



The photo above shows the reinforcing steel being placed for the reservoir dividing wall. The existing water pollution control plant can be seen in the background.

The water storage capacity expansion was needed to service the existing population of Thornbury in addition to future development.



Completed reservoir.

## Thornbury Water Storage Expansion

### Town of The Blue Mountains

In 2004, following the completion of a Class Environmental Assessment planning process, undertaken by the Ainley Group, the Town of The Blue Mountains extended the engineering contract to include final design and construction administration/site observation services for a new water storage facility in Thornbury. The water storage capacity expansion was needed to service the existing population of Thornbury in addition to future development.

A Design Brief for the proposed works was completed in October of 2003. Based on the design criteria, it was determined that the grade level reservoir should have a total usable volume of 3,400 m<sup>3</sup> in two interconnected cells. In-line centrifugal pumps were selected to compliment the existing pumping facilities at the water filtration plant. Three pumps were provided; 2 max day at 87 L/s each and 1, max duty at 103 L/s. The station is equipped to provide top-up chlorination using sodium hypochlorite. A diesel driven engine provides standby power. The station is controlled by the water level in the existing elevated water storage tank. The design included an expansion of the Town's existing SCADA system, HVAC, site servicing, driveway access and landscaping.

#### Project Facts

**Client:** Town of The Blue Mountains (Thornbury)

#### Scope of Work:

- Detailed design:
  - SCADA system expansion
  - provision of top-up chlorination
  - HVAC
  - site servicing
  - driveway access
  - landscaping
- Construction administration
- Site observation.

#### Key Design Criteria:

- Design population of 8,000 persons
- Volume = 3,400 m<sup>3</sup>
- 2 pumps @ 87L/s
- 1 pump @ 103L/s

#### Project Cost:

Construction: \$2,400,000  
Engineering: \$240,000