

### 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) |
|--------|--------------|------------------|-----------------------|------------------|----------------|-----------------|--------------|
| 201    | 0.167        | 5.00             | 26.000                | 1800             | 341303.439     | 398529.705      | 1.811        |
| 202    | 0.050        | 5.00             | 26.281                | 1800             | 341285.794     | 398489.401      | 2.202        |
| 203    | 0.155        | 5.00             | 26.161                | 1800             | 341273.582     | 398482.487      | 2.117        |
| 204    | 0.111        | 5.00             | 26.476                | 1800             | 341179.793     | 398484.684      | 1.528        |
| 205    | 0.061        | 5.00             | 26.799                | 1800             | 341203.092     | 398484.051      | 2.931        |
| 206    | 0.077        | 5.00             | 26.048                | 1800             | 341321.334     | 398482.227      | 1.828        |
| 207    | 0.058        | 5.00             | 26.065                | 1800             | 341332.233     | 398467.891      | 1.890        |
| 208    | 0.039        | 5.00             | 26.226                | 1800             | 341336.532     | 398454.808      | 2.085        |
| 209    | 0.096        | 5.00             | 26.618                | 1800             | 341337.391     | 398422.104      | 2.559        |
| TANK 1 | 0.000        | 5.00             | 26.187                | 1200             | 341278.376     | 398419.674      | 2.254        |
| 210    | 0.111        | 5.00             | 26.187                | 1800             | 341278.513     | 398423.358      | 2.275        |
| TANK 2 | 0.000        | 5.00             | 26.090                | 1200             | 341224.501     | 398420.822      | 2.301        |
| 211    | 0.077        | 5.00             | 26.090                | 1800             | 341224.638     | 398424.506      | 2.313        |
| 212    | 0.125        | 5.00             | 25.948                | 1800             | 341201.865     | 398424.991      | 2.228        |
| TANK 3 | 0.000        | 5.00             | 25.574                | 1200             | 341143.932     | 398422.174      | 2.053        |
| 213    | 0.164        | 5.00             | 25.574                | 1800             | 341144.069     | 398425.858      | 2.074        |
| 214    | 0.095        | 5.00             | 26.234                | 1500             | 341145.103     | 398492.307      | 2.487        |
| 215    | 0.085        | 5.00             | 26.586                | 1500             | 341122.392     | 398500.888      | 2.900        |
| 216    | 0.099        | 5.00             | 25.711                | 1500             | 341110.897     | 398469.553      | 2.108        |
| 217    | 0.066        | 5.00             | 25.256                | 1800             | 341105.936     | 398441.010      | 1.725        |
| 218    | 0.037        | 5.00             | 25.325                | 1800             | 341110.690     | 398426.361      | 1.908        |
| 219    | 0.000        |                  | 25.000                |                  | 341094.622     | 398420.783      | 1.771        |
| 220    | 0.000        | 5.00             | 25.000                | 1800             | 341095.815     | 398384.710      | 1.775        |
| 221    | 0.043        | 5.00             | 24.957                | 1800             | 341110.998     | 398398.491      | 1.890        |
| 222    | 0.125        | 5.00             | 24.825                | 2100             | 341110.940     | 398381.877      | 1.800        |
| 223    | 0.201        | 5.00             | 24.436                | 1500             | 341110.872     | 398351.655      | 1.548        |
| 224    | 0.101        | 5.00             | 24.775                | 1500             | 341110.814     | 398306.777      | 3.143        |
| 225    | 0.143        | 5.00             | 24.102                | 1800             | 341117.234     | 398237.866      | 1.500        |
| 226    | 0.144        | 5.00             | 24.111                | 1800             | 341110.910     | 398247.980      | 2.626        |
| 227    | 0.065        | 5.00             | 23.842                | 1800             | 341098.139     | 398243.520      | 2.391        |
| 228    | 0.107        | 5.00             | 23.710                | 1800             | 341087.117     | 398244.175      | 2.287        |
| TANK 4 | 0.000        | 5.00             | 23.294                | 1200             | 341033.069     | 398271.576      | 1.972        |
| 229    | 0.234        | 5.00             | 23.294                | 1800             | 341030.346     | 398263.665      | 2.021        |
| TANK 5 | 0.000        | 5.00             | 23.110                | 1200             | 340965.118     | 398295.052      | 1.911        |
| 230    | 0.207        | 5.00             | 23.165                | 1800             | 340962.275     | 398286.970      | 2.072        |
| 231    | 0.108        | 5.00             | 25.265                | 1500             | 341011.541     | 398478.569      | 1.425        |
| 232    | 0.000        | 5.00             | 26.005                | 1500             | 340961.860     | 398497.840      | 1.425        |
| 233    | 0.132        | 5.00             | 25.583                | 1800             | 340981.440     | 398490.288      | 4.063        |
| 234    | 0.117        | 5.00             | 24.342                | 1800             | 340956.567     | 398422.643      | 3.002        |
| 235    | 0.109        | 5.00             | 25.044                | 1500             | 341071.311     | 398456.339      | 1.500        |
| 236    | 0.045        | 5.00             | 25.500                | 1500             | 341040.122     | 398468.465      | 2.155        |
| 237    | 0.127        | 5.00             | 24.426                | 1500             | 341022.287     | 398422.594      | 1.575        |
| 238    | 0.198        | 5.00             | 24.541                | 1500             | 341068.921     | 398373.973      | 1.500        |
| 239    | 0.205        | 5.00             | 23.787                | 2100             | 341011.100     | 398393.822      | 2.333        |
| 240    | 0.074        | 5.00             | 24.081                | 1800             | 340962.994     | 398410.606      | 2.754        |
| 241    | 0.034        | 5.00             | 24.156                | 1800             | 340956.280     | 398410.738      | 2.846        |
| 242    | 0.041        | 5.00             | 23.773                | 1800             | 340955.912     | 398392.026      | 2.510        |
| 243    | 0.090        | 5.00             | 23.370                | 1800             | 340947.638     | 398366.993      | 2.173        |
| 244    | 0.070        | 5.00             | 24.312                | 1800             | 341073.154     | 398314.107      | 2.793        |
| 245    | 0.113        | 5.00             | 24.213                | 1800             | 341012.160     | 398334.828      | 2.855        |
| 246    | 0.267        | 5.00             | 23.908                | 1800             | 340988.282     | 398337.897      | 2.610        |
| 247    | 0.000        | 5.00             | 23.367                | 1800             | 340930.701     | 398356.741      | 2.220        |

### 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) |
|--------|--------------|------------------|-----------------------|------------------|----------------|-----------------|--------------|
| 248    | 0.000        |                  | 23.268                | 1800             | 340916.552     | 398305.027      | 2.255        |
| TANK 6 | 0.000        | 5.00             | 23.110                | 1200             | 340925.472     | 398302.476      | 2.250        |
| 249    | 0.077        | 5.00             | 23.110                | 2100             | 340924.113     | 398298.865      | 2.270        |
| 251    | 0.000        |                  | 22.000                |                  | 340919.275     | 398283.282      | 1.638        |
| 253    | 0.000        | 5.00             | 22.000                |                  | 340883.968     | 398172.442      | 1.950        |
| 254    | 0.000        |                  | 22.000                | 2700             | 340880.040     | 398159.342      | 1.984        |
| 255    | 0.141        | 5.00             | 21.922                | 2400             | 340913.022     | 398226.885      | 4.970        |
| 256    | 0.129        | 5.00             | 21.998                | 2700             | 340893.178     | 398163.029      | 5.213        |
| 257    | 0.045        | 5.00             | 22.045                | 2700             | 340886.617     | 398155.499      | 5.885        |
| 258    | 0.076        | 5.00             | 21.906                | 2700             | 340880.391     | 398148.782      | 5.769        |
| 259    | 0.058        | 5.00             | 21.538                | 2700             | 340876.924     | 398139.018      | 5.427        |
| 260    | 0.069        | 5.00             | 19.289                | 2700             | 340877.118     | 398094.348      | 3.290        |
| 261    | 0.000        |                  | 19.029                | 1500             | 340877.165     | 398083.172      | 3.077        |
| 262    | 0.000        |                  | 18.492                | 1500             | 340852.304     | 398082.671      | 2.644        |
| 263    | 0.000        |                  | 17.908                | 1500             | 340824.088     | 398085.970      | 2.178        |
| 264    | 0.000        |                  | 16.911                | 1500             | 340777.274     | 398097.701      | 3.261        |
| 265    |              |                  | 14.322                | 1500             | 340760.612     | 398092.122      | 1.471        |

### Links (Input)

| 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) |
|--------|------------|------------|---------------|----------------|--------------|--------------|-------------|----------------|-------------|------------------|-----------------|
| 1.000  | 201        | 202        | 43.997        | 0.600          | 24.189       | 24.079       | 0.110       | 400.0          | 450         | 5.73             | 50.0            |
| 1.001  | 202        | 203        | 14.033        | 0.600          | 24.079       | 24.044       | 0.035       | 400.0          | 450         | 5.96             | 50.0            |
| 1.002  | 203        | 205        | 70.507        | 0.600          | 24.044       | 23.868       | 0.176       | 400.0          | 450         | 7.12             | 50.0            |
| 2.000  | 204        | 205        | 23.308        | 0.600          | 24.948       | 24.093       | 0.855       | 27.3           | 225         | 5.15             | 50.0            |
| 1.003  | 205        | 212        | 59.073        | 0.600          | 23.868       | 23.720       | 0.148       | 400.0          | 450         | 8.10             | 50.0            |
| 3.000  | 206        | 207        | 18.009        | 0.600          | 24.220       | 24.175       | 0.045       | 400.0          | 450         | 5.30             | 50.0            |
| 3.001  | 207        | 208        | 13.771        | 0.600          | 24.175       | 24.141       | 0.034       | 400.0          | 450         | 5.52             | 50.0            |
| 3.002  | 208        | 209        | 32.715        | 0.600          | 24.141       | 24.059       | 0.082       | 400.0          | 450         | 6.06             | 50.0            |
| 3.003  | 209        | 210        | 58.891        | 0.600          | 24.059       | 23.912       | 0.147       | 400.0          | 450         | 7.04             | 50.0            |
| 14.000 | TANK 1     | 210        | 3.687         | 0.600          | 23.933       | 24.450       | -0.517      | -7.1           | 225         | 5.06             | 50.0            |
| 3.004  | 210        | 211        | 53.887        | 0.600          | 23.912       | 23.777       | 0.135       | 400.0          | 450         | 7.93             | 50.0            |
| 15.000 | TANK 2     | 211        | 3.687         | 0.600          | 23.789       | 24.450       | -0.661      | -5.6           | 225         | 5.06             | 50.0            |
| 3.005  | 211        | 212        | 22.778        | 0.600          | 23.777       | 23.720       | 0.057       | 400.0          | 450         | 8.30             | 50.0            |
| 1.004  | 212        | 213        | 57.803        | 0.600          | 23.720       | 23.575       | 0.145       | 400.0          | 450         | 9.25             | 49.9            |
| 16.000 | TANK 3     | 213        | 3.687         | 0.600          | 23.521       | 24.350       | -0.829      | -4.4           | 225         | 5.06             | 50.0            |
| 1.005  | 213        | 218        | 33.383        | 0.600          | 23.500       | 23.417       | 0.083       | 400.0          | 525         | 9.75             | 48.6            |
| 4.000  | 214        | 215        | 24.278        | 0.600          | 23.747       | 23.686       | 0.061       | 400.0          | 450         | 5.40             | 50.0            |
| 4.001  | 215        | 216        | 33.377        | 0.600          | 23.686       | 23.603       | 0.083       | 400.0          | 450         | 5.95             | 50.0            |
| 4.002  | 216        | 217        | 28.971        | 0.600          | 23.603       | 23.531       | 0.072       | 400.0          | 450         | 6.43             | 50.0            |
| 4.003  | 217        | 218        | 15.401        | 0.600          | 23.531       | 23.492       | 0.039       | 400.0          | 450         | 6.68             | 50.0            |
| 1.006  | 218        | 219        | 17.009        | 0.600          | 23.417       | 23.374       | 0.043       | 400.0          | 525         | 10.01            | 47.9            |
| 5.000  | 220        | 222        | 15.388        | 0.600          | 23.225       | 23.025       | 0.200       | 76.9           | 525         | 5.10             | 50.0            |
| 6.000  | 221        | 222        | 16.614        | 0.600          | 23.067       | 23.025       | 0.042       | 400.0          | 525         | 5.25             | 50.0            |
| 5.001  | 222        | 223        | 30.222        | 0.600          | 23.025       | 22.888       | 0.137       | 220.6          | 300         | 5.73             | 45.8            |
| 5.002  | 223        | 224        | 44.878        | 0.600          | 22.888       | 21.932       | 0.956       | 46.9           | 300         | 6.05             | 50.0            |
| 5.003  | 224        | 226        | 58.797        | 0.600          | 21.632       | 21.485       | 0.147       | 400.0          | 600         | 6.86             | 50.0            |
| 7.000  | 225        | 226        | 11.928        | 0.600          | 22.602       | 22.531       | 0.071       | 168.0          | 225         | 5.20             | 50.0            |
| 5.004  | 226        | 227        | 13.527        | 0.600          | 21.485       | 21.451       | 0.034       | 400.0          | 600         | 7.05             | 50.0            |
| 5.005  | 227        | 228        | 11.041        | 0.600          | 21.451       | 21.423       | 0.028       | 400.0          | 600         | 7.20             | 50.0            |

### Links (Input)

| 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) |
|--------|---------|---------|------------|-------------|-----------|-----------|----------|-------------|----------|---------------|--------------|
| 5.006  | 228     | 229     | 60.023     | 0.600       | 21.423    | 21.273    | 0.150    | 400.0       | 600      | 8.02          | 50.0         |
| 17.000 | TANK 4  | 229     | 8.367      | 0.600       | 21.322    | 21.800    | -0.478   | -17.5       | 225      | 5.14          | 50.0         |
| 5.007  | 229     | 230     | 71.950     | 0.600       | 21.273    | 21.093    | 0.180    | 400.0       | 600      | 9.01          | 50.0         |
| 18.000 | TANK 5  | 230     | 8.567      | 0.600       | 21.199    | 21.650    | -0.451   | -19.0       | 225      | 5.14          | 50.0         |
| 5.008  | 230     | 249     | 39.973     | 0.600       | 21.093    | 20.990    | 0.103    | 388.1       | 600      | 9.56          | 49.1         |
| 8.000  | 231     | 233     | 32.302     | 0.600       | 23.840    | 21.895    | 1.945    | 16.6        | 225      | 5.17          | 50.0         |
| 9.000  | 232     | 233     | 20.986     | 0.600       | 24.580    | 22.795    | 1.785    | 11.8        | 225      | 5.09          | 50.0         |
| 8.001  | 233     | 234     | 72.073     | 0.600       | 21.520    | 21.340    | 0.180    | 400.0       | 600      | 6.16          | 50.0         |
| 8.002  | 234     | 241     | 11.908     | 0.600       | 21.340    | 21.310    | 0.030    | 400.0       | 600      | 6.32          | 50.0         |
| 10.000 | 235     | 236     | 33.463     | 0.600       | 23.544    | 23.345    | 0.199    | 168.0       | 300      | 5.46          | 50.0         |
| 10.001 | 236     | 237     | 49.216     | 0.600       | 23.345    | 22.851    | 0.494    | 99.6        | 300      | 5.98          | 50.0         |
| 10.002 | 237     | 239     | 30.870     | 0.600       | 22.851    | 21.754    | 1.097    | 28.1        | 300      | 6.15          | 50.0         |
| 11.000 | 238     | 239     | 61.133     | 0.600       | 23.041    | 21.754    | 1.287    | 47.5        | 300      | 5.45          | 50.0         |
| 10.003 | 239     | 240     | 50.950     | 0.600       | 21.454    | 21.327    | 0.127    | 400.0       | 600      | 6.86          | 50.0         |
| 10.004 | 240     | 241     | 6.715      | 0.600       | 21.327    | 21.310    | 0.017    | 400.0       | 600      | 6.95          | 50.0         |
| 8.003  | 241     | 242     | 18.716     | 0.600       | 21.310    | 21.263    | 0.047    | 400.0       | 600      | 7.21          | 50.0         |
| 8.004  | 242     | 243     | 26.365     | 0.600       | 21.263    | 21.197    | 0.066    | 400.0       | 600      | 7.57          | 50.0         |
| 8.005  | 243     | 247     | 19.798     | 0.600       | 21.197    | 21.148    | 0.049    | 400.0       | 600      | 7.84          | 50.0         |
| 12.000 | 244     | 245     | 64.418     | 0.600       | 21.519    | 21.358    | 0.161    | 400.0       | 600      | 5.89          | 50.0         |
| 12.001 | 245     | 246     | 24.074     | 0.600       | 21.358    | 21.298    | 0.060    | 400.0       | 600      | 6.22          | 50.0         |
| 12.002 | 246     | 247     | 60.586     | 0.600       | 21.298    | 21.147    | 0.151    | 400.0       | 600      | 7.05          | 50.0         |
| 8.006  | 247     | 248     | 53.615     | 0.600       | 21.147    | 21.013    | 0.134    | 400.0       | 600      | 8.58          | 50.0         |
| 8.007  | 248     | 249     | 9.754      | 0.600       | 21.013    | 20.990    | 0.023    | 424.1       | 600      | 8.72          | 50.0         |
| 19.000 | TANK 6  | 249     | 3.858      | 0.600       | 20.860    | 21.550    | -0.690   | -5.6        | 225      | 5.06          | 50.0         |
| 5.009  | 249     | 251     | 16.317     | 0.600       | 20.840    | 20.799    | 0.041    | 400.0       | 750      | 9.75          | 48.6         |
| 5.013  | 253     | 254     | 13.676     | 0.600       | 20.050    | 20.016    | 0.034    | 400.0       | 750      | 5.16          | 50.0         |
| 5.014  | 254     | 258     | 10.566     | 0.600       | 20.016    | 19.593    | 0.423    | 25.0        | 375      | 5.21          | 50.0         |
| 13.000 | 255     | 256     | 66.868     | 0.600       | 16.952    | 16.785    | 0.167    | 400.0       | 1200     | 5.60          | 50.0         |
| 13.001 | 256     | 257     | 9.987      | 0.600       | 16.785    | 16.760    | 0.025    | 400.0       | 1200     | 5.69          | 50.0         |
| 13.002 | 257     | 258     | 9.159      | 0.600       | 16.160    | 16.137    | 0.023    | 400.0       | 1800     | 5.75          | 50.0         |
| 5.015  | 258     | 259     | 10.361     | 0.600       | 16.137    | 16.111    | 0.026    | 400.0       | 1800     | 5.82          | 50.0         |
| 5.016  | 259     | 260     | 44.670     | 0.600       | 16.111    | 15.999    | 0.112    | 400.0       | 1800     | 6.13          | 50.0         |
| 5.017  | 260     | 261     | 11.176     | 0.600       | 15.999    | 15.952    | 0.047    | 240.0       | 375      | 6.29          | 50.0         |
| 5.018  | 261     | 262     | 24.866     | 0.600       | 15.952    | 15.848    | 0.104    | 240.0       | 375      | 6.65          | 50.0         |
| 5.019  | 262     | 263     | 28.408     | 0.600       | 15.848    | 15.730    | 0.118    | 240.0       | 375      | 7.06          | 50.0         |
| 5.020  | 263     | 264     | 48.261     | 0.600       | 15.730    | 13.650    | 2.080    | 23.2        | 375      | 7.27          | 50.0         |
| 5.021  | 264     | 265     | 17.571     | 0.600       | 13.650    | 12.851    | 0.799    | 22.0        | 375      | 7.35          | 50.0         |

### 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) |
|-------|------------|-------------|-----------|-----------------------------|-----------|-----------|--------------|-----------|-----------|--------------|
| 1.000 | 43.997     | 400.0       | 450       | Circular_Default Sewer Type | 26.000    | 24.189    | 1.361        | 26.281    | 24.079    | 1.752        |
| 1.001 | 14.033     | 400.0       | 450       | Circular_Default Sewer Type | 26.281    | 24.079    | 1.752        | 26.161    | 24.044    | 1.667        |
| 1.002 | 70.507     | 400.0       | 450       | Circular_Default Sewer Type | 26.161    | 24.044    | 1.667        | 26.799    | 23.868    | 2.481        |
| 2.000 | 23.308     | 27.3        | 225       | Circular_Default Sewer Type | 26.476    | 24.948    | 1.303        | 26.799    | 24.093    | 2.481        |
| Link  | US Node    | Dia (mm)    | Node Type | MH Type                     | DS Node   | Dia (mm)  | Node Type    | MH Type   |           |              |
| 1.000 | 201        | 1800        | Manhole   | Adoptable                   | 202       | 1800      | Manhole      | Adoptable |           |              |
| 1.001 | 202        | 1800        | Manhole   | Adoptable                   | 203       | 1800      | Manhole      | Adoptable |           |              |
| 1.002 | 203        | 1800        | Manhole   | Adoptable                   | 205       | 1800      | Manhole      | Adoptable |           |              |
| 2.000 | 204        | 1800        | Manhole   | Adoptable                   | 205       | 1800      | Manhole      | Adoptable |           |              |

### Pipeline Schedule

| Link   | Length<br>(m) | Slope<br>(1:X) | Dia<br>(mm) | Link<br>Type                | US CL<br>(m) | US IL<br>(m) | US Depth<br>(m) | DS CL<br>(m) | DS IL<br>(m) | DS Depth<br>(m) |
|--------|---------------|----------------|-------------|-----------------------------|--------------|--------------|-----------------|--------------|--------------|-----------------|
| 1.003  | 59.073        | 400.0          | 450         | Circular_Default Sewer Type | 26.799       | 23.868       | 2.481           | 25.948       | 23.720       | 1.778           |
| 3.000  | 18.009        | 400.0          | 450         | Circular_Default Sewer Type | 26.048       | 24.220       | 1.378           | 26.065       | 24.175       | 1.440           |
| 3.001  | 13.771        | 400.0          | 450         | Circular_Default Sewer Type | 26.065       | 24.175       | 1.440           | 26.226       | 24.141       | 1.635           |
| 3.002  | 32.715        | 400.0          | 450         | Circular_Default Sewer Type | 26.226       | 24.141       | 1.635           | 26.618       | 24.059       | 2.109           |
| 3.003  | 58.891        | 400.0          | 450         | Circular_Default Sewer Type | 26.618       | 24.059       | 2.109           | 26.187       | 23.912       | 1.825           |
| 14.000 | 3.687         | -7.1           | 225         | Circular_Default Sewer Type | 26.187       | 23.933       | 2.029           | 26.187       | 24.450       | 1.512           |
| 3.004  | 53.887        | 400.0          | 450         | Circular_Default Sewer Type | 26.187       | 23.912       | 1.825           | 26.090       | 23.777       | 1.863           |
| 15.000 | 3.687         | -5.6           | 225         | Circular_Default Sewer Type | 26.090       | 23.789       | 2.076           | 26.090       | 24.450       | 1.415           |
| 3.005  | 22.778        | 400.0          | 450         | Circular_Default Sewer Type | 26.090       | 23.777       | 1.863           | 25.948       | 23.720       | 1.778           |
| 1.004  | 57.803        | 400.0          | 450         | Circular_Default Sewer Type | 25.948       | 23.720       | 1.778           | 25.574       | 23.575       | 1.549           |
| 16.000 | 3.687         | -4.4           | 225         | Circular_Default Sewer Type | 25.574       | 23.521       | 1.828           | 25.574       | 24.350       | 0.999           |
| 1.005  | 33.383        | 400.0          | 525         | Circular_Default Sewer Type | 25.574       | 23.500       | 1.549           | 25.325       | 23.417       | 1.383           |
| 4.000  | 24.278        | 400.0          | 450         | Circular_Default Sewer Type | 26.234       | 23.747       | 2.037           | 26.586       | 23.686       | 2.450           |
| 4.001  | 33.377        | 400.0          | 450         | Circular_Default Sewer Type | 26.586       | 23.686       | 2.450           | 25.711       | 23.603       | 1.658           |
| 4.002  | 28.971        | 400.0          | 450         | Circular_Default Sewer Type | 25.711       | 23.603       | 1.658           | 25.256       | 23.531       | 1.275           |
| 4.003  | 15.401        | 400.0          | 450         | Circular_Default Sewer Type | 25.256       | 23.531       | 1.275           | 25.325       | 23.492       | 1.383           |
| 1.006  | 17.009        | 400.0          | 525         | Circular_Default Sewer Type | 25.325       | 23.417       | 1.383           | 25.000       | 23.374       | 1.101           |
| 5.000  | 15.388        | 76.9           | 525         | Circular_Default Sewer Type | 25.000       | 23.225       | 1.250           | 24.825       | 23.025       | 1.275           |
| 6.000  | 16.614        | 400.0          | 525         | Circular_Default Sewer Type | 24.957       | 23.067       | 1.365           | 24.825       | 23.025       | 1.275           |
| 5.001  | 30.222        | 220.6          | 300         | Circular_Default Sewer Type | 24.825       | 23.025       | 1.500           | 24.436       | 22.888       | 1.248           |
| 5.002  | 44.878        | 46.9           | 300         | Circular_Default Sewer Type | 24.436       | 22.888       | 1.248           | 24.775       | 21.932       | 2.543           |
| 5.003  | 58.797        | 400.0          | 600         | Circular_Default Sewer Type | 24.775       | 21.632       | 2.543           | 24.111       | 21.485       | 2.026           |
| 7.000  | 11.928        | 168.0          | 225         | Circular_Default Sewer Type | 24.102       | 22.602       | 1.275           | 24.111       | 22.531       | 1.355           |
| 5.004  | 13.527        | 400.0          | 600         | Circular_Default Sewer Type | 24.111       | 21.485       | 2.026           | 23.842       | 21.451       | 1.791           |
| 5.005  | 11.041        | 400.0          | 600         | Circular_Default Sewer Type | 23.842       | 21.451       | 1.791           | 23.710       | 21.423       | 1.687           |

| Link   | US<br>Node | Dia<br>(mm) | Node<br>Type | MH<br>Type | DS<br>Node | Dia<br>(mm) | Node<br>Type | MH<br>Type |
|--------|------------|-------------|--------------|------------|------------|-------------|--------------|------------|
| 1.003  | 205        | 1800        | Manhole      | Adoptable  | 212        | 1800        | Manhole      | Adoptable  |
| 3.000  | 206        | 1800        | Manhole      | Adoptable  | 207        | 1800        | Manhole      | Adoptable  |
| 3.001  | 207        | 1800        | Manhole      | Adoptable  | 208        | 1800        | Manhole      | Adoptable  |
| 3.002  | 208        | 1800        | Manhole      | Adoptable  | 209        | 1800        | Manhole      | Adoptable  |
| 3.003  | 209        | 1800        | Manhole      | Adoptable  | 210        | 1800        | Manhole      | Adoptable  |
| 14.000 | TANK 1     | 1200        | Manhole      | Adoptable  | 210        | 1800        | Manhole      | Adoptable  |
| 3.004  | 210        | 1800        | Manhole      | Adoptable  | 211        | 1800        | Manhole      | Adoptable  |
| 15.000 | TANK 2     | 1200        | Manhole      | Adoptable  | 211        | 1800        | Manhole      | Adoptable  |
| 3.005  | 211        | 1800        | Manhole      | Adoptable  | 212        | 1800        | Manhole      | Adoptable  |
| 1.004  | 212        | 1800        | Manhole      | Adoptable  | 213        | 1800        | Manhole      | Adoptable  |
| 16.000 | TANK 3     | 1200        | Manhole      | Adoptable  | 213        | 1800        | Manhole      | Adoptable  |
| 1.005  | 213        | 1800        | Manhole      | Adoptable  | 218        | 1800        | Manhole      | Adoptable  |
| 4.000  | 214        | 1500        | Manhole      | Adoptable  | 215        | 1500        | Manhole      | Adoptable  |
| 4.001  | 215        | 1500        | Manhole      | Adoptable  | 216        | 1500        | Manhole      | Adoptable  |
| 4.002  | 216        | 1500        | Manhole      | Adoptable  | 217        | 1800        | Manhole      | Adoptable  |
| 4.003  | 217        | 1800        | Manhole      | Adoptable  | 218        | 1800        | Manhole      | Adoptable  |
| 1.006  | 218        | 1800        | Manhole      | Adoptable  | 219        |             | Junction     |            |
| 5.000  | 220        | 1800        | Manhole      | Adoptable  | 222        | 2100        | Manhole      | Adoptable  |
| 6.000  | 221        | 1800        | Manhole      | Adoptable  | 222        | 2100        | Manhole      | Adoptable  |
| 5.001  | 222        | 2100        | Manhole      | Adoptable  | 223        | 1500        | Manhole      | Adoptable  |
| 5.002  | 223        | 1500        | Manhole      | Adoptable  | 224        | 1500        | Manhole      | Adoptable  |
| 5.003  | 224        | 1500        | Manhole      | Adoptable  | 226        | 1800        | Manhole      | Adoptable  |
| 7.000  | 225        | 1800        | Manhole      | Adoptable  | 226        | 1800        | Manhole      | Adoptable  |
| 5.004  | 226        | 1800        | Manhole      | Adoptable  | 227        | 1800        | Manhole      | Adoptable  |
| 5.005  | 227        | 1800        | Manhole      | Adoptable  | 228        | 1800        | Manhole      | Adoptable  |

### Pipeline Schedule

| Link   | Length<br>(m) | Slope<br>(1:X) | Dia<br>(mm) | Link<br>Type                | US CL<br>(m) | US IL<br>(m) | US Depth<br>(m) | DS CL<br>(m) | DS IL<br>(m) | DS Depth<br>(m) |
|--------|---------------|----------------|-------------|-----------------------------|--------------|--------------|-----------------|--------------|--------------|-----------------|
| 5.006  | 60.023        | 400.0          | 600         | Circular_Default Sewer Type | 23.710       | 21.423       | 1.687           | 23.294       | 21.273       | 1.421           |
| 17.000 | 8.367         | -17.5          | 225         | Circular_Default Sewer Type | 23.294       | 21.322       | 1.747           | 23.294       | 21.800       | 1.269           |
| 5.007  | 71.950        | 400.0          | 600         | Circular_Default Sewer Type | 23.294       | 21.273       | 1.421           | 23.165       | 21.093       | 1.472           |
| 18.000 | 8.567         | -19.0          | 225         | Circular_Default Sewer Type | 23.110       | 21.199       | 1.686           | 23.165       | 21.650       | 1.290           |
| 5.008  | 39.973        | 388.1          | 600         | Circular_Default Sewer Type | 23.165       | 21.093       | 1.472           | 23.110       | 20.990       | 1.520           |
| 8.000  | 32.302        | 16.6           | 225         | Circular_Default Sewer Type | 25.265       | 23.840       | 1.200           | 25.583       | 21.895       | 3.463           |
| 9.000  | 20.986        | 11.8           | 225         | Circular_Default Sewer Type | 26.005       | 24.580       | 1.200           | 25.583       | 22.795       | 2.563           |
| 8.001  | 72.073        | 400.0          | 600         | Circular_Default Sewer Type | 25.583       | 21.520       | 3.463           | 24.342       | 21.340       | 2.402           |
| 8.002  | 11.908        | 400.0          | 600         | Circular_Default Sewer Type | 24.342       | 21.340       | 2.402           | 24.156       | 21.310       | 2.246           |
| 10.000 | 33.463        | 168.0          | 300         | Circular_Default Sewer Type | 25.044       | 23.544       | 1.200           | 25.500       | 23.345       | 1.855           |
| 10.001 | 49.216        | 99.6           | 300         | Circular_Default Sewer Type | 25.500       | 23.345       | 1.855           | 24.426       | 22.851       | 1.275           |
| 10.002 | 30.870        | 28.1           | 300         | Circular_Default Sewer Type | 24.426       | 22.851       | 1.275           | 23.787       | 21.754       | 1.733           |
| 11.000 | 61.133        | 47.5           | 300         | Circular_Default Sewer Type | 24.541       | 23.041       | 1.200           | 23.787       | 21.754       | 1.733           |
| 10.003 | 50.950        | 400.0          | 600         | Circular_Default Sewer Type | 23.787       | 21.454       | 1.733           | 24.081       | 21.327       | 2.154           |
| 10.004 | 6.715         | 400.0          | 600         | Circular_Default Sewer Type | 24.081       | 21.327       | 2.154           | 24.156       | 21.310       | 2.246           |
| 8.003  | 18.716        | 400.0          | 600         | Circular_Default Sewer Type | 24.156       | 21.310       | 2.246           | 23.773       | 21.263       | 1.910           |
| 8.004  | 26.365        | 400.0          | 600         | Circular_Default Sewer Type | 23.773       | 21.263       | 1.910           | 23.370       | 21.197       | 1.573           |
| 8.005  | 19.798        | 400.0          | 600         | Circular_Default Sewer Type | 23.370       | 21.197       | 1.573           | 23.367       | 21.148       | 1.619           |
| 12.000 | 64.418        | 400.0          | 600         | Circular_Default Sewer Type | 24.312       | 21.519       | 2.193           | 24.213       | 21.358       | 2.255           |
| 12.001 | 24.074        | 400.0          | 600         | Circular_Default Sewer Type | 24.213       | 21.358       | 2.255           | 23.908       | 21.298       | 2.010           |
| 12.002 | 60.586        | 400.0          | 600         | Circular_Default Sewer Type | 23.908       | 21.298       | 2.010           | 23.367       | 21.147       | 1.620           |
| 8.006  | 53.615        | 400.0          | 600         | Circular_Default Sewer Type | 23.367       | 21.147       | 1.620           | 23.268       | 21.013       | 1.655           |
| 8.007  | 9.754         | 424.1          | 600         | Circular_Default Sewer Type | 23.268       | 21.013       | 1.655           | 23.110       | 20.990       | 1.520           |
| 19.000 | 3.858         | -5.6           | 225         | Circular_Default Sewer Type | 23.110       | 20.860       | 2.025           | 23.110       | 21.550       | 1.335           |
| 5.009  | 16.317        | 400.0          | 750         | Circular_Default Sewer Type | 23.110       | 20.840       | 1.520           | 22.000       | 20.799       | 0.451           |

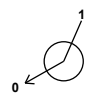
| Link   | US<br>Node | Dia<br>(mm) | Node<br>Type | MH<br>Type | DS<br>Node | Dia<br>(mm) | Node<br>Type | MH<br>Type |
|--------|------------|-------------|--------------|------------|------------|-------------|--------------|------------|
| 5.006  | 228        | 1800        | Manhole      | Adoptable  | 229        | 1800        | Manhole      | Adoptable  |
| 17.000 | TANK 4     | 1200        | Manhole      | Adoptable  | 229        | 1800        | Manhole      | Adoptable  |
| 5.007  | 229        | 1800        | Manhole      | Adoptable  | 230        | 1800        | Manhole      | Adoptable  |
| 18.000 | TANK 5     | 1200        | Manhole      | Adoptable  | 230        | 1800        | Manhole      | Adoptable  |
| 5.008  | 230        | 1800        | Manhole      | Adoptable  | 249        | 2100        | Manhole      | Adoptable  |
| 8.000  | 231        | 1500        | Manhole      | Adoptable  | 233        | 1800        | Manhole      | Adoptable  |
| 9.000  | 232        | 1500        | Manhole      | Adoptable  | 233        | 1800        | Manhole      | Adoptable  |
| 8.001  | 233        | 1800        | Manhole      | Adoptable  | 234        | 1800        | Manhole      | Adoptable  |
| 8.002  | 234        | 1800        | Manhole      | Adoptable  | 241        | 1800        | Manhole      | Adoptable  |
| 10.000 | 235        | 1500        | Manhole      | Adoptable  | 236        | 1500        | Manhole      | Adoptable  |
| 10.001 | 236        | 1500        | Manhole      | Adoptable  | 237        | 1500        | Manhole      | Adoptable  |
| 10.002 | 237        | 1500        | Manhole      | Adoptable  | 239        | 2100        | Manhole      | Adoptable  |
| 11.000 | 238        | 1500        | Manhole      | Adoptable  | 239        | 2100        | Manhole      | Adoptable  |
| 10.003 | 239        | 2100        | Manhole      | Adoptable  | 240        | 1800        | Manhole      | Adoptable  |
| 10.004 | 240        | 1800        | Manhole      | Adoptable  | 241        | 1800        | Manhole      | Adoptable  |
| 8.003  | 241        | 1800        | Manhole      | Adoptable  | 242        | 1800        | Manhole      | Adoptable  |
| 8.004  | 242        | 1800        | Manhole      | Adoptable  | 243        | 1800        | Manhole      | Adoptable  |
| 8.005  | 243        | 1800        | Manhole      | Adoptable  | 247        | 1800        | Manhole      | Adoptable  |
| 12.000 | 244        | 1800        | Manhole      | Adoptable  | 245        | 1800        | Manhole      | Adoptable  |
| 12.001 | 245        | 1800        | Manhole      | Adoptable  | 246        | 1800        | Manhole      | Adoptable  |
| 12.002 | 246        | 1800        | Manhole      | Adoptable  | 247        | 1800        | Manhole      | Adoptable  |
| 8.006  | 247        | 1800        | Manhole      | Adoptable  | 248        | 1800        | Manhole      | Adoptable  |
| 8.007  | 248        | 1800        | Manhole      | Adoptable  | 249        | 2100        | Manhole      | Adoptable  |
| 19.000 | TANK 6     | 1200        | Manhole      | Adoptable  | 249        | 2100        | Manhole      | Adoptable  |
| 5.009  | 249        | 2100        | Manhole      | Adoptable  | 251        |             | Junction     |            |

### Pipeline Schedule

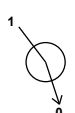
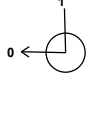
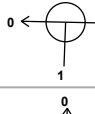
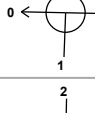
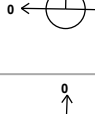
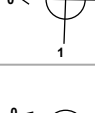
| Link   | Length<br>(m) | Slope<br>(1:X) | Dia<br>(mm) | Link<br>Type                | US CL<br>(m) | US IL<br>(m) | US Depth<br>(m) | DS CL<br>(m) | DS IL<br>(m) | DS Depth<br>(m) |
|--------|---------------|----------------|-------------|-----------------------------|--------------|--------------|-----------------|--------------|--------------|-----------------|
| 5.013  | 13.676        | 400.0          | 750         | Circular_Default Sewer Type | 22.000       | 20.050       | 1.200           | 22.000       | 20.016       | 1.234           |
| 5.014  | 10.566        | 25.0           | 375         | Circular_Default Sewer Type | 22.000       | 20.016       | 1.609           | 21.906       | 19.593       | 1.938           |
| 13.000 | 66.868        | 400.0          | 1200        | Circular_Default Sewer Type | 21.922       | 16.952       | 3.770           | 21.998       | 16.785       | 4.013           |
| 13.001 | 9.987         | 400.0          | 1200        | Circular_Default Sewer Type | 21.998       | 16.785       | 4.013           | 22.045       | 16.760       | 4.085           |
| 13.002 | 9.159         | 400.0          | 1800        | Circular_Default Sewer Type | 22.045       | 16.160       | 4.085           | 21.906       | 16.137       | 3.969           |
| 5.015  | 10.361        | 400.0          | 1800        | Circular_Default Sewer Type | 21.906       | 16.137       | 3.969           | 21.538       | 16.111       | 3.627           |
| 5.016  | 44.670        | 400.0          | 1800        | Circular_Default Sewer Type | 21.538       | 16.111       | 3.627           | 19.289       | 15.999       | 1.490           |
| 5.017  | 11.176        | 240.0          | 375         | Circular_Default Sewer Type | 19.289       | 15.999       | 2.915           | 19.029       | 15.952       | 2.702           |
| 5.018  | 24.866        | 240.0          | 375         | Circular_Default Sewer Type | 19.029       | 15.952       | 2.702           | 18.492       | 15.848       | 2.269           |
| 5.019  | 28.408        | 240.0          | 375         | Circular_Default Sewer Type | 18.492       | 15.848       | 2.269           | 17.908       | 15.730       | 1.803           |
| 5.020  | 48.261        | 23.2           | 375         | Circular_Default Sewer Type | 17.908       | 15.730       | 1.803           | 16.911       | 13.650       | 2.886           |
| 5.021  | 17.571        | 22.0           | 375         | Circular_Default Sewer Type | 16.911       | 13.650       | 2.886           | 14.322       | 12.851       | 1.096           |

| Link   | US<br>Node | Dia<br>(mm) | Node<br>Type | MH<br>Type | DS<br>Node | Dia<br>(mm) | Node<br>Type | MH<br>Type |
|--------|------------|-------------|--------------|------------|------------|-------------|--------------|------------|
| 5.013  | 253        |             | Junction     |            | 254        | 2700        | Manhole      | Adoptable  |
| 5.014  | 254        | 2700        | Manhole      | Adoptable  | 258        | 2700        | Manhole      | Adoptable  |
| 13.000 | 255        | 2400        | Manhole      | Adoptable  | 256        | 2700        | Manhole      | Adoptable  |
| 13.001 | 256        | 2700        | Manhole      | Adoptable  | 257        | 2700        | Manhole      | Adoptable  |
| 13.002 | 257        | 2700        | Manhole      | Adoptable  | 258        | 2700        | Manhole      | Adoptable  |
| 5.015  | 258        | 2700        | Manhole      | Adoptable  | 259        | 2700        | Manhole      | Adoptable  |
| 5.016  | 259        | 2700        | Manhole      | Adoptable  | 260        | 2700        | Manhole      | Adoptable  |
| 5.017  | 260        | 2700        | Manhole      | Adoptable  | 261        | 1500        | Manhole      | Adoptable  |
| 5.018  | 261        | 1500        | Manhole      | Adoptable  | 262        | 1500        | Manhole      | Adoptable  |
| 5.019  | 262        | 1500        | Manhole      | Adoptable  | 263        | 1500        | Manhole      | Adoptable  |
| 5.020  | 263        | 1500        | Manhole      | Adoptable  | 264        | 1500        | Manhole      | Adoptable  |
| 5.021  | 264        | 1500        | Manhole      | Adoptable  | 265        | 1500        | Manhole      | Adoptable  |

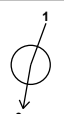
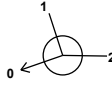
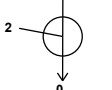
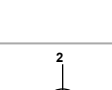
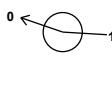
### Manhole Schedule

| Node | Easting<br>(m) | Northing<br>(m) | CL<br>(m) | Depth<br>(m) | Dia<br>(mm) | Connections                                                                          | Link | IL<br>(m) | Dia<br>(mm) |     |
|------|----------------|-----------------|-----------|--------------|-------------|--------------------------------------------------------------------------------------|------|-----------|-------------|-----|
| 201  | 341303.439     | 398529.705      | 26.000    | 1.811        | 1800        |  | 0    | 1.000     | 24.189      | 450 |
| 202  | 341285.794     | 398489.401      | 26.281    | 2.202        | 1800        |  | 1    | 1.000     | 24.079      | 450 |
|      |                |                 |           |              |             |  | 0    | 1.001     | 24.079      | 450 |
| 203  | 341273.582     | 398482.487      | 26.161    | 2.117        | 1800        |  | 1    | 1.001     | 24.044      | 450 |
|      |                |                 |           |              |             |  | 0    | 1.002     | 24.044      | 450 |
| 204  | 341179.793     | 398484.684      | 26.476    | 1.528        | 1800        |  | 0    | 2.000     | 24.948      | 225 |
| 205  | 341203.092     | 398484.051      | 26.799    | 2.931        | 1800        |  | 1    | 2.000     | 24.093      | 225 |
|      |                |                 |           |              |             |  | 2    | 1.002     | 23.868      | 450 |
|      |                |                 |           |              |             |  | 0    | 1.003     | 23.868      | 450 |

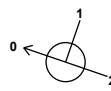
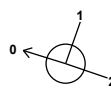
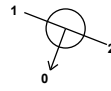
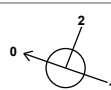
### Manhole Schedule

| Node   | Easting<br>(m) | Northing<br>(m) | CL<br>(m) | Depth<br>(m) | Dia<br>(mm) | Connections                                                                                     | Link | IL<br>(m) | Dia<br>(mm) |     |
|--------|----------------|-----------------|-----------|--------------|-------------|-------------------------------------------------------------------------------------------------|------|-----------|-------------|-----|
| 206    | 341321.334     | 398482.227      | 26.048    | 1.828        | 1800        | <div></div>   | 0    | 3.000     | 24.220      | 450 |
| 207    | 341332.233     | 398467.891      | 26.065    | 1.890        | 1800        | <div></div>   | 1    | 3.000     | 24.175      | 450 |
|        |                |                 |           |              |             |                                                                                                 | 0    | 3.001     | 24.175      | 450 |
| 208    | 341336.532     | 398454.808      | 26.226    | 2.085        | 1800        | <div></div>   | 1    | 3.001     | 24.141      | 450 |
|        |                |                 |           |              |             |                                                                                                 | 0    | 3.002     | 24.141      | 450 |
| 209    | 341337.391     | 398422.104      | 26.618    | 2.559        | 1800        | <div></div>   | 1    | 3.002     | 24.059      | 450 |
|        |                |                 |           |              |             |                                                                                                 | 0    | 3.003     | 24.059      | 450 |
| TANK 1 | 341278.376     | 398419.674      | 26.187    | 2.254        | 1200        | <div></div>   | 0    | 14.000    | 23.933      | 225 |
| 210    | 341278.513     | 398423.358      | 26.187    | 2.275        | 1800        | <div></div> | 1    | 14.000    | 24.450      | 225 |
|        |                |                 |           |              |             |                                                                                                 | 2    | 3.003     | 23.912      | 450 |
|        |                |                 |           |              |             |                                                                                                 | 0    | 3.004     | 23.912      | 450 |
| TANK 2 | 341224.501     | 398420.822      | 26.090    | 2.301        | 1200        | <div></div> | 0    | 15.000    | 23.789      | 225 |
| 211    | 341224.638     | 398424.506      | 26.090    | 2.313        | 1800        | <div></div> | 1    | 15.000    | 24.450      | 225 |
|        |                |                 |           |              |             |                                                                                                 | 2    | 3.004     | 23.777      | 450 |
|        |                |                 |           |              |             |                                                                                                 | 0    | 3.005     | 23.777      | 450 |
| 212    | 341201.865     | 398424.991      | 25.948    | 2.228        | 1800        | <div></div> | 1    | 3.005     | 23.720      | 450 |
|        |                |                 |           |              |             |                                                                                                 | 2    | 1.003     | 23.720      | 450 |
|        |                |                 |           |              |             |                                                                                                 | 0    | 1.004     | 23.720      | 450 |
| TANK 3 | 341143.932     | 398422.174      | 25.574    | 2.053        | 1200        | <div></div> | 0    | 16.000    | 23.521      | 225 |
| 213    | 341144.069     | 398425.858      | 25.574    | 2.074        | 1800        | <div></div> | 1    | 16.000    | 24.350      | 225 |
|        |                |                 |           |              |             |                                                                                                 | 2    | 1.004     | 23.575      | 450 |
|        |                |                 |           |              |             |                                                                                                 | 0    | 1.005     | 23.500      | 525 |
| 214    | 341145.103     | 398492.307      | 26.234    | 2.487        | 1500        | <div></div> | 0    | 4.000     | 23.747      | 450 |
| 215    | 341122.392     | 398500.888      | 26.586    | 2.900        | 1500        | <div></div> | 1    | 4.000     | 23.686      | 450 |
|        |                |                 |           |              |             |                                                                                                 | 0    | 4.001     | 23.686      | 450 |

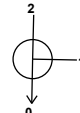
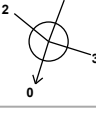
### Manhole Schedule

| Node | Easting (m) | Northing (m) | CL (m) | Depth (m) | Dia (mm) | Connections                                                                          | Link               | IL (m)           | Dia (mm)   |
|------|-------------|--------------|--------|-----------|----------|--------------------------------------------------------------------------------------|--------------------|------------------|------------|
| 216  | 341110.897  | 398469.553   | 25.711 | 2.108     | 1500     |    | 1 4.001            | 23.603           | 450        |
| 217  | 341105.936  | 398441.010   | 25.256 | 1.725     | 1800     |    | 1 4.002            | 23.531           | 450        |
| 218  | 341110.690  | 398426.361   | 25.325 | 1.908     | 1800     |    | 1 4.003<br>2 1.005 | 23.492<br>23.417 | 450<br>525 |
| 219  | 341094.622  | 398420.783   | 25.000 | 1.771     |          |    | 1 1.006            | 23.374           | 525        |
| 220  | 341095.815  | 398384.710   | 25.000 | 1.775     | 1800     |    | 0 5.000            | 23.225           | 525        |
| 221  | 341110.998  | 398398.491   | 24.957 | 1.890     | 1800     |  | 0 6.000            | 23.067           | 525        |
| 222  | 341110.940  | 398381.877   | 24.825 | 1.800     | 2100     |  | 1 6.000<br>2 5.000 | 23.025           | 525        |
| 223  | 341110.872  | 398351.655   | 24.436 | 1.548     | 1500     |  | 1 5.001            | 22.888           | 300        |
| 224  | 341110.814  | 398306.777   | 24.775 | 3.143     | 1500     |  | 0 5.002            | 22.888           | 300        |
| 225  | 341117.234  | 398237.866   | 24.102 | 1.500     | 1800     |  | 1 5.002            | 21.932           | 300        |
| 226  | 341110.910  | 398247.980   | 24.111 | 2.626     | 1800     |  | 0 7.000            | 22.602           | 225        |
| 227  | 341098.139  | 398243.520   | 23.842 | 2.391     | 1800     |  | 1 7.000<br>2 5.003 | 22.531<br>21.485 | 225<br>600 |
| 228  | 341087.117  | 398244.175   | 23.710 | 2.287     | 1800     |  | 0 5.004            | 21.485           | 600        |
|      |             |              |        |           |          |  | 1 5.004            | 21.451           | 600        |
|      |             |              |        |           |          |  | 0 5.005            | 21.451           | 600        |
|      |             |              |        |           |          |  | 1 5.005            | 21.423           | 600        |
|      |             |              |        |           |          |  | 0 5.006            | 21.423           | 600        |

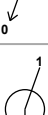
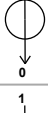
### Manhole Schedule

| Node   | Easting<br>(m) | Northing<br>(m) | CL<br>(m) | Depth<br>(m) | Dia<br>(mm) | Connections                                                                                              | Link        | IL<br>(m)                  | Dia<br>(mm)                |                   |
|--------|----------------|-----------------|-----------|--------------|-------------|----------------------------------------------------------------------------------------------------------|-------------|----------------------------|----------------------------|-------------------|
| TANK 4 | 341033.069     | 398271.576      | 23.294    | 1.972        | 1200        | <br>0                   | 0           | 17.000                     | 21.322                     | 225               |
| 229    | 341030.346     | 398263.665      | 23.294    | 2.021        | 1800        | <br>0<br>1<br>2<br>0   | 1<br>2<br>0 | 17.000<br>5.006<br>5.007   | 21.800<br>21.273<br>21.273 | 225<br>600<br>600 |
| TANK 5 | 340965.118     | 398295.052      | 23.110    | 1.911        | 1200        | <br>0                   | 0           | 18.000                     | 21.199                     | 225               |
| 230    | 340962.275     | 398286.970      | 23.165    | 2.072        | 1800        | <br>0<br>1<br>2<br>0   | 1<br>2<br>0 | 18.000<br>5.007<br>5.008   | 21.650<br>21.093<br>21.093 | 225<br>600<br>600 |
| 231    | 341011.541     | 398478.569      | 25.265    | 1.425        | 1500        | <br>0                   | 0           | 8.000                      | 23.840                     | 225               |
| 232    | 340961.860     | 398497.840      | 26.005    | 1.425        | 1500        | <br>0                | 0           | 9.000                      | 24.580                     | 225               |
| 233    | 340981.440     | 398490.288      | 25.583    | 4.063        | 1800        | <br>1<br>2<br>0      | 1<br>2<br>0 | 9.000<br>8.000<br>8.001    | 22.795<br>21.895<br>21.520 | 225<br>225<br>600 |
| 234    | 340956.567     | 398422.643      | 24.342    | 3.002        | 1800        | <br>1<br>0            | 1<br>0      | 8.001<br>8.002             | 21.340<br>21.340           | 600<br>600        |
| 235    | 341071.311     | 398456.339      | 25.044    | 1.500        | 1500        | <br>0                 | 0           | 10.000                     | 23.544                     | 300               |
| 236    | 341040.122     | 398468.465      | 25.500    | 2.155        | 1500        | <br>0<br>1<br>0      | 1<br>0      | 10.000<br>10.001           | 23.345<br>23.345           | 300<br>300        |
| 237    | 341022.287     | 398422.594      | 24.426    | 1.575        | 1500        | <br>1<br>0            | 1<br>0      | 10.001<br>10.002           | 22.851<br>22.851           | 300<br>300        |
| 238    | 341068.921     | 398373.973      | 24.541    | 1.500        | 1500        | <br>0                 | 0           | 11.000                     | 23.041                     | 300               |
| 239    | 341011.100     | 398393.822      | 23.787    | 2.333        | 2100        | <br>2<br>0<br>1<br>0 | 1<br>2<br>0 | 11.000<br>10.002<br>10.003 | 21.754<br>21.754<br>21.454 | 300<br>300<br>600 |

### Manhole Schedule

| Node   | Easting (m) | Northing (m) | CL (m) | Depth (m) | Dia (mm) | Connections                                                                          | Link                           | IL (m)                     | Dia (mm)          |
|--------|-------------|--------------|--------|-----------|----------|--------------------------------------------------------------------------------------|--------------------------------|----------------------------|-------------------|
| 240    | 340962.994  | 398410.606   | 24.081 | 2.754     | 1800     |    | 1 10.003                       | 21.327                     | 600               |
| 241    | 340956.280  | 398410.738   | 24.156 | 2.846     | 1800     |    | 1 10.004<br>2 8.002<br>0 8.003 | 21.327<br>21.310<br>21.310 | 600<br>600<br>600 |
| 242    | 340955.912  | 398392.026   | 23.773 | 2.510     | 1800     |     | 1 8.003                        | 21.263                     | 600               |
| 243    | 340947.638  | 398366.993   | 23.370 | 2.173     | 1800     |     | 1 8.004                        | 21.197                     | 600               |
| 244    | 341073.154  | 398314.107   | 24.312 | 2.793     | 1800     |     | 0 12.000                       | 21.519                     | 600               |
| 245    | 341012.160  | 398334.828   | 24.213 | 2.855     | 1800     |  | 1 12.000                       | 21.358                     | 600               |
| 246    | 340988.282  | 398337.897   | 23.908 | 2.610     | 1800     |  | 0 12.001                       | 21.358                     | 600               |
| 247    | 340930.701  | 398356.741   | 23.367 | 2.220     | 1800     |  | 1 12.002                       | 21.147                     | 600               |
| 248    | 340916.552  | 398305.027   | 23.268 | 2.255     | 1800     |  | 2 8.005<br>0 8.006             | 21.148<br>21.147           | 600<br>600        |
| TANK 6 | 340925.472  | 398302.476   | 23.110 | 2.250     | 1200     |   | 1 8.006                        | 21.013                     | 600               |
| 249    | 340924.113  | 398298.865   | 23.110 | 2.270     | 2100     |  | 0 8.007                        | 21.013                     | 600               |
| 251    | 340919.275  | 398283.282   | 22.000 | 1.638     |          |   | 1 5.009                        | 20.840                     | 750               |
| 253    | 340883.968  | 398172.442   | 22.000 | 1.950     |          |   | 0 5.013                        | 20.050                     | 750               |

### Manhole Schedule

| Node | Easting<br>(m) | Northing<br>(m) | CL<br>(m) | Depth<br>(m) | Dia<br>(mm) | Connections                                                                                    | Link | IL<br>(m) | Dia<br>(mm) |      |
|------|----------------|-----------------|-----------|--------------|-------------|------------------------------------------------------------------------------------------------|------|-----------|-------------|------|
| 254  | 340880.040     | 398159.342      | 22.000    | 1.984        | 2700        | <div></div>   | 1    | 5.013     | 20.016      | 750  |
|      |                |                 |           |              |             | <div></div>   | 0    | 5.014     | 20.016      | 375  |
| 255  | 340913.022     | 398226.885      | 21.922    | 4.970        | 2400        | <div></div>   | 0    | 13.000    | 16.952      | 1200 |
| 256  | 340893.178     | 398163.029      | 21.998    | 5.213        | 2700        | <div></div>   | 1    | 13.000    | 16.785      | 1200 |
|      |                |                 |           |              |             | <div></div>   | 0    | 13.001    | 16.785      | 1200 |
| 257  | 340886.617     | 398155.499      | 22.045    | 5.885        | 2700        | <div></div>   | 1    | 13.001    | 16.760      | 1200 |
|      |                |                 |           |              |             | <div></div>   | 0    | 13.002    | 16.160      | 1800 |
| 258  | 340880.391     | 398148.782      | 21.906    | 5.769        | 2700        | <div></div>  | 1    | 13.002    | 16.137      | 1800 |
|      |                |                 |           |              |             | <div></div> | 2    | 5.014     | 19.593      | 375  |
|      |                |                 |           |              |             | <div></div> | 0    | 5.015     | 16.137      | 1800 |
| 259  | 340876.924     | 398139.018      | 21.538    | 5.427        | 2700        | <div></div> | 1    | 5.015     | 16.111      | 1800 |
|      |                |                 |           |              |             | <div></div> | 0    | 5.016     | 16.111      | 1800 |
| 260  | 340877.118     | 398094.348      | 19.289    | 3.290        | 2700        | <div></div> | 1    | 5.016     | 15.999      | 1800 |
|      |                |                 |           |              |             | <div></div> | 0    | 5.017     | 15.999      | 375  |
| 261  | 340877.165     | 398083.172      | 19.029    | 3.077        | 1500        | <div></div> | 1    | 5.017     | 15.952      | 375  |
|      |                |                 |           |              |             | <div></div> | 0    | 5.018     | 15.952      | 375  |
| 262  | 340852.304     | 398082.671      | 18.492    | 2.644        | 1500        | <div></div> | 1    | 5.018     | 15.848      | 375  |
|      |                |                 |           |              |             | <div></div> | 0    | 5.019     | 15.848      | 375  |
| 263  | 340824.088     | 398085.970      | 17.908    | 2.178        | 1500        | <div></div> | 1    | 5.019     | 15.730      | 375  |
|      |                |                 |           |              |             | <div></div> | 0    | 5.020     | 15.730      | 375  |
| 264  | 340777.274     | 398097.701      | 16.911    | 3.261        | 1500        | <div></div> | 1    | 5.020     | 13.650      | 375  |
|      |                |                 |           |              |             | <div></div> | 0    | 5.021     | 13.650      | 375  |
| 265  | 340760.612     | 398092.122      | 14.322    | 1.471        | 1500        | <div></div> | 1    | 5.021     | 12.851      | 375  |

### Node 222 Online Hydro-Brake® Control

|                          |        |                         |                                |
|--------------------------|--------|-------------------------|--------------------------------|
| Flap Valve               | x      | Objective               | (HE) Minimise upstream storage |
| Replaces Downstream Link | x      | Sump Available          | ✓                              |
| Invert Level (m)         | 23.025 | Product Number          | CTL-SHE-0228-3000-1675-3000    |
| Design Depth (m)         | 1.675  | Min Outlet Diameter (m) | 0.300                          |
| Design Flow (l/s)        | 30.0   | Min Node Diameter (mm)  | 2100                           |

### Node TANK 1 Offline Orifice Control

|              |     |                  |        |                       |       |
|--------------|-----|------------------|--------|-----------------------|-------|
| Flap Valve   | ✓   | Invert Level (m) | 23.933 | Discharge Coefficient | 0.600 |
| Loop to Node | 210 | Diameter (m)     | 0.225  |                       |       |

### Node TANK 2 Offline Orifice Control

|              |     |                  |        |                       |       |
|--------------|-----|------------------|--------|-----------------------|-------|
| Flap Valve   | ✓   | Invert Level (m) | 23.789 | Discharge Coefficient | 0.600 |
| Loop to Node | 211 | Diameter (m)     | 0.225  |                       |       |

### Node TANK 3 Offline Orifice Control

|              |     |                  |        |                       |       |
|--------------|-----|------------------|--------|-----------------------|-------|
| Flap Valve   | ✓   | Invert Level (m) | 23.521 | Discharge Coefficient | 0.600 |
| Loop to Node | 213 | Diameter (m)     | 0.225  |                       |       |

### Node 254 Online Hydro-Brake® Control

|                          |        |                         |                                |
|--------------------------|--------|-------------------------|--------------------------------|
| Flap Valve               | x      | Objective               | (HE) Minimise upstream storage |
| Replaces Downstream Link | x      | Sump Available          | ✓                              |
| Invert Level (m)         | 20.016 | Product Number          | CTL-SHE-0325-6600-1539-6600    |
| Design Depth (m)         | 1.539  | Min Outlet Diameter (m) | 0.375                          |
| Design Flow (l/s)        | 66.0   | Min Node Diameter (mm)  | 2700                           |

### Node 260 Online Hydro-Brake® Control

|                          |        |                         |                                |
|--------------------------|--------|-------------------------|--------------------------------|
| Flap Valve               | x      | Objective               | (HE) Minimise upstream storage |
| Replaces Downstream Link | x      | Sump Available          | ✓                              |
| Invert Level (m)         | 15.999 | Product Number          | CTL-SHE-0307-7250-3700-7250    |
| Design Depth (m)         | 3.700  | Min Outlet Diameter (m) | 0.000                          |
| Design Flow (l/s)        | 72.5   | Min Node Diameter (mm)  | 0                              |

### Node TANK 4 Offline Orifice Control

|              |     |                  |        |                       |       |
|--------------|-----|------------------|--------|-----------------------|-------|
| Flap Valve   | ✓   | Invert Level (m) | 21.322 | Discharge Coefficient | 0.600 |
| Loop to Node | 229 | Diameter (m)     | 0.225  |                       |       |

### Node TANK 5 Offline Orifice Control

|              |     |                  |        |                       |       |
|--------------|-----|------------------|--------|-----------------------|-------|
| Flap Valve   | ✓   | Invert Level (m) | 21.199 | Discharge Coefficient | 0.600 |
| Loop to Node | 230 | Diameter (m)     | 0.225  |                       |       |

### Node TANK 6 Offline Orifice Control

|              |     |                  |        |                       |       |
|--------------|-----|------------------|--------|-----------------------|-------|
| Flap Valve   | ✓   | Invert Level (m) | 20.860 | Discharge Coefficient | 0.600 |
| Loop to Node | 249 | Diameter (m)     | 0.225  |                       |       |

### Node 220 Flow through Pond Storage Structure

|                             |         |                           |        |                          |         |
|-----------------------------|---------|---------------------------|--------|--------------------------|---------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 1.00   | Main Channel Length (m)  | 36.100  |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 23.225 | Main Channel Slope (1:X) | 10000.0 |
| Safety Factor               | 2.0     | Time to half empty (mins) |        | Main Channel n           | 0.350   |

#### Inlets 219

| 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     | 135.3                  | 135.3                      | 0.500     | 236.2                  | 239.0                      | 1.000     | 366.1                  | 372.5                      | 1.500     | 522.1                  | 532.8                      |
| 0.100     | 149.8                  | 150.4                      | 0.600     | 260.2                  | 263.6                      | 1.100     | 395.2                  | 402.4                      | 1.600     | 557.1                  | 568.8                      |
| 0.200     | 169.9                  | 171.0                      | 0.700     | 285.2                  | 289.3                      | 1.200     | 425.3                  | 433.3                      | 1.700     | 593.4                  | 606.1                      |
| 0.300     | 191.1                  | 192.7                      | 0.800     | 311.1                  | 315.9                      | 1.300     | 456.4                  | 465.3                      |           |                        |                            |
| 0.400     | 213.1                  | 215.3                      | 0.900     | 338.0                  | 343.6                      | 1.400     | 488.6                  | 498.4                      |           |                        |                            |

### Node TANK 1 Depth/Area Storage Structure

|                             |         |               |      |                           |        |
|-----------------------------|---------|---------------|------|---------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0  | Invert Level (m)          | 23.933 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 1.00 | Time to half empty (mins) | 104    |

| 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     | 100.0                  | 100.0                      | 1.200     | 100.0                  | 142.5                      | 1.201     | 0.0                    | 142.5                      |

### Node TANK 2 Depth/Area Storage Structure

|                             |         |               |      |                           |        |
|-----------------------------|---------|---------------|------|---------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0  | Invert Level (m)          | 23.789 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 1.00 | Time to half empty (mins) | 180    |

| 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     | 100.0                  | 100.0                      | 1.200     | 100.0                  | 142.5                      | 1.201     | 0.0                    | 142.5                      |

### Node TANK 3 Depth/Area Storage Structure

|                             |         |               |      |                           |        |
|-----------------------------|---------|---------------|------|---------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0  | Invert Level (m)          | 23.521 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 1.00 | Time to half empty (mins) |        |

| 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     | 100.0                  | 100.0                      | 1.200     | 100.0                  | 142.5                      | 1.201     | 0.0                    | 142.5                      |

### Node 253 Flow through Pond Storage Structure

|                             |         |                           |        |                          |         |
|-----------------------------|---------|---------------------------|--------|--------------------------|---------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 1.00   | Main Channel Length (m)  | 125.000 |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 20.050 | Main Channel Slope (1:X) | 400.0   |
| Safety Factor               | 2.0     | Time to half empty (mins) |        | Main Channel n           | 0.350   |

#### Inlets 251

| 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     | 56.5                   | 56.5                       | 0.500     | 688.5                  | 689.5                      | 1.000     | 1103.8                 | 1108.2                     | 1.500     | 1542.9                 | 1552.0                     |
| 0.100     | 146.7                  | 146.8                      | 0.600     | 769.7                  | 771.3                      | 1.100     | 1189.7                 | 1194.9                     | 1.600     | 1633.7                 | 1643.9                     |
| 0.200     | 274.8                  | 275.0                      | 0.700     | 851.8                  | 854.0                      | 1.200     | 1276.6                 | 1282.7                     |           |                        |                            |
| 0.300     | 455.6                  | 455.9                      | 0.800     | 934.8                  | 937.7                      | 1.300     | 1364.4                 | 1371.4                     |           |                        |                            |
| 0.400     | 608.3                  | 608.8                      | 0.900     | 1018.8                 | 1022.4                     | 1.400     | 1453.2                 | 1461.2                     |           |                        |                            |

#### Node TANK 4 Depth/Area Storage Structure

|                             |         |               |      |                           |        |
|-----------------------------|---------|---------------|------|---------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0  | Invert Level (m)          | 21.322 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 1.00 | Time to half empty (mins) | 0      |

| 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     | 135.0                  | 135.0                      | 0.800     | 135.0                  | 168.0                      | 0.801     | 0.0                    | 168.0                      |

#### Node TANK 5 Depth/Area Storage Structure

|                             |         |               |      |                           |        |
|-----------------------------|---------|---------------|------|---------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0  | Invert Level (m)          | 21.199 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 1.00 | Time to half empty (mins) | 96     |

| 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     | 195.0                  | 195.0                      | 0.800     | 195.0                  | 234.6                      | 0.801     | 0.0                    | 234.6                      |

#### Node TANK 6 Depth/Area Storage Structure

|                             |         |               |      |                           |        |
|-----------------------------|---------|---------------|------|---------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0  | Invert Level (m)          | 20.860 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity      | 1.00 | Time to half empty (mins) | 232    |

| 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     | 126.0                  | 126.0                      | 1.200     | 126.0                  | 173.7                      | 1.201     | 0.0                    | 173.7                      |

**Results for 30 year Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute winter  | 201     | 12          | 24.492    | 0.303     | 55.2         | 0.7722        | 0.0000     | OK         |
| 15 minute winter  | 202     | 13          | 24.541    | 0.462     | 69.2         | 1.1749        | 0.0000     | SURCHARGED |
| 15 minute winter  | 203     | 13          | 24.520    | 0.476     | 114.9        | 1.2118        | 0.0000     | SURCHARGED |
| 15 minute winter  | 204     | 9           | 25.042    | 0.094     | 36.7         | 0.2391        | 0.0000     | OK         |
| 15 minute winter  | 205     | 13          | 24.444    | 0.576     | 163.4        | 1.4659        | 0.0000     | SURCHARGED |
| 15 minute winter  | 206     | 14          | 24.437    | 0.217     | 25.4         | 0.5526        | 0.0000     | OK         |
| 15 minute winter  | 207     | 13          | 24.466    | 0.291     | 43.8         | 0.7416        | 0.0000     | OK         |
| 15 minute winter  | 208     | 13          | 24.448    | 0.307     | 64.6         | 0.7807        | 0.0000     | OK         |
| 15 minute winter  | 209     | 13          | 24.427    | 0.368     | 85.6         | 0.9362        | 0.0000     | OK         |
| 15 minute summer  | TANK 1  | 1           | 23.933    | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 15 minute winter  | 210     | 11          | 24.434    | 0.522     | 114.8        | 1.3289        | 0.0000     | SURCHARGED |
| 15 minute summer  | TANK 2  | 1           | 23.789    | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 15 minute winter  | 211     | 11          | 24.405    | 0.628     | 98.4         | 1.5985        | 0.0000     | SURCHARGED |
| 15 minute winter  | 212     | 11          | 24.375    | 0.655     | 222.9        | 1.6677        | 0.0000     | SURCHARGED |
| 15 minute summer  | TANK 3  | 1           | 23.521    | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 120 minute winter | 213     | 116         | 24.338    | 0.838     | 125.5        | 2.1331        | 0.0000     | SURCHARGED |
| 120 minute winter | 214     | 116         | 24.338    | 0.591     | 10.0         | 1.0436        | 0.0000     | SURCHARGED |
| 120 minute winter | 215     | 116         | 24.338    | 0.652     | 17.6         | 1.1514        | 0.0000     | SURCHARGED |
| 120 minute winter | 216     | 116         | 24.338    | 0.735     | 25.3         | 1.2980        | 0.0000     | SURCHARGED |
| 120 minute winter | 217     | 118         | 24.338    | 0.807     | 27.0         | 2.0528        | 0.0000     | SURCHARGED |
| 120 minute winter | 218     | 118         | 24.338    | 0.921     | 137.6        | 2.3431        | 0.0000     | SURCHARGED |
| 120 minute winter | 219     | 118         | 24.337    | 1.108     | 133.0        | 0.0000        | 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) |
|-----------------------------|---------|-------------------|---------|---------------|----------------|----------|---------------|--------------------|
| 15 minute winter            | 201     | 1.000             | 202     | 52.7          | 0.696          | 0.328    | 5.9269        |                    |
| 15 minute winter            | 202     | 1.001             | 203     | 63.8          | 0.649          | 0.397    | 2.2234        |                    |
| 15 minute winter            | 203     | 1.002             | 205     | 106.8         | 0.893          | 0.665    | 11.1714       |                    |
| 15 minute winter            | 204     | 2.000             | 205     | 36.5          | 2.199          | 0.365    | 0.6388        |                    |
| 15 minute winter            | 205     | 1.003             | 212     | 115.0         | 0.864          | 0.716    | 9.3597        |                    |
| 15 minute winter            | 206     | 3.000             | 207     | 31.6          | 0.472          | 0.197    | 1.6415        |                    |
| 15 minute winter            | 207     | 3.001             | 208     | 57.2          | 0.672          | 0.356    | 1.5403        |                    |
| 15 minute winter            | 208     | 3.002             | 209     | 55.8          | 0.727          | 0.348    | 4.1521        |                    |
| 15 minute winter            | 209     | 3.003             | 210     | 78.1          | 0.833          | 0.486    | 8.7500        |                    |
| 15 minute summer            | TANK 1  | 14.000            | 210     | 0.0           | 0.000          | 0.000    | 0.0000        |                    |
| 15 minute summer            | TANK 1  | Orifice           | 210     | 0.0           |                |          |               | 0.0                |
| 15 minute winter            | 210     | 3.004             | 211     | 80.5          | 0.778          | 0.501    | 8.5380        |                    |
| 15 minute summer            | TANK 2  | 15.000            | 211     | 0.0           | 0.000          | 0.000    | 0.0000        |                    |
| 15 minute summer            | TANK 2  | Orifice           | 211     | 0.0           |                |          |               | 0.0                |
| 15 minute winter            | 211     | 3.005             | 212     | 91.6          | 0.578          | 0.570    | 3.6090        |                    |
| 15 minute winter            | 212     | 1.004             | 213     | 218.9         | 1.382          | 1.362    | 9.1585        |                    |
| 15 minute summer            | TANK 3  | 16.000            | 213     | 0.0           | 0.000          | 0.000    | 0.0000        |                    |
| 15 minute summer            | TANK 3  | Orifice           | 213     | 0.0           |                |          |               | 0.0                |
| 120 minute winter           | 213     | 1.005             | 218     | 117.3         | 0.840          | 0.487    | 7.2118        |                    |
| 120 minute winter           | 214     | 4.000             | 215     | 9.2           | 0.438          | 0.057    | 3.8467        |                    |
| 120 minute winter           | 215     | 4.001             | 216     | 16.1          | 0.531          | 0.100    | 5.2884        |                    |
| 120 minute winter           | 216     | 4.002             | 217     | 20.9          | 0.567          | 0.130    | 4.5903        |                    |
| 120 minute winter           | 217     | 4.003             | 218     | 26.1          | 0.570          | 0.162    | 2.4402        |                    |
| 120 minute winter           | 218     | 1.006             | 219     | 133.0         | 1.087          | 0.552    | 3.6745        |                    |
| 120 minute winter           | 219     | Flow through Pond | 220     | 77.3          | 0.047          | 0.247    | 282.9397      |                    |

**Results for 30 year Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 120 minute winter | 220     | 118         | 24.337    | 1.112     | 93.5         | 2.8308        | 0.0000     | SURCHARGED |
| 120 minute winter | 221     | 118         | 24.337    | 1.269     | 33.3         | 3.2309        | 0.0000     | SURCHARGED |
| 120 minute winter | 222     | 118         | 24.337    | 1.312     | 96.5         | 4.5431        | 0.0000     | SURCHARGED |
| 15 minute winter  | 223     | 11          | 23.054    | 0.166     | 89.6         | 0.2925        | 0.0000     | OK         |
| 15 minute winter  | 224     | 12          | 21.946    | 0.314     | 120.7        | 0.5542        | 0.0000     | OK         |
| 15 minute winter  | 225     | 10          | 22.848    | 0.246     | 47.2         | 0.6270        | 0.0000     | SURCHARGED |
| 15 minute winter  | 226     | 12          | 21.922    | 0.437     | 205.6        | 1.1133        | 0.0000     | OK         |
| 15 minute winter  | 227     | 12          | 21.891    | 0.440     | 219.2        | 1.1193        | 0.0000     | OK         |
| 15 minute winter  | 228     | 12          | 21.852    | 0.429     | 249.4        | 1.0912        | 0.0000     | OK         |
| 15 minute summer  | TANK 4  | 1           | 21.322    | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 15 minute winter  | 229     | 12          | 21.764    | 0.491     | 313.7        | 1.2492        | 0.0000     | OK         |
| 15 minute summer  | TANK 5  | 1           | 21.199    | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 15 minute winter  | 230     | 12          | 21.616    | 0.523     | 356.5        | 1.3308        | 0.0000     | OK         |
| 15 minute winter  | 231     | 10          | 23.923    | 0.083     | 35.7         | 0.1468        | 0.0000     | OK         |
| 15 minute summer  | 232     | 1           | 24.580    | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 15 minute winter  | 233     | 13          | 21.921    | 0.401     | 78.9         | 1.0207        | 0.0000     | OK         |
| 15 minute winter  | 234     | 12          | 21.921    | 0.581     | 94.1         | 1.4796        | 0.0000     | OK         |
| 15 minute winter  | 235     | 10          | 23.684    | 0.140     | 36.0         | 0.2481        | 0.0000     | OK         |
| 15 minute winter  | 236     | 10          | 23.489    | 0.144     | 50.4         | 0.2536        | 0.0000     | OK         |
| 15 minute winter  | 237     | 10          | 22.995    | 0.144     | 91.0         | 0.2548        | 0.0000     | OK         |
| 15 minute winter  | 238     | 10          | 23.175    | 0.134     | 65.4         | 0.2373        | 0.0000     | OK         |
| 15 minute winter  | 239     | 12          | 21.956    | 0.502     | 220.3        | 1.7380        | 0.0000     | OK         |
| 15 minute winter  | 240     | 12          | 21.933    | 0.606     | 227.6        | 1.5431        | 0.0000     | SURCHARGED |

| 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 winter              | 220     | 5.000   | 222     | 91.3          | 0.729          | 0.165    | 3.3243        |                    |
| 120 minute winter              | 221     | 6.000   | 222     | 32.9          | -0.177         | 0.136    | 3.5892        |                    |
| 120 minute winter              | 222     | 5.001   | 223     | 30.0          | 1.242          | 0.403    | 0.8513        |                    |
| 15 minute winter               | 223     | 5.002   | 224     | 89.3          | 2.316          | 0.549    | 1.7314        |                    |
| 15 minute winter               | 224     | 5.003   | 226     | 115.4         | 0.717          | 0.337    | 10.8529       |                    |
| 15 minute winter               | 225     | 7.000   | 226     | 46.2          | 1.186          | 1.154    | 0.4397        |                    |
| 15 minute winter               | 226     | 5.004   | 227     | 199.0         | 0.916          | 0.581    | 2.9862        |                    |
| 15 minute winter               | 227     | 5.005   | 228     | 216.2         | 1.019          | 0.631    | 2.4117        |                    |
| 15 minute winter               | 228     | 5.006   | 229     | 242.2         | 1.084          | 0.707    | 13.8733       |                    |
| 15 minute summer               | TANK 4  | 17.000  | 229     | 0.0           | 0.000          | 0.000    | 0.0000        |                    |
| 15 minute summer               | TANK 4  | Orifice | 229     | 0.0           |                |          |               | 0.0                |
| 15 minute winter               | 229     | 5.007   | 230     | 302.2         | 1.192          | 0.882    | 18.2543       |                    |
| 15 minute summer               | TANK 5  | 18.000  | 230     | 0.0           | 0.000          | 0.000    | 0.0000        |                    |
| 15 minute summer               | TANK 5  | Orifice | 230     | 0.0           |                |          |               | 0.0                |
| 15 minute winter               | 230     | 5.008   | 249     | 353.3         | 1.428          | 1.016    | 9.8757        |                    |
| 15 minute winter               | 231     | 8.000   | 233     | 35.3          | 2.715          | 0.275    | 0.4200        |                    |
| 15 minute summer               | 232     | 9.000   | 233     | 0.0           | 0.000          | 0.000    | 0.0000        |                    |
| 15 minute winter               | 233     | 8.001   | 234     | 59.5          | 0.560          | 0.174    | 17.1413       |                    |
| 15 minute winter               | 234     | 8.002   | 241     | 87.7          | 0.356          | 0.256    | 3.3395        |                    |
| 15 minute winter               | 235     | 10.000  | 236     | 35.5          | 1.081          | 0.415    | 1.0979        |                    |
| 15 minute winter               | 236     | 10.001  | 237     | 49.6          | 1.512          | 0.445    | 1.6429        |                    |
| 15 minute winter               | 237     | 10.002  | 239     | 91.6          | 2.770          | 0.436    | 1.2158        |                    |
| 15 minute winter               | 238     | 11.000  | 239     | 63.8          | 2.138          | 0.395    | 2.3210        |                    |
| 15 minute winter               | 239     | 10.003  | 240     | 203.2         | 0.914          | 0.594    | 13.5881       |                    |
| 15 minute winter               | 240     | 10.004  | 241     | 210.4         | 0.847          | 0.615    | 1.8914        |                    |

**Results for 30 year Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute winter  | 241     | 12          | 21.917    | 0.607     | 293.3        | 1.5451        | 0.0000     | SURCHARGED |
| 15 minute winter  | 242     | 12          | 21.864    | 0.601     | 296.7        | 1.5288        | 0.0000     | SURCHARGED |
| 15 minute winter  | 243     | 12          | 21.795    | 0.598     | 313.4        | 1.5220        | 0.0000     | OK         |
| 15 minute winter  | 244     | 13          | 21.776    | 0.257     | 33.5         | 0.6533        | 0.0000     | OK         |
| 15 minute winter  | 245     | 13          | 21.762    | 0.404     | 59.0         | 1.0272        | 0.0000     | OK         |
| 15 minute winter  | 246     | 13          | 21.750    | 0.452     | 116.7        | 1.1498        | 0.0000     | OK         |
| 15 minute winter  | 247     | 14          | 21.736    | 0.589     | 376.5        | 1.4999        | 0.0000     | OK         |
| 15 minute winter  | 248     | 12          | 21.553    | 0.540     | 378.0        | 1.3755        | 0.0000     | OK         |
| 15 minute summer  | TANK 6  | 1           | 20.860    | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 30 minute winter  | 249     | 24          | 21.472    | 0.632     | 666.1        | 2.1909        | 0.0000     | OK         |
| 30 minute winter  | 251     | 26          | 21.439    | 1.077     | 665.5        | 0.0000        | 0.0000     | OK         |
| 180 minute winter | 253     | 176         | 21.292    | 1.242     | 242.0        | 0.0000        | 0.0000     | SURCHARGED |
| 180 minute winter | 254     | 176         | 21.292    | 1.276     | 69.2         | 7.3056        | 0.0000     | SURCHARGED |
| 360 minute winter | 255     | 240         | 17.085    | 0.133     | 6.5          | 0.6008        | 0.0000     | OK         |
| 360 minute winter | 256     | 240         | 17.085    | 0.300     | 12.5         | 1.7157        | 0.0000     | OK         |
| 360 minute winter | 257     | 240         | 17.085    | 0.925     | 13.2         | 5.2942        | 0.0000     | OK         |
| 360 minute winter | 258     | 240         | 17.085    | 0.948     | 80.4         | 5.4259        | 0.0000     | OK         |
| 360 minute winter | 259     | 240         | 17.085    | 0.974     | 79.6         | 5.5744        | 0.0000     | OK         |
| 360 minute winter | 260     | 240         | 17.084    | 1.085     | 75.1         | 6.2153        | 0.0000     | SURCHARGED |
| 360 minute winter | 261     | 240         | 16.166    | 0.214     | 71.8         | 0.3788        | 0.0000     | OK         |
| 360 minute winter | 262     | 240         | 16.050    | 0.202     | 71.8         | 0.3568        | 0.0000     | OK         |
| 360 minute winter | 263     | 240         | 15.836    | 0.106     | 71.8         | 0.1872        | 0.0000     | OK         |
| 360 minute winter | 264     | 240         | 13.761    | 0.111     | 71.8         | 0.1963        | 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) |
|-----------------------------|---------|-------------------|---------|---------------|----------------|----------|---------------|--------------------|
| 15 minute winter            | 241     | 8.003             | 242     | 284.0         | 1.051          | 0.829    | 5.2701        | 0.0                |
| 15 minute winter            | 242     | 8.004             | 243     | 290.2         | 1.054          | 0.848    | 7.4204        |                    |
| 15 minute winter            | 243     | 8.005             | 247     | 313.8         | 1.123          | 0.916    | 5.5486        |                    |
| 15 minute winter            | 244     | 12.000            | 245     | 21.8          | 0.383          | 0.064    | 10.1993       |                    |
| 15 minute winter            | 245     | 12.001            | 246     | 49.7          | 0.443          | 0.145    | 5.1671        |                    |
| 15 minute winter            | 246     | 12.002            | 247     | 94.9          | 0.721          | 0.277    | 15.3637       |                    |
| 15 minute winter            | 247     | 8.006             | 248     | 378.0         | 1.377          | 1.104    | 14.6484       |                    |
| 15 minute winter            | 248     | 8.007             | 249     | 381.2         | 1.554          | 1.146    | 2.4426        |                    |
| 15 minute summer            | TANK 6  | 19.000            | 249     | 0.0           | 0.000          | 0.000    | 0.0000        |                    |
| 15 minute summer            | TANK 6  | Orifice           | 249     | 0.0           |                |          |               |                    |
| 30 minute winter            | 249     | 5.009             | 251     | 665.5         | 1.960          | 1.082    | 6.4951        | 2003.4             |
| 30 minute winter            | 251     | Flow through Pond | 253     | 483.7         | 0.140          | 0.296    | 541.3917      |                    |
| 180 minute winter           | 253     | 5.013             | 254     | 69.2          | 0.317          | 0.112    | 6.0191        |                    |
| 180 minute winter           | 254     | 5.014             | 258     | 66.0          | 2.513          | 0.164    | 0.2777        |                    |
| 360 minute winter           | 255     | 13.000            | 256     | 6.5           | 0.328          | 0.003    | 9.5970        |                    |
| 360 minute winter           | 256     | 13.001            | 257     | 11.3          | 0.564          | 0.005    | 2.3234        |                    |
| 360 minute winter           | 257     | 13.002            | 258     | 11.2          | 0.273          | 0.002    | 12.2044       |                    |
| 360 minute winter           | 258     | 5.015             | 259     | 77.1          | 0.449          | 0.013    | 14.2602       |                    |
| 360 minute winter           | 259     | 5.016             | 260     | 72.0          | 0.158          | 0.012    | 66.9544       |                    |
| 360 minute winter           | 260     | 5.017             | 261     | 71.8          | 1.058          | 0.558    | 0.7587        |                    |
| 360 minute winter           | 261     | 5.018             | 262     | 71.8          | 1.144          | 0.558    | 1.5612        |                    |
| 360 minute winter           | 262     | 5.019             | 263     | 71.8          | 1.687          | 0.558    | 1.2215        |                    |
| 360 minute winter           | 263     | 5.020             | 264     | 71.8          | 2.721          | 0.172    | 1.2742        |                    |
| 360 minute winter           | 264     | 5.021             | 265     | 71.8          | 2.779          | 0.168    | 0.4544        |                    |

**Results for 30 year Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 360 minute winter | 265        | 240            | 12.954       | 0.103        | 71.8            | 0.0000           | 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) |
|--------------------------------|------------|------|------------|------------------|-------------------|----------|------------------|-----------------------|
|--------------------------------|------------|------|------------|------------------|-------------------|----------|------------------|-----------------------|

**Results for 100 year Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute winter  | 201     | 12          | 25.107    | 0.918     | 71.5         | 2.3363        | 0.0000     | SURCHARGED |
| 15 minute winter  | 202     | 12          | 25.042    | 0.963     | 117.2        | 2.4496        | 0.0000     | SURCHARGED |
| 15 minute winter  | 203     | 11          | 25.068    | 1.024     | 131.3        | 2.6068        | 0.0000     | SURCHARGED |
| 15 minute winter  | 204     | 12          | 25.077    | 0.129     | 47.5         | 0.3296        | 0.0000     | OK         |
| 15 minute winter  | 205     | 12          | 24.951    | 1.083     | 197.0        | 2.7556        | 0.0000     | SURCHARGED |
| 15 minute winter  | 206     | 12          | 24.973    | 0.753     | 91.3         | 1.9154        | 0.0000     | SURCHARGED |
| 15 minute winter  | 207     | 12          | 24.830    | 0.655     | 67.9         | 1.6660        | 0.0000     | SURCHARGED |
| 15 minute winter  | 208     | 12          | 24.882    | 0.741     | 73.4         | 1.8865        | 0.0000     | SURCHARGED |
| 15 minute winter  | 209     | 12          | 24.899    | 0.840     | 120.6        | 2.1381        | 0.0000     | SURCHARGED |
| 15 minute winter  | TANK 1  | 16          | 24.049    | 0.116     | 79.9         | 11.7665       | 0.0000     | OK         |
| 30 minute winter  | 210     | 20          | 24.711    | 0.799     | 128.2        | 2.0334        | 0.0000     | SURCHARGED |
| 15 minute winter  | TANK 2  | 15          | 23.897    | 0.108     | 76.1         | 10.9080       | 0.0000     | OK         |
| 15 minute winter  | 211     | 12          | 24.684    | 0.907     | 100.6        | 2.3085        | 0.0000     | SURCHARGED |
| 15 minute winter  | 212     | 12          | 24.708    | 0.988     | 255.5        | 2.5145        | 0.0000     | SURCHARGED |
| 120 minute winter | TANK 3  | 118         | 24.457    | 0.936     | 77.2         | 94.6611       | 0.0000     | SURCHARGED |
| 180 minute winter | 213     | 172         | 24.455    | 0.955     | 106.3        | 2.4306        | 0.0000     | SURCHARGED |
| 180 minute winter | 214     | 172         | 24.455    | 0.708     | 9.7          | 1.2505        | 0.0000     | SURCHARGED |
| 180 minute winter | 215     | 172         | 24.455    | 0.769     | 17.4         | 1.3580        | 0.0000     | SURCHARGED |
| 180 minute winter | 216     | 172         | 24.454    | 0.851     | 26.9         | 1.5046        | 0.0000     | SURCHARGED |
| 180 minute winter | 217     | 172         | 24.454    | 0.923     | 33.0         | 2.3501        | 0.0000     | SURCHARGED |
| 180 minute winter | 218     | 172         | 24.454    | 1.037     | 128.0        | 2.6399        | 0.0000     | SURCHARGED |
| 180 minute winter | 219     | 176         | 24.454    | 1.225     | 127.2        | 0.0000        | 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) |
|-----------------------------|---------|-------------------|---------|---------------|----------------|----------|---------------|--------------------|
| 15 minute winter            | 201     | 1.000             | 202     | 61.0          | 0.712          | 0.380    | 6.9710        |                    |
| 15 minute winter            | 202     | 1.001             | 203     | 78.8          | 0.648          | 0.490    | 2.2234        |                    |
| 15 minute winter            | 203     | 1.002             | 205     | 130.9         | 0.892          | 0.815    | 11.1714       |                    |
| 15 minute winter            | 204     | 2.000             | 205     | 47.5          | 2.222          | 0.475    | 0.7390        |                    |
| 15 minute winter            | 205     | 1.003             | 212     | 188.0         | 1.187          | 1.170    | 9.3597        |                    |
| 15 minute winter            | 206     | 3.000             | 207     | -60.3         | 0.480          | -0.376   | 2.8534        |                    |
| 15 minute winter            | 207     | 3.001             | 208     | 63.8          | 0.697          | 0.397    | 2.1819        |                    |
| 15 minute winter            | 208     | 3.002             | 209     | 74.3          | 0.737          | 0.462    | 5.1835        |                    |
| 15 minute winter            | 209     | 3.003             | 210     | 116.4         | 0.844          | 0.725    | 9.3309        |                    |
| 15 minute winter            | TANK 1  | 14.000            | 210     | -79.9         | -4.213         | -2.010   | 0.0774        |                    |
| 15 minute winter            | TANK 1  | Orifice           | 210     | 4.7           |                |          |               | 11.6               |
| 30 minute winter            | 210     | 3.004             | 211     | 67.9          | 0.682          | 0.423    | 8.5380        |                    |
| 15 minute winter            | TANK 2  | 15.000            | 211     | -76.1         | -4.475         | -1.914   | 0.0779        |                    |
| 15 minute winter            | TANK 2  | Orifice           | 211     | 4.3           |                |          |               | 10.5               |
| 15 minute winter            | 211     | 3.005             | 212     | 80.5          | 0.557          | 0.501    | 3.6090        |                    |
| 15 minute winter            | 212     | 1.004             | 213     | 257.6         | 1.626          | 1.603    | 9.1585        |                    |
| 120 minute winter           | TANK 3  | 16.000            | 213     | -77.2         | -4.559         | -1.942   | 0.1063        |                    |
| 120 minute winter           | TANK 3  | Orifice           | 213     | 26.4          |                |          |               | 96.8               |
| 180 minute winter           | 213     | 1.005             | 218     | 99.2          | 0.774          | 0.412    | 7.2118        |                    |
| 180 minute winter           | 214     | 4.000             | 215     | 8.8           | 0.411          | 0.055    | 3.8467        |                    |
| 180 minute winter           | 215     | 4.001             | 216     | 16.8          | 0.496          | 0.105    | 5.2884        |                    |
| 180 minute winter           | 216     | 4.002             | 217     | 26.3          | 0.539          | 0.164    | 4.5903        |                    |
| 180 minute winter           | 217     | 4.003             | 218     | 32.1          | 0.562          | 0.200    | 2.4402        |                    |
| 180 minute winter           | 218     | 1.006             | 219     | 127.2         | 0.991          | 0.528    | 3.6745        |                    |
| 180 minute winter           | 219     | Flow through Pond | 220     | 70.0          | 0.045          | 0.224    | 331.4303      |                    |

**Results for 100 year Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 180 minute winter | 220     | 176         | 24.454    | 1.229     | 84.9         | 3.1276        | 0.0000     | SURCHARGED |
| 180 minute winter | 221     | 172         | 24.453    | 1.386     | 29.0         | 3.5270        | 0.0000     | SURCHARGED |
| 180 minute winter | 222     | 176         | 24.453    | 1.428     | 85.3         | 4.9465        | 0.0000     | SURCHARGED |
| 15 minute winter  | 223     | 11          | 23.080    | 0.192     | 113.1        | 0.3387        | 0.0000     | OK         |
| 15 minute winter  | 224     | 12          | 22.192    | 0.560     | 153.0        | 0.9898        | 0.0000     | OK         |
| 15 minute winter  | 225     | 10          | 22.949    | 0.347     | 61.2         | 0.8825        | 0.0000     | SURCHARGED |
| 15 minute winter  | 226     | 12          | 22.138    | 0.653     | 256.1        | 1.6614        | 0.0000     | SURCHARGED |
| 15 minute winter  | 227     | 12          | 22.085    | 0.634     | 262.1        | 1.6144        | 0.0000     | SURCHARGED |
| 15 minute winter  | 228     | 12          | 22.046    | 0.623     | 298.4        | 1.5849        | 0.0000     | SURCHARGED |
| 15 minute winter  | TANK 4  | 15          | 21.344    | 0.022     | 21.3         | 2.9659        | 0.0000     | OK         |
| 15 minute winter  | 229     | 11          | 21.927    | 0.654     | 373.3        | 1.6633        | 0.0000     | SURCHARGED |
| 15 minute winter  | TANK 5  | 15          | 21.203    | 0.004     | 6.0          | 0.8666        | 0.0000     | OK         |
| 15 minute winter  | 230     | 11          | 21.721    | 0.628     | 428.6        | 1.5985        | 0.0000     | SURCHARGED |
| 15 minute winter  | 231     | 10          | 23.936    | 0.096     | 46.2         | 0.1699        | 0.0000     | OK         |
| 15 minute summer  | 232     | 1           | 24.580    | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 15 minute winter  | 233     | 13          | 22.430    | 0.910     | 102.2        | 2.3157        | 0.0000     | SURCHARGED |
| 15 minute winter  | 234     | 13          | 22.387    | 1.047     | 146.9        | 2.6636        | 0.0000     | SURCHARGED |
| 15 minute winter  | 235     | 10          | 23.709    | 0.165     | 46.7         | 0.2918        | 0.0000     | OK         |
| 15 minute winter  | 236     | 10          | 23.514    | 0.169     | 65.3         | 0.2986        | 0.0000     | OK         |
| 15 minute winter  | 237     | 12          | 23.025    | 0.174     | 117.8        | 0.3072        | 0.0000     | OK         |
| 15 minute winter  | 238     | 10          | 23.193    | 0.152     | 84.7         | 0.2683        | 0.0000     | OK         |
| 15 minute winter  | 239     | 13          | 22.481    | 1.027     | 290.0        | 3.5584        | 0.0000     | SURCHARGED |
| 15 minute winter  | 240     | 13          | 22.404    | 1.077     | 281.6        | 2.7405        | 0.0000     | SURCHARGED |

| Link Event<br>(Upstream Depth) | US Node | Link    | DS Node | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|---------|---------|---------|---------------|----------------|----------|---------------|--------------------|
| 180 minute winter              | 220     | 5.000   | 222     | 82.6          | 0.797          | 0.149    | 3.3243        |                    |
| 180 minute winter              | 221     | 6.000   | 222     | 34.3          | 0.195          | 0.142    | 3.5892        |                    |
| 180 minute winter              | 222     | 5.001   | 223     | 30.0          | 1.239          | 0.402    | 0.8326        |                    |
| 15 minute winter               | 223     | 5.002   | 224     | 111.6         | 2.431          | 0.686    | 2.3823        |                    |
| 15 minute winter               | 224     | 5.003   | 226     | 139.4         | 0.717          | 0.407    | 16.3288       |                    |
| 15 minute winter               | 225     | 7.000   | 226     | 59.7          | 1.504          | 1.494    | 0.4595        |                    |
| 15 minute winter               | 226     | 5.004   | 227     | 234.3         | 0.946          | 0.684    | 3.8102        |                    |
| 15 minute winter               | 227     | 5.005   | 228     | 252.6         | 1.039          | 0.738    | 3.1100        |                    |
| 15 minute winter               | 228     | 5.006   | 229     | 284.9         | 1.094          | 0.832    | 16.9071       |                    |
| 15 minute winter               | TANK 4  | 17.000  | 229     | -21.3         | -2.875         | -0.536   | 0.0963        |                    |
| 15 minute winter               | TANK 4  | Orifice | 229     | 0.8           |                |          |               | 1.4                |
| 15 minute winter               | 229     | 5.007   | 230     | 345.2         | 1.226          | 1.008    | 20.2667       |                    |
| 15 minute winter               | TANK 5  | 18.000  | 230     | -6.0          | -1.744         | -0.151   | 0.0461        |                    |
| 15 minute winter               | TANK 5  | Orifice | 230     | 0.1           |                |          |               | 0.2                |
| 15 minute winter               | 230     | 5.008   | 249     | 423.7         | 1.524          | 1.219    | 11.1534       |                    |
| 15 minute winter               | 231     | 8.000   | 233     | 45.7          | 2.903          | 0.356    | 0.8820        |                    |
| 15 minute summer               | 232     | 9.000   | 233     | 0.0           | 0.000          | 0.000    | 0.0000        |                    |
| 15 minute winter               | 233     | 8.001   | 234     | 99.8          | 0.551          | 0.292    | 20.3013       |                    |
| 15 minute winter               | 234     | 8.002   | 241     | 131.4         | 0.466          | 0.384    | 3.3542        |                    |
| 15 minute winter               | 235     | 10.000  | 236     | 46.0          | 1.141          | 0.538    | 1.3488        |                    |
| 15 minute winter               | 236     | 10.001  | 237     | 64.7          | 1.607          | 0.581    | 2.0103        |                    |
| 15 minute winter               | 237     | 10.002  | 239     | 118.4         | 2.806          | 0.563    | 1.7401        |                    |
| 15 minute winter               | 238     | 11.000  | 239     | 83.9          | 2.156          | 0.519    | 3.2129        |                    |
| 15 minute winter               | 239     | 10.003  | 240     | 256.9         | 0.939          | 0.750    | 14.3515       |                    |
| 15 minute winter               | 240     | 10.004  | 241     | 278.6         | 0.989          | 0.814    | 1.8915        |                    |

**Results for 100 year Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute winter  | 241     | 13          | 22.379    | 1.069     | 401.2        | 2.7213        | 0.0000     | SURCHARGED |
| 15 minute winter  | 242     | 13          | 22.293    | 1.030     | 410.3        | 2.6223        | 0.0000     | SURCHARGED |
| 15 minute winter  | 243     | 13          | 22.182    | 0.985     | 428.6        | 2.5065        | 0.0000     | SURCHARGED |
| 15 minute winter  | 244     | 12          | 22.255    | 0.736     | 77.4         | 1.8740        | 0.0000     | SURCHARGED |
| 15 minute winter  | 245     | 13          | 22.116    | 0.758     | 116.8        | 1.9294        | 0.0000     | SURCHARGED |
| 15 minute winter  | 246     | 13          | 22.123    | 0.825     | 145.7        | 2.0990        | 0.0000     | SURCHARGED |
| 15 minute winter  | 247     | 13          | 22.081    | 0.934     | 521.1        | 2.3781        | 0.0000     | SURCHARGED |
| 15 minute winter  | 248     | 13          | 21.703    | 0.690     | 519.7        | 1.7571        | 0.0000     | SURCHARGED |
| 30 minute winter  | TANK 6  | 28          | 20.869    | 0.009     | 5.6          | 1.1910        | 0.0000     | OK         |
| 30 minute winter  | 249     | 24          | 21.591    | 0.751     | 826.6        | 2.6026        | 0.0000     | SURCHARGED |
| 30 minute winter  | 251     | 25          | 21.536    | 1.174     | 811.0        | 0.0000        | 0.0000     | OK         |
| 180 minute winter | 253     | 180         | 21.493    | 1.443     | 270.3        | 0.0000        | 0.0000     | SURCHARGED |
| 180 minute winter | 254     | 180         | 21.492    | 1.476     | 69.2         | 8.4533        | 0.0000     | SURCHARGED |
| 240 minute winter | 255     | 188         | 17.265    | 0.313     | 11.6         | 1.4169        | 0.0000     | OK         |
| 240 minute winter | 256     | 184         | 17.264    | 0.479     | 21.8         | 2.7454        | 0.0000     | OK         |
| 240 minute winter | 257     | 184         | 17.264    | 1.104     | 20.8         | 6.3239        | 0.0000     | OK         |
| 240 minute winter | 258     | 184         | 17.264    | 1.127     | 88.2         | 6.4555        | 0.0000     | OK         |
| 240 minute winter | 259     | 184         | 17.264    | 1.153     | 87.3         | 6.6041        | 0.0000     | OK         |
| 240 minute winter | 260     | 180         | 17.264    | 1.265     | 79.8         | 7.2452        | 0.0000     | SURCHARGED |
| 240 minute winter | 261     | 184         | 16.168    | 0.216     | 72.4         | 0.3809        | 0.0000     | OK         |
| 240 minute winter | 262     | 184         | 16.051    | 0.203     | 72.4         | 0.3585        | 0.0000     | OK         |
| 240 minute winter | 263     | 184         | 15.836    | 0.106     | 72.4         | 0.1880        | 0.0000     | OK         |
| 240 minute winter | 264     | 184         | 13.762    | 0.112     | 72.4         | 0.1973        | 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) |
|-----------------------------|---------|-------------------|---------|---------------|----------------|----------|---------------|--------------------|
| 15 minute winter            | 241     | 8.003             | 242     | 396.6         | 1.408          | 1.158    | 5.2719        |                    |
| 15 minute winter            | 242     | 8.004             | 243     | 398.5         | 1.415          | 1.164    | 7.4264        |                    |
| 15 minute winter            | 243     | 8.005             | 247     | 416.5         | 1.479          | 1.216    | 5.5766        |                    |
| 15 minute winter            | 244     | 12.000            | 245     | -53.4         | 0.394          | -0.156   | 18.1451       |                    |
| 15 minute winter            | 245     | 12.001            | 246     | 97.6          | 0.428          | 0.285    | 6.7811        |                    |
| 15 minute winter            | 246     | 12.002            | 247     | 144.0         | 0.747          | 0.420    | 17.0657       |                    |
| 15 minute winter            | 247     | 8.006             | 248     | 519.7         | 1.845          | 1.518    | 15.1021       |                    |
| 15 minute winter            | 248     | 8.007             | 249     | 522.6         | 1.856          | 1.572    | 2.7216        |                    |
| 30 minute winter            | TANK 6  | 19.000            | 249     | -5.6          | -3.146         | -0.140   | 0.0099        |                    |
| 30 minute winter            | TANK 6  | Orifice           | 249     | 0.0           |                |          |               | 0.0                |
| 30 minute winter            | 249     | 5.009             | 251     | 811.0         | 2.105          | 1.318    | 7.1640        |                    |
| 30 minute winter            | 251     | Flow through Pond | 253     | 640.0         | 0.152          | 0.392    | 713.3173      |                    |
| 180 minute winter           | 253     | 5.013             | 254     | 69.2          | 0.370          | 0.112    | 6.0191        |                    |
| 180 minute winter           | 254     | 5.014             | 258     | 66.0          | 2.513          | 0.164    | 0.2777        |                    |
| 240 minute winter           | 255     | 13.000            | 256     | 11.3          | 0.381          | 0.005    | 21.8541       |                    |
| 240 minute winter           | 256     | 13.001            | 257     | 17.7          | 0.635          | 0.008    | 4.3428        |                    |
| 240 minute winter           | 257     | 13.002            | 258     | 17.3          | 0.330          | 0.003    | 15.1258       |                    |
| 240 minute winter           | 258     | 5.015             | 259     | 83.2          | 0.444          | 0.014    | 17.5506       |                    |
| 240 minute winter           | 259     | 5.016             | 260     | 74.3          | 0.199          | 0.012    | 80.8883       |                    |
| 240 minute winter           | 260     | 5.017             | 261     | 72.4          | 1.060          | 0.563    | 0.7638        |                    |
| 240 minute winter           | 261     | 5.018             | 262     | 72.4          | 1.146          | 0.563    | 1.5711        |                    |
| 240 minute winter           | 262     | 5.019             | 263     | 72.4          | 1.691          | 0.563    | 1.2288        |                    |
| 240 minute winter           | 263     | 5.020             | 264     | 72.4          | 2.727          | 0.174    | 1.2823        |                    |
| 240 minute winter           | 264     | 5.021             | 265     | 72.4          | 2.785          | 0.169    | 0.4572        | 1710.8             |

**Results for 100 year Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event        | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m³) | Flood<br>(m³) | Status |
|-------------------|------------|----------------|--------------|--------------|-----------------|------------------|---------------|--------|
| 240 minute winter | 265        | 184            | 12.954       | 0.103        | 72.4            | 0.0000           | 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) |
|--------------------------------|------------|------|------------|------------------|-------------------|----------|------------------|-----------------------|
|--------------------------------|------------|------|------------|------------------|-------------------|----------|------------------|-----------------------|

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute winter  | 201     | 11          | 26.000    | 1.811     | 143.7        | 4.6090        | 0.9333     | FLOOD      |
| 15 minute winter  | 202     | 11          | 25.993    | 1.914     | 126.8        | 4.8719        | 0.0000     | FLOOD RISK |
| 15 minute winter  | 203     | 11          | 25.975    | 1.931     | 195.5        | 4.9141        | 0.0000     | FLOOD RISK |
| 15 minute winter  | 204     | 11          | 25.999    | 1.051     | 68.9         | 2.6747        | 0.0000     | SURCHARGED |
| 15 minute winter  | 205     | 11          | 25.653    | 1.785     | 286.2        | 4.5440        | 0.0000     | SURCHARGED |
| 15 minute winter  | 206     | 11          | 25.500    | 1.280     | 47.8         | 3.2568        | 0.0000     | SURCHARGED |
| 15 minute winter  | 207     | 11          | 25.443    | 1.268     | 85.2         | 3.2259        | 0.0000     | SURCHARGED |
| 15 minute winter  | 208     | 11          | 25.426    | 1.285     | 133.8        | 3.2698        | 0.0000     | SURCHARGED |
| 15 minute winter  | 209     | 11          | 25.418    | 1.359     | 161.3        | 3.4577        | 0.0000     | SURCHARGED |
| 180 minute winter | TANK 1  | 176         | 24.724    | 0.791     | 40.1         | 80.0083       | 0.0000     | SURCHARGED |
| 15 minute winter  | 210     | 11          | 25.190    | 1.278     | 231.0        | 3.2520        | 0.0000     | SURCHARGED |
| 180 minute winter | TANK 2  | 176         | 24.724    | 0.935     | 46.8         | 94.5496       | 0.0000     | SURCHARGED |
| 15 minute winter  | 211     | 11          | 25.121    | 1.344     | 173.4        | 3.4214        | 0.0000     | SURCHARGED |
| 15 minute winter  | 212     | 11          | 25.130    | 1.410     | 351.2        | 3.5887        | 0.0000     | SURCHARGED |
| 180 minute winter | TANK 3  | 176         | 24.721    | 1.200     | 105.1        | 121.3866      | 0.0000     | SURCHARGED |
| 180 minute winter | 213     | 176         | 24.721    | 1.221     | 142.8        | 3.1083        | 0.0000     | SURCHARGED |
| 180 minute winter | 214     | 180         | 24.721    | 0.974     | 14.0         | 1.7203        | 0.0000     | SURCHARGED |
| 180 minute winter | 215     | 180         | 24.721    | 1.035     | 26.2         | 1.8280        | 0.0000     | SURCHARGED |
| 180 minute winter | 216     | 180         | 24.720    | 1.117     | 40.5         | 1.9746        | 0.0000     | SURCHARGED |
| 180 minute winter | 217     | 176         | 24.720    | 1.189     | 49.9         | 3.0272        | 0.0000     | SURCHARGED |
| 180 minute winter | 218     | 176         | 24.720    | 1.303     | 176.6        | 3.3173        | 0.0000     | SURCHARGED |
| 180 minute winter | 219     | 180         | 24.720    | 1.491     | 175.8        | 0.0000        | 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) |
|-----------------------------|---------|-------------------|---------|---------------|----------------|----------|---------------|--------------------|
| 15 minute winter            | 201     | 1.000             | 202     | 95.8          | 0.722          | 0.596    | 6.9710        |                    |
| 15 minute winter            | 202     | 1.001             | 203     | 116.9         | 0.738          | 0.728    | 2.2234        |                    |
| 15 minute winter            | 203     | 1.002             | 205     | 194.1         | 1.225          | 1.208    | 11.1714       |                    |
| 15 minute winter            | 204     | 2.000             | 205     | 62.5          | 2.250          | 0.625    | 0.9270        |                    |
| 15 minute winter            | 205     | 1.003             | 212     | 290.6         | 1.834          | 1.809    | 9.3597        |                    |
| 15 minute winter            | 206     | 3.000             | 207     | 57.1          | 0.492          | 0.355    | 2.8534        |                    |
| 15 minute winter            | 207     | 3.001             | 208     | 111.0         | 0.718          | 0.691    | 2.1819        |                    |
| 15 minute winter            | 208     | 3.002             | 209     | 114.8         | 0.747          | 0.714    | 5.1835        |                    |
| 15 minute winter            | 209     | 3.003             | 210     | 177.1         | 1.118          | 1.102    | 9.3309        |                    |
| 180 minute winter           | TANK 1  | 14.000            | 210     | -40.1         | -3.015         | -1.010   | 0.1466        |                    |
| 180 minute winter           | TANK 1  | Orifice           | 210     | 27.8          |                |          |               | 82.4               |
| 15 minute winter            | 210     | 3.004             | 211     | 79.6          | 0.797          | 0.496    | 8.5380        |                    |
| 180 minute winter           | TANK 2  | 15.000            | 211     | -46.8         | -3.311         | -1.177   | 0.1466        |                    |
| 180 minute winter           | TANK 2  | Orifice           | 211     | 26.8          |                |          |               | 69.5               |
| 15 minute winter            | 211     | 3.005             | 212     | 71.3          | 0.569          | 0.444    | 3.6090        |                    |
| 15 minute winter            | 212     | 1.004             | 213     | 305.0         | 1.925          | 1.899    | 9.1585        |                    |
| 180 minute winter           | TANK 3  | 16.000            | 213     | -105.1        | -3.787         | -2.644   | 0.1466        |                    |
| 180 minute winter           | TANK 3  | Orifice           | 213     | 25.8          |                |          |               | 66.9               |
| 180 minute winter           | 213     | 1.005             | 218     | 123.0         | 0.729          | 0.510    | 7.2118        |                    |
| 180 minute winter           | 214     | 4.000             | 215     | 13.7          | 0.404          | 0.085    | 3.8467        |                    |
| 180 minute winter           | 215     | 4.001             | 216     | 25.9          | 0.498          | 0.161    | 5.2884        |                    |
| 180 minute winter           | 216     | 4.002             | 217     | 40.2          | 0.521          | 0.250    | 4.5903        |                    |
| 180 minute winter           | 217     | 4.003             | 218     | 49.5          | 0.578          | 0.308    | 2.4402        |                    |
| 180 minute winter           | 218     | 1.006             | 219     | 175.8         | 0.945          | 0.729    | 3.6745        |                    |
| 180 minute winter           | 219     | Flow through Pond | 220     | 90.6          | 0.053          | 0.290    | 458.2071      |                    |

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 180 minute winter | 220     | 180         | 24.720    | 1.495     | 90.6         | 3.8047        | 0.0000     | FLOOD RISK |
| 180 minute winter | 221     | 176         | 24.719    | 1.652     | 21.3         | 4.2039        | 0.0000     | FLOOD RISK |
| 180 minute winter | 222     | 180         | 24.719    | 1.694     | 74.6         | 5.8675        | 0.0000     | FLOOD RISK |
| 15 minute winter  | 223     | 11          | 23.713    | 0.825     | 145.2        | 1.4578        | 0.0000     | SURCHARGED |
| 15 minute winter  | 224     | 11          | 23.093    | 1.461     | 195.3        | 2.5810        | 0.0000     | SURCHARGED |
| 15 minute winter  | 225     | 11          | 23.462    | 0.860     | 88.7         | 2.1883        | 0.0000     | SURCHARGED |
| 15 minute winter  | 226     | 11          | 23.065    | 1.580     | 340.1        | 4.0219        | 0.0000     | SURCHARGED |
| 15 minute winter  | 227     | 11          | 23.002    | 1.551     | 383.7        | 3.9478        | 0.0000     | SURCHARGED |
| 15 minute winter  | 228     | 11          | 22.926    | 1.503     | 447.1        | 3.8257        | 0.0000     | SURCHARGED |
| 30 minute winter  | TANK 4  | 26          | 21.568    | 0.246     | 104.8        | 33.4930       | 0.0000     | SURCHARGED |
| 15 minute winter  | 229     | 11          | 22.605    | 1.332     | 573.6        | 3.3893        | 0.0000     | SURCHARGED |
| 240 minute winter | TANK 5  | 252         | 21.696    | 0.497     | 24.0         | 97.4344       | 0.0000     | SURCHARGED |
| 15 minute winter  | 230     | 11          | 22.158    | 1.065     | 602.8        | 2.7102        | 0.0000     | SURCHARGED |
| 15 minute winter  | 231     | 12          | 24.038    | 0.198     | 67.0         | 0.3503        | 0.0000     | OK         |
| 15 minute summer  | 232     | 1           | 24.580    | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 15 minute winter  | 233     | 12          | 23.695    | 2.175     | 146.4        | 5.5342        | 0.0000     | SURCHARGED |
| 15 minute winter  | 234     | 12          | 23.668    | 2.328     | 180.4        | 5.9260        | 0.0000     | SURCHARGED |
| 15 minute winter  | 235     | 12          | 24.589    | 1.045     | 67.6         | 1.8466        | 0.0000     | SURCHARGED |
| 15 minute winter  | 236     | 12          | 24.510    | 1.165     | 94.8         | 2.0592        | 0.0000     | SURCHARGED |
| 15 minute winter  | 237     | 12          | 24.286    | 1.435     | 155.4        | 2.5351        | 0.0000     | FLOOD RISK |
| 15 minute winter  | 238     | 12          | 24.353    | 1.312     | 122.9        | 2.3184        | 0.0000     | FLOOD RISK |
| 15 minute winter  | 239     | 12          | 23.787    | 2.333     | 363.6        | 8.0815        | 3.5106     | FLOOD      |
| 15 minute winter  | 240     | 12          | 23.691    | 2.364     | 363.0        | 6.0154        | 0.0000     | SURCHARGED |

| Link Event<br>(Upstream Depth) | US Node | Link    | DS Node | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|---------|---------|---------|---------------|----------------|----------|---------------|--------------------|
| 180 minute winter              | 220     | 5.000   | 222     | 69.3          | 0.361          | 0.125    | 3.3243        |                    |
| 180 minute winter              | 221     | 6.000   | 222     | 34.4          | 0.178          | 0.143    | 3.5892        |                    |
| 180 minute winter              | 222     | 5.001   | 223     | 30.0          | 1.229          | 0.402    | 0.8527        |                    |
| 15 minute winter               | 223     | 5.002   | 224     | 136.3         | 2.491          | 0.838    | 3.1603        |                    |
| 15 minute winter               | 224     | 5.003   | 226     | 187.3         | 0.717          | 0.547    | 16.5618       |                    |
| 15 minute winter               | 225     | 7.000   | 226     | 83.0          | 2.088          | 2.076    | 0.4744        |                    |
| 15 minute winter               | 226     | 5.004   | 227     | 352.2         | 1.250          | 1.028    | 3.8102        |                    |
| 15 minute winter               | 227     | 5.005   | 228     | 395.2         | 1.403          | 1.154    | 3.1100        |                    |
| 15 minute winter               | 228     | 5.006   | 229     | 458.1         | 1.627          | 1.338    | 16.9071       |                    |
| 30 minute winter               | TANK 4  | 17.000  | 229     | -104.8        | -3.332         | -2.635   | 0.2806        |                    |
| 30 minute winter               | TANK 4  | Orifice | 229     | 22.7          |                |          |               | 25.9               |
| 15 minute winter               | 229     | 5.007   | 230     | 481.9         | 1.711          | 1.407    | 20.2667       |                    |
| 240 minute winter              | TANK 5  | 18.000  | 230     | -24.0         | -2.217         | -0.604   | 0.2137        |                    |
| 240 minute winter              | TANK 5  | Orifice | 230     | 5.5           |                |          |               | 46.6               |
| 15 minute winter               | 230     | 5.008   | 249     | 573.2         | 2.035          | 1.649    | 11.2595       |                    |
| 15 minute winter               | 231     | 8.000   | 233     | 64.5          | 2.953          | 0.502    | 1.2410        |                    |
| 15 minute summer               | 232     | 9.000   | 233     | 0.0           | 0.000          | 0.000    | 0.4173        |                    |
| 15 minute winter               | 233     | 8.001   | 234     | 123.7         | 0.601          | 0.361    | 20.3013       |                    |
| 15 minute winter               | 234     | 8.002   | 241     | 179.9         | 0.639          | 0.525    | 3.3542        |                    |
| 15 minute winter               | 235     | 10.000  | 236     | 66.9          | 1.206          | 0.783    | 2.3564        |                    |
| 15 minute winter               | 236     | 10.001  | 237     | 81.3          | 1.592          | 0.730    | 3.4658        |                    |
| 15 minute winter               | 237     | 10.002  | 239     | 136.2         | 2.736          | 0.648    | 2.1738        |                    |
| 15 minute winter               | 238     | 11.000  | 239     | 107.7         | 2.140          | 0.666    | 4.3049        |                    |
| 15 minute winter               | 239     | 10.003  | 240     | 317.1         | 1.126          | 0.926    | 14.3515       |                    |
| 15 minute winter               | 240     | 10.004  | 241     | 347.3         | 1.233          | 1.014    | 1.8915        |                    |

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute winter  | 241     | 12          | 23.649    | 2.339     | 517.9        | 5.9520        | 0.0000     | SURCHARGED |
| 15 minute winter  | 242     | 12          | 23.468    | 2.205     | 527.4        | 5.6128        | 0.0000     | SURCHARGED |
| 15 minute winter  | 243     | 12          | 23.224    | 2.027     | 568.1        | 5.1600        | 0.0000     | FLOOD RISK |
| 15 minute winter  | 244     | 12          | 23.134    | 1.615     | 181.5        | 4.1090        | 0.0000     | SURCHARGED |
| 15 minute winter  | 245     | 12          | 23.062    | 1.704     | 201.3        | 4.3363        | 0.0000     | SURCHARGED |
| 15 minute winter  | 246     | 12          | 23.045    | 1.747     | 273.7        | 4.4474        | 0.0000     | SURCHARGED |
| 15 minute winter  | 247     | 12          | 22.981    | 1.834     | 782.8        | 4.6683        | 0.0000     | SURCHARGED |
| 15 minute winter  | 248     | 12          | 22.085    | 1.072     | 789.9        | 2.7292        | 0.0000     | SURCHARGED |
| 180 minute winter | TANK 6  | 176         | 21.719    | 0.859     | 82.0         | 109.1627      | 0.0000     | SURCHARGED |
| 15 minute winter  | 249     | 11          | 21.788    | 0.948     | 1352.6       | 3.2849        | 0.0000     | SURCHARGED |
| 180 minute winter | 251     | 176         | 21.718    | 1.355     | 447.1        | 0.0000        | 0.0000     | OK         |
| 180 minute winter | 253     | 176         | 21.717    | 1.667     | 303.7        | 0.0000        | 0.0000     | FLOOD RISK |
| 180 minute winter | 254     | 176         | 21.717    | 1.701     | 69.7         | 9.7380        | 0.0000     | FLOOD RISK |
| 360 minute winter | 255     | 464         | 19.087    | 2.135     | 12.3         | 9.6602        | 0.0000     | SURCHARGED |
| 360 minute winter | 256     | 456         | 19.087    | 2.302     | 20.4         | 13.1806       | 0.0000     | SURCHARGED |
| 360 minute winter | 257     | 456         | 19.087    | 2.927     | 18.0         | 16.7618       | 0.0000     | SURCHARGED |
| 360 minute winter | 258     | 456         | 19.087    | 2.950     | 81.3         | 16.8944       | 0.0000     | SURCHARGED |
| 360 minute winter | 259     | 456         | 19.088    | 2.977     | 81.6         | 17.0439       | 0.0000     | SURCHARGED |
| 360 minute winter | 260     | 456         | 19.088    | 3.089     | 78.7         | 17.6871       | 0.0000     | FLOOD RISK |
| 60 minute winter  | 261     | 44          | 16.168    | 0.216     | 72.4         | 0.3809        | 0.0000     | OK         |
| 60 minute winter  | 262     | 44          | 16.051    | 0.203     | 72.4         | 0.3585        | 0.0000     | OK         |
| 60 minute summer  | 263     | 59          | 15.836    | 0.106     | 72.4         | 0.1880        | 0.0000     | OK         |
| 120 minute summer | 264     | 216         | 13.762    | 0.112     | 72.4         | 0.1973        | 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) |
|--------------------------------|---------|-------------------|---------|---------------|----------------|----------|---------------|--------------------|
| 15 minute winter               | 241     | 8.003             | 242     | 512.8         | 1.821          | 1.497    | 5.2719        |                    |
| 15 minute winter               | 242     | 8.004             | 243     | 536.1         | 1.903          | 1.565    | 7.4264        |                    |
| 15 minute winter               | 243     | 8.005             | 247     | 574.1         | 2.038          | 1.676    | 5.5766        |                    |
| 15 minute winter               | 244     | 12.000            | 245     | -138.1        | -0.490         | -0.403   | 18.1451       |                    |
| 15 minute winter               | 245     | 12.001            | 246     | -131.2        | -0.466         | -0.383   | 6.7811        |                    |
| 15 minute winter               | 246     | 12.002            | 247     | 266.8         | 0.947          | 0.779    | 17.0657       |                    |
| 15 minute winter               | 247     | 8.006             | 248     | 789.9         | 2.804          | 2.307    | 15.1021       |                    |
| 15 minute winter               | 248     | 8.007             | 249     | 794.7         | 2.822          | 2.390    | 2.7475        |                    |
| 180 minute winter              | TANK 6  | 19.000            | 249     | -82.0         | -4.008         | -2.063   | 0.1383        |                    |
| 180 minute winter              | TANK 6  | Orifice           | 249     | 26.4          |                |          |               | 98.7               |
| 15 minute winter               | 249     | 5.009             | 251     | 1306.7        | 2.971          | 2.124    | 7.1814        |                    |
| 180 minute winter              | 251     | Flow through Pond | 253     | 303.7         | 0.088          | 0.186    | 1320.5347     |                    |
| 180 minute winter              | 253     | 5.013             | 254     | 69.7          | 0.350          | 0.113    | 6.0191        |                    |
| 180 minute winter              | 254     | 5.014             | 258     | 66.9          | 2.522          | 0.167    | 0.2808        |                    |
| 360 minute winter              | 255     | 13.000            | 256     | 9.5           | 0.333          | 0.005    | 75.3408       |                    |
| 360 minute winter              | 256     | 13.001            | 257     | 14.2          | 0.564          | 0.007    | 11.2524       |                    |
| 360 minute winter              | 257     | 13.002            | 258     | 15.3          | 0.324          | 0.003    | 23.2189       |                    |
| 360 minute winter              | 258     | 5.015             | 259     | 77.7          | 0.450          | 0.013    | 26.2661       |                    |
| 360 minute winter              | 259     | 5.016             | 260     | 73.4          | 0.189          | 0.012    | 113.2427      |                    |
| 360 minute winter              | 260     | 5.017             | 261     | 72.4          | 1.060          | 0.563    | 0.7638        |                    |
| 60 minute winter               | 261     | 5.018             | 262     | 72.4          | 1.146          | 0.563    | 1.5713        |                    |
| 60 minute winter               | 262     | 5.019             | 263     | 72.4          | 1.691          | 0.563    | 1.2289        |                    |
| 60 minute summer               | 263     | 5.020             | 264     | 72.4          | 2.727          | 0.174    | 1.2824        |                    |
| 120 minute summer              | 264     | 5.021             | 265     | 72.4          | 2.785          | 0.169    | 0.4573        | 1384.5             |

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.40%**

| Node Event       | US<br>Node | Peak<br>(mins) | Level<br>(m) | Depth<br>(m) | Inflow<br>(l/s) | Node<br>Vol (m <sup>3</sup> ) | Flood<br>(m <sup>3</sup> ) | Status |
|------------------|------------|----------------|--------------|--------------|-----------------|-------------------------------|----------------------------|--------|
| 60 minute winter | 265        | 45             | 12.954       | 0.103        | 72.4            | 0.0000                        | 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 (m <sup>3</sup> ) | Discharge<br>Vol (m <sup>3</sup> ) |
|--------------------------------|------------|------|------------|------------------|-------------------|----------|-------------------------------|------------------------------------|
|--------------------------------|------------|------|------------|------------------|-------------------|----------|-------------------------------|------------------------------------|