

# case study

## LEACHATE WATER HARVESTING

**Hornsby Shire Council**  
**Foxglove Oval, Mt Colah**

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Filter pump control  
DB.2 CB.10

The custom designed panel controls and monitors the system

### Clients Brief:

To design and install a pump, filter and control system that will transfer and treat leachate water for re-use on the oval irrigation system.

### The Challenge:

The primary leachate treatment system had been in operation for several years. Parts of the system had been vandalized over time and needed repair. The final addition to the system was to be a secondary treatment and transfer system.

### Our Solution:

We performed the necessary repairs to the existing polyethylene holding tank which involved minor excavation, boulder retaining walls and security fencing. Once the water passes through primary treatment it is held in the holding tank. Watermatic Irrigation designed and installed the submersible pump, filtration, supply pipes and pump controller. The submersible pump transfers the pre-treated leachate water up to the irrigation header tank which is located approximately 370m away, on demand. The leachate water passes through automatic media and UV filtration prior to being held in the irrigation header tank. The pump, UV filter and town water top up are controlled by a custom designed control panel which logs and stores data on the system. A submersible pressure transducer monitors the level in the leachate tank and the irrigation header tank so the user can see at a glance the available water.

An overview of the control room, showing the media filter, UV filter and system controller

### Outcomes:

This installation will improve water quality down stream and save over 3 000 000 litres of town water per year.



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