



# Sunset and Heathfield Pump Stations and Force Main Upgrade

## Frequently Asked Questions

December 2017

### PROJECT BACKGROUND

#### **What is the Sunset and Heathfield Pump Stations and Force Main Upgrade project?**

The Sunset and Heathfield Pump Stations and related sewer pipes send sewage from Sammamish, Issaquah, and Bellevue to be treated at King County's treatment plant in Renton. This project will upgrade both pump stations and the connected force main pipe. The project will also upgrade an underground sewer connection called the Eastgate Trunk, near I-90.

#### **Why is the project necessary?**

The pump stations and connected force main pipe have served the area for 50 years. They need to be upgraded to keep up with the growing population. This project will ensure King County can provide continued, reliable sewer service to the area for years to come.

#### **What does the project include?**

Four new pumps, new electrical and controls systems, new standby generators, and new heating and air conditioning systems will be installed at each pump station. There are two force main pipes that connect the pump stations to King County's larger wastewater system. One of the existing pipes is 12 inches in diameter and the other is 24 inches in diameter. The existing 12-inch diameter pipe will be replaced with a new 24-inch diameter pipe. Read our [December 2016 newsletter](#) for more information on the final design.

#### **What is the current project schedule?**

King County completed project design in late 2016. Construction began in 2017 and is expected to end in 2020. The schedule and duration for construction activities is tentative and is subject to change as work progresses. We will continue to provide email notices and door fliers with updates on timing of specific construction activities. If you would like to join our email list, please sign up on [our website](#).

### CONSTRUCTION

#### **What will pump station construction involve?**

Most of the construction at the two pump stations will occur inside. Improvements outside of the buildings includes new landscaping and installation of a larger generator. You can expect to see crew members, trucks, and equipment at each pump station during construction.

#### **What will the new force main pipe construction involve?**

The new force main pipe will be installed along Southeast 35th Place, 164th Place Southeast, and Southeast 38th Street. Force main pipe construction began in 2017.

This work will require different construction methods – open cut construction, trenchless crossings, and horizontal directional drilling (HDD). During this work, you can expect noise, vibration, and single-lane or full road closures. You will see signs, crew members, trucks, and equipment. King County will work with the community to reduce construction impacts when possible.

**What are the differences between each construction method?**

Open cut construction requires digging trenches, while trenchless construction, including horizontal directional drilling (HDD), is a type of subsurface work that requires few trenches, avoids sensitive environmental areas and minimizes impact to surface streets.

**Open cut**

Open cut is a method of installing underground pipes that requires digging an uncovered trench. Once crews have finished digging the trench, they lay pipe into the open trench and restore all disturbed areas.

**Horizontal Directional Drilling (HDD)**

HDD is a construction method typically used to install pipelines under busy roadways and environmentally sensitive areas (such as wetlands and streams). The contractor uses a machine on the surface to drill an underground pathway for the new pipe, and then pulls the pipe through the new path. There are three main steps in the HDD process:

**1. Pilot bore**

The contractor builds entry and exit points for the drilling operation. To protect the surface, steel pipes called casings will be installed where the drill enters and exits. The entry and exit points for this pipe will be at the Sunset Pump Station and in the King County right-of-way along 164th Pl. S.E. where it turns into S.E. 38th St. Then the contractor will complete the pilot bore, establishing the underground path for the new pipeline. This process is expected to take approximately two weeks.

**2. Reaming pass**

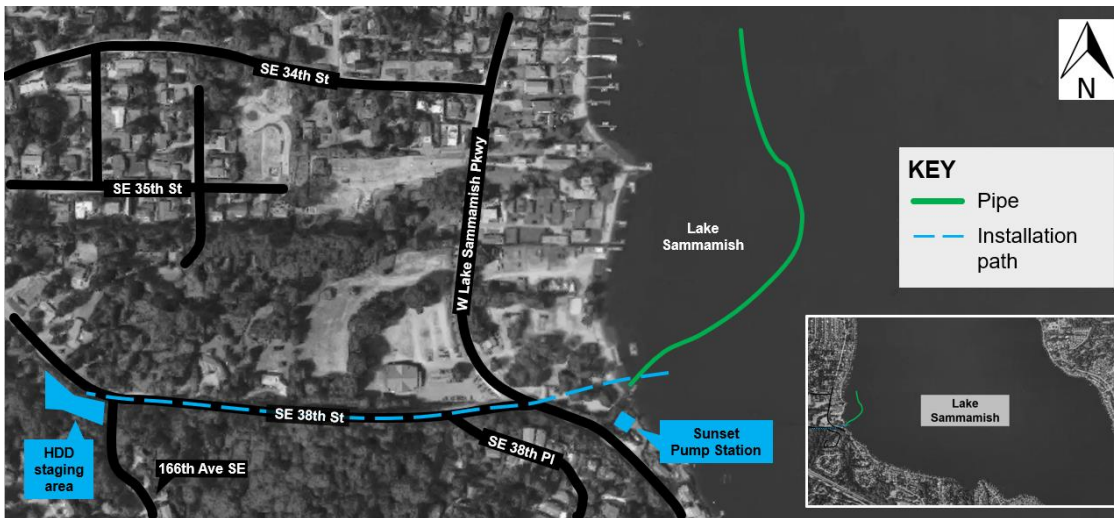
The contractor enlarges the hole to the final pipe size using a reamer. Mud from drilling in this step is collected and recycled. This process is expected to take approximately one month.

**3. Pipe installation**

Once the bore hole is prepared, the pipe is pulled through the hole. For this project, the pipe will be floated on Lake Sammamish and pulled through from east to west. Pullback must be done without stopping. After the pipe is in place, crews will spend several weeks grouting and testing the pipe. This process is expected to take approximately two to three days.

**BOATER INFORMATION****Where is the pipe floating?**

The 1600-foot pipe is currently floating on Lake Sammamish, connected to a dock between Vasa Park and Sunset Pump Station. This portion of the pipe will be installed along Southeast 38th Street via horizontal directional drilling (HDD).



### **What safety measures are in place to mark and anchor the pipe?**

The pipe is marked with U.S. Coast Guard-approved lights and buoys to ensure it is visible to those on the lake.

The pipe is held in place with eleven submerged buoy-marked anchors that the contractor maintains. Boaters are encouraged to maintain a safe distance of at least 50 feet from the pipe and limit speed to avoid collisions, and prevent any damage to boats from anchor cables.

### **How does the pipe stay afloat?**

The empty pipe's lightweight material allows it to remain afloat.

### **When will the pipe be installed?**

Prior to installing the pipe, crews must excavate entrance and exit pits for the pipe at the Sunset Pump Station and near the King County staging area along 164th Place Southeast. Due to a limited area for staging, the pipe had to be connected and floated on Lake Sammamish before crews could mobilize equipment to drill an underground pathway and install the floating pipe. Crews plan to install the pipe in spring 2018 and it is scheduled to take approximately two to three days. The underwater anchors will remain in place through summer 2018. Removing the anchors during the summer will minimize impacts to salmon and other fish.

## **CONSTRUCTION IMPACTS**

### **What are typical work hours?**

Typical working hours are 7 a.m. to 7 p.m. Monday-Saturday. Some work activities may require the contractor to work outside of these times. If this occurs, the contractor will work with the City of Bellevue prior to starting work and residents will be notified by King County through fliers and/or email updates.

### **Will roads be closed during construction?**

There may be temporary road and lane closures. Construction crews will maintain 24-hour emergency access, and flaggers will be present to help drivers and people biking and walking detour around closures. Residents will be notified prior to any road closures.

**Will access to driveways be maintained?**

King County will work with the construction contractor to keep access to driveways and homes open as much as possible. There may be times that vehicle access will be limited during working hours. Affected residents will be notified prior to any driveway impacts.

**Will there be noise?**

Noise associated with construction activities should be expected, though the contractor is required to stay within the City of Bellevue Noise Ordinance requirements. King County will plan to monitor noise throughout construction.

**Will the noise from the pump stations increase?**

Noise is expected to remain at current levels when generators are not in operation. The upgrades include new generators that may result in higher noise levels during severe storm events; however, noise is expected to continue to comply with the City of Bellevue Noise Ordinance requirements.

**Where will construction equipment be staged?**

Construction equipment will be staged in the following locations:

- West of the intersection of Southeast Eastgate Way and Southeast 37th Street
- King County property south of 164th Place Southeast, just west of 166th Avenue Southeast
- Vasa Park property
- Sunset Pump Station
- Heathfield Pump Station

**Will construction impact buses?**

The contractor is required to maintain access to school bus stops throughout construction, including Community Transit route 888 (special school bus route).

**Will my utilities be affected/relocated?**

Some utilities, such as gas and electricity, may be impacted. You will receive notice from your provider about any outages/impacts.

**Will parking be impacted?**

Some on street parking will be unavailable during construction. The contractor will place no parking signs near the work area when necessary, at least 48 hours in advance.

**Will there be impacts to Vasa Park?**

The construction contractor is required to maintain access to Vasa Park at all times. Most construction activity near Vasa Park is expected to conclude in spring 2018. King County is working closely with Vasa Park throughout construction to minimize impacts to the park.

**How will the project team address impacts to the environment?**

The project team will continue to collect and review information on animals, plants, creeks, and wetlands in the area during construction. King County will work with the community, City of Bellevue, and appropriate government agencies to make sure all environmental restoration activities meet legal requirements. Low-impact construction methods will be used where the new force main pipe crosses Vasa Creek. Trees and other plants may need to be removed during construction. The County will re-plant new trees and plants in their place at the end of the project.

**How can I stay informed during construction?**

King County will provide advance notice and updates of construction activities via:

- The project [website](#)
- Email updates (sign up on the project [website](#))
- Door-to-door fliers to project-area neighbors
- Phone calls to immediately impacted residences when necessary

You can also call our 24-hour construction hotline at 206-296-7800.

## DESIGN AND COMMUNITY FEEDBACK

### What did the project team consider during design?

Reliability, efficiency, lifecycle cost, permitting, operations and maintenance needs, environmental impacts, community input, and sustainability are some of the factors the project team considered throughout design of the pump station and force main upgrades.

### What feedback has the community shared?

More than 250 neighbors and community members were surveyed so the project team could learn about the community's interests and concerns. Based on their answers, King County knows neighbors want to maintain the look and feel of the project area and reduce traffic impacts during construction.

King County also hosted an open house in March 2014 inviting members of the public to share their preferences on fencing, landscaping, and lighting at the Sunset Pump Station. Their input is reflected in the final selection of fencing and lighting, shared at an open house in January 2017. To learn more about community input throughout design, please visit the [public involvement](#) page on our website.

## OTHER

### Will artwork be added?

No permanent artwork installations are planned at either pump station. Information may be installed at a kiosk along the I-90 trail system between West Lake Sammamish Parkway Southeast and Southeast Eastgate Way. This signage would help educate community members about the project.

### Will the project be educational?

Our team is planning to partner with local schools to educate students about wastewater. The County is happy to set up a site tour for classes that want to learn about their sewer service. Contact De'Sean Quinn (contact information below) for more information.



### How will the pump stations be certified sustainable?

King County works to build and operate facilities that benefit the local community, environment, and economy on all our projects. The good news is King County can now earn a certificate for these efforts, called Envision.

The Envision program provides a framework to help measure how well an organization incorporates sustainability (environment, equity, and economy) on infrastructure projects and industrial facilities. This is similar to the Leadership in Energy and Environmental Design (LEED) program, which certifies occupied commercial and residential buildings.

**Envision is similar to LEED!**  
*(Leadership in Energy and Environmental Design)*

**How do they compare?**

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|                                |   |
| <p>--Certifies occupied commercial and residential buildings</p> <p>--Focus on environmental sustainability</p> | <p>--Certifies infrastructure and industrial facilities</p> <p>--Focus on sustainability triple-bottom line: environment, equity, economy</p> |

**For more information**

- Visit [www.kingcounty.gov/sunsetheathfield](http://www.kingcounty.gov/sunsetheathfield)
- Call the project hotline at **206-296-7800**
- Email De'Sean Quinn at [desean.quinn@kingcounty.gov](mailto:desean.quinn@kingcounty.gov)