



Key:

- Gravel Pits ⊕
- 450 x 900 Sumps ■
- 900mm Open Channelling - - - - -
- 150Ø @1:100 Stormwater Drainpipe - - - - -
- Overland flow - - - - -

Surface Water Control Notes:

- I. The proposed development increases the modified catchment surface water flow being roof & paved areas discharging to the stormwater outfall. The increase is from 5.07 l/s or 0.00507 m³/s to 63.33 l/s or 0.06333 m³/s being a total of 58.26 l/s or 0.05826m³/s.
- II. Off set from the increase of modified development there is a decrease in overland surface water flow. The decrease is from 42.51 l/s or 0.04251 m³/s to 12.84 l/s or 0.01284 m³/s being a total of 29.67 l/s or 0.02967m³/s.
- III. The total catchment surface water flow increasing from 47.58 l/s or 0.04758 m³/s to 76.17 l/s or 0.07617m³/s therefore an increase of surface water flow across the catchment of 28.59 l/s or 0.02859m³/s.
- IV. Percolation testing carried out confirms that due to basal and lateral ground water movement, soakage is appropriate outfall for surface water control of this development.
- V. It is proposed that 7 gravel pits of 7.5m³ void storage volume are installed at regular intervals around the perimeter of the unsealed areas to provide the storage volume required. Each gravel pit to be 2.5m x 2.5m x 3m deep (7.5m³ storage volume) will also provide surface water entry to the underlying gravels.
- VI. Surface water channelling around the edge of the unsealed hardstand area will direct flow to the gravel pits. The location of the pits and channelling is shown on GS-01.2 Surface Water Overlay at Appendix A.
- VII. Note that no water tanks have been considered as part of this solution.