



# NORTH MERCER ISLAND/ENATAI Sewer Upgrade Project

APRIL 2017

## Installing King County's new sewer pipeline in North Mercer Island/Enatai

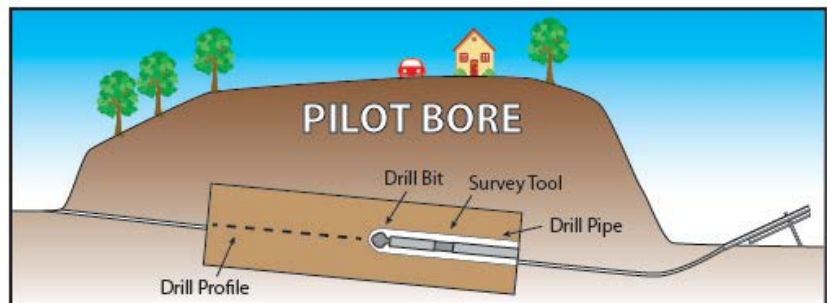
Installed during the 1970's, the county's North Mercer Island and Enatai sewer pipelines are aging and reaching capacity. Increasing sewer capacity will allow King County to provide reliable wastewater service through the year 2060.

To avoid surface impacts in critical areas and maintain safety depth standards, **Horizontal Directional Drilling (HDD)** will be used from Enatai Beach Park to Sweylocken Pump Station.

With HDD, the contractor uses equipment on the surface to drill an underground pathway for the new pipe, and then to pull the pipe through the path. See below for an overview of how HDD works.

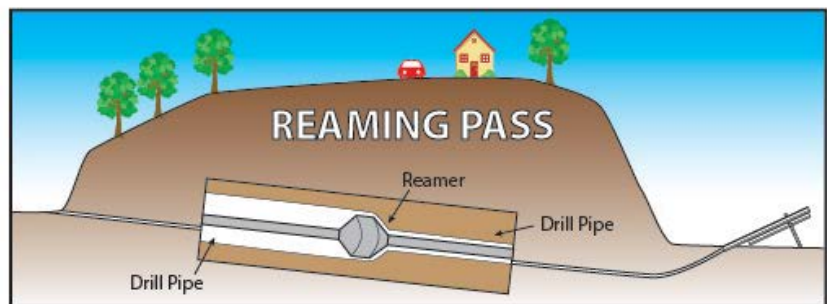
### **Pilot Bore**

The contractor builds entry and exit points for the drilling operation. Steel pipes called *casings* will be installed where the drill enters and exits. The contractor will then carry out the pilot bore, establishing the underground path for the new pipeline.



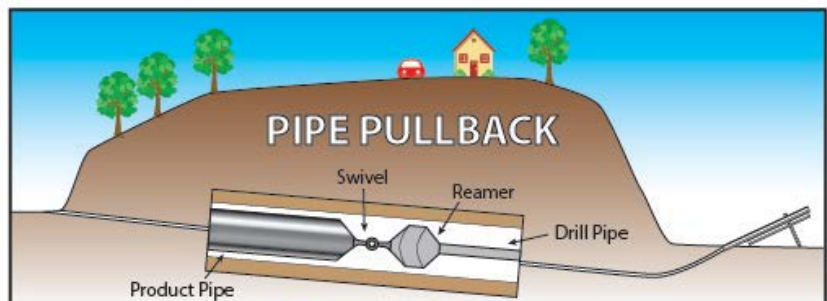
### **Reaming Pass**

The contractor enlarges the hole to the final pipe size using a *reamer*. Mud from drilling in this step is hauled off site.



### **Pipe Pullback**

Once the bore hole is prepared, the pipeline is pulled through the hole. The contractor will stage on Lake Washington and pull toward Sweylocken Pump Station.





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## Horizontal Directional Drilling – Examples of equipment used



To protect the surface, crews will install steel conductor casings underground prior to drilling the pilot bore.



Specific drilling equipment is chosen depending on soil conditions. During project design, soil conditions are analyzed at the depth where the pipeline will be installed.



While the drilling crew is preparing the bore hole, a crew uses heat to fuse pipe sections together. The growing pipeline is laid out in long strings. On the day of pullback, the strings are fused together and pulled through the borehole.

**For more information:**

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**Sign up for text alerts** Text KING MERCERSEWER to 468-311 for Mercer Island updates, or KING ENATAISEWER to 468-311 for Bellevue updates

**Visit the project Web page at** [www.kingcounty.gov/MercerEnataiSewer](http://www.kingcounty.gov/MercerEnataiSewer)

**ALTERNATIVE FORMATS AVAILABLE**  
 206-477-5371/ 711 (TTY Relay)