



**King County**

Department of Natural Resources and Parks  
Wastewater Treatment Division

## NORTH MERCER ISLAND/ENATAI

## Sewer Upgrade Project

### Sewer Construction Has Been Progressing For A Year

*We've accomplished a lot, and we still have a long way to go.*

King County is upgrading four miles of sewer pipeline across north Mercer Island and southwest Bellevue. In addition, we are upgrading the North Mercer Pump Station and Lift Station 11 at Fruitland Landing.

The sewer upgrade is a big project that's been years in the making. When work is complete, the new pipe and upgraded pump stations will keep sewage flowing efficiently for the next fifty years and more. This project is part of King County's commitment to clean water and our communities.

*Spring  
2023*

**THANK YOU!**

King County's team extends a special "thank you" to project neighbors who lived with construction activities and impacts to benefit their entire community. We appreciate your patience as we work to upgrade our system.

### What to Expect in the Year Ahead



*Excavators dig the base for the temporary pump station.*

#### Upgrading the North Mercer Pump Station

This year, we will finish building the temporary pump station, which must be working before we can upgrade the North Mercer Pump Station.



*A 32-inch pipe near the I-90 trail on Mercer Island.*

#### Working in the road on north Mercer Island residential streets

We will continue to install pipes and structures under residential streets on north Mercer Island.



*Dredging is the first step for in-water pipe installation.*

#### Installing pipe in the East Channel

As early as this summer, we will begin installing pipe underneath the lake bed between Mercer Island and Bellevue.



*Expect road closures around North Mercer Way while crews install pipe.*

#### Detouring traffic around construction on North Mercer Way

This spring, we will begin installing sewer pipes underneath N Mercer Way between the Mercer Park & Ride and Island Crest Way.



*Crews clear and grade work areas prior to construction to store materials and make space for construction.*

#### Making connections at Enatai Beach Park and Sweyolocken

We will install structures to connect the pipe installed under the Enatai hillside into the existing sewer system.



*Shoring boxes allow crews to safely work below the ground.*

#### Installing a pipe under the I-90 Trail

We continue to work on sections of the I-90 Trail. Cyclists and pedestrians will continue to detour around trail closures.

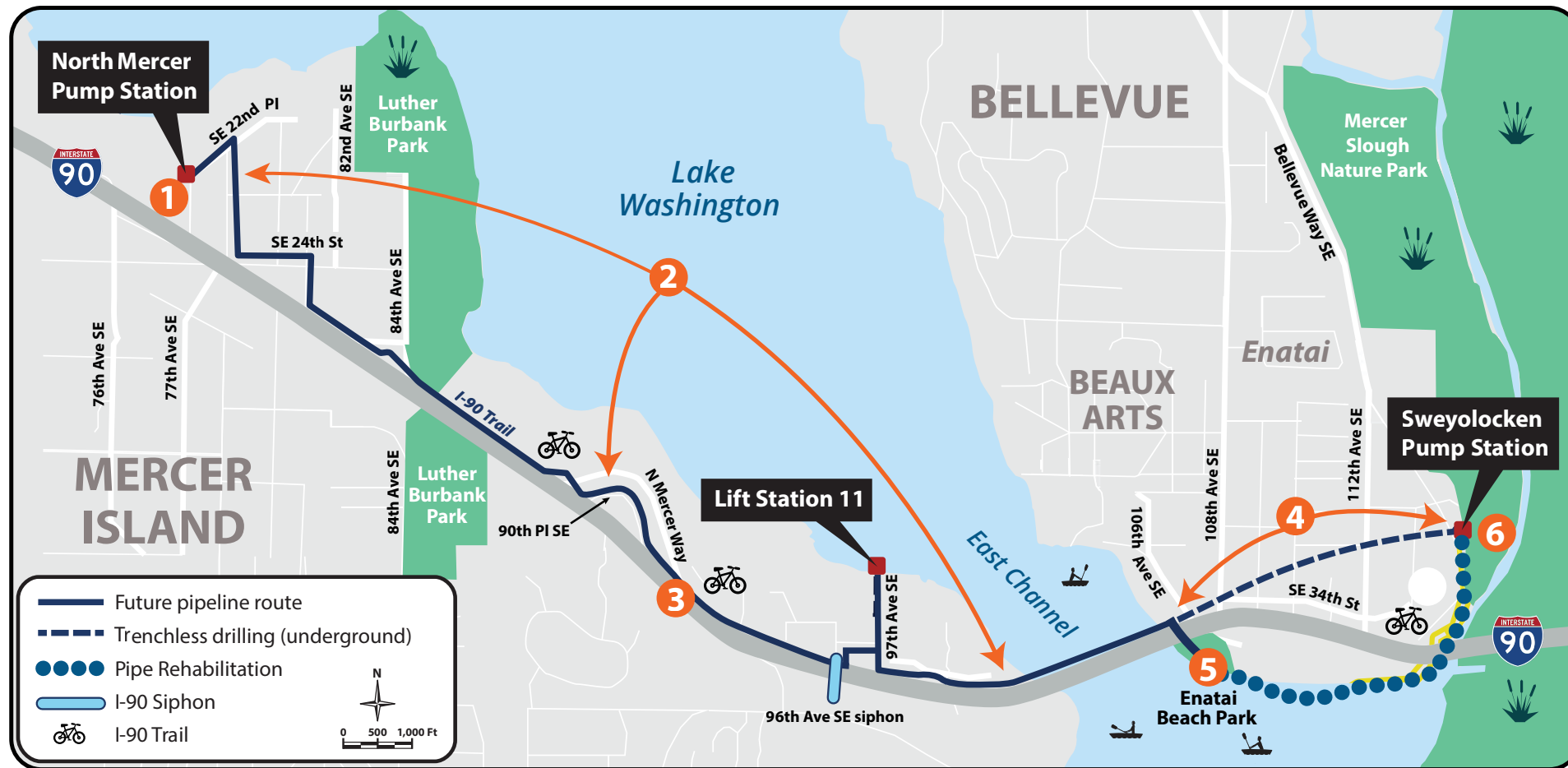
**Safety is everyone's responsibility! Be aware of construction equipment and detour signs around the project area.**

**Turn the page to see what's happening behind the fence and beyond what you can see from the street →**





## Behind the Fence: 2022 Construction Progress



### 1 North Mercer Pump Station

We prepared the site and began building a temporary pump station.



*Crews build a retaining wall and install wooden panels, called lagging, to hold back the ground before building the temporary pump station.*



*Air vents circulate fresh air for crew members working underground.*

## North Mercer Residential Streets

**2** We installed sewer pipes underneath residential streets including SE 22nd St, 78th Ave SE, and 90th Pl SE. We began construction activities on SE 35th Pl.



*This year crews finished installing a new sewer main on SE 22nd St.*



*An odor control facility on SE 35th Pl will neutralize odors where two pipes meet.*



*Crews install drainage improvements on 90th Pl SE.*

## Meeting You In Your Neighborhood

We met community at various events including the Mercer Island Farmer's Market and the Mercer Island Summer Celebration.



As work progressed onto new residential streets, we hosted four neighborhood walks to meet with neighbors, answer questions, and share updates about work.



*A group of neighbors meet with King County staff to discuss construction progress onto SE 78th St.*

### 3 I-90 Trail

**3** We began installing sewer pipes across from Covenant Living at the Shores and continued pipe installation towards Shorewood Drive.



*Shoring holds back the soil so that crews can safely work below the surface grade.*



Crews install a maintenance hole where two pipes connect.

#### 4 Enatai Hillside

4 We completed installing a section of pipe deep underground.

**>> Check out the insert for more info!**



*Feeding the pipe into the HDD hole by Enatai Beach Park.*

### 5 Enatai Beach Park

5 We closed a portion of Enatai Beach Park underneath the I-90 bridge to use for material storage. We also began construction for structures to connect pipes from under Lake Washington to the pipe to Swayolocken.



*Staging areas near construction zones.*


**Sweyolocken**

**6** We installed new pipe deep underground and began work for structures to tie that pipe into the Sveyolocken Pump Station.



*Preparing the site at Sveyolocken for the HDD pipe pull.*



Crew members install a flange plate, which allows pipe segments to be easily screwed together.





**King County**

Department of Natural Resources and Parks  
Wastewater Treatment Division

## NORTH MERCER ISLAND/ENATAI

## Sewer Upgrade Project

# King County's Enatai Siphon will serve you and your neighborhood for years to come.

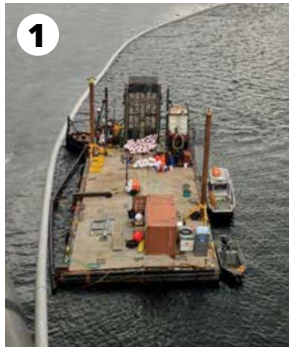
*In December 2022, we installed a pipe between Enatai Beach Park and the Sweyolocken Pump Station using an underground construction method called Horizontal Directional Drilling (HDD).*

### What is Horizontal Directional Drilling (HDD)?

HDD is a construction method which uses a machine to drill an underground pathway. Then it pulls a new pipe through the path.

### Why use HDD?

HDD is a reliable way to install pipes without disrupting roads, hills, homes or environmentally sensitive areas. King County used HDD in this case to account for all of these considerations at the Enatai hillside.



### Why float the pipe on Lake Washington?

Floating the pipe on Lake Washington allowed us to minimize roadway impacts near Enatai Beach Park as no additional space was needed to stage the fused pipe. There were teams on barges in the water and on land that worked 24-hours a day to ensure the pipe pull was successful.

### What happened after the pipe pull?

After the pipe pull, construction crews discharged the water that was in the pipe during the pull, then inspected and tested the pipe for quality and cleanliness. The discharged water was placed in baker tanks and inspected for environmental standards before being discharged into natural areas.

**Photos:** **1:** 3,000 feet of fused pipe were floated on Lake Washington before the pipe was pulled under the Enatai hillside. **2:** A crane lifted the new sewer pipe out of the water in preparation for underground installation. **3:** Feeding the pipe into the HDD hole by Enatai Beach Park. **4:** A rig at Sweyolocken pulls the end of the pipe line through the pipe path. **5:** The new sewer pipe entered the pipe path at Enatai Beach Park.

**PIPE  
STATS**



Length  
**Over 3,000 ft.**



Depth  
**Up to 160 ft. below ground**



Width  
**32 in.**

## Protecting the environment during construction.

In water work is completed when spawning or migrating fish are less likely to be in the area, also known as a "fish window." This is a state and federal regulatory requirement that protects fish species in this region. In addition, we set up environmental protections such as silt fences to protect waterways and wildlife habitats.



*A silt fence protects waterways from debris at the construction staging area.*

# NORTH MERCER ISLAND/ENATAI Sewer Upgrade Project

Este boletín informativo brinda información acerca del proyecto de actualización del alcantarillado en el norte de Mercer/Enatai, el cual comenzará a construirse durante este año en Mercer Island y Bellevue. Para obtener más información, llame al 425-305-3578, deje un mensaje con su número de teléfono e indique su idioma. Se proporcionará un intérprete sin costo.

本通讯为您提供有关北 Mercer/Enatai 下水道升级项目的信息，该项目将于今年晚些时候在 Mercer 岛和 Bellevue 开始建造。如需更多信息，请致电 425-305-3578，使用您的电话号码留言并选定您所讲的语言。我们将免费提供口译员服务。

本通訊為您提供有關北 Mercer/Enatai 下水道升級項目的資訊，該項目將於今年晚些時候在 Mercer 島和 Bellevue 開始建造。如需更多資訊，請致電 425-305-3578，使用您的電話號碼留言並選定您所講的語言。我們將免費提供口譯員服務。

A graphic with an orange background. On the left is a white traffic cone icon. To its right, the words "CONSTRUCTION UNDERWAY" are written in large, bold, white capital letters. Below the cone, the text "Scan or visit our website to sign up for alerts!" is written in white. To the right of this text is a square QR code. Below the text and QR code is a white icon of a smartphone with signal waves emanating from it.

**CONSTRUCTION UNDERWAY**

Scan or visit our website to sign up for alerts!

## Talk to us!

***For more information, or to schedule a virtual meeting, please contact the Community Relations Team.***

☎ 425-305-3578    ✉ [NMEsewer@kingcounty.gov](mailto:NMEsewer@kingcounty.gov)



***Visit the project web page to learn more and sign up for email and text alerts.***

[www.kingcounty.gov/MercerEnataiSewer](http://www.kingcounty.gov/MercerEnataiSewer)

Alternative formats available  
206-477-5371 or TTY relay: 711

@KingCountyWTD

