



December 3, 2009

### Baltac & Hilltop Road Sewer Construction Update

With construction of the sewer system now well underway in your neighbourhood, and in response to some of the inquiries we have been fielding, the following provides a brief overview of the system that is going into the ground within your community.

One of the key objectives of the sewer design is to service as many properties as possible with a gravity sewer main. Gravity mains ideally require the road to generally drain in one direction to avoid making the pipe on the street excessively deep. This general slope does not exist in many areas of the Baltac community. Deep sewer mains are substantially more expensive to install and create additional surface damage during construction. They can also be extremely difficult to maintain.

In areas where gravity sewers are not feasible because of site constraints, low pressure sewer lines are being installed. These areas were determined by the following criteria:

- areas where the road is rolling up and down with no significant grading direction (Hill Top Road)
- areas where the majority of residents are believed to have septic tanks in their rear yard (east side of Hill Top Road)
- areas where the homes – and especially the basements - are significantly lower than the road (west side of Hill Top Road and south Baltac between the beach access and Lake Drive)
- areas where the homes are significantly higher than the road (south Baltac between the beach access and Lake Drive)

In all of these situations, low pressure service connections allow greater flexibility for changing grades and manoeuvring around retaining walls and other significant landscaping features. Gravity sewer service connections do not allow that flexibility.

Low pressure sewer systems require pumps in each home that grind up everything into a slurry and pump it to the sewer mains. These systems are also characterized by smaller main lines (2" to 4" diameter) than the typical gravity mains (8" diameter) and the requirement for fewer manholes in the roadway. Pumps located in a tank either inside or outside each home only turn on when the tank reaches a certain level. At that time they push the fluid through the service line and along the main. Each home is protected from sewer backups through a one way valve at the property line, and a second valve in the pump itself. To ensure that all pumps on the system work in unison and are of the same capabilities, the RDEK specifies that all pumps be Environment One pumps. Additional information regarding Environment One pumps is available at the Windermere Water and Sewer offices, or online at [www.eone.com](http://www.eone.com).

In the case of Baltac Road north of the beach access, gravity mains are being utilized to service one side of the road, while pressurized service connections are required for the homes along the lake, where the homes are lower than the road. This allows numerous options for the location of the service connections for the homes on the lake, while also taking advantage of the general grading of the area towards the lake access at the intersection of Baltac & Nappe Roads.

Gravity mains are being installed in all of the lower roadways north of the Beach Access on Baltac Road, and at the south end of Baltac Road between the Hill Top Road Reservoir and Lake Drive. Both of these areas naturally drain to low areas where a centralized lift station will be installed. The lift stations are mostly below ground and contain a series of pumps that pump the fluid to the WWSC sewage lagoons for treatment.

Wildstone Construction and Engineering, our onsite contractor, is required to install a service connection to each property line as part of the current work. WWSC is working with Wildstone to extend these service connections all the way to the home for interested residents. Each home has specific considerations that will need to be reviewed as part of any construction on private property. Installing the service connection from the road, across the property line and all the way to the house at the same time will provide the most cost effective installation for the homeowner. These household connections are expected to be installed beginning in the early spring 2010, in advance of the proposed project completion date of May, 2010. Many of you have already provided WWSC with lot maps and other details regarding your existing septic fields and tanks. Thanks to those who have responded to that request. We will be continuing the process of contacting residents over the winter months to discuss the details of each connection. If you are interested in receiving more information regarding connection to the main system, please contact Jill Pawlyshyn at WWSC by phone at 250.342.6999 or by email [jpawlyshyn@windermerewater.com](mailto:jpawlyshyn@windermerewater.com) before December 15, 2009 to allow us to provide connection quotes in a timely manner.

We would like to thank-you again for your patience during this time of construction. And please do not hesitate to contact our office if you have any questions.

Sincerely,



Paul Partlo  
President