

Basic Stormwater Detention Assessment

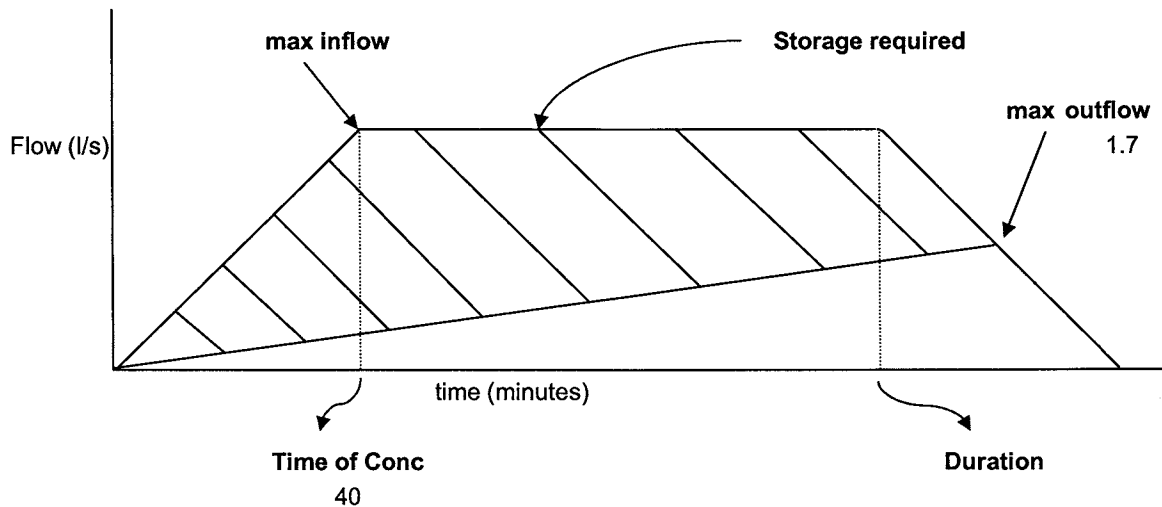
Title: East Gawler Master Plan
 Catchment: 2

Date: 06/12/07
 Job No: C070975

Area: 169.8 m²
 Coeff Permeability: 0.60
 Time of conc.: 40 min
 ARI Storm: 100
 Max Outflow Qp: 1.70 m³/sec

| Duration min | Intensity mm/hr | Inflow rate Ip m ³ /sec | Inflow Vol Vi m ³ | Max Storage Smax m ³ |
|--------------|-----------------|------------------------------------|------------------------------|---------------------------------|
| 15 | 103 | 29.1 | 26234.10 | 23429.10 |
| 30 | 68 | 19.2 | 34639.20 | 31069.20 |
| 45 | 53 | 15.0 | 40497.30 | 36162.30 |
| 60 | 43.2 | 12.2 | 44012.16 | 38912.16 |
| 120 | 26.8 | 7.6 | 54607.68 | 46447.68 |
| 180 | 20.1 | 5.7 | 61433.64 | 50213.64 |
| 240 | 16.4 | 4.6 | 66833.28 | 52553.28 |
| 300 | 14 | 4.0 | 71316.00 | 53976.00 |
| 360 | 12.3 | 3.5 | 75187.44 | 54787.44 |
| 420 | 11 | 3.1 | 78447.60 | 54987.60 |
| 480 | 10 | 2.8 | 81504.00 | 54984.00 |
| 540 | 9.22 | 2.6 | 84540.02 | 54960.02 |
| 600 | 8.56 | 2.4 | 87209.28 | 54569.28 |
| 660 | 8 | 2.3 | 89654.40 | 53954.40 |
| 720 | 7.52 | 2.1 | 91936.51 | 53176.51 |
| 840 | 6.73 | 1.9 | 95991.34 | 51111.34 |
| 960 | 6.1 | 1.7 | 99434.88 | 48434.88 |
| 1080 | 5.6 | 1.6 | 102695.04 | 45575.04 |
| 1440 | 4.53 | 1.3 | 110763.94 | 35283.94 |
| 3600 | 2.2 | 0.6 | 134481.60 | -51158.40 |
| 4320 | 1.88 | 0.5 | 137904.77 | -84455.23 |

Max Storage: 54987.60 m³
 Say: 55000 m³



Basic Stormwater Detention Assessment

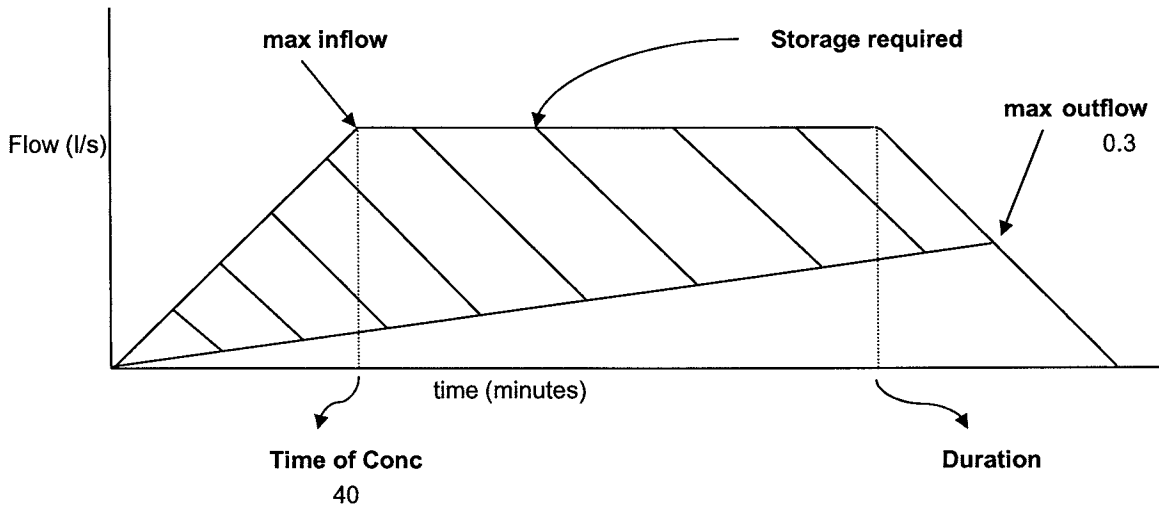
Title: East Gawler Master Plan
 Catchment: 3

Date: 06/12/07
 Job No: C070975

| | |
|--------------------|--------------------------|
| Area | 17.2 m ² |
| Coeff Permeability | 0.60 |
| Time of conc. | 40 min |
| ARI Storm | 100 |
| Max Outflow Qp | 0.30 m ³ /sec |

| Duration min | Intensity mm/hr | Inflow rate Ip m ³ /sec | Inflow Vol Vi m ³ | Max Storage Smax m ³ |
|--------------|-----------------|------------------------------------|------------------------------|---------------------------------|
| 15 | 103 | 3.0 | 2657.40 | 2162.40 |
| 30 | 68 | 1.9 | 3508.80 | 2878.80 |
| 45 | 53 | 1.5 | 4102.20 | 3337.20 |
| 60 | 43.2 | 1.2 | 4458.24 | 3558.24 |
| 120 | 26.8 | 0.8 | 5531.52 | 4091.52 |
| 180 | 20.1 | 0.6 | 6222.96 | 4242.96 |
| 240 | 16.4 | 0.5 | 6769.92 | 4249.92 |
| 300 | 14 | 0.4 | 7224.00 | 4164.00 |
| 360 | 12.3 | 0.4 | 7616.16 | 4016.16 |
| 420 | 11 | 0.3 | 7946.40 | 3806.40 |
| 480 | 10 | 0.3 | 8256.00 | 3576.00 |
| 540 | 9.22 | 0.3 | 8563.54 | 3343.54 |
| 600 | 8.56 | 0.2 | 8833.92 | 3073.92 |
| 660 | 8 | 0.2 | 9081.60 | 2781.60 |
| 720 | 7.52 | 0.2 | 9312.77 | 2472.77 |
| 840 | 6.73 | 0.2 | 9723.50 | 1803.50 |
| 960 | 6.1 | 0.2 | 10072.32 | 1072.32 |
| 1080 | 5.6 | 0.2 | 10402.56 | 322.56 |
| 1440 | 4.53 | 0.1 | 11219.90 | -2100.10 |
| 3600 | 2.2 | 0.1 | 13622.40 | -19137.60 |
| 4320 | 1.88 | 0.1 | 13969.15 | -25270.85 |

Max Storage: 4249.92 m³
 Say: 4200 m³



Basic Stormwater Detention Assessment

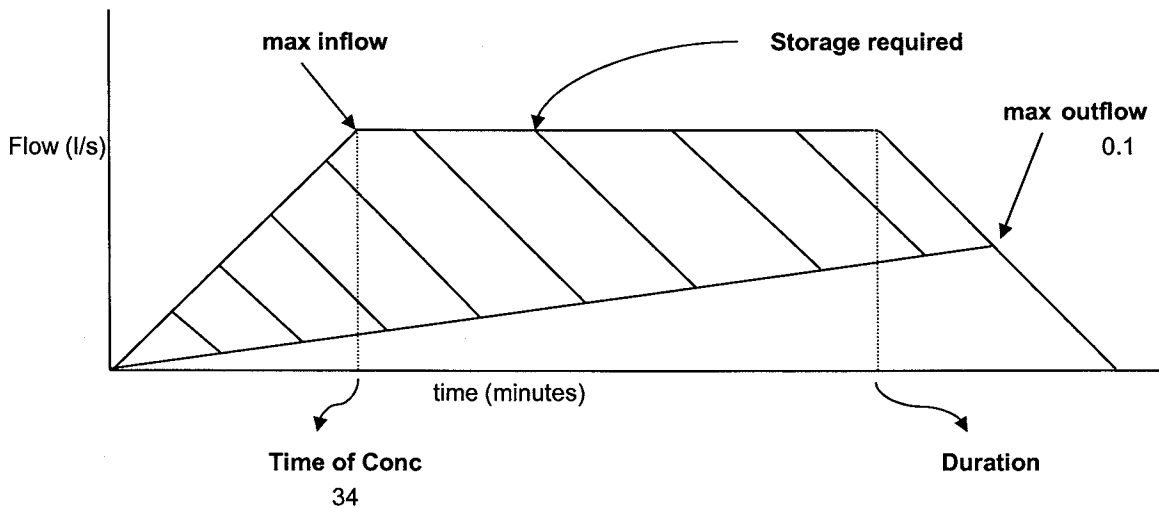
Title: East Gawler Master Plan
 Catchment: 4

Date: 06/12/07
 Job No: C070975

| | |
|--------------------|--------------------------|
| Area | 8 m ² |
| Coeff Permeability | 0.60 |
| Time of conc. | 34 min |
| ARI Storm | 100 |
| Max Outflow Qp | 0.10 m ³ /sec |

| Duration min | Intensity mm/hr | Inflow rate Ip m ³ /sec | Inflow Vol Vi m ³ | Max Storage Smax m ³ |
|--------------|-----------------|------------------------------------|------------------------------|---------------------------------|
| 15 | 103 | 1.4 | 1236.00 | 1089.00 |
| 30 | 68 | 0.9 | 1632.00 | 1440.00 |
| 45 | 53 | 0.7 | 1908.00 | 1671.00 |
| 60 | 43.2 | 0.6 | 2073.60 | 1791.60 |
| 120 | 26.8 | 0.4 | 2572.80 | 2110.80 |
| 180 | 20.1 | 0.3 | 2894.40 | 2252.40 |
| 240 | 16.4 | 0.2 | 3148.80 | 2326.80 |
| 300 | 14 | 0.2 | 3360.00 | 2358.00 |
| 360 | 12.3 | 0.2 | 3542.40 | 2360.40 |
| 420 | 11 | 0.1 | 3696.00 | 2334.00 |
| 480 | 10 | 0.1 | 3840.00 | 2298.00 |
| 540 | 9.22 | 0.1 | 3983.04 | 2261.04 |
| 600 | 8.56 | 0.1 | 4108.80 | 2206.80 |
| 660 | 8 | 0.1 | 4224.00 | 2142.00 |
| 720 | 7.52 | 0.1 | 4331.52 | 2069.52 |
| 840 | 6.73 | 0.1 | 4522.56 | 1900.56 |
| 960 | 6.1 | 0.1 | 4684.80 | 1702.80 |
| 1080 | 5.6 | 0.1 | 4838.40 | 1496.40 |
| 1440 | 4.53 | 0.1 | 5218.56 | 796.56 |
| 3600 | 2.2 | 0.0 | 6336.00 | -4566.00 |
| 4320 | 1.88 | 0.0 | 6497.28 | -6564.72 |

Max Storage: 2360.40 m³
 Say: 2400 m³



Basic Stormwater Detention Assessment

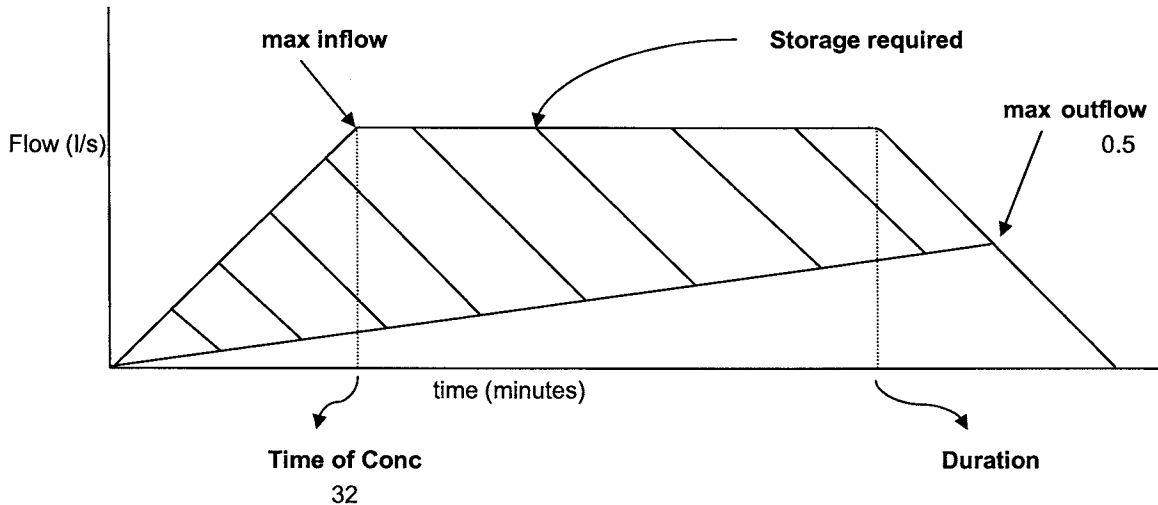
Title: East Gawler Master Plan
 Catchment: 5

Date: 06/12/07
 Job No: C070975

| | | |
|--------------------|------|---------------------|
| Area | 32.1 | m ² |
| Coeff Permeability | 0.50 | |
| Time of conc. | 32 | min |
| ARI Storm | 100 | |
| Max Outflow Qp | 0.50 | m ³ /sec |

| Duration min | Intensity mm/hr | Inflow rate Ip m ³ /sec | Inflow Vol Vi m ³ | Max Storage Smax m ³ |
|--------------|-----------------|------------------------------------|------------------------------|---------------------------------|
| 15 | 103 | 4.6 | 4132.88 | 3427.88 |
| 30 | 68 | 3.0 | 5457.00 | 4527.00 |
| 45 | 53 | 2.4 | 6379.88 | 5224.88 |
| 60 | 43.2 | 1.9 | 6933.60 | 5553.60 |
| 120 | 26.8 | 1.2 | 8602.80 | 6322.80 |
| 180 | 20.1 | 0.9 | 9678.15 | 6498.15 |
| 240 | 16.4 | 0.7 | 10528.80 | 6448.80 |
| 300 | 14 | 0.6 | 11235.00 | 6255.00 |
| 360 | 12.3 | 0.5 | 11844.90 | 5964.90 |
| 420 | 11 | 0.5 | 12358.50 | 5578.50 |
| 480 | 10 | 0.4 | 12840.00 | 5160.00 |
| 540 | 9.22 | 0.4 | 13318.29 | 4738.29 |
| 600 | 8.56 | 0.4 | 13738.80 | 4258.80 |
| 660 | 8 | 0.4 | 14124.00 | 3744.00 |
| 720 | 7.52 | 0.3 | 14483.52 | 3203.52 |
| 840 | 6.73 | 0.3 | 15122.31 | 2042.31 |
| 960 | 6.1 | 0.3 | 15664.80 | 784.80 |
| 1080 | 5.6 | 0.2 | 16178.40 | -501.60 |
| 1440 | 4.53 | 0.2 | 17449.56 | -4630.44 |
| 3600 | 2.2 | 0.1 | 21186.00 | -33294.00 |
| 4320 | 1.88 | 0.1 | 21725.28 | -43554.72 |

Max Storage: 6498.15 m³
 Say: 6500 m³



Basic Stormwater Detention Assessment

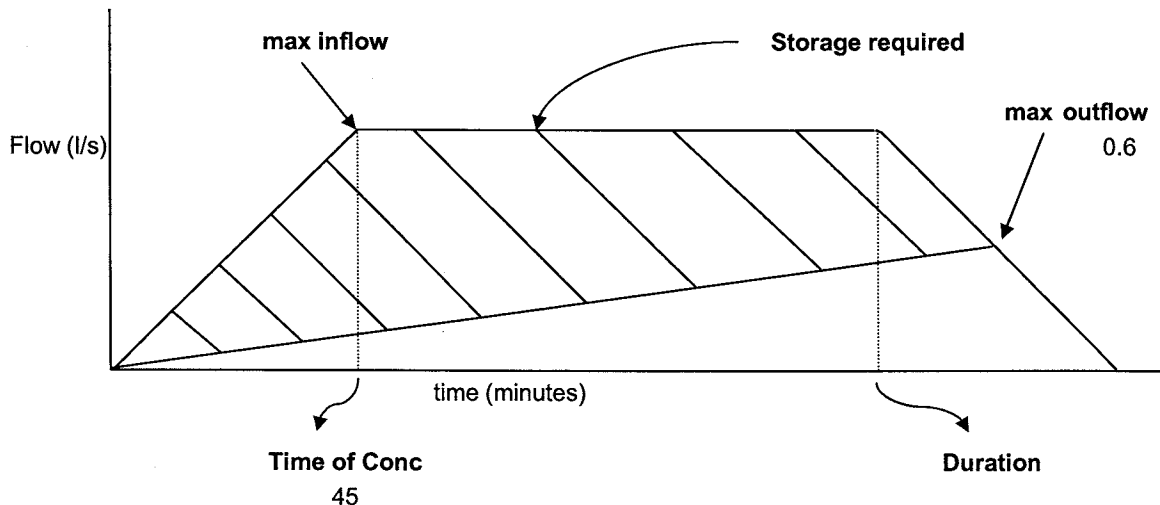
Title: East Gawler Master Plan
Catchment: 6

Date: 06/12/07
Job No: C070975

| | | |
|--------------------|------|---------------------|
| Area | 58.5 | m ² |
| Coeff Permeability | 0.60 | |
| Time of conc. | 45 | min |
| ARI Storm | 100 | |
| Max Outflow Qp | 0.60 | m ³ /sec |

| Duration min | Intensity mm/hr | Inflow rate Ip m ³ /sec | Inflow Vol Vi m ³ | Max Storage Smax m ³ |
|-----------------|--------------------|---------------------------------------|---------------------------------|------------------------------------|
| 15 | 103 | 10.0 | 9038.25 | 7958.25 |
| 30 | 68 | 6.6 | 11934.00 | 10584.00 |
| 45 | 53 | 5.2 | 13952.25 | 12332.25 |
| 60 | 43.2 | 4.2 | 15163.20 | 13273.20 |
| 120 | 26.8 | 2.6 | 18813.60 | 15843.60 |
| 180 | 20.1 | 2.0 | 21165.30 | 17115.30 |
| 240 | 16.4 | 1.6 | 23025.60 | 17895.60 |
| 300 | 14 | 1.4 | 24570.00 | 18360.00 |
| 360 | 12.3 | 1.2 | 25903.80 | 18613.80 |
| 420 | 11 | 1.1 | 27027.00 | 18657.00 |
| 480 | 10 | 1.0 | 28080.00 | 18630.00 |
| 540 | 9.22 | 0.9 | 29125.98 | 18595.98 |
| 600 | 8.56 | 0.8 | 30045.60 | 18435.60 |
| 660 | 8 | 0.8 | 30888.00 | 18198.00 |
| 720 | 7.52 | 0.7 | 31674.24 | 17904.24 |
| 840 | 6.73 | 0.7 | 33071.22 | 17141.22 |
| 960 | 6.1 | 0.6 | 34257.60 | 16167.60 |
| 1080 | 5.6 | 0.5 | 35380.80 | 15130.80 |
| 1440 | 4.53 | 0.4 | 38160.72 | 11430.72 |
| 3600 | 2.2 | 0.2 | 46332.00 | -19278.00 |
| 4320 | 1.88 | 0.2 | 47511.36 | -31058.64 |

Max Storage: 18657.00 m³
 Say: 18700 m³



Basic Stormwater Detention Assessment

Title: East Gawler Master Plan
Catchment: 7

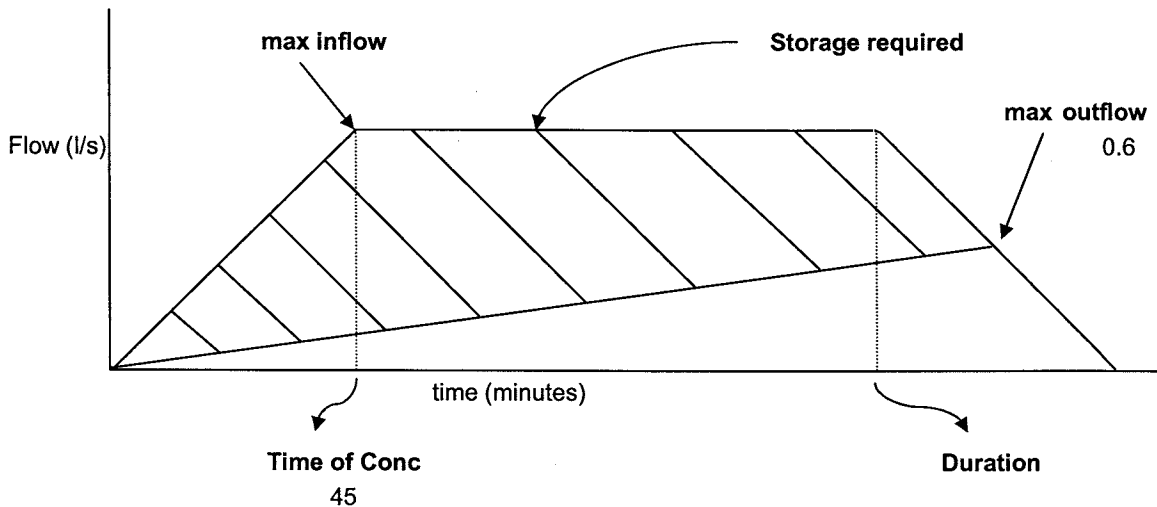
Date: 06/12/07
Job No: C070975

| | |
|--------------------|--------------------------|
| Area | 43.1 m ² |
| Coeff Permeability | 0.60 |
| Time of conc. | 45 min |
| ARI Storm | 100 |
| Max Outflow Qp | 0.60 m ³ /sec |

| Duration min | Intensity mm/hr | Inflow rate Ip m ³ /sec | Inflow Vol Vi m ³ | Max Storage Smax m ³ |
|--------------|-----------------|------------------------------------|------------------------------|---------------------------------|
| 15 | 103 | 7.4 | 6658.95 | 5578.95 |
| 30 | 68 | 4.9 | 8792.40 | 7442.40 |
| 45 | 53 | 3.8 | 10279.35 | 8659.35 |
| 60 | 43.2 | 3.1 | 11171.52 | 9281.52 |
| 120 | 26.8 | 1.9 | 13860.96 | 10890.96 |
| 180 | 20.1 | 1.4 | 15593.58 | 11543.58 |
| 240 | 16.4 | 1.2 | 16964.16 | 11834.16 |
| 300 | 14 | 1.0 | 18102.00 | 11892.00 |
| 360 | 12.3 | 0.9 | 19084.68 | 11794.68 |
| 420 | 11 | 0.8 | 19912.20 | 11542.20 |
| 480 | 10 | 0.7 | 20688.00 | 11238.00 |
| 540 | 9.22 | 0.7 | 21458.63 | 10928.63 |
| 600 | 8.56 | 0.6 | 22136.16 | 10526.16 |
| 660 | 8 | 0.6 | 22756.80 | 10066.80 |
| 720 | 7.52 | 0.5 | 23336.06 | 9566.06 |
| 840 | 6.73 | 0.5 | 24365.29 | 8435.29 |
| 960 | 6.1 | 0.4 | 25239.36 | 7149.36 |
| 1080 | 5.6 | 0.4 | 26066.88 | 5816.88 |
| 1440 | 4.53 | 0.3 | 28114.99 | 1384.99 |
| 3600 | 2.2 | 0.2 | 34135.20 | -31474.80 |
| 4320 | 1.88 | 0.1 | 35004.10 | -43565.90 |

Max Storage: 11892.00 m³

Say: 11900 m³



Basic Stormwater Detention Assessment

Title: East Gawler Master Plan
Catchment: 8

Date: 06/12/07
Job No: C070975

| | |
|--------------------|--------------------------|
| Area | 16.9 m ² |
| Coeff Permeability | 0.65 |
| Time of conc. | 38 min |
| ARI Storm | 100 |
| Max Outflow Qp | 0.20 m ³ /sec |

| Duration min | Intensity mm/hr | Inflow rate Ip m ³ /sec | Inflow Vol Vi m ³ | Max Storage Smax m ³ |
|--------------|-----------------|------------------------------------|------------------------------|---------------------------------|
| 15 | 103 | 3.1 | 2828.64 | 2510.64 |
| 30 | 68 | 2.1 | 3734.90 | 3326.90 |
| 45 | 53 | 1.6 | 4366.54 | 3868.54 |
| 60 | 43.2 | 1.3 | 4745.52 | 4157.52 |
| 120 | 26.8 | 0.8 | 5887.96 | 4939.96 |
| 180 | 20.1 | 0.6 | 6623.96 | 5315.96 |
| 240 | 16.4 | 0.5 | 7206.16 | 5538.16 |
| 300 | 14 | 0.4 | 7689.50 | 5661.50 |
| 360 | 12.3 | 0.4 | 8106.93 | 5718.93 |
| 420 | 11 | 0.3 | 8458.45 | 5710.45 |
| 480 | 10 | 0.3 | 8788.00 | 5680.00 |
| 540 | 9.22 | 0.3 | 9115.35 | 5647.35 |
| 600 | 8.56 | 0.3 | 9403.16 | 5575.16 |
| 660 | 8 | 0.2 | 9666.80 | 5478.80 |
| 720 | 7.52 | 0.2 | 9912.86 | 5364.86 |
| 840 | 6.73 | 0.2 | 10350.07 | 5082.07 |
| 960 | 6.1 | 0.2 | 10721.36 | 4733.36 |
| 1080 | 5.6 | 0.2 | 11072.88 | 4364.88 |
| 1440 | 4.53 | 0.1 | 11942.89 | 3074.89 |
| 3600 | 2.2 | 0.1 | 14500.20 | -7327.80 |
| 4320 | 1.88 | 0.1 | 14869.30 | -11278.70 |

Max Storage: 5718.93 m³
 Say: 5700 m³

