





## Investing in the Health of the Sound and the Future of our Region

May 2021

### **Project Background**

Seattle Public Utilities and King County Wastewater Treatment Division are building an underground storage tunnel to significantly reduce the amount of polluted stormwater and sewage that flows into the Lake Washington Ship Canal, Salmon Bay, and Lake Union from our sewer system during storms.

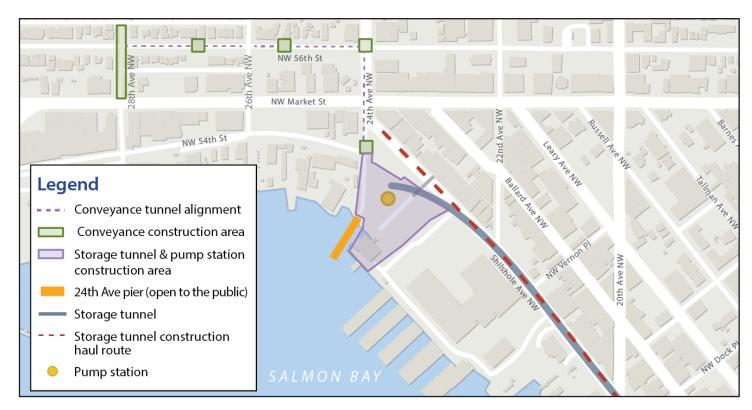
The tunnel is 2.7-miles long, running from Ballard to Wallingford, and 18-ft, 10-in wide. It will temporarily hold more than 29 million gallons of sewage and stormwater during heavy rains, keeping it out of Lake Washington. When the storm passes, the stored sewage and stormwater will be sent to King County's West Point Wastewater Treatment Plant.

#### **Ballard Site Overview**

Ballard will be home to the western end of the tunnel and above-ground facilities, including a pump station. Tunnel boring will start at this location and move toward Fremont and Wallingford.

Seattle Public Utilities and King County began work near 24th Ave NW and Shilshole Ave NW in 2018 to prepare for tunneling. Site elements include:

- New 24th Ave Pier that contains art inlays by artist Christian French (complete)
- Excavation and construction of a new vertical shaft that will send flows to the new storage tunnel
- Pedestrian and street improvements on 24th Ave NW
- · Street end improvements
- New pipes along NW 56th St, 28th Ave NW and 24th Ave NW
- Ballard Pump Station site with small buildings, fencing, 100-ft-deep by 90-ft-wide drop shaft, and 65-foot tall pump station tower
- · Fencing around the pump station area







## **Ballard Pump Station**

The Ballard Pump Station will be a 65-ft tall illuminated tower that will house above- and below-ground mechanical equipment and odor control. It will pump the flows captured in the storage tunnel to the West Point Wastewater Treatment Plant. The site will be a fenced-off yard with SPU vehicle access and landscaping.

Our designers have been inspired by Ballard's history, the underground infrastructure, and how Ballard looks today. The cylindrical shape mirrors the pump station and below-ground equipment space. The frame around the building echoes the industrial feel and scaffolding of Ballard's shipyards. Near the tower will be smaller buildings for equipment as well as parking for maintenance crews.

Artist Jeffrey Veregge is working to create public art at the pump station site.

## Conveyance: New Underground Pipes Coming in 2022

In addition to the Ballard Site and pump station, we will be building new pipes along NW 56th St, 28th Ave NW, and 24th Ave NW to connect Ballard's existing sewer and stormwater overflow pipes to the storage tunnel.



Rendering of the future Ballard Pump Station

## **Contact**

For questions or comments about this project:

Email: SPU\_ShipCanalProject@seattle.gov

Call: 206-386-9778

Website: spushipcanal.participate.online

For interpretation services please call 206-386-9778

如需要口譯服務 請撥電話號碼 206-386-9778

통역 서비스를 원하시면 206-386-9778 으로

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Para servicios de interpretación por favor llame al **206-386-9778** 

Para sa serbisyo ng tagapagpaliwanag tumawag sa 206-386-9778









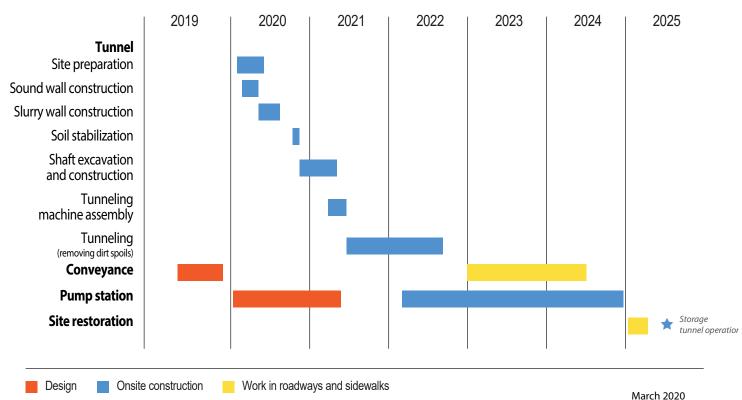
## What to Expect During Construction

- Parking restrictions along the east side of 24th Ave NW so construction trucks can exit the work site
- Trucks and large equipment moving in and out of the work zone
- · Noise typical of a large construction site
- Access to all buildings and businesses will be maintained
- Email updates on progress and current impacts - sign up at spushipcanal.participate.online



The reconstruction of the 24th Ave Pier was completed in 2019

## **Ballard Schedule**



Schedule is subject to change











The following photos are examples from other construction sites



## **Site Preparation**

In spring 2020, crews prepared the work area and set up fences for the safety of crews and people nearby.



### **Soil Stabilization**

After site set up, crews began preparing the soil for underground construction using stabilization techniques (jet grouting, ground freezing, etc.).



## **Tunneling**

MudHoney will begin its journey toward Wallingford summer 2021.



## **Sound Wall Construction**

Crews installed a 12-ft sound wall and fencing at the project site.



## **Excavation & Construction**

Crews dug and worked beneath the surface to build underground structures that will be used to access the storage tunnel for operations and maintenance.



#### **Site Restoration**

Once construction is complete, all impacted areas will be restored to previous conditions. This will include the landscape restoration, repaying streets and sidewalks.



## **Slurry Wall Construction**

Crews built an 87-ft diameter, 210-ft deep slurry wall to reinforce the circular access shaft.



# **Tunneling Machine Assembly**

Crews lowered pieces of MudHoney, our tunnel boring machine, into the underground work area and put it together.