



# NORTH MERCER ISLAND/ENATAI Sewer Upgrade Project

November 2017

## Keeping sewage flowing during construction

King County Wastewater Treatment Division needs to replace and repair aging sewer pipes that serve areas in North Mercer Island, the southwest portion of Bellevue near Enatai Beach, and the Town of Beaux Arts Village. The pipeline carries wastewater from the North Mercer Island Pump Station to the Sveyolocken Pump Station in Bellevue. The engineering and design for this project is in process with construction scheduled to begin in 2020.

### Re-lining the Enatai Interceptor

As part of this project, King County will re-line the existing Enatai Interceptor (yellow highlighted line on map to right) – an aging 27-inch pipeline that runs along the Bellevue shoreline between the Enatai Beach Park and the Sveyolocken Pump Station in Mercer Slough. Re-lining the pipe requires crews to insert, expand and cure a liner that will protect the pipe from cracks and leaks as it ages.



While performing the work, King County cannot maintain sewer service for the 25 homes along SE Lake Drive that connect directly to the Enatai Interceptor. Instead, the County will install a temporary service line and up to 13 grinder pumps along the shore to maintain sewer service for all 25 homes.

### Temporary sewer system

Environmental permits will require most work in Lake Washington and Mercer Slough to occur during the summer in order to protect fish. As a result, re-lining work will take up to two years due to the limited working window. The County explored several options, including long-term hotel stays, and determined that installation of a temporary system would create the least impacts to residents along SE Lake Drive. Installation of a temporary bypass line and grinder pumps will provide residents with uninterrupted service during the re-lining work.

**Alternative Formats Available**  
**206-477-5371 TTY Relay: 711**

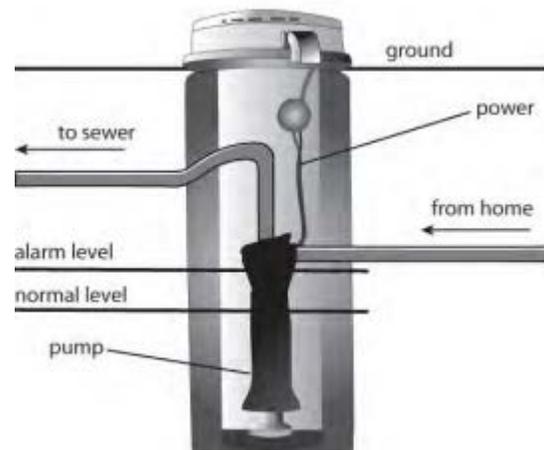


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As much as possible, we design the wastewater system to use gravity to keep waste flowing. Because of the topography of the Enatai shoreline, that is not an option for this temporary system. We need to install grinder pumps as part of the temporary sewer service to pump flows to the temporary sewer line.

### What is a grinder pump?

Rather than sewage going directly from the home to the sewer line, the grinder pump acts as a holding tank for waste coming from homes and pipes. Once the wastewater within the pump rises to a specific level, the pump will begin to grind the waste, similar to the garbage disposal in your kitchen sink. The pump then pumps wastewater through the temporary bypass pipe back into the sewer system.



**Concept drawing of a grinder pump**

### Temporary construction easements

In order to work on your property to connect and maintain the grinder pumps, King County will need a temporary construction easement, or TCE, from you. This agreement gives the County access to your property within specific parameters. One of King County's real property representatives will work with you this fall and into 2018 to finalize the TCE.

### Grinder pump installation

Anticipated to begin in 2021, grinder pump installation requires King County crews to dig a hole (deep enough to install the grinder pump and reach your existing sewer line). After soil has been removed, each pump is lowered into place and connected to the home and county sewer lines. Crews will fill the holes with soil once the grinder pump is operational, leaving the lid and a control panel visible aboveground. Two 2-inch temporary pipes (a bypass sewer line and an electrical line) will run along the ground surface connecting the grinder pumps to the sewer system and providing power.

### Restoring your property

Once crews complete the relining of the Enatai Interceptor, homes will be reconnected to the main pipeline, and King County will remove the temporary lines and grinder pumps and restore properties to their original condition.

**If you have any questions or concerns about the project, please contact King County's community relations specialist Kristine Cramer at 206-477-5415 or [kristine.cramer@kingcounty.gov](mailto:kristine.cramer@kingcounty.gov).**

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