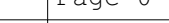


|                                                         |                               |                                                                                     |
|---------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------|
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|          |                  |
|----------|------------------|
| Causeway | Network 2017.1.1 |
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### STORM SEWER DESIGN by the Modified Rational Method

## Design Criteria for WOOTON FARM.SWS

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

|                                      |        |                                       |       |
|--------------------------------------|--------|---------------------------------------|-------|
| Return Period (years)                | 100    | PIMP (%)                              | 100   |
| M5-60 (mm)                           | 19.000 | Add Flow / Climate Change (%)         | 40    |
| Ratio R                              | 0.389  | Minimum Backdrop Height (m)           | 0.200 |
| Maximum Rainfall (mm/hr)             | 50     | Maximum Backdrop Height (m)           | 0.000 |
| Maximum Time of Concentration (mins) | 30     | Min Design Depth for Optimisation (m) | 1.200 |
| Foul Sewage (l/s/ha)                 | 0.000  | Min Vel for Auto Design only (m/s)    | 0.75  |
| Volumetric Runoff Coeff.             | 0.750  | Min Slope for Optimisation (1:X)      | 500   |

Designed with Level Soffits

Network Design Table for WOOTON FARM.SWS

| PN    | Length<br>(m) | Fall<br>(m) | Slope<br>(1:X) | I.Area<br>(ha) | T.E.<br>(mins) | Base<br>Flow (l/s) | k<br>(mm) | HYD<br>SECT | DIA<br>(mm) | Section Type |
|-------|---------------|-------------|----------------|----------------|----------------|--------------------|-----------|-------------|-------------|--------------|
| 1.000 | 7.100         | 0.069       | 102.9          | 0.023          | 5.00           | 0.0                | 0.600     | o           | 100         | Pipe/Conduit |
| 1.001 | 21.554        | 0.216       | 100.0          | 0.020          | 0.00           | 0.0                | 0.600     | o           | 150         | Pipe/Conduit |
| 1.002 | 11.902        | 0.119       | 100.0          | 0.019          | 0.00           | 0.0                | 0.600     | o           | 150         | Pipe/Conduit |
| 2.000 | 5.803         | 0.204       | 28.5           | 0.007          | 5.00           | 0.0                | 0.600     | o           | 100         | Pipe/Conduit |
| 1.003 | 18.769        | 0.459       | 40.9           | 0.000          | 0.00           | 0.0                | 0.600     | o           | 150         | Pipe/Conduit |
| 3.000 | 7.061         | 0.163       | 43.3           | 0.007          | 5.00           | 0.0                | 0.600     | o           | 100         | Pipe/Conduit |
| 1.004 | 8.374         | 0.031       | 270.1          | 0.029          | 0.00           | 0.0                | 0.600     | o           | 225         | Pipe/Conduit |

## Network Results Table

| PN    | Rain<br>(mm/hr) | T.C.<br>(mins) | US/IL<br>(m) | E I.Area<br>(ha) | E Base<br>Flow (l/s) | Foul<br>(l/s) | Add Flow<br>(l/s) | Vel<br>(m/s) | Cap<br>(l/s) | Flow<br>(l/s) |
|-------|-----------------|----------------|--------------|------------------|----------------------|---------------|-------------------|--------------|--------------|---------------|
| 1.000 | 50.00           | 5.16           | 125.450      | 0.023            | 0.0                  | 0.0           | 1.2               | 0.76         | 6.0          | 4.4           |
| 1.001 | 50.00           | 5.51           | 125.331      | 0.043            | 0.0                  | 0.0           | 2.3               | 1.00         | 17.8         | 8.2           |
| 1.002 | 50.00           | 5.71           | 125.115      | 0.062            | 0.0                  | 0.0           | 3.4               | 1.00         | 17.8         | 11.8          |
| 2.000 | 50.00           | 5.07           | 125.250      | 0.007            | 0.0                  | 0.0           | 0.4               | 1.45         | 11.4         | 1.3           |
| 1.003 | 50.00           | 5.91           | 124.996      | 0.069            | 0.0                  | 0.0           | 3.7               | 1.58         | 27.9         | 13.1          |
| 3.000 | 50.00           | 5.10           | 124.750      | 0.007            | 0.0                  | 0.0           | 0.4               | 1.17         | 9.2          | 1.3           |
| 1.004 | 50.00           | 6.09           | 124.462      | 0.105            | 0.0                  | 0.0           | 5.7               | 0.79         | 31.4         | 19.9          |

|                                                         |                               |                                                                                     |
|---------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------|
| JNM Engineering Ltd                                     |                               | Page 1                                                                              |
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Network Design Table for WOOTON FARM.SWS

| PN    | Length<br>(m) | Fall<br>(m) | Slope<br>(1:X) | I.Area<br>(ha) | T.E.<br>(mins) | Base<br>Flow (l/s) | k<br>(mm) | HYD<br>SECT | DIA<br>(mm) | Section Type |
|-------|---------------|-------------|----------------|----------------|----------------|--------------------|-----------|-------------|-------------|--------------|
| 4.000 | 19.963        | 0.894       | 22.3           | 0.016          | 5.00           | 0.0                | 0.600     | o           | 100         | Pipe/Conduit |
| 1.005 | 8.433         | 0.029       | 291.6          | 0.004          | 0.00           | 0.0                | 0.600     | o           | 225         | Pipe/Conduit |
| 5.000 | 29.392        | 0.735       | 40.0           | 0.009          | 5.00           | 0.0                | 0.600     | o           | 100         | Pipe/Conduit |
| 5.001 | 3.983         | 0.188       | 21.2           | 0.000          | 0.00           | 0.0                | 0.600     | o           | 100         | Pipe/Conduit |
| 1.006 | 3.314         | 0.011       | 301.3          | 0.000          | 0.00           | 0.0                | 0.600     | o           | 225         | Pipe/Conduit |
| 1.007 | 3.096         | 0.010       | 309.6          | 0.000          | 0.00           | 0.0                | 0.600     | o           | 225         | Pipe/Conduit |
| 1.008 | 23.338        | 2.000       | 11.7           | 0.000          | 0.00           | 0.0                | 0.600     | o           | 225         | Pipe/Conduit |
| 1.009 | 27.557        | 0.093       | 296.3          | 0.000          | 0.00           | 0.0                | 0.600     | o           | 225         | Pipe/Conduit |
| 1.010 | 35.320        | 0.119       | 296.8          | 0.000          | 0.00           | 0.0                | 0.600     | o           | 225         | Pipe/Conduit |
| 1.011 | 60.240        | 0.203       | 296.7          | 0.000          | 0.00           | 0.0                | 0.600     | o           | 225         | Pipe/Conduit |
| 1.012 | 77.436        | 0.261       | 296.7          | 0.000          | 0.00           | 0.0                | 0.600     | o           | 225         | Pipe/Conduit |
| 1.013 | 39.371        | 0.133       | 296.0          | 0.000          | 0.00           | 0.0                | 0.600     | o           | 225         | Pipe/Conduit |

Network Results Table

| PN    | Rain<br>(mm/hr) | T.C.<br>(mins) | US/IL<br>(m) | Σ I.Area<br>(ha) | Σ Base<br>Flow (l/s) | Foul<br>(l/s) | Add Flow<br>(l/s) | Vel<br>(m/s) | Cap<br>(l/s) | Flow<br>(l/s) |
|-------|-----------------|----------------|--------------|------------------|----------------------|---------------|-------------------|--------------|--------------|---------------|
| 4.000 | 50.00           | 5.20           | 125.450      | 0.016            | 0.0                  | 0.0           | 0.9               | 1.64         | 12.9         | 3.0           |
| 1.005 | 50.00           | 6.27           | 124.431      | 0.125            | 0.0                  | 0.0           | 6.8               | 0.76         | 30.2         | 23.7          |
| 5.000 | 50.00           | 5.40           | 125.450      | 0.009            | 0.0                  | 0.0           | 0.5               | 1.22         | 9.6          | 1.7           |
| 5.001 | 50.00           | 5.44           | 124.715      | 0.009            | 0.0                  | 0.0           | 0.5               | 1.69         | 13.2         | 1.7           |
| 1.006 | 50.00           | 6.34           | 124.402      | 0.134            | 0.0                  | 0.0           | 7.3               | 0.75         | 29.7         | 25.4          |
| 1.007 | 50.00           | 6.41           | 124.391      | 0.134            | 0.0                  | 0.0           | 7.3               | 0.74         | 29.3         | 25.4          |
| 1.008 | 50.00           | 6.52           | 124.381      | 0.134            | 0.0                  | 0.0           | 7.3               | 3.85         | 153.2        | 25.4          |
| 1.009 | 50.00           | 7.12           | 122.381      | 0.134            | 0.0                  | 0.0           | 7.3               | 0.75         | 30.0         | 25.4          |
| 1.010 | 50.00           | 7.91           | 122.288      | 0.134            | 0.0                  | 0.0           | 7.3               | 0.75         | 30.0         | 25.4          |
| 1.011 | 50.00           | 9.24           | 122.169      | 0.134            | 0.0                  | 0.0           | 7.3               | 0.75         | 30.0         | 25.4          |
| 1.012 | 50.00           | 10.95          | 121.966      | 0.134            | 0.0                  | 0.0           | 7.3               | 0.75         | 30.0         | 25.4          |
| 1.013 | 50.00           | 11.82          | 121.705      | 0.134            | 0.0                  | 0.0           | 7.3               | 0.75         | 30.0         | 25.4          |

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|--------------------------------------------------------------------|-----------|--------------|---------------|--------------------|-------------------------------|---------------------------|---------------|-------------------------------------------------------------------------------------|---------------------------|---------------|
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| Date 07/12/2017<br>File WOOTON FARM.MDX                            |           |              |               |                    | Designed by JJM<br>Checked by |                           |               |                                                                                     |                           |               |
| Causeway                                                           |           |              |               |                    | Network 2017.1.1              |                           |               |                                                                                     |                           |               |
| <p align="center"><u>Manhole Schedules for WOOTON FARM.SWS</u></p> |           |              |               |                    |                               |                           |               |                                                                                     |                           |               |
| MH Name                                                            | MH CL (m) | MH Depth (m) | MH Connection | MH Diam., L*W (mm) | PN                            | Pipe Out Invert Level (m) | Diameter (mm) | PN                                                                                  | Pipes In Invert Level (m) | Diameter (mm) |
| 1                                                                  | 126.450   | 1.000        | Open Manhole  | 1200               | 1.000                         | 125.450                   | 100           |                                                                                     |                           |               |
| 2                                                                  | 126.450   | 1.119        | Open Manhole  | 1200               | 1.001                         | 125.331                   | 150           | 1.000                                                                               | 125.381                   | 100           |
| 3                                                                  | 126.450   | 1.335        | Open Manhole  | 1200               | 1.002                         | 125.115                   | 150           | 1.001                                                                               | 125.115                   | 150           |
| 16                                                                 | 126.000   | 0.750        | Open Manhole  | 1200               | 2.000                         | 125.250                   | 100           |                                                                                     |                           |               |
| 4                                                                  | 125.550   | 0.554        | Open Manhole  | 1200               | 1.003                         | 124.996                   | 150           | 1.002                                                                               | 124.996                   | 150           |
|                                                                    |           |              |               |                    |                               |                           |               | 2.000                                                                               | 125.046                   | 100           |
| 17                                                                 | 125.550   | 0.800        | Open Manhole  | 1200               | 3.000                         | 124.750                   | 100           |                                                                                     |                           |               |
| 5                                                                  | 125.550   | 1.088        | Open Manhole  | 1200               | 1.004                         | 124.462                   | 225           | 1.003                                                                               | 124.537                   | 150           |
|                                                                    |           |              |               |                    |                               |                           |               | 3.000                                                                               | 124.587                   | 100           |
| 18                                                                 | 126.450   | 1.000        | Open Manhole  | 1200               | 4.000                         | 125.450                   | 100           |                                                                                     |                           |               |
| 6                                                                  | 125.550   | 1.119        | Open Manhole  | 1200               | 1.005                         | 124.431                   | 225           | 1.004                                                                               | 124.431                   | 225           |
|                                                                    |           |              |               |                    |                               |                           |               | 4.000                                                                               | 124.556                   | 100           |
| 19                                                                 | 126.450   | 1.000        | Open Manhole  | 1200               | 5.000                         | 125.450                   | 100           |                                                                                     |                           |               |
| 20                                                                 | 126.450   | 1.735        | Open Manhole  | 1200               | 5.001                         | 124.715                   | 100           | 5.000                                                                               | 124.715                   | 100           |
| 7                                                                  | 126.000   | 1.598        | Open Manhole  | 1200               | 1.006                         | 124.402                   | 225           | 1.005                                                                               | 124.402                   | 225           |
|                                                                    |           |              |               |                    |                               |                           |               | 5.001                                                                               | 124.527                   | 100           |
| 8                                                                  | 126.000   | 1.609        | Open Manhole  | 1200               | 1.007                         | 124.391                   | 225           | 1.006                                                                               | 124.391                   | 225           |
| 9                                                                  | 126.000   | 1.619        | Open Manhole  | 1200               | 1.008                         | 124.381                   | 225           | 1.007                                                                               | 124.381                   | 225           |
| 10                                                                 | 124.000   | 1.619        | Open Manhole  | 1200               | 1.009                         | 122.381                   | 225           | 1.008                                                                               | 122.381                   | 225           |
| 11                                                                 | 123.750   | 1.462        | Open Manhole  | 1200               | 1.010                         | 122.288                   | 225           | 1.009                                                                               | 122.288                   | 225           |
| 12                                                                 | 123.500   | 1.331        | Open Manhole  | 1200               | 1.011                         | 122.169                   | 225           | 1.010                                                                               | 122.169                   | 225           |
| 13                                                                 | 123.250   | 1.284        | Open Manhole  | 1200               | 1.012                         | 121.966                   | 225           | 1.011                                                                               | 121.966                   | 225           |
| 14                                                                 | 123.000   | 1.295        | Open Manhole  | 1200               | 1.013                         | 121.705                   | 225           | 1.012                                                                               | 121.705                   | 225           |
| 15                                                                 | 122.750   | 1.178        | Open Manhole  | 0                  |                               | OUTFALL                   |               | 1.013                                                                               | 121.572                   | 225           |
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|                                                         |                               |                                                                                     |
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| Causeway Network 2017.1.1                               |                               |                                                                                     |

| PIPELINE SCHEDULES for WOOTON FARM.SWS |            |             |         |             |             |             |               |                |      |
|----------------------------------------|------------|-------------|---------|-------------|-------------|-------------|---------------|----------------|------|
| Upstream Manhole                       |            |             |         |             |             |             |               |                |      |
| PN                                     | Hyd Sect   | Diam (mm)   | MH Name | C.Level (m) | I.Level (m) | D.Depth (m) | MH Connection | MH DIAM., (mm) | L*W  |
| 1.000                                  | o          | 100         | 1       | 126.450     | 125.450     | 0.900       | Open Manhole  |                | 1200 |
| 1.001                                  | o          | 150         | 2       | 126.450     | 125.331     | 0.969       | Open Manhole  |                | 1200 |
| 1.002                                  | o          | 150         | 3       | 126.450     | 125.115     | 1.185       | Open Manhole  |                | 1200 |
| 2.000                                  | o          | 100         | 16      | 126.000     | 125.250     | 0.650       | Open Manhole  |                | 1200 |
| 1.003                                  | o          | 150         | 4       | 125.550     | 124.996     | 0.404       | Open Manhole  |                | 1200 |
| 3.000                                  | o          | 100         | 17      | 125.550     | 124.750     | 0.700       | Open Manhole  |                | 1200 |
| 1.004                                  | o          | 225         | 5       | 125.550     | 124.462     | 0.863       | Open Manhole  |                | 1200 |
| 4.000                                  | o          | 100         | 18      | 126.450     | 125.450     | 0.900       | Open Manhole  |                | 1200 |
| 1.005                                  | o          | 225         | 6       | 125.550     | 124.431     | 0.894       | Open Manhole  |                | 1200 |
| 5.000                                  | o          | 100         | 19      | 126.450     | 125.450     | 0.900       | Open Manhole  |                | 1200 |
| 5.001                                  | o          | 100         | 20      | 126.450     | 124.715     | 1.635       | Open Manhole  |                | 1200 |
| 1.006                                  | o          | 225         | 7       | 126.000     | 124.402     | 1.373       | Open Manhole  |                | 1200 |
| Downstream Manhole                     |            |             |         |             |             |             |               |                |      |
| PN                                     | Length (m) | Slope (1:X) | MH Name | C.Level (m) | I.Level (m) | D.Depth (m) | MH Connection | MH DIAM., (mm) | L*W  |
| 1.000                                  | 7.100      | 102.9       | 2       | 126.450     | 125.381     | 0.969       | Open Manhole  |                | 1200 |
| 1.001                                  | 21.554     | 100.0       | 3       | 126.450     | 125.115     | 1.185       | Open Manhole  |                | 1200 |
| 1.002                                  | 11.902     | 100.0       | 4       | 125.550     | 124.996     | 0.404       | Open Manhole  |                | 1200 |
| 2.000                                  | 5.803      | 28.5        | 4       | 125.550     | 125.046     | 0.404       | Open Manhole  |                | 1200 |
| 1.003                                  | 18.769     | 40.9        | 5       | 125.550     | 124.537     | 0.863       | Open Manhole  |                | 1200 |
| 3.000                                  | 7.061      | 43.3        | 5       | 125.550     | 124.587     | 0.863       | Open Manhole  |                | 1200 |
| 1.004                                  | 8.374      | 270.1       | 6       | 125.550     | 124.431     | 0.894       | Open Manhole  |                | 1200 |
| 4.000                                  | 19.963     | 22.3        | 6       | 125.550     | 124.556     | 0.894       | Open Manhole  |                | 1200 |
| 1.005                                  | 8.433      | 291.6       | 7       | 126.000     | 124.402     | 1.373       | Open Manhole  |                | 1200 |
| 5.000                                  | 29.392     | 40.0        | 20      | 126.450     | 124.715     | 1.635       | Open Manhole  |                | 1200 |
| 5.001                                  | 3.983      | 21.2        | 7       | 126.000     | 124.527     | 1.373       | Open Manhole  |                | 1200 |
| 1.006                                  | 3.314      | 301.3       | 8       | 126.000     | 124.391     | 1.384       | Open Manhole  |                | 1200 |

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| WOOTON FARM                                             |  |                                                                                     |
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PIPELINE SCHEDULES for WOOTON FARM.SWS

Upstream Manhole

| PN    | Hyd Sect | Diam (mm) | MH Name | C.Level (m) | I.Level (m) | D.Depth (m) | MH Connection | MH DIAM., L*W (mm) |
|-------|----------|-----------|---------|-------------|-------------|-------------|---------------|--------------------|
| 1.007 | o        | 225       | 8       | 126.000     | 124.391     | 1.384       | Open Manhole  | 1200               |
| 1.008 | o        | 225       | 9       | 126.000     | 124.381     | 1.394       | Open Manhole  | 1200               |
| 1.009 | o        | 225       | 10      | 124.000     | 122.381     | 1.394       | Open Manhole  | 1200               |
| 1.010 | o        | 225       | 11      | 123.750     | 122.288     | 1.237       | Open Manhole  | 1200               |
| 1.011 | o        | 225       | 12      | 123.500     | 122.169     | 1.106       | Open Manhole  | 1200               |
| 1.012 | o        | 225       | 13      | 123.250     | 121.966     | 1.059       | Open Manhole  | 1200               |
| 1.013 | o        | 225       | 14      | 123.000     | 121.705     | 1.070       | Open Manhole  | 1200               |

Downstream Manhole

| PN    | Length (m) | Slope (1:X) | MH Name | C.Level (m) | I.Level (m) | D.Depth (m) | MH Connection | MH DIAM., L*W (mm) |
|-------|------------|-------------|---------|-------------|-------------|-------------|---------------|--------------------|
| 1.007 | 3.096      | 309.6       | 9       | 126.000     | 124.381     | 1.394       | Open Manhole  | 1200               |
| 1.008 | 23.338     | 11.7        | 10      | 124.000     | 122.381     | 1.394       | Open Manhole  | 1200               |
| 1.009 | 27.557     | 296.3       | 11      | 123.750     | 122.288     | 1.237       | Open Manhole  | 1200               |
| 1.010 | 35.320     | 296.8       | 12      | 123.500     | 122.169     | 1.106       | Open Manhole  | 1200               |
| 1.011 | 60.240     | 296.7       | 13      | 123.250     | 121.966     | 1.059       | Open Manhole  | 1200               |
| 1.012 | 77.436     | 296.7       | 14      | 123.000     | 121.705     | 1.070       | Open Manhole  | 1200               |
| 1.013 | 39.371     | 296.0       | 15      | 122.750     | 121.572     | 0.953       | Open Manhole  | 0                  |

Free Flowing Outfall Details for WOOTON FARM.SWS

| Outfall Pipe Number | Outfall Name | C. Level (m) | I. Level (m) | Min I. Level (m) | D,L (mm) | W (mm) |
|---------------------|--------------|--------------|--------------|------------------|----------|--------|
| 1.013               | 15           | 122.750      | 121.572      | 0.000            | 0        | 0      |

Simulation Criteria for WOOTON FARM.SWS

|                                 |       |                                   |        |
|---------------------------------|-------|-----------------------------------|--------|
| Volumetric Runoff Coeff         | 0.840 | Foul Sewage per hectare (l/s)     | 0.000  |
| Areal Reduction Factor          | 1.000 | Additional Flow - % of Total Flow | 40.000 |
| Hot Start (mins)                | 0     | MADD Factor * 10m³/ha Storage     | 2.000  |
| Hot Start Level (mm)            | 0     | Run Time (mins)                   | 480    |
| Manhole Headloss Coeff (Global) | 0.500 | Output Interval (mins)            | 4      |
| Number of Input Hydrographs     | 0     | Number of Storage Structures      | 1      |
| Number of Online Controls       | 1     | Number of Time/Area Diagrams      | 0      |
| Number of Offline Controls      | 0     |                                   |        |

Synthetic Rainfall Details

|                       |     |            |                   |
|-----------------------|-----|------------|-------------------|
| Rainfall Model        | FSR | Region     | England and Wales |
| Return Period (years) | 100 | M5-60 (mm) | 19.000            |

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|                                                                                                                                                                                                                                                    |                 |                                                                                     |
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| Date 07/12/2017                                                                                                                                                                                                                                    | Designed by JJM |                                                                                     |
| File WOOTON FARM.MDX                                                                                                                                                                                                                               | Checked by      |                                                                                     |
| Causeway                                                                                                                                                                                                                                           |                 | Network 2017.1.1                                                                    |
| <p style="text-align: center;"><u>Synthetic Rainfall Details</u></p> <p style="text-align: center;"> Ratio R    0.389                      Cv (Winter)   0.840<br/> Profile Type Winter Storm Duration (mins)    240<br/> Cv (Summer)   0.750 </p> |                 |                                                                                     |
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|                                                         |                 |                                                                                     |
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| Date 07/12/2017                                         | Designed by JJM |                                                                                     |
| File WOOTON FARM.MDX                                    | Checked by      |                                                                                     |
| Causeway                                                |                 | Network 2017.1.1                                                                    |

Online Controls for WOOTON FARM.SWS

Hydro-Brake® Optimum Manhole: 8, DS/PN: 1.007, Volume (m³): 1.9

|                                   |                            |
|-----------------------------------|----------------------------|
| Unit Reference                    | MD-SHE-0103-5000-1200-5000 |
| Design Head (m)                   | 1.200                      |
| Design Flow (l/s)                 | 5.0                        |
| Flush-Flo™                        | Calculated                 |
| Objective                         | Minimise upstream storage  |
| Application                       | Surface                    |
| Sump Available                    | Yes                        |
| Diameter (mm)                     | 103                        |
| Invert Level (m)                  | 124.391                    |
| Minimum Outlet Pipe Diameter (mm) | 150                        |
| Suggested Manhole Diameter (mm)   | 1200                       |

| Control Points            | Head (m) | Flow (l/s) | Control Points            | Head (m) | Flow (l/s) |
|---------------------------|----------|------------|---------------------------|----------|------------|
| Design Point (Calculated) | 1.200    | 5.0        | Kick-Flo®                 | 0.745    | 4.0        |
| Flush-Flo™                | 0.354    | 5.0        | Mean Flow over Head Range | -        | 4.4        |

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

| Depth (m) | Flow (l/s) | Depth (m) | Flow (l/s) | Depth (m) | Flow (l/s) | Depth (m) | Flow (l/s) |
|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
| 0.100     | 3.4        | 1.200     | 5.0        | 3.000     | 7.7        | 7.000     | 11.5       |
| 0.200     | 4.7        | 1.400     | 5.4        | 3.500     | 8.3        | 7.500     | 11.8       |
| 0.300     | 5.0        | 1.600     | 5.7        | 4.000     | 8.8        | 8.000     | 12.2       |
| 0.400     | 5.0        | 1.800     | 6.0        | 4.500     | 9.3        | 8.500     | 12.6       |
| 0.500     | 4.9        | 2.000     | 6.3        | 5.000     | 9.8        | 9.000     | 12.9       |
| 0.600     | 4.7        | 2.200     | 6.6        | 5.500     | 10.2       | 9.500     | 13.3       |
| 0.800     | 4.1        | 2.400     | 6.9        | 6.000     | 10.7       |           |            |
| 1.000     | 4.6        | 2.600     | 7.2        | 6.500     | 11.1       |           |            |

| JNM Engineering Ltd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | Page 7                                                                              |                        |                        |                        |                        |           |                        |       |       |       |       |       |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|-----------|------------------------|-------|-------|-------|-------|-------|-----|
| 9B Pemberton House<br>Stafford Court<br>Telford TF3 3BD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | WOOTON FARM            |  |                        |                        |                        |                        |           |                        |       |       |       |       |       |     |
| Date 07/12/2017                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Designed by JJM        |                                                                                     |                        |                        |                        |                        |           |                        |       |       |       |       |       |     |
| File WOOTON FARM.MDX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Checked by             |                                                                                     |                        |                        |                        |                        |           |                        |       |       |       |       |       |     |
| Causeway                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        | Network 2017.1.1                                                                    |                        |                        |                        |                        |           |                        |       |       |       |       |       |     |
| <p style="text-align: center;"><u>Storage Structures for WOOTON FARM.SWS</u></p> <p style="text-align: center;"><u>Tank or Pond Manhole: 7, DS/PN: 1.006</u></p> <p style="text-align: center;">Invert Level (m) 124.402</p> <table border="1"> <thead> <tr> <th>Depth (m)</th> <th>Area (m<sup>2</sup>)</th> <th>Depth (m)</th> <th>Area (m<sup>2</sup>)</th> <th>Depth (m)</th> <th>Area (m<sup>2</sup>)</th> </tr> </thead> <tbody> <tr> <td>0.000</td> <td>100.0</td> <td>0.500</td> <td>100.0</td> <td>0.501</td> <td>0.0</td> </tr> </tbody> </table> |                        |                                                                                     | Depth (m)              | Area (m <sup>2</sup> ) | Depth (m)              | Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | 0.000 | 100.0 | 0.500 | 100.0 | 0.501 | 0.0 |
| Depth (m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Area (m <sup>2</sup> ) | Depth (m)                                                                           | Area (m <sup>2</sup> ) | Depth (m)              | Area (m <sup>2</sup> ) |                        |           |                        |       |       |       |       |       |     |
| 0.000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 100.0                  | 0.500                                                                               | 100.0                  | 0.501                  | 0.0                    |                        |           |                        |       |       |       |       |       |     |
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