summer           | 3               | 1.003  | 4               | 48.5          | 0.788          | 0.686    | 3.6077        |                    |
| 120 minute summer           | 4               | 1.004  | 5               | 68.8          | 0.977          | 1.079    | 3.4901        |                    |
| 120 minute summer           | 5               | 1.005  | 6               | 101.2         | 1.437          | 1.585    | 3.8171        |                    |
| 120 minute summer           | 6               | 1.006  | 7               | 133.5         | 1.210          | 1.161    | 9.3904        |                    |
| 120 minute summer           | 7               | 1.007  | 8               | 159.2         | 1.472          | 1.385    | 3.6417        |                    |
| 120 minute summer           | 8               | 1.008  | BASIN 2 INLET 1 | 159.1         | 1.443          | 0.640    | 1.6386        |                    |
| 120 minute summer           | BASIN 2 INLET 1 | 1.009  | BASIN 2         | 159.1         | 1.694          | 1.441    | 5.8783        |                    |
| 1440 minute winter          | 10              | 12.002 | BASIN 1 INLET   | 15.3          | 0.449          | 0.069    | 0.6641        |                    |
| 1440 minute winter          | BASIN 1 INLET   | 12.003 | BASIN 1         | 15.3          | 0.577          | 0.138    | 0.8523        |                    |
| 1440 minute winter          | BASIN 1         | 12.004 | BASIN 1 OUTLET  | 5.0           | 0.119          | 0.045    | 0.9732        |                    |
| 1440 minute winter          | BASIN 1 OUTLET  | 12.005 | BASIN 2 INLET 2 | 5.4           | 0.122          | 0.049    | 1.1365        |                    |
| 1440 minute winter          | BASIN 2 INLET 2 | 12.006 | BASIN 2         | 5.1           | 0.129          | 0.046    | 2.0586        |                    |
| 1440 minute winter          | BASIN 2         | 1.010  | BASIN 2 OUTLET  | 5.8           | 0.395          | 0.052    | 0.4972        |                    |

**Results for 10 year +40% CC Critical Storm Duration. Lowest mass balance: 99.85%**

| Node Event         | US Node        | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|----------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 1440 minute winter | BASIN 2 OUTLET | 1410        | 4.175     | 0.675     | 5.8          | 0.9658        | 0.0000     | SURCHARGED |
| 1440 minute winter | HYDROBRAKE     | 1410        | 4.175     | 0.744     | 5.4          | 0.8412        | 0.0000     | SURCHARGED |
| 120 minute summer  | OUTFALL        | 844         | 2.537     | 0.037     | 5.0          | 0.0000        | 0.0000     | OK         |
| 120 minute summer  | PP1            | 78          | 5.907     | 0.317     | 26.6         | 14.9060       | 0.0000     | SURCHARGED |
| 120 minute summer  | PP2            | 78          | 5.960     | 0.340     | 34.8         | 16.2660       | 0.0000     | SURCHARGED |
| 120 minute summer  | PP3            | 72          | 5.412     | 0.242     | 24.3         | 7.3001        | 0.0000     | SURCHARGED |
| 120 minute summer  | PP4            | 68          | 4.788     | 0.098     | 17.3         | 5.1580        | 0.0000     | OK         |
| 120 minute summer  | PP5            | 66          | 4.703     | 0.078     | 12.4         | 1.2764        | 0.0000     | OK         |
| 120 minute summer  | PP6            | 80          | 5.570     | 0.380     | 26.7         | 20.0869       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PP7            | 74          | 4.556     | 0.216     | 84.4         | 26.5228       | 0.0000     | SURCHARGED |
| 120 minute summer  | PPD1           | 66          | 5.997     | 0.097     | 18.8         | 2.3361        | 0.0000     | OK         |
| 120 minute summer  | PPD2           | 74          | 6.112     | 0.162     | 23.7         | 9.0690        | 0.0000     | FLOOD RISK |
| 120 minute summer  | PPD3           | 66          | 6.125     | 0.065     | 13.5         | 3.7628        | 0.0000     | OK         |
| 120 minute summer  | PPD4           | 70          | 5.820     | 0.110     | 31.6         | 14.1679       | 0.0000     | OK         |
| 120 minute summer  | PPD5           | 66          | 5.522     | 0.022     | 1.8          | 0.3871        | 0.0000     | OK         |

| Link Event<br>(Upstream Depth) | US Node        | Link   | DS Node    | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|----------------|--------|------------|---------------|----------------|----------|---------------|--------------------|
| 1440 minute winter             | BASIN 2 OUTLET | 1.011  | HYDROBRAKE | 5.4           | 0.314          | 0.044    | 0.3892        |                    |
| 1440 minute winter             | HYDROBRAKE     | 1.012  | OUTFALL    | 5.0           | 1.466          | 0.133    | 0.0713        | 747.0              |
| 120 minute summer              | PP1            | 1.001  | 1          | 24.4          | 1.450          | 1.002    | 0.3671        |                    |
| 120 minute summer              | PP2            | 4.001  | 4          | 29.4          | 1.717          | 1.023    | 0.6282        |                    |
| 120 minute summer              | PP3            | 7.000  | 6          | 17.0          | 1.206          | 0.858    | 1.1615        |                    |
| 120 minute summer              | PP4            | 9.000  | 7          | 13.2          | 1.112          | 0.581    | 0.5755        |                    |
| 120 minute summer              | PP5            | 11.000 | 7          | 11.3          | 1.187          | 0.440    | 0.3621        |                    |
| 120 minute summer              | PP6            | 5.001  | 5          | 23.2          | 1.411          | 1.006    | 0.6969        |                    |
| 120 minute summer              | PP7            | 12.001 | 10         | 56.9          | 3.809          | 0.710    | 0.0410        |                    |
| 120 minute summer              | PPD1           | 1.000  | PP1        | 17.3          | 1.190          | 0.691    | 0.2327        |                    |
| 120 minute summer              | PPD2           | 4.000  | PP2        | 16.0          | 0.987          | 0.935    | 0.6212        |                    |
| 120 minute summer              | PPD3           | 2.000  | 3          | 12.1          | 1.343          | 0.375    | 0.4386        |                    |
| 120 minute summer              | PPD4           | 6.000  | 5          | 20.3          | 1.601          | 0.523    | 0.3922        |                    |
| 120 minute summer              | PPD5           | 10.000 | 7          | 1.7           | 0.745          | 0.044    | 0.3126        |                    |

**Results for 10 year +40% CC Critical Storm Duration. Lowest mass balance: 99.85%**

| 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 summer | PPD6       | 72             | 5.588        | 0.088        | 22.8            | 10.1500          | 0.0000        | OK     |
| 120 minute summer | PPD7       | 66             | 5.558        | 0.048        | 11.7            | 2.1081           | 0.0000        | OK     |
| 120 minute summer | PPD8       | 80             | 4.779        | 0.119        | 98.9            | 103.2598         | 0.0000        | OK     |

| Link Event<br>(Upstream Depth) | US<br>Node | Link   | DS<br>Node | Outflow<br>(l/s) | Velocity<br>(m/s) | Flow/Cap | Link<br>Vol (m³) | Discharge<br>Vol (m³) |
|--------------------------------|------------|--------|------------|------------------|-------------------|----------|------------------|-----------------------|
| 120 minute summer              | PPD6       | 5.000  | PP6        | 16.1             | 1.275             | 0.413    | 0.0924           |                       |
| 120 minute summer              | PPD7       | 8.000  | 6          | 11.1             | 1.728             | 0.218    | 0.1622           |                       |
| 120 minute summer              | PPD8       | 12.000 | PP7        | 31.4             | 2.493             | 0.688    | 0.0800           |                       |

**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.86%**

| Node Event         | US Node         | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|-----------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 120 minute summer  | 1               | 72          | 5.943     | 0.893     | 29.7         | 12.5080       | 0.0000     | FLOOD RISK |
| 120 minute summer  | 2               | 64          | 6.193     | 1.333     | 26.8         | 1.5076        | 0.0000     | SURCHARGED |
| 120 minute summer  | 3               | 70          | 5.931     | 1.178     | 52.3         | 1.4389        | 0.0000     | SURCHARGED |
| 120 minute summer  | 4               | 70          | 5.808     | 1.264     | 71.3         | 1.7240        | 0.0000     | SURCHARGED |
| 120 minute summer  | 5               | 70          | 5.576     | 1.197     | 101.8        | 1.3932        | 0.0000     | SURCHARGED |
| 120 minute summer  | 6               | 66          | 5.120     | 0.997     | 139.6        | 1.4274        | 0.0000     | SURCHARGED |
| 120 minute summer  | 7               | 66          | 4.657     | 0.818     | 165.2        | 1.1712        | 0.0000     | SURCHARGED |
| 120 minute summer  | 8               | 66          | 4.370     | 0.641     | 165.2        | 0.9174        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 2 INLET 1 | 1440        | 4.337     | 0.837     | 41.1         | 1.1972        | 0.0000     | SURCHARGED |
| 1440 minute winter | 10              | 1440        | 4.337     | 0.762     | 18.6         | 1.0900        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 1 INLET   | 1440        | 4.337     | 0.837     | 18.6         | 1.1973        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 1         | 1440        | 4.337     | 0.837     | 22.3         | 624.6866      | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 1 OUTLET  | 1440        | 4.337     | 0.837     | 4.9          | 1.1973        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 2 INLET 2 | 1440        | 4.337     | 0.837     | 5.4          | 1.1973        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 2         | 1440        | 4.337     | 0.837     | 43.5         | 1243.7470     | 0.0000     | SURCHARGED |

| Link Event (Upstream Depth) | US Node         | Link   | DS Node         | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|-----------------------------|-----------------|--------|-----------------|---------------|----------------|----------|---------------|--------------------|
| 120 minute summer           | 1               | 1.002  | 3               | 32.2          | 0.684          | 0.379    | 3.5496        |                    |
| 120 minute summer           | 2               | 3.000  | 3               | 26.3          | 1.496          | 1.695    | 0.1975        |                    |
| 120 minute summer           | 3               | 1.003  | 4               | 51.4          | 0.786          | 0.728    | 3.6077        |                    |
| 120 minute summer           | 4               | 1.004  | 5               | 71.2          | 1.012          | 1.118    | 3.4901        |                    |
| 120 minute summer           | 5               | 1.005  | 6               | 102.0         | 1.449          | 1.598    | 3.8171        |                    |
| 120 minute summer           | 6               | 1.006  | 7               | 139.3         | 1.263          | 1.212    | 9.3904        |                    |
| 120 minute summer           | 7               | 1.007  | 8               | 165.2         | 1.498          | 1.438    | 3.6417        |                    |
| 120 minute summer           | 8               | 1.008  | BASIN 2 INLET 1 | 165.2         | 1.498          | 0.664    | 1.6386        |                    |
| 1440 minute winter          | BASIN 2 INLET 1 | 1.009  | BASIN 2         | 34.7          | 0.600          | 0.315    | 5.8783        |                    |
| 1440 minute winter          | 10              | 12.002 | BASIN 1 INLET   | 18.6          | 0.476          | 0.083    | 0.6641        |                    |
| 1440 minute winter          | BASIN 1 INLET   | 12.003 | BASIN 1         | 18.5          | 0.617          | 0.168    | 0.8523        |                    |
| 1440 minute winter          | BASIN 1         | 12.004 | BASIN 1 OUTLET  | 4.9           | 0.119          | 0.044    | 0.9732        |                    |
| 1440 minute winter          | BASIN 1 OUTLET  | 12.005 | BASIN 2 INLET 2 | 5.4           | 0.122          | 0.049    | 1.1365        |                    |
| 1440 minute winter          | BASIN 2 INLET 2 | 12.006 | BASIN 2         | 4.7           | 0.127          | 0.043    | 2.0586        |                    |
| 1440 minute winter          | BASIN 2         | 1.010  | BASIN 2 OUTLET  | 6.3           | 0.406          | 0.057    | 0.4972        |                    |

**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.86%**

| Node Event         | US Node        | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|----------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 1440 minute winter | BASIN 2 OUTLET | 1440        | 4.337     | 0.837     | 6.3          | 1.1972        | 0.0000     | SURCHARGED |
| 1440 minute winter | HYDROBRAKE     | 1440        | 4.336     | 0.905     | 6.3          | 1.0240        | 0.0000     | SURCHARGED |
| 240 minute summer  | OUTFALL        | 140         | 2.537     | 0.037     | 5.0          | 0.0000        | 0.0000     | OK         |
| 120 minute summer  | PP1            | 82          | 6.001     | 0.411     | 30.3         | 24.8869       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PP2            | 82          | 6.045     | 0.425     | 37.2         | 25.3544       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PP3            | 74          | 5.514     | 0.344     | 31.1         | 14.5266       | 0.0000     | SURCHARGED |
| 120 minute summer  | PP4            | 72          | 4.840     | 0.150     | 22.0         | 9.1783        | 0.0000     | OK         |
| 120 minute summer  | PP5            | 70          | 4.751     | 0.126     | 15.8         | 3.2082        | 0.0000     | OK         |
| 120 minute summer  | PP6            | 82          | 5.640     | 0.450     | 34.2         | 28.0746       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PP7            | 76          | 4.616     | 0.276     | 103.2        | 43.3463       | 0.0000     | SURCHARGED |
| 120 minute summer  | PPD1           | 76          | 6.058     | 0.158     | 24.0         | 6.0555        | 0.0000     | FLOOD RISK |
| 120 minute summer  | PPD2           | 78          | 6.185     | 0.235     | 30.2         | 16.5926       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PPD3           | 68          | 6.146     | 0.086     | 17.2         | 5.2629        | 0.0000     | OK         |
| 120 minute summer  | PPD4           | 74          | 5.872     | 0.162     | 40.4         | 22.9669       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PPD5           | 66          | 5.525     | 0.025     | 2.3          | 0.4640        | 0.0000     | OK         |

| Link Event<br>(Upstream Depth) | US Node        | Link   | DS Node    | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|----------------|--------|------------|---------------|----------------|----------|---------------|--------------------|
| 1440 minute winter             | BASIN 2 OUTLET | 1.011  | HYDROBRAKE | 6.3           | 0.386          | 0.051    | 0.3892        |                    |
| 1440 minute winter             | HYDROBRAKE     | 1.012  | OUTFALL    | 5.0           | 1.466          | 0.133    | 0.0713        | 701.3              |
| 120 minute summer              | PP1            | 1.001  | 1          | 26.0          | 1.476          | 1.067    | 0.3671        |                    |
| 120 minute summer              | PP2            | 4.001  | 4          | 28.7          | 1.714          | 1.000    | 0.6282        |                    |
| 120 minute summer              | PP3            | 7.000  | 6          | 17.2          | 1.183          | 0.868    | 1.1615        |                    |
| 120 minute summer              | PP4            | 9.000  | 7          | 14.7          | 1.103          | 0.648    | 0.6808        |                    |
| 120 minute summer              | PP5            | 11.000 | 7          | 12.4          | 1.152          | 0.484    | 0.4494        |                    |
| 120 minute summer              | PP6            | 5.001  | 5          | 24.4          | 1.438          | 1.059    | 0.6969        |                    |
| 120 minute summer              | PP7            | 12.001 | 10         | 60.5          | 3.803          | 0.756    | 0.0477        |                    |
| 120 minute summer              | PPD1           | 1.000  | PP1        | 18.4          | 1.197          | 0.734    | 0.2760        |                    |
| 120 minute summer              | PPD2           | 4.000  | PP2        | 16.2          | 0.986          | 0.945    | 0.6212        |                    |
| 120 minute summer              | PPD3           | 2.000  | 3          | 13.1          | 1.379          | 0.406    | 0.4960        |                    |
| 120 minute summer              | PPD4           | 6.000  | 5          | 22.9          | 1.620          | 0.589    | 0.4395        |                    |
| 120 minute summer              | PPD5           | 10.000 | 7          | 2.2           | 0.748          | 0.058    | 0.3178        |                    |

**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.86%**

| 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 summer | PPD6       | 82             | 5.655        | 0.155        | 29.1            | 18.7248          | 0.0000        | FLOOD RISK |
| 120 minute summer | PPD7       | 66             | 5.566        | 0.056        | 15.0            | 2.6593           | 0.0000        | OK         |
| 120 minute summer | PPD8       | 84             | 4.809        | 0.149        | 126.3           | 141.8360         | 0.0000        | OK         |

| Link Event<br>(Upstream Depth) | US<br>Node | Link   | DS<br>Node | Outflow<br>(l/s) | Velocity<br>(m/s) | Flow/Cap | Link<br>Vol (m³) | Discharge<br>Vol (m³) |
|--------------------------------|------------|--------|------------|------------------|-------------------|----------|------------------|-----------------------|
| 120 minute summer              | PPD6       | 5.000  | PP6        | 16.9             | 1.264             | 0.434    | 0.1150           |                       |
| 120 minute summer              | PPD7       | 8.000  | 6          | 13.8             | 1.701             | 0.272    | 0.1710           |                       |
| 120 minute summer              | PPD8       | 12.000 | PP7        | 36.0             | 2.430             | 0.788    | 0.0865           |                       |

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.90%**

| Node Event         | US Node         | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|-----------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 120 minute summer  | 1               | 76          | 6.049     | 0.999     | 32.7         | 20.9550       | 0.0000     | FLOOD RISK |
| 120 minute summer  | 2               | 64          | 6.518     | 1.658     | 34.8         | 1.8753        | 0.0000     | FLOOD RISK |
| 120 minute summer  | 3               | 74          | 6.038     | 1.285     | 64.3         | 3.7661        | 0.0000     | SURCHARGED |
| 120 minute summer  | 4               | 74          | 5.909     | 1.365     | 75.7         | 3.6432        | 0.0000     | SURCHARGED |
| 120 minute summer  | 5               | 74          | 5.668     | 1.289     | 101.1        | 2.8803        | 0.0000     | SURCHARGED |
| 120 minute summer  | 6               | 66          | 5.221     | 1.098     | 146.4        | 1.5710        | 0.0000     | SURCHARGED |
| 120 minute summer  | 7               | 74          | 4.714     | 0.875     | 171.1        | 1.2526        | 0.0000     | SURCHARGED |
| 1440 minute winter | 8               | 1440        | 4.556     | 0.827     | 44.9         | 1.1831        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 2 INLET 1 | 1440        | 4.556     | 1.056     | 55.0         | 1.5108        | 0.0000     | SURCHARGED |
| 1440 minute winter | 10              | 1890        | 4.570     | 0.995     | 24.3         | 1.4239        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 1 INLET   | 1440        | 4.556     | 1.056     | 24.3         | 1.5109        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 1         | 1440        | 4.556     | 1.056     | 29.1         | 834.7953      | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 1 OUTLET  | 1440        | 4.556     | 1.056     | 6.0          | 1.5108        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 2 INLET 2 | 1440        | 4.556     | 1.056     | 5.9          | 1.5108        | 0.0000     | SURCHARGED |
| 1440 minute winter | BASIN 2         | 1440        | 4.556     | 1.056     | 56.0         | 1634.2060     | 0.0000     | SURCHARGED |

  

| Link Event (Upstream Depth) | US Node         | Link   | DS Node         | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|-----------------------------|-----------------|--------|-----------------|---------------|----------------|----------|---------------|--------------------|
| 120 minute summer           | 1               | 1.002  | 3               | 33.8          | 0.677          | 0.398    | 3.5496        |                    |
| 120 minute summer           | 2               | 3.000  | 3               | 34.4          | 1.953          | 2.212    | 0.1975        |                    |
| 120 minute summer           | 3               | 1.003  | 4               | 51.6          | 0.776          | 0.730    | 3.6077        |                    |
| 120 minute summer           | 4               | 1.004  | 5               | 71.9          | 1.021          | 1.128    | 3.4901        |                    |
| 120 minute summer           | 5               | 1.005  | 6               | 102.5         | 1.456          | 1.606    | 3.8171        |                    |
| 120 minute summer           | 6               | 1.006  | 7               | 146.2         | 1.325          | 1.271    | 9.3904        |                    |
| 120 minute summer           | 7               | 1.007  | 8               | 171.1         | 1.552          | 1.489    | 3.6417        |                    |
| 1440 minute winter          | 8               | 1.008  | BASIN 2 INLET 1 | 55.0          | 0.598          | 0.221    | 1.6386        |                    |
| 1440 minute winter          | BASIN 2 INLET 1 | 1.009  | BASIN 2         | 46.5          | 0.671          | 0.421    | 5.8783        |                    |
| 1440 minute winter          | 10              | 12.002 | BASIN 1 INLET   | 24.3          | 0.512          | 0.109    | 0.6641        |                    |
| 1440 minute winter          | BASIN 1 INLET   | 12.003 | BASIN 1         | 24.2          | 0.670          | 0.219    | 0.8523        |                    |
| 1440 minute winter          | BASIN 1         | 12.004 | BASIN 1 OUTLET  | 6.0           | 0.123          | 0.054    | 0.9732        |                    |
| 1440 minute winter          | BASIN 1 OUTLET  | 12.005 | BASIN 2 INLET 2 | 5.9           | 0.125          | 0.053    | 1.1365        |                    |
| 1440 minute winter          | BASIN 2 INLET 2 | 12.006 | BASIN 2         | 6.1           | 0.129          | 0.055    | 2.0586        |                    |
| 1440 minute winter          | BASIN 2         | 1.010  | BASIN 2 OUTLET  | 5.3           | 0.409          | 0.048    | 0.4972        |                    |

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.90%**

| Node Event         | US Node        | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|----------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 1440 minute winter | BASIN 2 OUTLET | 1440        | 4.556     | 1.056     | 5.3          | 1.5107        | 0.0000     | SURCHARGED |
| 1440 minute winter | HYDROBRAKE     | 1440        | 4.555     | 1.124     | 6.8          | 1.2718        | 0.0000     | SURCHARGED |
| 720 minute summer  | OUTFALL        | 345         | 2.537     | 0.037     | 5.0          | 0.0000        | 0.0000     | OK         |
| 120 minute summer  | PP1            | 86          | 6.109     | 0.519     | 35.4         | 38.4775       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PP2            | 88          | 6.147     | 0.527     | 43.2         | 38.7057       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PP3            | 78          | 5.629     | 0.459     | 40.3         | 25.7099       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PP4            | 76          | 4.931     | 0.241     | 28.6         | 16.2506       | 0.0000     | SURCHARGED |
| 120 minute summer  | PP5            | 74          | 4.824     | 0.199     | 20.5         | 7.9189        | 0.0000     | SURCHARGED |
| 120 minute summer  | PP6            | 88          | 5.731     | 0.541     | 38.9         | 40.4265       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PP7            | 76          | 4.680     | 0.340     | 126.7        | 65.6313       | 0.0000     | SURCHARGED |
| 120 minute summer  | PPD1           | 78          | 6.164     | 0.264     | 31.1         | 13.5787       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PPD2           | 80          | 6.291     | 0.341     | 39.2         | 27.4460       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PPD3           | 74          | 6.201     | 0.141     | 22.3         | 9.0443        | 0.0000     | OK         |
| 120 minute summer  | PPD4           | 78          | 5.961     | 0.251     | 52.4         | 37.6823       | 0.0000     | FLOOD RISK |
| 120 minute summer  | PPD5           | 66          | 5.528     | 0.028     | 2.9          | 0.5460        | 0.0000     | OK         |

| Link Event<br>(Upstream Depth) | US Node        | Link   | DS Node    | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|----------------|--------|------------|---------------|----------------|----------|---------------|--------------------|
| 1440 minute winter             | BASIN 2 OUTLET | 1.011  | HYDROBRAKE | 6.8           | 0.389          | 0.054    | 0.3892        |                    |
| 1440 minute winter             | HYDROBRAKE     | 1.012  | OUTFALL    | 5.0           | 1.466          | 0.133    | 0.0713        | 701.1              |
| 120 minute summer              | PP1            | 1.001  | 1          | 27.6          | 1.570          | 1.135    | 0.3671        |                    |
| 120 minute summer              | PP2            | 4.001  | 4          | 28.8          | 1.787          | 1.001    | 0.6282        |                    |
| 120 minute summer              | PP3            | 7.000  | 6          | 16.7          | 1.203          | 0.841    | 1.1615        |                    |
| 120 minute summer              | PP4            | 9.000  | 7          | 12.8          | 1.121          | 0.563    | 0.6811        |                    |
| 120 minute summer              | PP5            | 11.000 | 7          | 11.2          | 1.134          | 0.437    | 0.4743        |                    |
| 120 minute summer              | PP6            | 5.001  | 5          | 25.5          | 1.465          | 1.108    | 0.6969        |                    |
| 120 minute summer              | PP7            | 12.001 | 10         | 64.7          | 3.817          | 0.808    | 0.0477        |                    |
| 120 minute summer              | PPD1           | 1.000  | PP1        | 18.6          | 1.183          | 0.741    | 0.2760        |                    |
| 120 minute summer              | PPD2           | 4.000  | PP2        | 15.9          | 0.985          | 0.925    | 0.6212        |                    |
| 120 minute summer              | PPD3           | 2.000  | 3          | 13.9          | 1.360          | 0.429    | 0.6144        |                    |
| 120 minute summer              | PPD4           | 6.000  | 5          | 23.2          | 1.623          | 0.596    | 0.4395        |                    |
| 120 minute summer              | PPD5           | 10.000 | 7          | 2.8           | 0.750          | 0.074    | 0.3236        |                    |

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.90%**

| 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 summer | PPD6       | 88             | 5.745        | 0.245        | 37.7            | 30.1666          | 0.0000        | FLOOD RISK |
| 120 minute summer | PPD7       | 66             | 5.585        | 0.075        | 19.4            | 3.8804           | 0.0000        | OK         |
| 120 minute summer | PPD8       | 88             | 4.857        | 0.197        | 163.6           | 201.3051         | 0.0000        | FLOOD RISK |

  

| Link Event<br>(Upstream Depth) | US<br>Node | Link   | DS<br>Node | Outflow<br>(l/s) | Velocity<br>(m/s) | Flow/Cap | Link<br>Vol (m³) | Discharge<br>Vol (m³) |
|--------------------------------|------------|--------|------------|------------------|-------------------|----------|------------------|-----------------------|
| 120 minute summer              | PPD6       | 5.000  | PP6        | 17.4             | 1.277             | 0.446    | 0.1150           |                       |
| 120 minute summer              | PPD7       | 8.000  | 6          | 16.9             | 1.746             | 0.332    | 0.1915           |                       |
| 120 minute summer              | PPD8       | 12.000 | PP7        | 37.1             | 2.111             | 0.812    | 0.0866           |                       |