



*Fused watermain ready for installation by directional drilling.*

## Powerline Road/WPCP Watermain Extension Town of Wasaga Beach

The existing water distribution system in the west end of Wasaga Beach (two elevated water storage reservoirs) did not have sufficient capacity to fully recharge the tanks in an efficient manner. To alleviate the problem, it was proposed to extend a trunk watermain from Powerline Road to Sunnidale Road.

The Ainley Group completed a Class Environmental Assessment (Schedule B) in 2007, which outlined several options. The preferred option included the installation of a new watermain from Powerline Road to the Water Pollution Control Plant (WPCP) through Wasaga Beach Provincial Park using horizontal directional drilling methods and then extending the watermain from the WPCP along Knox Road East to Sunnidale Road.

### Construction

The construction involved the installation of 700 metres of 500-mm diameter HDPE DR11 (400-mm inner diameter) through the Wasaga Beach Provincial Park (MNR) property by horizontal directional drilling. Before construction, a hydraulic network analysis was completed to confirm the required internal pipe size diameter of 400 mm.

### Project Facts

**Client:** Town of Wasaga Beach

#### Scope of Work:

- Installation of 700 metres of 550-mm dia. watermain under Wasaga Beach Provincial Park from Powerline Road to the WPCP using directional drilling
- Installation of 300 metres of 400-mm dia. watermain through the WPCP by open cut
- Installation of 150 metres of 400-mm dia. watermain along Powerline Road by open cut.

#### Key Design Criteria:

- Watermain runs through sensitive areas of Wasaga Beach Provincial Park
- The proposed watermain would likely run through the habitat of the Eastern Hognose snake and Hill's Thistle, a native thistle. Both are Provincially protected species.

**Project Cost:** \$1,067,000 (2008)

Another 300 metre section of 400-mm diameter PVC DR18 watermain was installed through the Water Pollution Control Plant (WPCP) property by using open cut methods. Another 150 metres of 400-mm diameter PVC DR18 was installed along Powerline Road by open cut to intersect with the watermain at Fernbrook Drive.

In a future contract, now in the EA stage, additional 400-mm diameter watermain will be installed under the Nottawasaga River using directional drilling. The watermain will surface at Knox Road East and run east to connect with the existing watermain at Sunnidale Road. Service connections will be made to the existing homes along Knox Road East when the watermain during installation.

The majority of construction was completed during the winter months. The weather provided some adverse conditions for the directional drilling crews and the installation of the pipeline.

The project was completed within budget constraints with substantial completion being achieved in January 2009.