

WELCOME

SR 520 PORTAGE BAY BRIDGE AND ROANOKE LID PROJECT

ANNUAL OPEN HOUSE

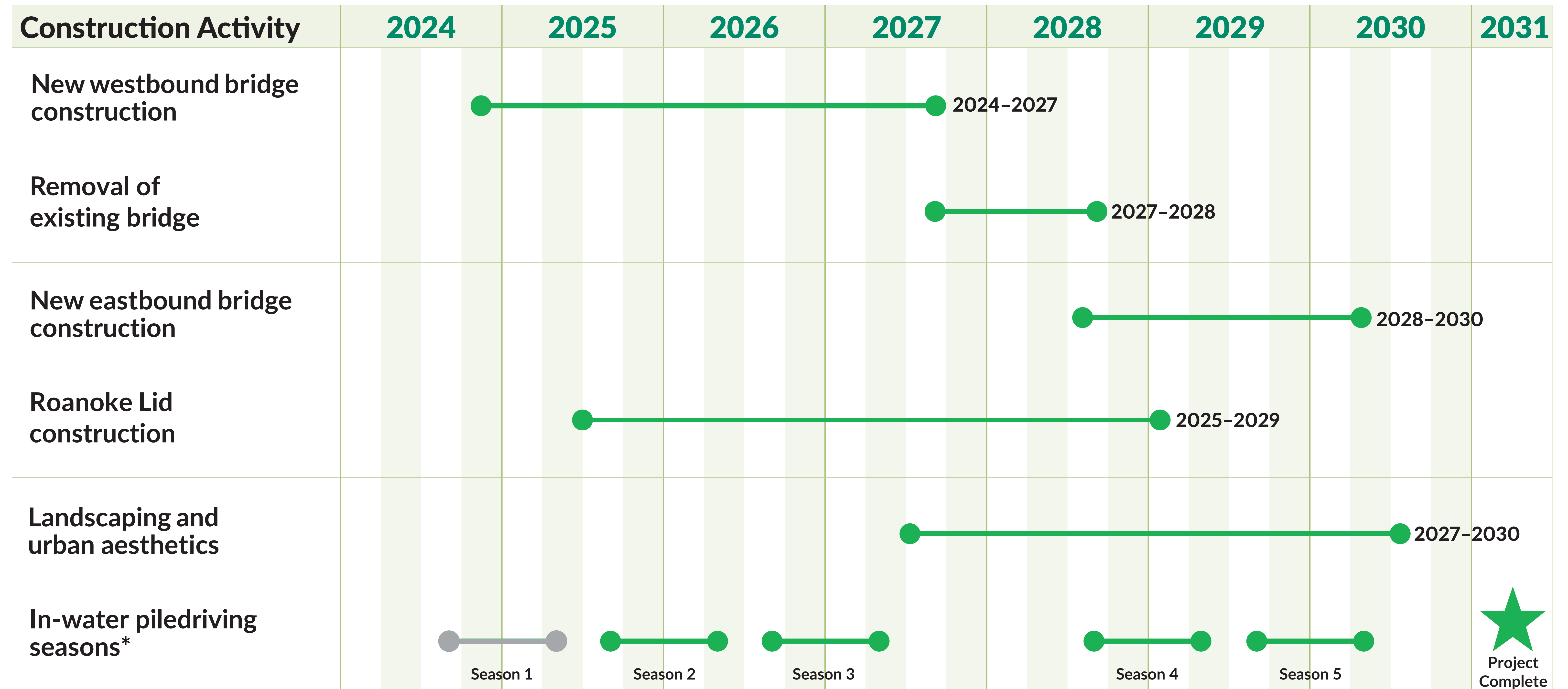
Presented by



SKANSKA

Project schedule

Schedule subject to change



*The in-water impact piledriving season lasts from September 1 to April 30. We will continue vibratory piledriving and have limited on land piledriving year-round.

Piledriving progress – 2024-2025

Since the start of piledriving in fall 2024, we've installed **over 300 temporary piles** in Portage Bay – that's more than 50% of the total piles we need! We'll continue installing piles in Portage Bay with an impact hammer during our in-water piledriving seasons – lasting from September to April – and installing piles on land for the next few years. We'll also continue using a vibratory hammer to install piles in Portage Bay year-round. **This was our busiest season, and we expect less piledriving in future seasons.**

For the 2025-2026 in-water impact piledriving season, we expect to install between 70 – 100 piles in Portage Bay.

November 7, 2024*

In-water impact piledriving



*We started Season 1 for in-water impact piledriving on November 7, 2024. Flip the images to see how much progress we've made!

Why are we installing piles in Portage Bay?

We are installing piles in Portage Bay to support **temporary work trestles** on the north and south sides of the existing bridge. The temporary work trestles act as platforms in the water. They allow us to build the new bridges and remove the existing structure with less effects to traffic. We are also building a temporary haul route over the Bill Dawson Trail from Montlake Boulevard to provide access to the work trestles.

In addition to the work trestles, the piles will support temporary structures – like on- and off-ramps – which will carry travelers and keep SR 520 traffic moving around work zones during construction.

STEEL PILES HELP SUPPORT STRUCTURES IN AND AROUND PORTAGE BAY



These steel piles have been driven in Portage Bay and cut to the correct height. They will support the temporary work trestle.



The steel piles between the existing bridge and the work trestle will support a new temporary eastbound off-ramp to Montlake Blvd.

Upcoming piledriving in Portage Bay

IN-WATER IMPACT PILEDIVING RESUMES SEPT. 1

Our second season of in-water impact piledriving begins Sept. 1, 2025, and continues through April 30, 2026. Typical impact piledriving hours will be 8 a.m. to 5 p.m. on weekdays and 9 a.m. to 5 p.m. on weekends, though we may work later into the evening if needed. We'll notify neighbors with email updates if our schedule changes.

We'll continue vibrating piles around the project area year-round. See below for where we expect to install piles in and around the water for Season 2.

To stay up to date with our future piledriving activities, attend our monthly construction meetings.

WHERE TO EXPECT PILEDIVING



We will continue installing piles both on land and in the water on the east side of the project where we need to connect the temporary work trestle with our haul road from Montlake Boulevard. We'll also work on the west side of Portage Bay to finish installing piles for the temporary work trestle.

MORE ABOUT OUR PILEDIVING SCHEDULE

Our in-water impact piledriving seasons – from September to April – align with the “fish window” in Portage Bay. A “fish window” is a specific time frame when in-water impact piledriving is permitted to minimize harm to fish populations. These windows are determined by regulatory agencies, like the Department of Fish and Wildlife, and are based on when fish are least likely to spawn or migrate in a particular waterway.

While we're not allowed to drive piles in the water with an impact hammer outside of the fish window (from April 30 to Sept. 1), we are allowed to use an impact hammer on land and a vibratory hammer in the water year-round.

More about pile installation

We've installed over half of the total piles we need in Portage Bay. Sometimes, the work can be hard to track from the street and your neighborhood. Take a look at our construction plans below to learn more about how piling helps us build the project more efficiently!



INSTALLING PILES

First, we install piles using a vibratory hammer or an impact hammer. We need to install these piles deep enough underground so that they can support future temporary structures, such as the work trestle, bridges and ramps.

Once the piles are installed deep enough, we cut them to the correct height.



GETTING TO THE TEMPORARY WORK TRESTLE

Outside of Portage Bay, crews are building a temporary haul road from Montlake Boulevard over the Bill Dawson Trail which will eventually connect to the temporary work trestle.

We need the temporary haul road so crews can access the work zone in Portage Bay from Montlake Boulevard instead of using the existing bridge. By not using the existing bridge, we can keep traffic moving on SR 520.



BUILDING THE TEMPORARY WORK TRESTLE

After we install and cut the piles, crews will build the temporary structures. In the photo above, crews weld a structural beam to a pile which will be used to support the weight of crews and equipment on the work trestle.

Crews will also weld steel sheets to the top of these temporary structures which will be used as the work trestle surface.



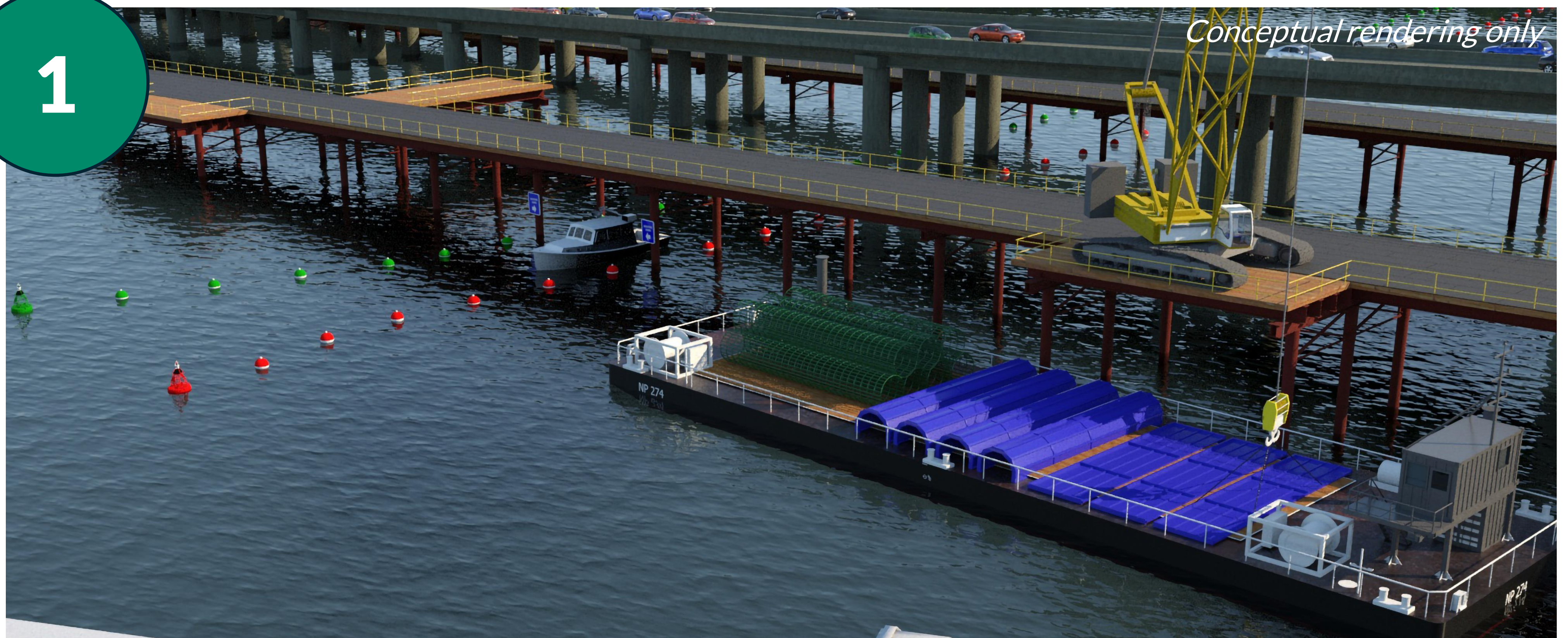
BUILDING THE BRIDGES FROM THE WORK TRESTLE

Once the surface of the work trestle and the temporary haul road are completed, we will primarily build the new bridges from the work trestle platforms. By working on platforms, we don't have to close lanes on SR 520 for months at a time to use as our work zone.

The piles will also support several traffic shifts as we move traffic away from our future work zones while we build the new Portage Bay bridges.

Building the new Portage Bay bridges

We're building the project in several stages. This approach allows us to shift traffic onto temporary – and eventually permanent – structures while we build the new Portage Bay bridges.

1


STEP 1: BUILD THE TEMPORARY WORK TRETTLES

We are building temporary work trestles on the north and south sides of the existing Portage Bay bridge. We first start with installing piles into Portage Bay using vibratory and impact hammers. Then, we build the surface of the new temporary work trestle. We will use the trestle as a platform while we build other temporary and permanent elements of the project.

2


STEP 2: BUILD THE NEW WESTBOUND PORTAGE BAY BRIDGE

After we complete the work trestle, we will begin using it to build the new permanent westbound bridge on the north side of the existing Portage Bay bridge. We'll move crews and equipment onto the work trestle by using a new temporary haul road from Montlake Boulevard near the NOAA driveway. We will also move permanent bridge support structures by barge from our staging site in Kenmore.

Building the new Portage Bay bridges

We'll move all traffic onto the new bridge on the north side of the existing bridge. Then, we will remove the existing bridge and build the new eastbound bridge. Around the Montlake Boulevard interchange, travelers will need to use temporary on- and off-ramps during construction.

3


STEP 3: REMOVE THE EXISTING PORTAGE BAY BRIDGE

Once the new westbound bridge on the north side of the existing Portage Bay bridge is completed, we will temporarily shift both directions of traffic to this bridge. We will build temporary on- and off-ramps to this bridge since it will be located further north of the existing bridge. By removing traffic from the existing bridge, crews can begin surgically removing the bridge piece by piece. See the “Removing the existing bridge” display board for more information!

4


STEP 4: BUILD THE NEW EASTBOUND PORTAGE BAY BRIDGE

After we remove the existing bridge, crews will work from the temporary work trestle to build the new eastbound bridge on the south side of the new westbound bridge. This new bridge will be near the same area as the existing bridge. We'll use the same construction methods as the new westbound bridge, which include installing drilled shafts and building bridge piers/columns. Once completed, we'll move eastbound traffic to this bridge from the shared bridge on the north side.

Building the new Portage Bay bridges

Through 2031, we will build two new parallel bridges to replace the existing Portage Bay bridge. We will finish the new westbound bridge (on the north side of the existing Portage Bay bridge) before we begin building the new eastbound bridge (on the south side of the new westbound bridge).

To build the bridges, we will:

1. Use the temporary work trestle to drill deep into Portage Bay so we can build foundations for the new permanent bridges. These foundations are also known as *drilled shafts*.
2. Build and install bridge piers (bridge posts) on the drilled shafts. We will use structural forms, reinforced steel and concrete to build each pier.
3. Install the bridge superstructures (girders, decks/surfaces, etc.) on the bridge piers.



Crews working on WSDOT's I-5 Puyallup River Bridge Project have installed bridge piers in the water from a temporary work trestle. Skanska will use a similar approach when they build the permanent supports for the Portage Bay bridges.

FINALIZING THE DESIGN FOR THE NEW BRIDGES

We are working to finalize the design for the two bridges that will replace the existing Portage Bay bridge. Each bridge will have about 65 drilled shafts. Each drilled shaft has an average casing length of 150 feet and an average diameter of 10-11 feet. We will also install some drilled shafts on land to support structures such as retaining walls.

Removing the existing bridge

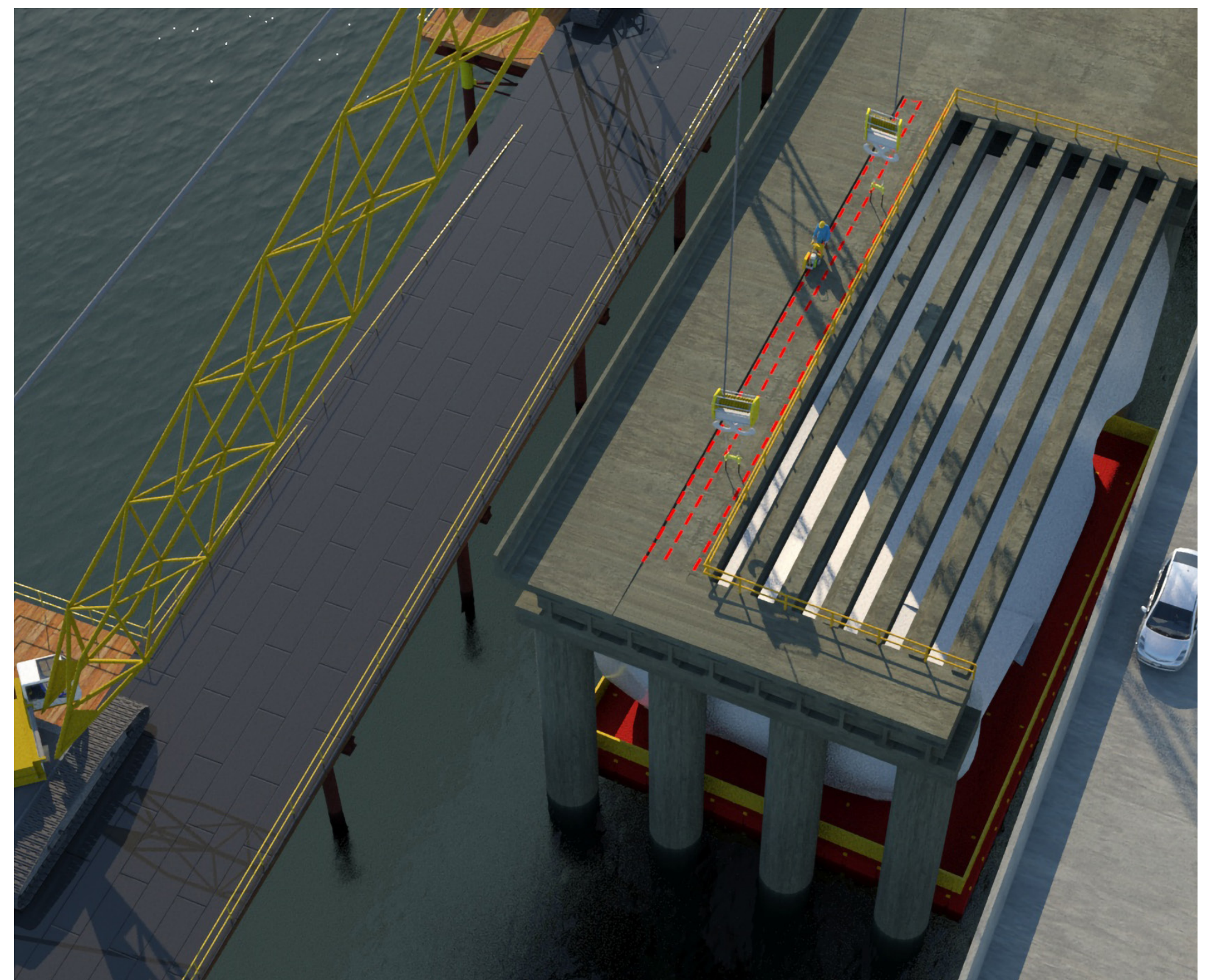
To minimize the amount of vibration and dust during construction, we will take a “surgical” approach to removing the existing bridge, taking it apart piece by piece. Afterwards, we will break down the pieces off-site, away from neighbors.

The renderings below are conceptual, and the exact equipment and methods we will use may change slightly.



STEP 1

Crews will build a temporary trestle in Portage Bay to provide them an area to work from. Crews will also install dust containment devices in the work zone and begin drilling into the bridge.



STEP 2

After crews have drilled holes in the bridge, they will use a wet saw to cut the surface of the bridge for removal. A wet saw helps minimize dust and reduces the use of concrete pulverizers and other loud equipment.



STEP 3

Crews will remove the girders of the bridge from the structure supports. After the pieces of the bridge are removed, crews will haul the pieces off-site with trucks and barges to be broken down and recycled.



STEP 4

Now that the bridge surface is removed, crews will remove the bridge supports (diaphragms and columns). We will cut the supports into pieces using a wire saw. The pieces will be hauled off-site with trucks and barges to be broken down further and recycled.

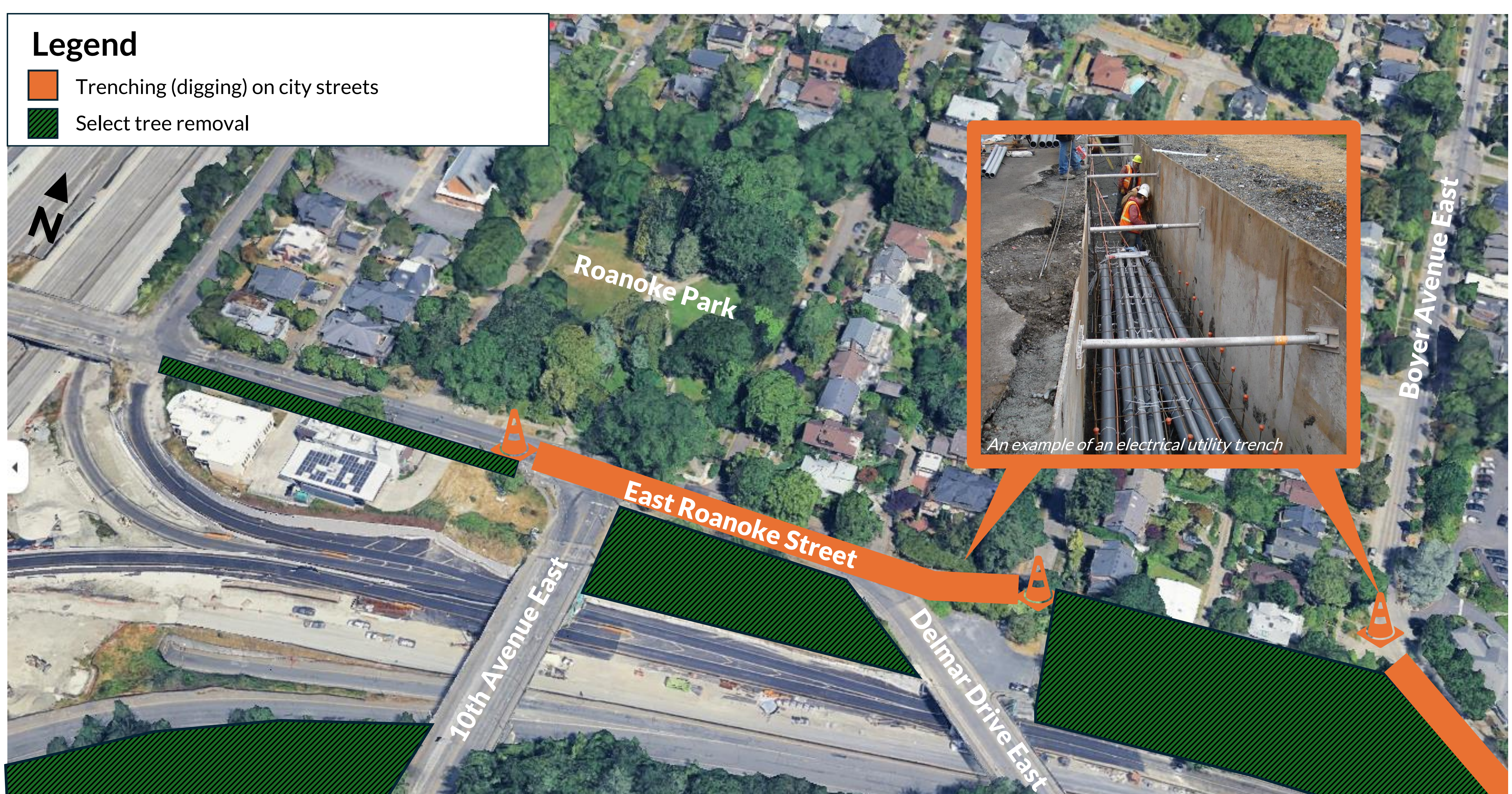
Construction near the Portage Bay and Roanoke Park neighborhoods

This fall, we will ramp up our activities in the Portage Bay and Roanoke Park neighborhoods where we will build the new Roanoke lid. Earlier this summer, we closed the Boyer Stairs as part of our planned major utility work in these neighborhoods. We'll complete the utility work in 2026, though we will stay in the area to build the Roanoke lid through the end of the project.

WHAT TO EXPECT

During the day and on some nights, you can expect crews in these neighborhoods to complete:

- Select tree removal in the Boyer hillside to make room for the new westbound Portage Bay Bridge and its support structures
- Select tree removal along East Roanoke Street, SR 520 and near the I-5 interchange to make room for traffic shifts
- Trenching (digging into the ground) along Boyer Avenue East, East Roanoke Street, 10th Avenue East and in the Boyer hillside for utility relocations
- Sidewalk, lane and street closures on Boyer Avenue East, East Roanoke Street and 10th Avenue East for utility work



REDUCING COMMUNITY IMPACTS

DURING CONSTRUCTION, SKANSKA HAS COMMITTED TO:

- Maintaining areas for recreational boaters around the work zone by using clearly marked boundaries.
- Using monitors to measure the levels of sediment in the water (turbidity).
- Using reinforced hydraulic hoses and floating oil containment devices (oil booms) to reduce the risk of leaks.
- Installing underwater “curtains” to reduce noise and vibration.
- Maintaining at least one navigational opening for boaters.
- Coordinating with yacht clubs and the boating community throughout construction.
- Prohibiting equipment from idling longer than five minutes.
- Paving the entrance and exit roads at the staging sites, reducing dust normally generated by gravel roads.
- Monitoring noise* and vibration levels 24/7 and stopping work if the levels go above a specific threshold.



Conceptual rendering of construction over Portage Bay.

*MORE ABOUT NOISE COMPLIANCE

Noise compliance is enforced by Skanska’s environmental and quality assurance consultants, WSDOT’s on-site independent noise monitor and real-time data monitoring done by designated project personnel. Noise levels are recorded 24/7, and monitoring alerts are sent for exceedances that happen during daytime and nighttime operations. If noise levels are exceeded, crews must stop working to bring noise levels below the limits.

Nighttime construction during the project

The city of Seattle granted a Major Public Project Construction Noise Variance to Skanska that sets limits for the allowable level of nighttime construction noise. We will obtain Temporary Noise Variances when nighttime work exceeds those limits. We'll also notify nearby neighbors in advance if the work will be loud, at night and close to homes.

HOW WE MONITOR NOISE:

- Electronic noise meters record noise levels 24 hours a day.
- Weekly noise reports are available to the public on the SR 520 Construction Corner webpage.
- An independent noise inspector on site during all nighttime work to report any violations or stop construction work.



SEE WHAT'S INCLUDED IN THE NIGHTTIME WORK PERMIT ON THE CONSTRUCTION CORNER

NIGHTTIME HOURS WHEN VARIANCE IS APPLICABLE:

Weekdays: 10 p.m. to 7 a.m. | Weekends: 10 p.m. to 9 a.m.



Crews move temporary traffic barriers on SR 520 at night.

MINIMIZING NOISE:

- Crews will install temporary noise screens for lid construction and around the WSDOT staging areas.
- Pure-tone backup alarms (the loud “beep, beep, beep” trucks often make when driving in reverse) are prohibited.

Planned nighttime construction activities

We will work at night to help stay on schedule, limit traffic disruptions and keep crews and the traveling public safe.

While most of our nighttime construction falls under the Major Public Project Construction Noise Variance, we will obtain a Temporary Noise Variance if we expect the work to exceed allowable levels and offer hotels to affected neighbors.

WHAT TO EXPECT AT NIGHT

- Crews building the surface of the work trestles in Portage Bay
- Some tree removal near SR 520
- Lane or ramp closures on SR 520 to prepare for traffic shifts (moving barriers, removing lane striping, etc.)
- Construction for the new temporary on- and off-ramps near Montlake Boulevard
- Digging (potholing) to locate underground utilities
- Welding and carpentry with hand tools



Crews work overnight on SR 520.

STAY UP TO DATE ON NIGHT WORK

If we expect to complete noisy construction at night, we will obtain a Temporary Noise Variance and offer hotels to nearby neighbors. We will notify neighbors with a flyer. If you would like to receive these notices via email, speak with a member of the outreach team at the sign-in table.

SHARE YOUR INFO



Closing the Boyer Stairs during utility work

Before we can build the new Portage Bay bridges, we need to relocate some water and electrical utilities in the hillside under where the Boyer Stairs are located. We have closed the stairs through 2030 to complete this utility work, the new bridges and the new Roanoke lid.

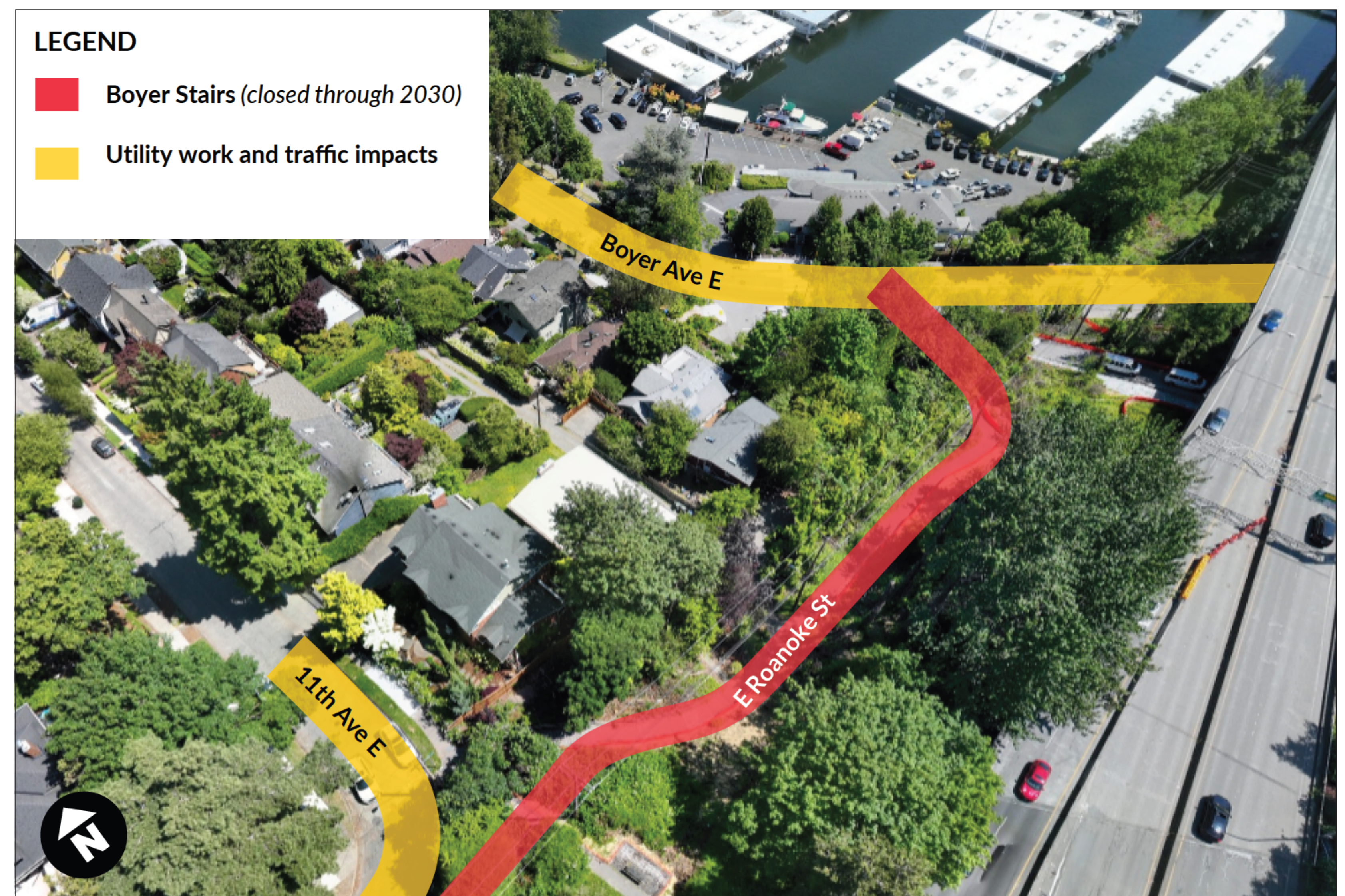
MORE ABOUT RELOCATING UTILITIES

The existing underground water and overhead electrical utilities are in the way of the new Portage Bay bridges, so we need to move them before starting bridge construction.

We will bury the utilities underground along Boyer Avenue East, through the hillside where the Boyer Stairs currently exist and continue onto East Roanoke Street.

We plan to finish the utility work on these streets in spring 2026, though you can expect occasional traffic changes through the end of the project.

We will rebuild and reopen the stairs towards the end of the project. The new stairs will include handrails and lighting.



We will work along Boyer Avenue East, the Boyer hillside near the Boyer Stairs, on 11th Avenue East and on East Roanoke Street to relocate some utilities. Nearby neighbors and travelers can expect increased traffic during this work.

LEARN MORE ABOUT UTILITY WORK

Want to learn more about the specifics of this work, including working hours, anticipated traffic effects and what to expect during construction? Check out the *Boyer Hillside Utility Packet* for more info!

Select tree and vegetation removal

We need to remove select trees and vegetation that conflict with construction activities and the final project design.

WHAT TO EXPECT

- Public notices posted on trees at least 30 days before we begin removing or protecting them
- Orange fencing installed around the base of protected trees
- Some dust when the felled trees are broken down into mulch
- Noise from electric saws, construction vehicles and wood chippers/mulchers
- Tree replacement towards the end of the project, which ensures more trees will be planted than are removed

MORE INFORMATION ON TREES AND VEGETATION

We've developed a resource for neighbors to learn more about why we need to remove select trees, our plans for protecting trees and the process for removing trees. Check out the *Tree and Vegetation Removal – Frequently Asked Questions* document for more!

PROTECT TREE

PUBLIC NOTICE

This Tree has been inspected by the City of Seattle & WSDOT. It is to be retained and protected from all construction impacts.

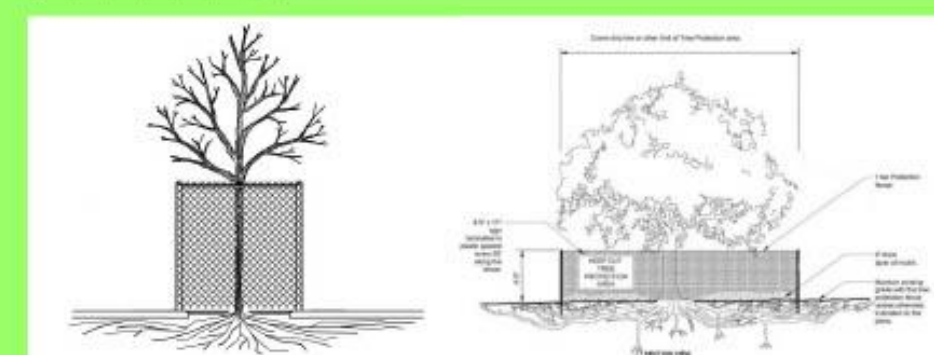
DO:

- Contact project arborist prior to any work or staging within the dripline. Phone#: _____
- Provide chain link construction fencing at dripline (or surrounding entire open tree pit area)
- Protect all exposed roots – mulch non-paved surfaces.

DO NOT:

- REMOVE OR PRUNE
- EXCAVATE OR TRENCH WITHIN DRIPLINE
- OPERATE EQUIPMENT/ STAGE OR STORE MATERIALS WITHIN DRIPLINE.

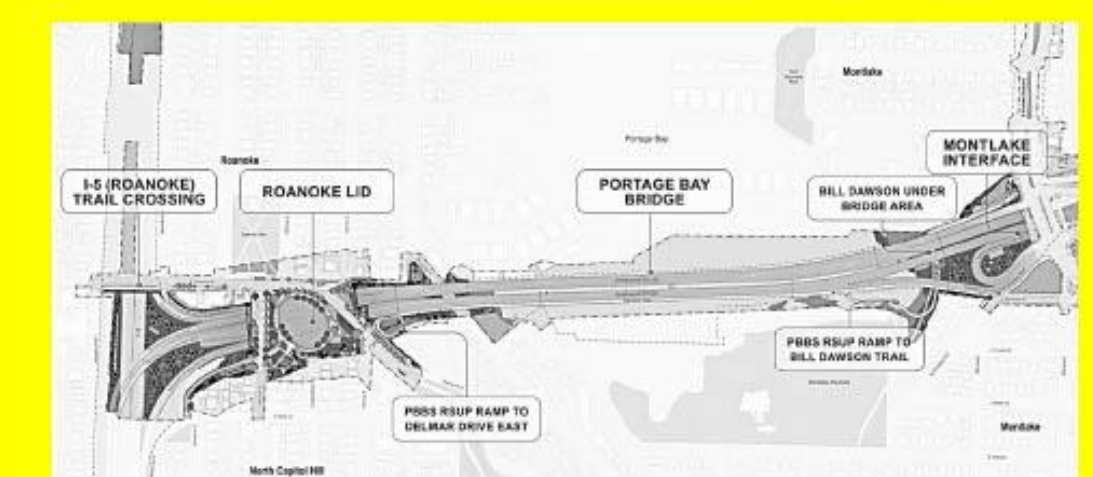
FAILURE TO PROVIDE PROPER PROTECTIONS MAY RESULT IN COLLECTION OF TREBLE DAMAGES. THIS TREE IS VALUED AT APPROXIMATELY \$_____.



PUBLIC NOTICE

This Tree Proposed for Removal and Replacement

WSDOT SR 520
Portage Bay Bridge and Roanoke Lid Project



Questions - Comments?

Please reference tree ID# _____
Phone (24 hours) - 206-319-4520
Email – sr520bridge@wsdot.wa.gov
Project Information:
sr520bridge@wsdot.wa.gov

THIS PLACARD SHALL ONLY BE REMOVED BY WSDOT OR CITY OF SEATTLE AUTHORITY

Tree protection notice

Tree removal notice

Shifting eastbound traffic on SR 520

This summer, crews installed several piles on land near the existing eastbound SR 520 off-ramp to Montlake Blvd. These piles will support a new temporary off-ramp that traffic will switch to once complete.

WHAT TO EXPECT

- We will work on some nights so crews can build the surface of the new temporary off-ramp.
- We will temporarily close a lane on eastbound SR 520.
- We will fully close the Portage Bay bridge for at least two weekends and on some nights.
- Once construction of the temporary off-ramp is complete, we will reroute traffic to the new temporary off-ramp in late 2025 or early 2026.

WHY DO WE NEED TO SHIFT TRAFFIC?

Shifting traffic to a temporary off-ramp allows our crews to move traffic out of the way of future construction activities.

Existing conditions of the eastbound SR 520 off-ramp to Montlake Boulevard



Future temporary eastbound SR 520 off-ramp to Montlake Boulevard

