



Laying the 300-mm diameter forcemain – a component of Phase 1 of the multi-stage expansion.

## Craigleith Forcemain Town of The Blue Mountains (Craigleith)

In 2004, because of development pressure in the Blue Mountain/Craigleith area, the Town of The Blue Mountains retained the Ainley Group to design and supervise the construction of an expansion to the Town's main sewage pump station/forcemain in Craigleith. Prior to this, the Ainley Group completed a Schedule B Class EA, which determined the need for the addition of a duplicate forcemain to the system along with revisions to the discharge piping at the main sewage pump station. During the preliminary design stage, it was determined that future expansions to the system would be required. The Stage 1 expansion (from 122 L/s to 180 L/s) involved the upgrade to the existing pump discharge piping along with the installation of a duplicate, 300-mm dia. forcemain. The identified Stage 2 expansion (to 215 L/s in 2010) will require the addition of a third sewage pump in the existing station. The planned Stage 3 expansion (to 323 L/s in 2015, which is the ultimate peak design flow for the service area, will involve the replacement of all three pumps in conjunction with an expansion of the Sewage Treatment Plant.

The Stage 1 upgrades were completed in 2006 for a construction cost of \$1,300,000. Engineering (pre-design, design, contract administration and resident site services) was completed at a cost of \$133,000.

The installation of the duplicate forcemain required approval of the MTO and the Grey Sauble Conservation Authority. Several road and creek crossings necessitated using horizontal directional drilling methods for pipe installation. The upgrade to the sewage pump-station piping required that the pump station be by-passed using temporary portable pumps. The work was completed in November 2006.

### Project Facts

**Client:** Town of The Blue Mountains

#### Scope of Work:

- Preliminary and detailed design
- Monitoring of construction
- MTO and Grey Sauble Conservation Authority approval
- Temporary by-passing of the pump station using portable pumps
- Planned Multi-Stage Expansion:
  - **Stage 1** - upgrade to the existing pump discharge piping along with the installation of a duplicate, 300-mm dia. forcemain (2006)
  - **Stage 2** – addition of a third sewage pump in the existing station (2010)
  - **Stage 3** – replacement of all three pumps in conjunction with an expansion of the Sewage Treatment Plant (2015).

#### Project Cost:

Construction: \$1,300,000 (Stage 1)  
Engineering: \$133,000