## **Enatai Technical Information Session**

Monday, April 24, 2017, 6 - 8 p.m. Bellevue High School 10416 SE Wolverine Way Bellevue, WA 98004

## **Attendance**

11 attendees

## Advance notification

Individual invitations were mailed and emailed to property owners in area, and the meeting was advertised through a project listserv message on April 11 and reminder on April 19.

## Meeting overview and purpose

King County Wastewater Treatment Division (WTD) presented details about drilling methods that will be used for this portion of the North Mercer Island and Enatai Sewer Upgrade project alignment. Technical experts answered questions about specific properties and impacts. King County used five boards and a roll plot to display the project area.



Project boards displayed project details.

The meeting provided an opportunity for project stakeholders to:

- Learn about the project construction details
- Hear how King County will work with neighbors throughout the project
- Ask about next steps

## Meeting format

From 6 to 6:30 p.m., participants viewed display boards and spoke with project staff. The team gave a presentation and answered questions from 6:30 to 7:45 p.m. Project staff were available for additional questions until 8 p.m.

## Presentation

The presentation covered project alignment, construction methods and the easement process. This project will require open-cut and in-water construction as well as trenchless horizontal directional drilling (HDD) and cured-in-place pipe rehabilitation (CIPP).





# NORTH MERCER ISLAND/ENATAI Sewer Upgrade Project

## Welcome and introductions



Community relations lead Kristine Cramer introduces project manager Sibel Yildiz

Kristine Cramer introduced project manager Sibel Yildiz, who opened the presentation and explained the agenda. She reviewed the project alignment and introduced the team of technical experts in attendance for the evening.

#### Horizontal directional drilling

Kim Staheli, the consultant team's trenchless construction lead, explained that HDD will take place on the alignment just north of I-90. There are three main steps in the HDD process: drilling of the pilot bore, reaming pass, and pipe pullback. The depth of the pipeline ranges from 45 to 130 feet.

#### Pilot bore

Kim explained that some residents have expressed concern about drilling spoils spilling into the East Channel of Lake Washington. To prevent this from happening, WTD will use a 60-inch conductor casing that will enter the ground at the same angle as the drill. In order to protect the soils, the bore will drill through the casing installed into the ground. This will protect surface soils until the drill is deep enough to stop surface disruption.

#### Reaming pass

Kim showed images of conductor casing and drills. For the North Mercer Island and Enatai sewer project, crews will drill from Enatai Beach Park toward Sweyolocken Pump Station, typically advancing at an average of 200 feet per day. The reaming passes, which will enlarge the hole, will be pulled between Sweyolocken Pump Station and Enatai Beach Park. This process will take approximately 30 days.

#### Pipe

The pipe will be pulled from Enatai Beach Park to Sweyolocken Pump Station over the course of two-to-three days. Sections of the pipe will likely be floated on Lake Washington and lifted by large cranes onto barges. Residents near Enatai Beach Park will see the pipe staged in Lake Washington and may hear construction noise; there will likely be some restrictions to boating access in the east channel at this time as well. Residents near the Sweyolocken Pump Station may notice an increase in construction vehicles and construction noise during this period.

#### Cured-in-place pipe rehabilitation

Cured-in-place pipe, or CIPP, will be used along the shoreline starting at Enatai Beach Park and ending at the Sweyolocken Pump Station. Pipe rehabilitation work is necessary to maintain service to the City of Bellevue lakeline and 108<sup>th</sup> Ave flows, in addition to the 25 homes that are directly connected to the existing pipe. A portion of the alignment is in Lake Washington, meaning that some construction will be conducted from barges.

Pipe rehabilitation will take place at existing manhole locations along the alignment. Crews will install a liner in the existing pipe that will be cured in place.



#### Easement process

Doug Williams, King County real property, reviewed the easement process. Bellevue residents whose homes require an easement were sent letters in January 2017. WTD will hire an independent and secondary appraiser to ensure accuracy of work. King County will reimburse residents up to \$750 towards a third appraisal if they feel it is necessary. Appraisals will consider subterranean and surface rights.

## Summary of questions

The following section summarizes general questions, comments and discussion from the community meeting. This summary does not document site-specific issues, which King County will address with individual homeowners in one-on-one and small group meetings.

Questions and comments focused on the following topics:

- Easement process
- Traffic during construction
- Horizontal directional drilling
- General project information

#### Easements

When will all easement agreements be finalized?

The project team is aiming to finalize all agreements by the first half of 2019.



The project team worked with homeowners to answer questions specific to individual properties.

#### Will the contractors take pictures of our property during the pre-construction survey?

Yes, it's a good way for the property owners and contractors to document the established conditions of the property.

#### What if a homeowner doesn't want the pipe to go under their property?

Our goal would be to understand why residents do not want the pipe under their property and see how we can address those specific concerns. King County will also work to ensure that property owners understand the project's benefit to long-term, reliable sewer service for the neighborhood and region.

#### Traffic during construction

#### Will the contractor use small cul-de-sac roads for haul routes?

The contractor and City of Bellevue will decide on approved haul routes, though it is unlikely that a small dead end street would see much traffic impact. It is part of our commitment to provide homeowner and emergency access to homes.

#### Will there be trucks continuously disrupting traffic?

The only time when there will be continuous trucks entering and exiting the construction area will be during the pipe pull back, near Enatai Beach Park, up to a period of 2-3 days.

#### Will there be damage to the road surfaces due to truck traffic?

We do not anticipate road damage, but the Bellevue Department of Transportation will look at roads in advance of construction to monitor any potential impacts.

#### HDD

#### What is an electromagnetic wire, and how does it work?

Crews will use electromagnetic wires placed on the ground surface – in some cases, on private property – to help monitor the drill used for HDD. The steering device for the drill, well below ground, emits a signal; crews track those signals through the electromagnetic wire and use them to calculate the location of the drill. The wire is small and will be anchored down so it will not be easily disrupted.

#### How noisy is it while you are enlarging the HDD hole for the pipe?

Noise levels depend on where your property is located along the alignment. There will be noise at both ends of the drill, at Enatai Beach Park and Sweyolocken Pump Station. The contractor will work with the City to determine hours of operation. Neighbors on top of the hill who are further from the drill entry and exit are unlikely to notice noise impacts. However, the project will have a 24/7 construction hotline available for any resident issues or questions during construction.

King County is also investigating sound walls and other noise mitigation measures.

#### How long are the sections of the pipe that will be installed during are pipe pullback?

The pipe will be delivered in 40-foot sections. We will likely fuse the sections together and install the entire 3,000-foot piece at one time.

#### Other

#### Will residents be put up in hotels during construction?

King County will put residents in hotels if there is interrupted service to their sewers or no access to their homes. King County will consider hotels under other circumstances.

#### How long will CIPP sections take?

We won't have specifics on construction schedule until a contractor is hired. At this time, we estimate that overall CIPP construction will take several months.

#### How will you inform the public when you're taking public comment?

When King County reaches the public comment phase of our environmental process, we will send a letter to anyone who lives within 500 feet of the alignment as well as send an announcement to our email list.

#### How are you coordinating with Sound Transit?

King County has been coordinating with Sound Transit and will continue to do so. Light rail construction is scheduled to finish before WTD construction begins. Doug Lane with the City of Bellevue explained that the permitting processes for both projects will address transportation issues.