

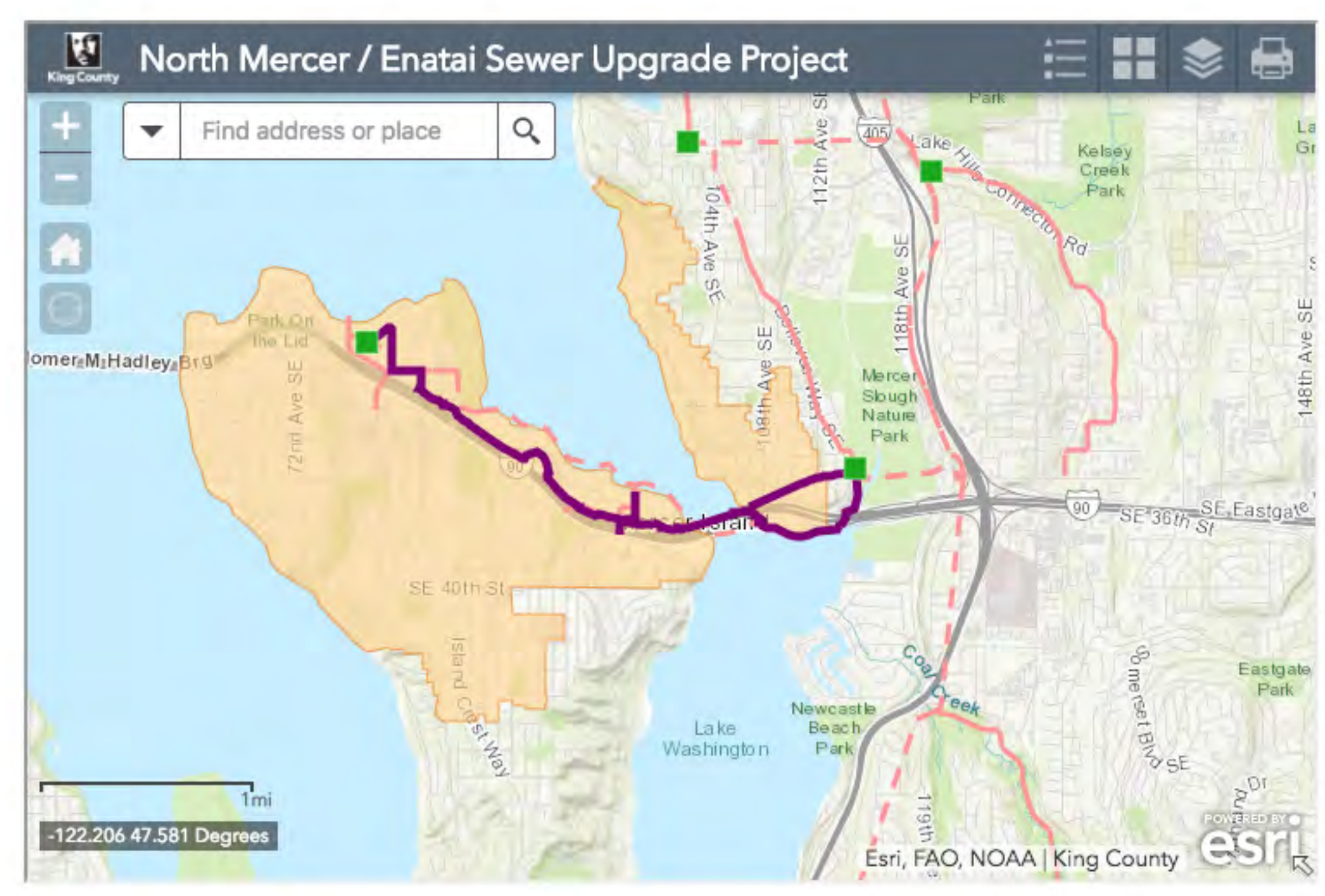


North Mercer Island/Enatai Sewer Upgrade Project

Online open house live until Mar. 31, 2018

Finalizing the pipe location for King County's North Mercer/Enatai Sewer Upgrade Project

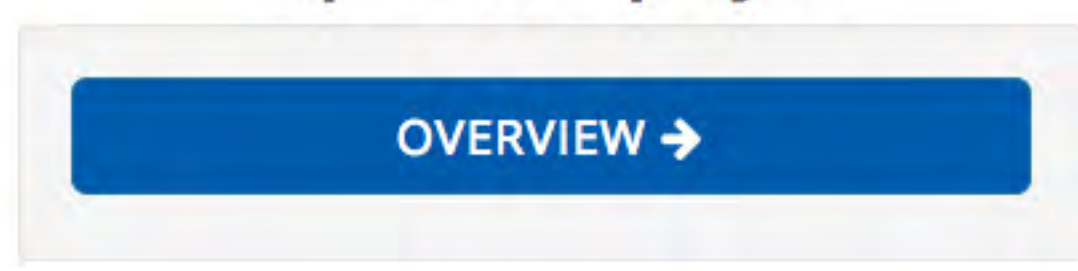
In early 2018, the project team narrowed down the location and depth of the new sewer pipe. King County is upgrading the sewer pipes that serve north Mercer Island, southwest Bellevue near Enatai Beach and the Town of Beaux Arts. These pipes were installed in the 1970s. Construction is scheduled to begin in 2020. When complete, the new sewer pipe will provide reliable wastewater service for decades.



We're glad you joined the conversation

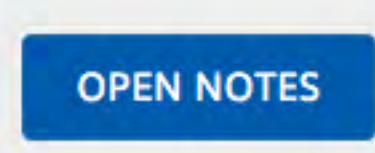
Please use the tabs to review the latest project information and detailed maps. A comment form is available for you to ask questions and share your thoughts with the project team.

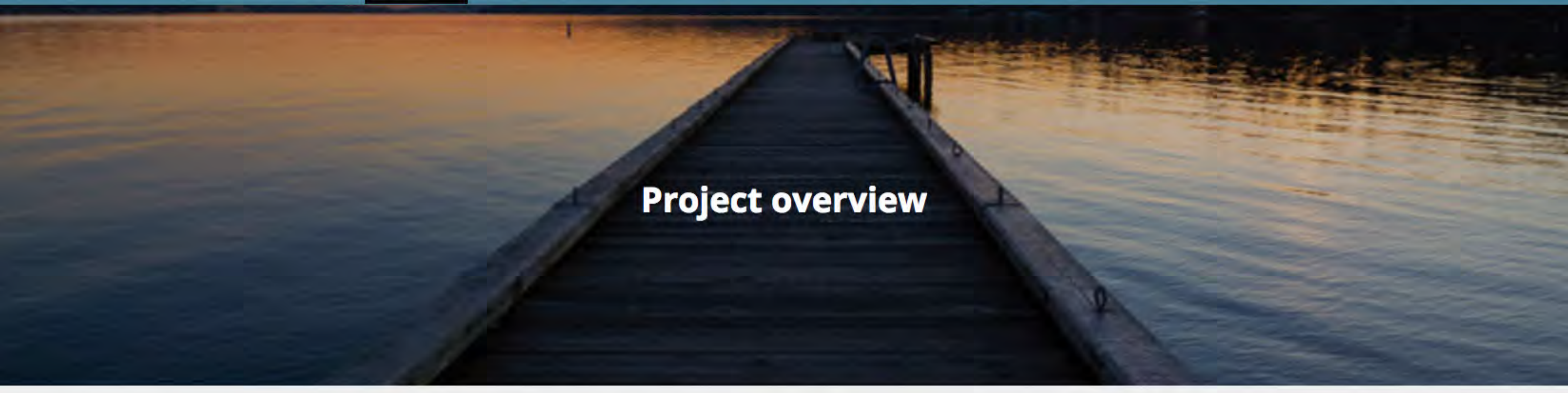
Explore the project



Take notes as you go

Click the "Open notes" button to start typing notes. You can transfer your notes to the comment form when you are done.





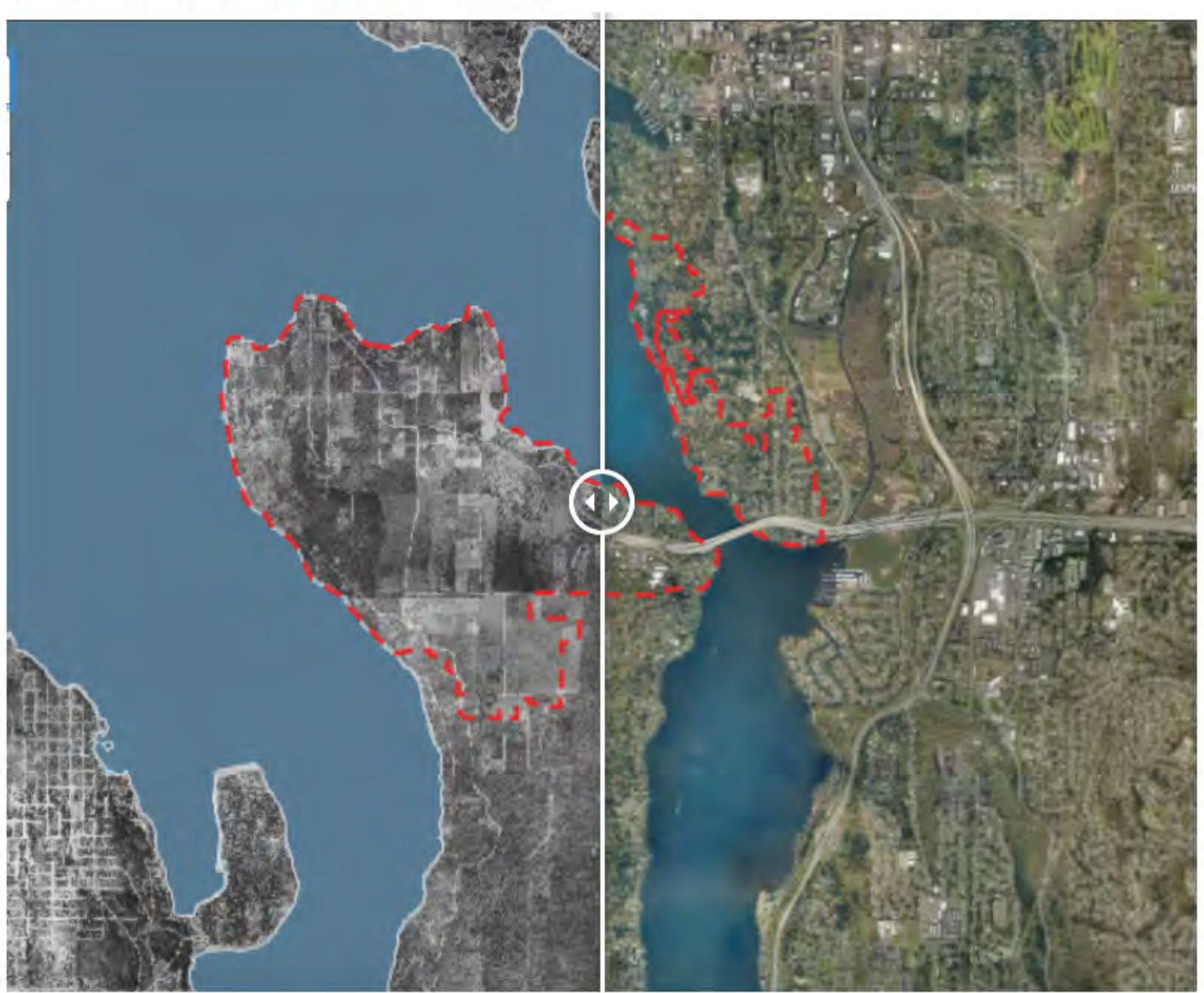
Project overview

Providing safe, reliable service for your community

King County provides wastewater service to 1.7 million people in the region. We operate and maintain nearly 400 miles of pipes that carry wastewater to one of five treatment plants. We regularly makes upgrades to our treatment plants and pipes to provide safe and reliable service.

We need to replace the aging pipes that serve North Mercer Island and southwest Bellevue near Enatai Beach. The existing pipe starts at the North Mercer Pump Station and travels under Lake Washington along northeast Mercer Island, across the East Channel and along the Enatai Shoreline, before connecting to the Sweylocken Pump Station in Mercer Slough. Wastewater from this line is sent to South Treatment Plant in Renton.

Comparative aerial views of Mercer Island



Change over time 1936 - 2015; Red dashed line indicates service area

The existing sewer pipe was installed nearly fifty years ago. The area looked a lot different from today, with lower population, less traffic and different values and rules related to the environment. The new pipe will stay out of the water as much as possible to limit the impact to sensitive environmental areas in and around Lake Washington.

North Mercer Island and Enatai Sewer Upgrade Project timeline



- 2014 - late 2015: Alternatives analysis
- Late 2015 - mid 2017: Preliminary design
- Mid 2017 - late 2019: Final design
- End of 2019: Final design complete
- 2020 - 2023: Procurement and construction

King County will keep the community informed throughout all stages of the project by hosting meetings, attending events, sending updates and talking with you.

The project is currently in final design. Construction is expected to begin in 2020 and take three years to complete.

Explore the project

← HOME

DESIGN →

Take notes as you go

Click the "Open notes" button to start typing notes. You can transfer your notes to the comment form when you are done.

OPEN NOTES



Design process

Developing and refining a sustainable design

Our goal is to design a system that provides safe, reliable sewer service for another 50 years or more. We decide the exact location of the pipe and how we will build it using information and direction from:

- [Fieldwork](#)
- [Technical memos](#)
- [Environmental studies](#)
- [Permitting](#)
- [Agency coordination](#)
- [Your input](#)



Typical drill rig used by King County

Fieldwork

You'll see our crews out collecting information about soils, groundwater, topography, existing utilities and other structures along the alignment.

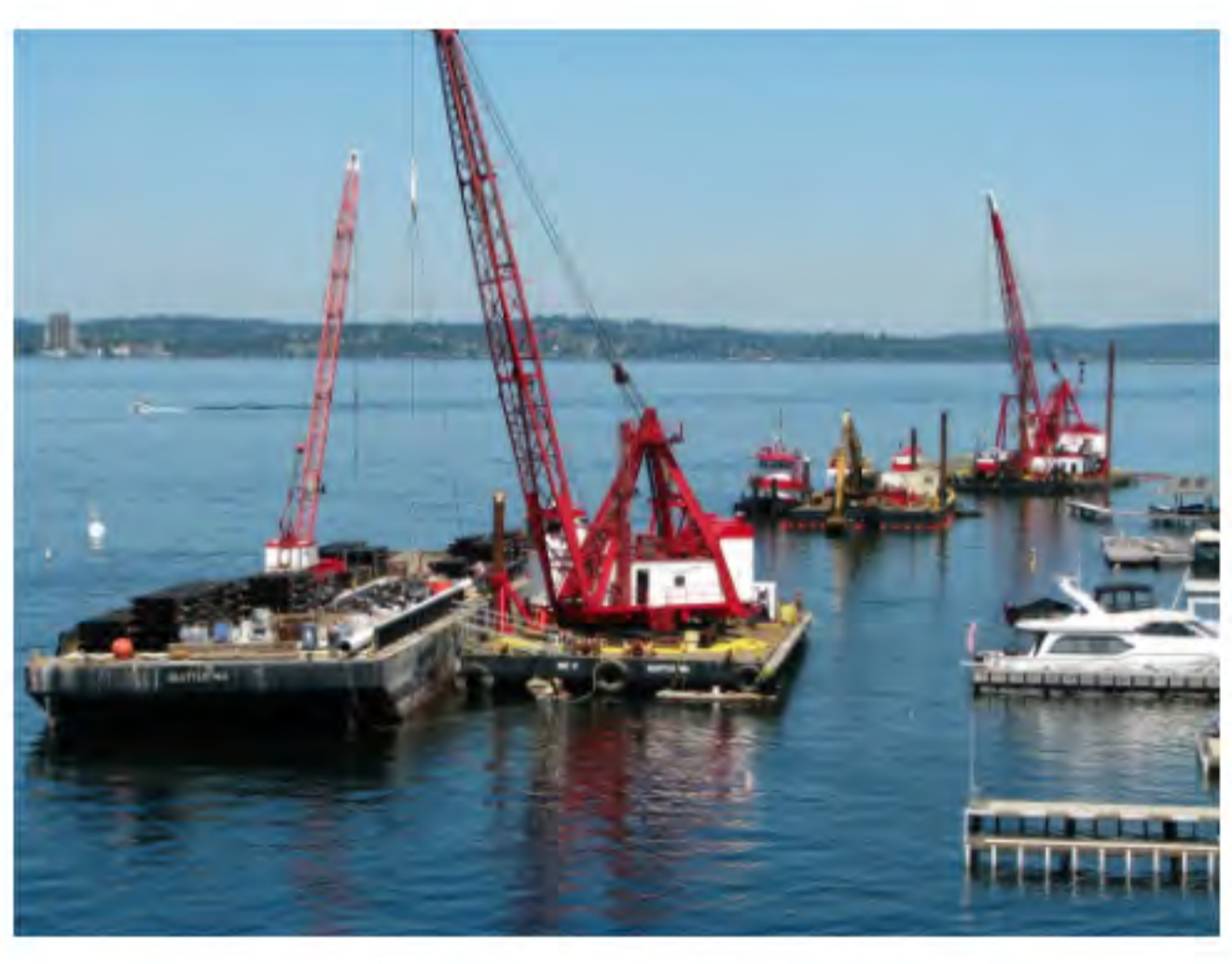
Technical memos

Our team completes a series of technical studies to inform important decisions about the project. Some of the questions we seek to answer with technical study include:

- What does traffic look like now and how will our project impact it?
- How will we keep groundwater out of our trench while we install the new pipe?
- What is the current noise level outside of our pump station and how will this change with newer equipment?
- What kind of material should the pipe be made out of?



Project engineer conducting survey work



Barges used for in-water work

Environmental studies

Environmental studies ensure that our work protects public health and the environment, and complies with environmental regulatory requirements. These studies address natural resources, such as wetlands and wildlife, and other important considerations such as traffic, noise and cultural resources. Environmental studies consider construction impacts and post-project mitigation.

Permitting

The project team works closely with the cities of Mercer Island and Bellevue. The cities issue permits that guide King County's work, including restoration efforts. State and federal permits direct environmental and public health protections.



King County works closely with the City of Mercer Island and the City of Bellevue



King County project staff walk the project area

Agency coordination

Coordination efforts focus on concurrent construction projects. The project team meets regularly with Sound Transit to understand overlapping work. Both Mercer Island and Bellevue have water line projects that overlap with the North Mercer/Enatai project area.

Your input

We recognize that you know your community best. We want to hear from you about what we should keep in mind as we continue developing our design. We will report back to you about how your input was considered.



Project engineer James Chae reviews the project route with open house attendees

Explore the project

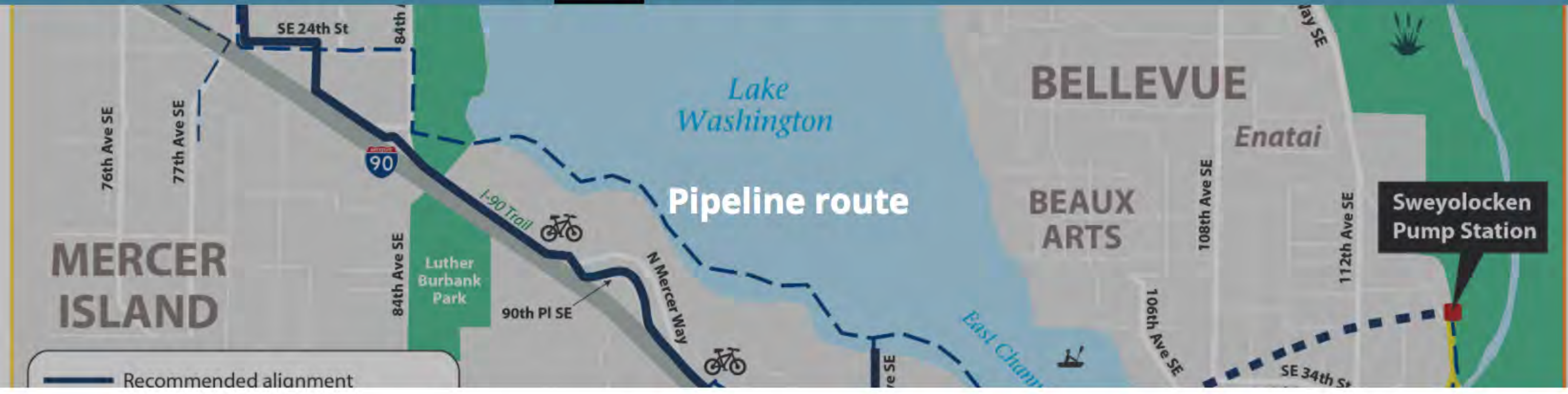
← OVERVIEW

ROUTE →

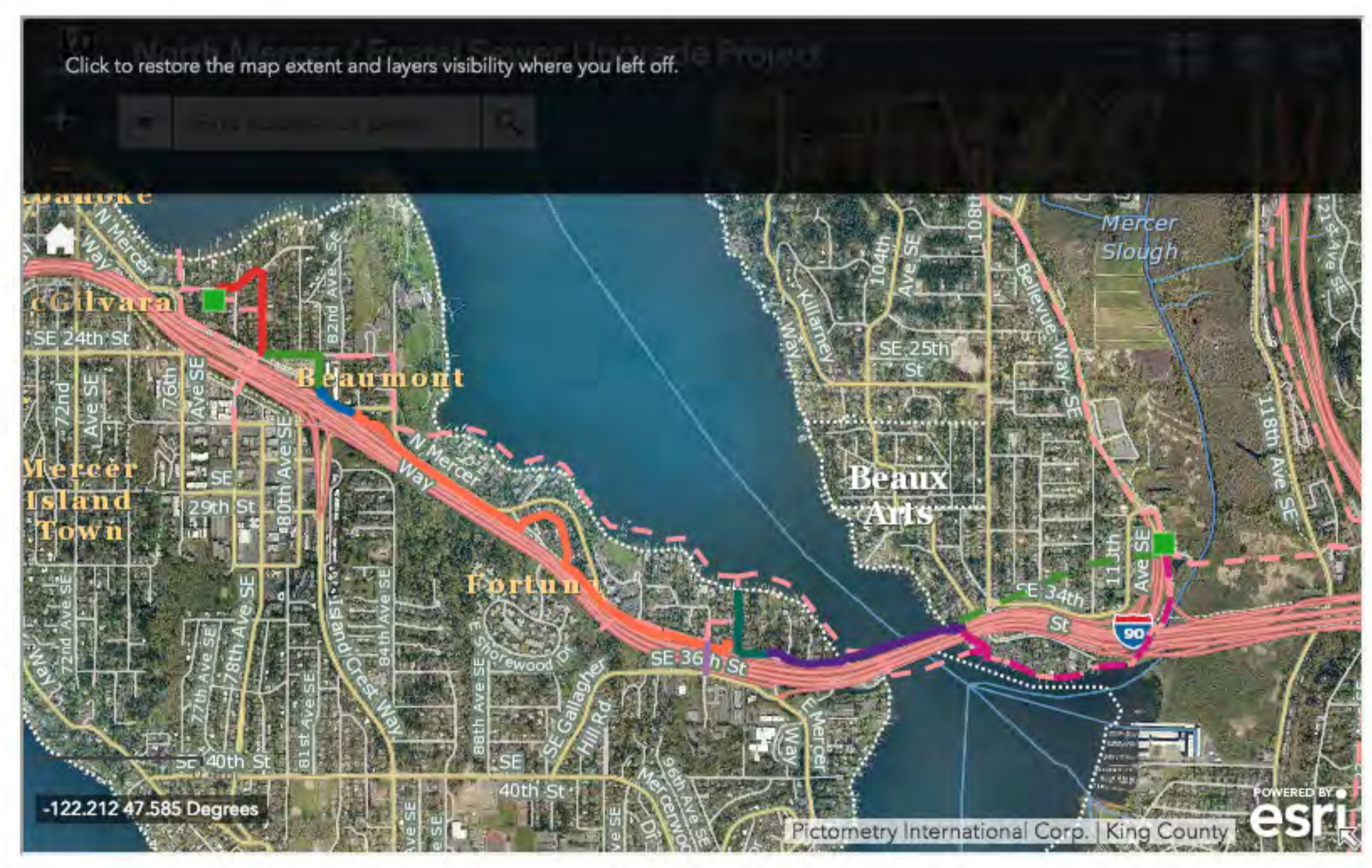
Take notes as you go

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OPEN NOTES



Last year, we shared the final project route with you, including which streets, trails and routes the pipeline would follow. Using information about the soils, plants and existing utilities on this route, additional details have come into focus. We now know which side of the street the pipe will be on, the depth of the pipe underground and what you might expect to see and experience while construction is underway.



Click on the links below to review information available for each segment of the project:

- North Mercer Pump Station
- Segment 1: S.E. 22nd Way & 78th Avenue S.E.
- Segment 2: S.E. 24th Street & 81st Avenue S.E.
- Segment 3: North Mercer Way
- Segment 4: I-90 Trail & 90th Place S.E.
- Segment 5: Lift Station 11 & 97th Avenue S.E.
- Segment 6: East Channel crossing
- Segment 7: Horizontal Directional Drilling (HDD)
- Segment 8: Bellevue pipeline rehabilitation

Explore the project

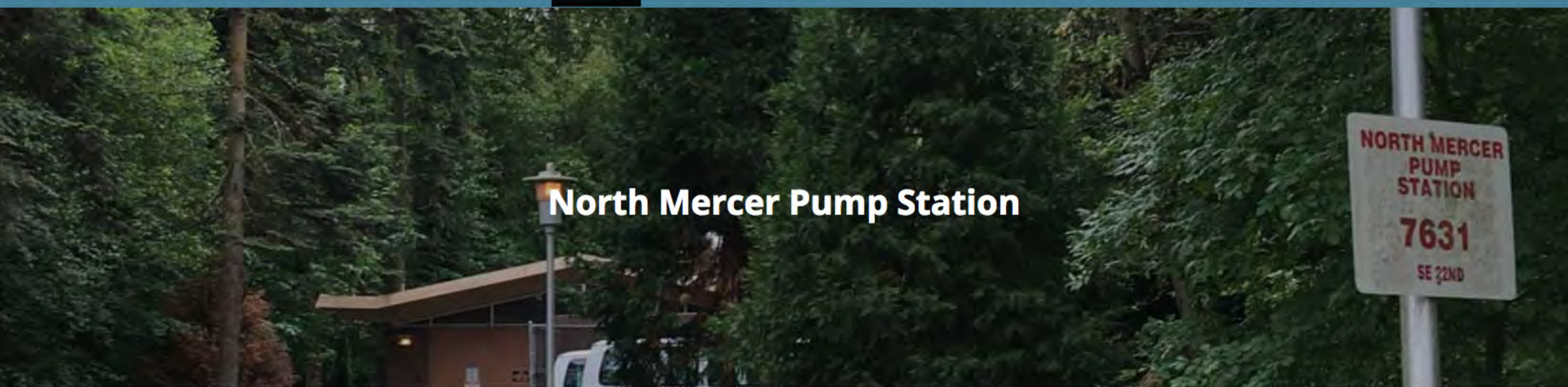
← DESIGN

NORTH MERCER PUMP STATION →

Take notes as you go

Click the "Open notes" button to start typing notes. You can transfer your notes to the comment form when you are done.

OPEN NOTES



North Mercer Pump Station



North Mercer Pump Station, located off of S.E. 22nd Street

The North Mercer Pump Station keeps flows moving east towards Bellevue and ultimately to King County's treatment plant in Renton. The existing pump station has been in use since 1970. Like the new pipe, the pump station needs to be upgraded to handle increased flows. King County will:

- Replace existing pumps with larger pumps
- Add a second building to house a standby generator; the generator is needed to power the pump station during power outages
- Replace the aging odor control system with a new, carbon-filter system



Conceptual schematic plan for North Mercer Pump Station

What to expect:

- Removal of trees and other vegetation on the site during construction
- Increased activity, noise and truck traffic while construction is underway
- Removal of invasive species across the site
- Site restoration, including new paint, fencing and landscaping after construction is complete



Interior of North Mercer Pump Station



Interior of North Mercer Pump Station

Explore the project

← ROUTE

SEGMENT 1 →

Take notes as you go

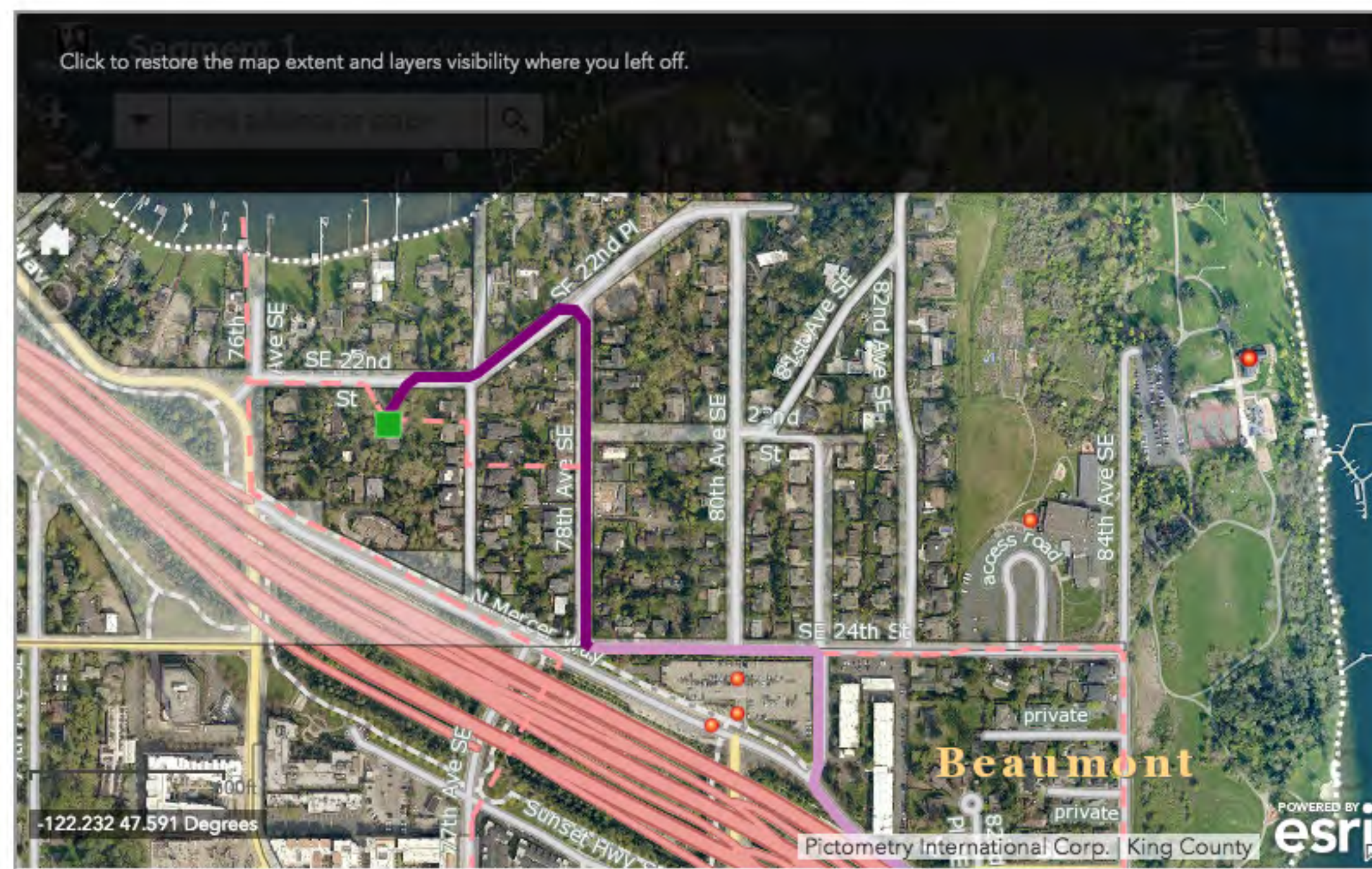
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OPEN NOTES



S.E. 22nd Way & 78th Avenue S.E.

From the North Mercer Pump Station, the pipe will follow along the north side of S.E. 22nd Way and the east side of 78th Avenue S.E. to S.E. 24th Street.



What to expect:

We know this work will be disruptive to those living nearby. We will have more information about what you can expect as we get closer to construction, but here is what we know so far:

- The pipe will be installed using an open trench from the surface
- Planter strips on the east side of the road will be taken out; these areas will be restored to City of Mercer Island standards following construction
- Lane closures, traffic delays, increased truck traffic, increased noise and vibration are expected
- Emergency access will be maintained at all times



Looking north on 78th Avenue S.E.



Looking east on S.E. 22nd Way

Explore the project

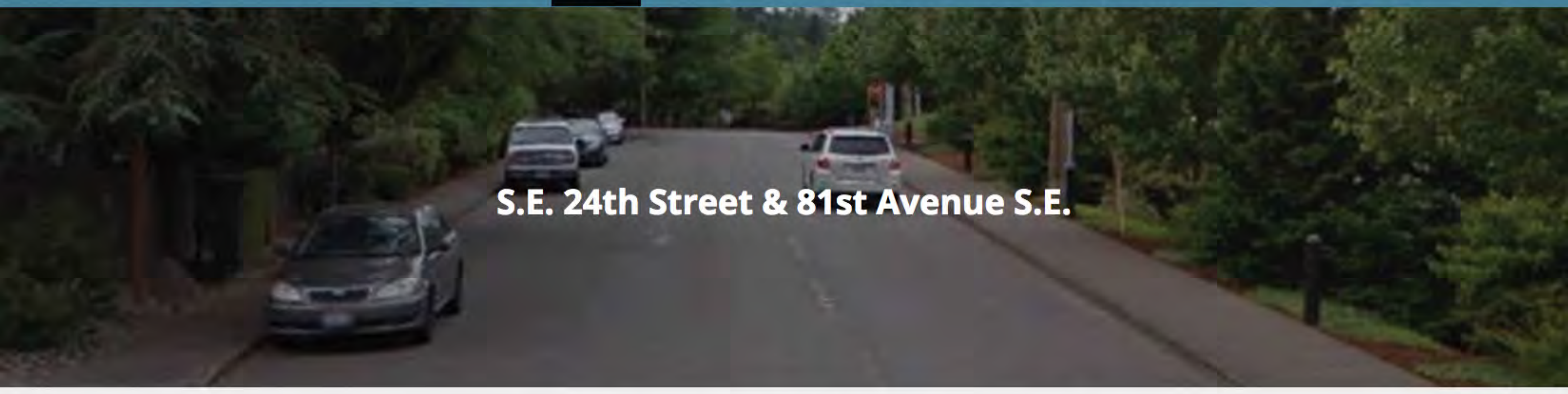
← NORTH MERCER PUMP STATION

SEGMENT 2 →

Take notes as you go

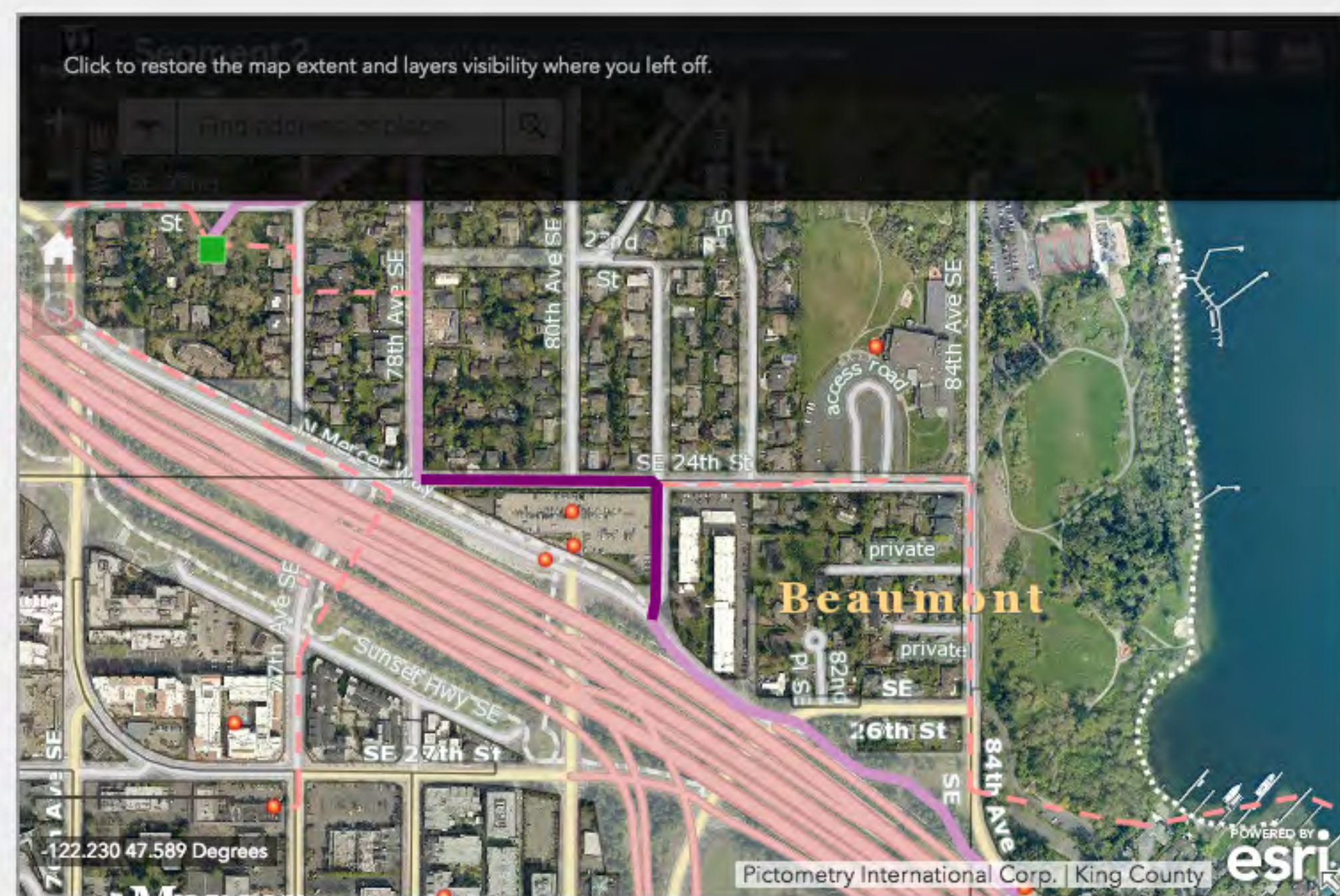
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OPEN NOTES



S.E. 24th Street & 81st Avenue S.E.

From 78th Avenue S.E., the pipe will follow along the centerline of N.E. 24th Street and on the west side of 81st Avenue S.E., toward North Mercer Way.



What to expect:

We know this work will be disruptive to those living nearby. We will have more information about what you can expect as we get closer to construction, but here is what we know so far:

- The pipe will be installed using an open trench from the surface
- Lane closures, sidewalk closures, traffic delays, increased truck traffic, increased noise and vibration are expected
- Emergency access will be maintained at all times
- The Mercer Island Park and Ride will be open



Looking east on S.E. 24th Street



Looking north on 81st Avenue S.E.

Explore the Project

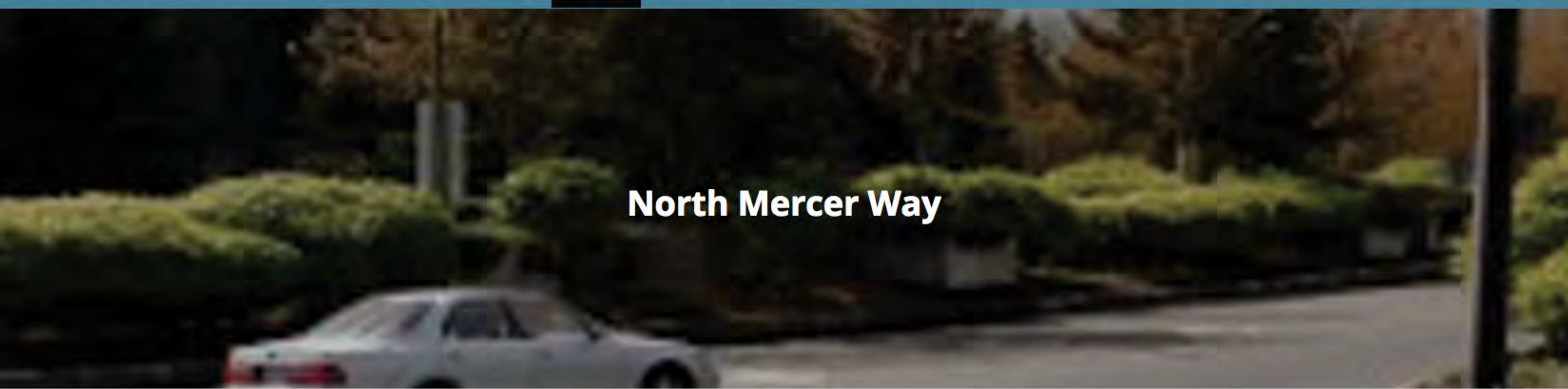
← SEGMENT 1

SEGMENT 3 →

Take notes as you go

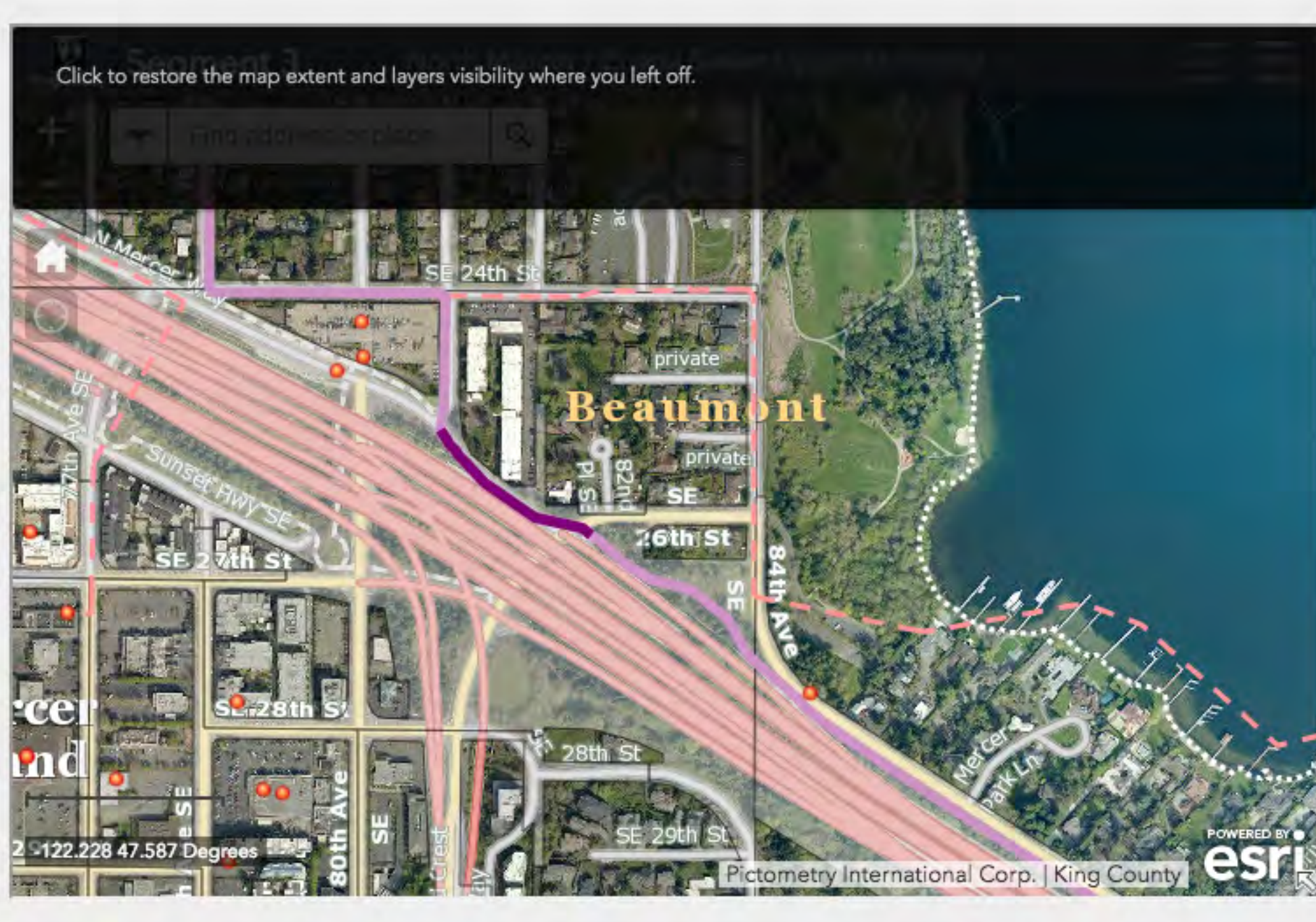
Click the "Open notes" button to start typing notes. You can transfer your notes to the comment form when you are done.

OPEN NOTES



North Mercer Way

The pipe will follow along the south side of North Mercer Way between 81st Avenue S.E. and Island Crest Way. From Island Crest Way it will follow the I-90 Trail.



What to expect:

While we tried to avoid North Mercer Way for the majority of the alignment, this 500-foot section of the pipe must be installed here to avoid utility conflicts on other streets. We know this is a busy corridor. We are still working out all of the details, but here is what we know so far about construction in this segment:

- The pipe will be installed using an open trench from the surface
- North Mercer Way will be closed from 81st Ave SE to Island Crest Way in an effort to complete this work safely and quickly; the intersections with 81st Ave SE and Island Crest Way will remain open, with intermittent lane closures
- Detours for vehicles, cyclists and pedestrians
- Increased truck traffic, increased noise and vibration are expected
- We are working with the City of Mercer Island to identify the best way to build the pipe safely and efficiently



Looking east on North Mercer Way

Explore the project

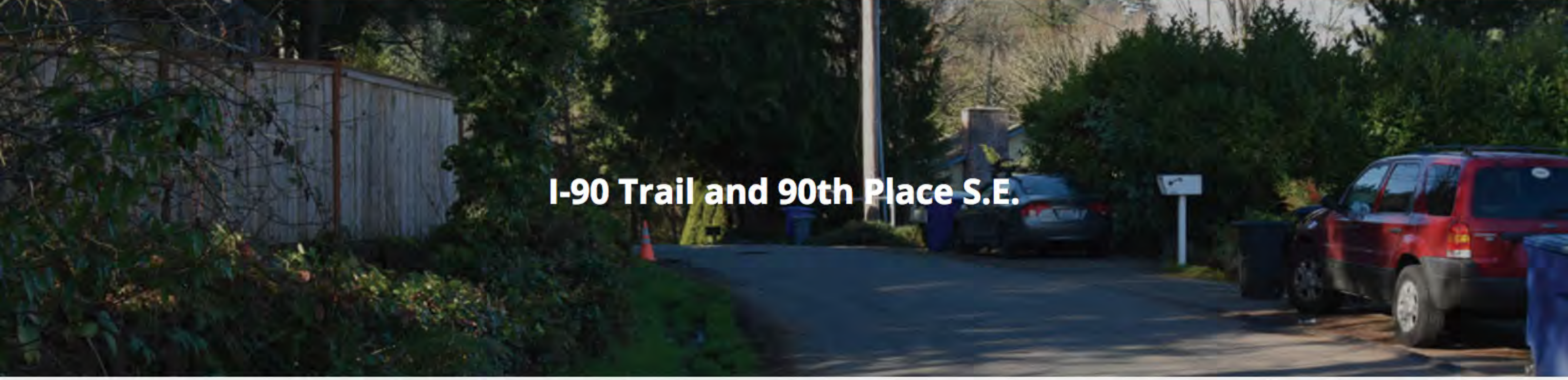
← SEGMENT 2

SEGMENT 4 →

Take notes as you go

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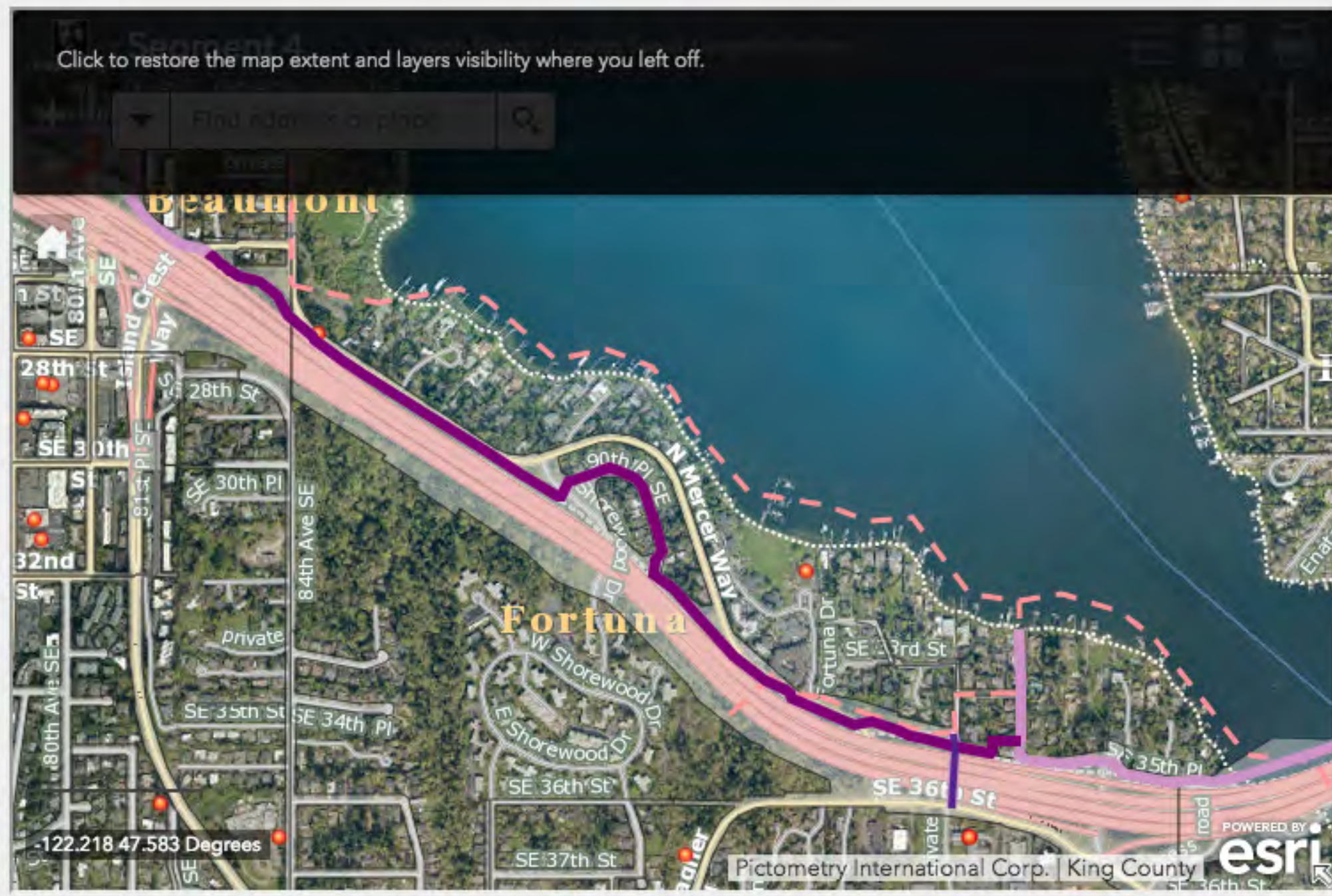
OPEN NOTES



I-90 Trail and 90th Place S.E.

A large portion of the new pipe will follow the I-90 Trail. The exact alignment of the pipe within or adjacent to the trail varies by location.

The pipe will come off of the I-90 Trail and follow 90th Place S.E. to keep wastewater flowing efficiently. The pipe will be installed on both the north and the south sides of the road, depending on location. The roadway is very narrow. The full width of the right-of-way may be needed to install the pipe.



What to expect during work on the trail:

- While the location within or near the trail varies, we expect full trail closures and off-site detours to complete this work
- We are working with local and regional bicycle and trail groups to understand how people use the trail; we will use this information along with direction from City of Mercer Island to develop safe, efficient detour routes

What to expect during work on 90th Place S.E.:

- The pipe will be installed using an open trench from the surface
- Emergency access to homes will be maintained at all times
- Some landscaping and structures within the right-of-way will be removed to complete this work; these areas will be restored to City of Mercer Island standards following construction completion
- Lane closures, traffic delays, increased truck traffic, increased noise and vibration are expected



Looking west on 90th Place S.E.

Explore the project

← SEGMENT 3

SEGMENT 5 →

Take notes as you go

Click the "Open notes" button to start typing notes. You can transfer your notes to the comment form when you are done.

OPEN NOTES



Lift Station 11 & 97th Avenue S.E.

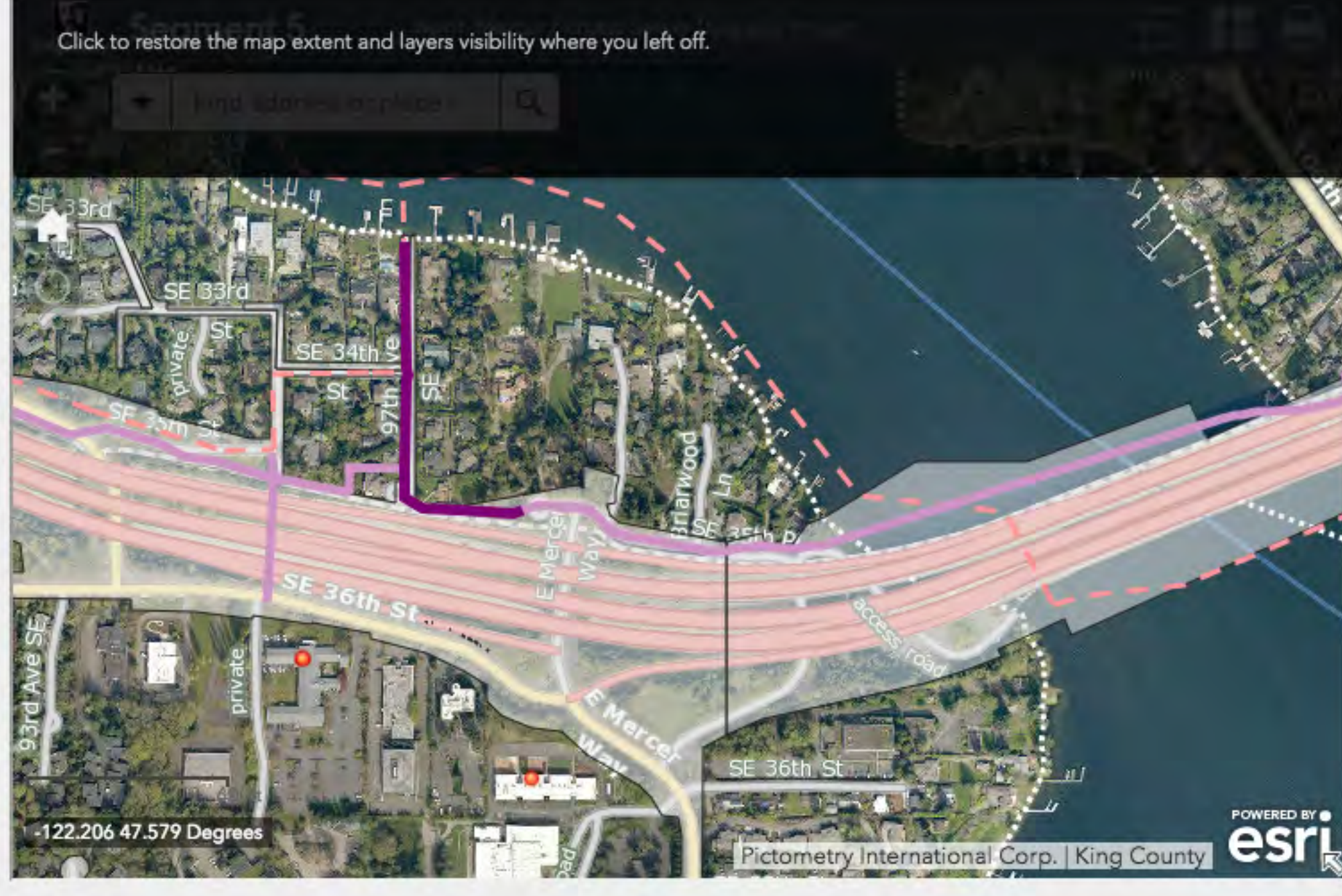
Lift Station 11

Lift Station 11 is located at the north end of 97th Avenue N.E. in Fruitland Landing Park. This lift station directs flows from the City of Mercer Island's local sewer line to our regional sewer line. Upgrades are needed to redirect flows from the existing King County pipe in Lake Washington to the new upland pipe.

While these upgrades are completed, construction will be noticeable to those who live, work and play nearby. The park will be restored to its existing condition upon project completion.

97th Avenue S.E.

From Lift Station 11 in Fruitland Landing, a new pipe will be installed near the middle of 97th Avenue S.E. and connect to the new pipe on the north side of the I-90 Trail. The roadway is very narrow and has many existing utilities. The full width of the right-of-way will be needed to install the pipe.



What to expect:

- The pipe will be installed using an open trench from the surface
- Emergency access to homes will be maintained at all times
- Some landscaping and structures within the right-of-way will be removed to complete this work; these areas will be restored to City of Mercer Island standards following construction completion
- Lane closures, traffic delays, increased truck traffic, increased noise and vibration are expected



Looking north on 97th Avenue S.E.

Explore the project

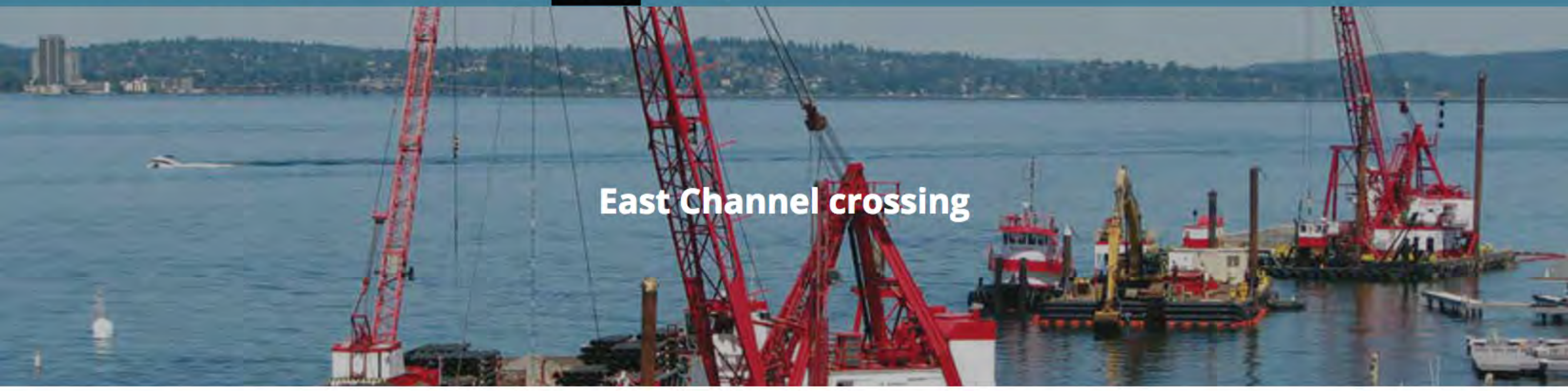
← SEGMENT 4

SEGMENT 6 →

Take notes as you go

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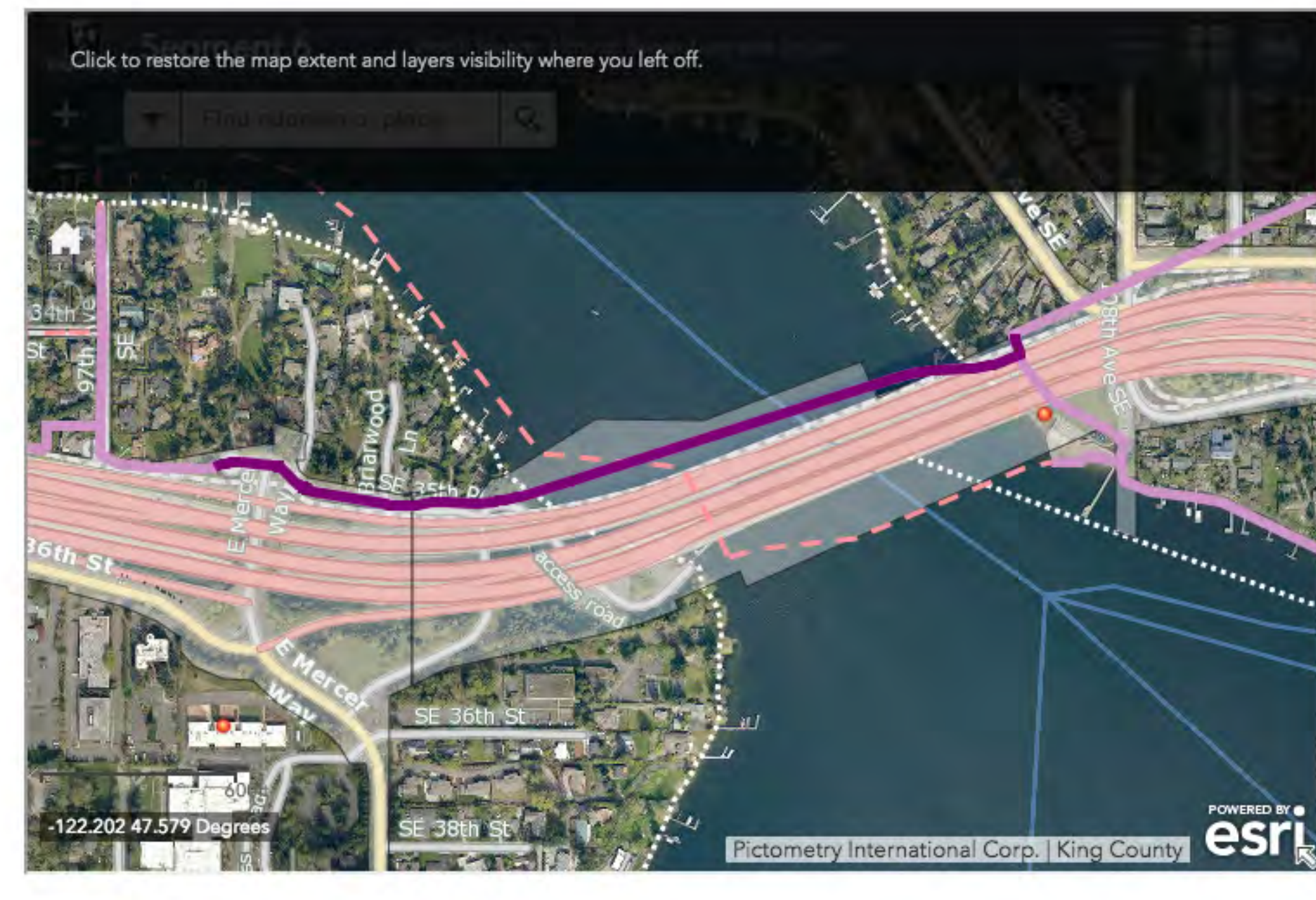
OPEN NOTES



East Channel crossing

East Channel crossing

The pipe will follow along the south side of S.E. 35th Place and enter the East Channel via the Mercer Island Boat Launch. The pipe will be placed under the lake bed across the East Channel just north of the I-90 bridge. The pipe will come back onto land under the I-90 bridge on the east side of the channel in Enatai Beach Park.



What to expect during work on land:

- The pipe will be installed using open trench construction
- Emergency access to homes will be maintained at all times
- Lane closures, traffic delays, increased truck traffic, increased noise and vibration are expected
- Partial closures of the Mercer Island Boat Launch at limited times during portions of this work

What to expect during work in the water:

King County is working with the City of Mercer Island, the City of Bellevue and permitting agencies to identify ways to reduce our impact to fish and wildlife while the pipe is installed under the East Channel. We will have more information about how this work will be conducted as we get closer to construction. Here is what we know now:

- The pipe will be installed using a trench dug from barges using 'clam shell' excavators on a crane
- The contractor will follow environmental guidelines set by regulatory agencies to keep the work zone contained
- Boat navigability will be maintained at all times
- We will avoid conflicts with major events, such as Seafair



In-water excavation work being performed by a clam shell digger

Explore the project

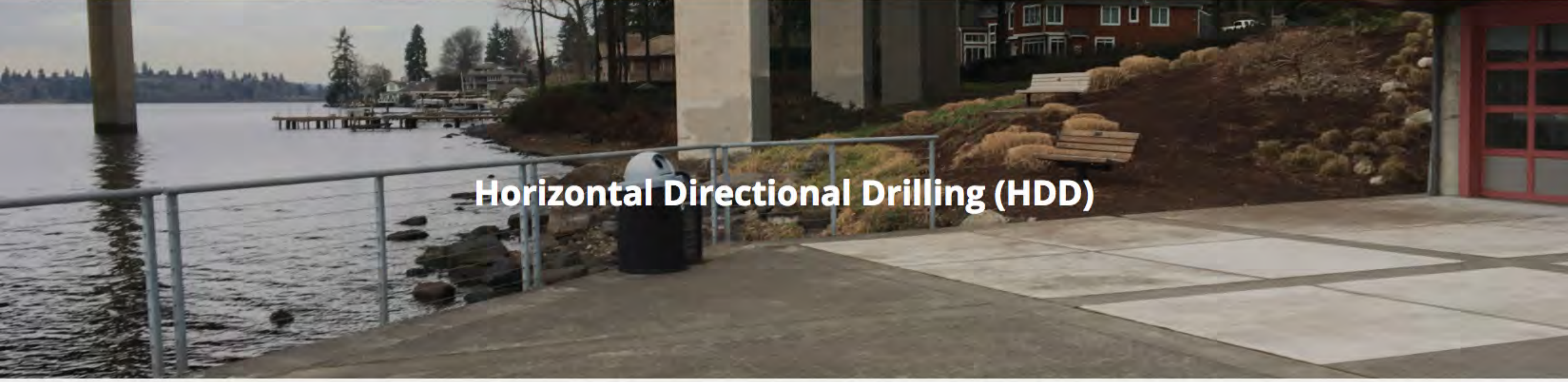
← SEGMENT 5

SEGMENT 7 →

Take notes as you go

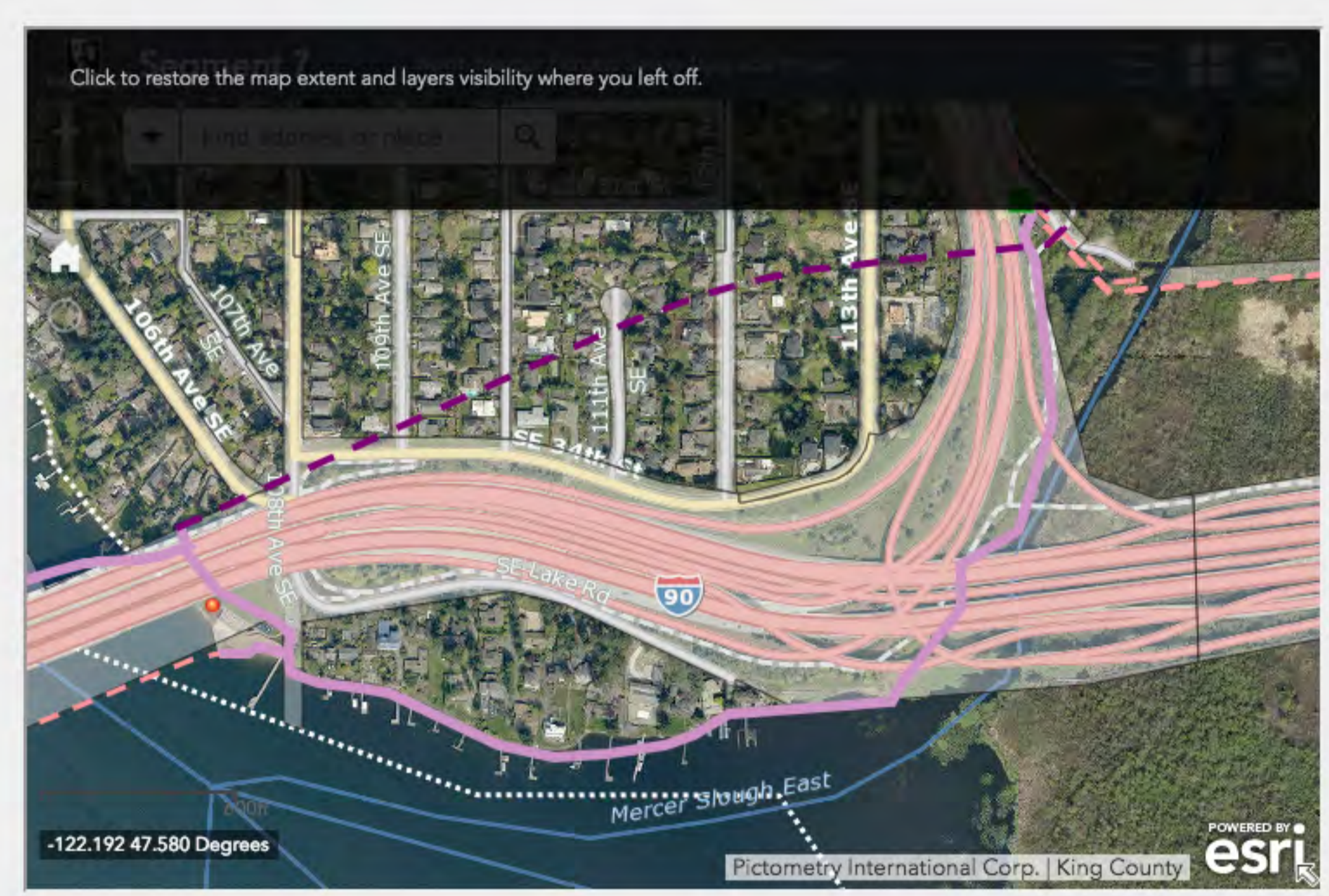
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OPEN NOTES



Horizontal Directional Drilling (HDD)

One section of the new pipe in Bellevue's Enatai Neighborhood will be installed using Horizontal Directional Drilling (HDD). This is a trenchless method of construction in which the pipe is installed deep underground from point to point using drilling equipment. This section will be installed between Enatai Beach Park and King County's Sweyolocken Pump Station.



What to expect:

- Two pits, one on either end of the HDD pipe route
- Increased noise, vibration and truck traffic near the pits while construction is underway
- Construction pipe floated in Lake Washington before the pipe is pulled underground
- Navigability will be maintained at all times
- Potential park closures at Enatai Beach Park



Crews installing a pipe using HDD

Explore the project

← SEGMENT 6

SEGMENT 8 →

Take notes as you go

Click the "Open notes" button to start typing notes. You can transfer your notes to the comment form when you are done.

OPEN NOTES



Bellevue pipeline rehabilitation

Part of the existing sewer line needs to be left in place because it serves much of the Enatai neighborhood and south Bellevue (red dotted line shown on map below). This section of pipe, which runs between Enatai Beach Park and Mercer Slough, will be relined to increase the life of the existing pipe.



What to expect:

- Some work limited to late summer and early fall to avoid fish spawning season
- Temporary bypass sewer systems on private property along S.E. Lake Drive to maintain service while the existing pipe is under construction
- Work conducted from land and via barges in Lake Washington
- The I-90 Trail will remain open between Enatai Beach Park and Mercer Slough during construction; trail users can expect short delays; flaggers and signage will be in place to safely direct you through the work zone



Example of a temporary bypass sewer system using grinder pumps

Explore the project

← SEGMENT 7

NEXT STEPS →

Take notes as you go

Click the "Open notes" button to start typing notes. You can transfer your notes to the comment form when you are done.

OPEN NOTES



Next steps

Construction is expected to begin in 2020 and take three years to complete. Before construction begins, King County will:



Conduct additional fieldwork



Complete environmental review, including the State Environmental Policy Act documents in 2018



Coordination with the City of Mercer Island, City of Bellevue and state and federal agencies



Develop construction timeline estimates and a detailed picture of what you can expect starting in 2020



King County project staff work with community members through design and construction

Our commitment to you

We are committed to keeping you informed of project progress throughout design and construction. We will share information about environmental review, construction details and plans for restoration as it becomes available. Our outreach efforts to date include:

- 6**

Open houses
- 17**

Community briefings
- 30**

Field work notices
- 7**

Community events
- 350**

One-on-one conversations

Upcoming opportunities to learn more and provide your feedback:

1. Mercer Island walk and talks on Saturday, March 3—The project team will walk residential streets with neighbors to discuss the detailed sewer route and what to expect during construction. Visit our [website](#) to learn more.
2. Summer fairs and festivals—We'll be out in your community this summer. Check our [website](#) for details on where we'll be.
3. Fall 2018 open houses—We expect to have more information about how we will build the sewer upgrade, what you can expect during construction, and our plans for restoration this fall. We'll be out in the fall to share this information with you.
4. Our project team is also available for meetings, briefings, and events. To request a meeting or to talk with the project team, please contact Kristine Cramer at 206-477-5415 or kristine.cramer@kingcounty.gov

Explore the project

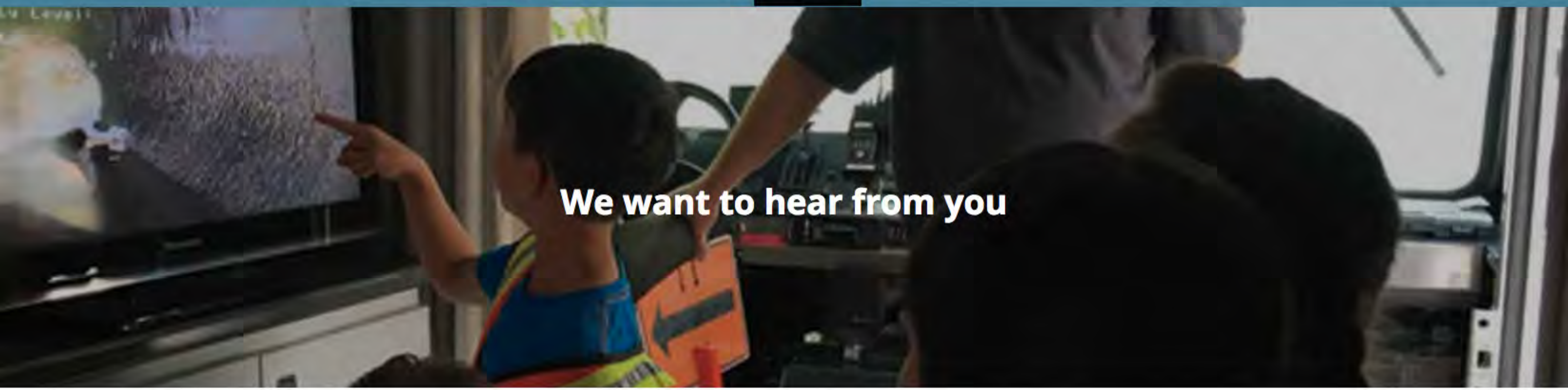
[← SEGMENT 8](#)

[COMMENT →](#)

Take notes as you go

Click the "Open notes" button to start typing notes. You can transfer your notes to the comment form when you are done.

[OPEN NOTES](#)



We want to hear from you

Thank you for visiting our online open house. King County is committed to working closely with you throughout the life of the project.

King County wants to be a good neighbor. What should we keep in mind moving forward?

Please use the comment form here, call or email Kristine at 206-477-5415 or kristine.cramer@kingcounty.gov to share your thoughts and ask questions.

Comment

Name *

First

Last

Email *

Phone

Comment/Question *

SUBMIT

Sign up for email or text updates

To sign up by phone:

- text KING MERCERSEWER to 468-311 for Mercer Island updates
- text KING ENATAISEWER to 468-311 for Bellevue updates

To manage your preferences, enter your email or wireless number and select Confirm.

1. Subscription type

*

Email address

CONFIRM

Explore the project

← NEXT STEPS