Ballard Link Extension

November 2023

WHAT IS FIELDWORK?

Sound Transit is in the planning phase for the Ballard Link Extension project. As part of this phase, Sound Transit is coordinating with property owners throughout the corridor to collect and analyze information necessary to plan and design potential light rail alignments being studied in the environmental review process. (**See the project folio for a project map and more information.**)

Crews will perform the fieldwork activities outlined below in various places along possible alignments after coordinating with property owners and receiving signed approval forms.

Civil Survey

Crews of two or three will use equipment mounted on small tripods or hand-held computers to gather property information such as topography and locations of trees, buildings, and utilities. Each surveying activity will typically take two to three days to complete and may require follow up visits, as needed.

Design/Site Reconnaissance Activities

Crews will use computers, measuring equipment, and sketch pads to gather site-specific information to prepare and verify data. Work will likely take one to three days per visit. Light vegetation cutting may be required if there is thick brush or blackberries in the area. Crews will remove and dispose of any cut vegetation.

Utility Locate

The utility companies that serve this property, or have easements, will locate their utilities and mark their subsurface locations on the surface of the property. Subsurface Utility Engineering uses Electromagnetic (EM) locating and survey tools to define the location of utilities. Teams access cabinets, pedestals, manholes, vaults, valve covers and other locations to obtain information and hook up equipment. It will appear similar to One Call services out in the road marking utility locations. Field crews
may visit a site several times to obtain data on all the utilities. In addition, Ground Penetrating Radar (GPR) will be utilized on the project and will be either truck mounted, towed, or on a pushcart similar to a lawn mower.

Example of geotechnical drilling equipment

Example of noise and vibration monitoring equipment

Noise and Vibration Monitoring

Crews will install, monitor, and remove sound and vibration testing equipment to document ambient noise levels in both indoor and outdoor locations, as well as understand how vibration might travel from potential light rail alignments. Vibration monitoring typically takes about one day to complete, which includes set up, testing, and take down. Noise monitoring typically takes two to three days, which includes set up, testing, and take down.

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Tree Analysis
Certified arborists will visit properties to evaluate trees larger than four inches in diameter and identify the species, height, diameter, and potential hazards. Trees may be marked with a tag or small dot of paint. Work will typically take one to three days per visit; and more than one visit may be required.

Wetland and Stream Delineation
These activities will include analysis of plants, water conditions, and soils by biologists. Crews will dig small holes and refill them once analysis is complete. Generally, vegetation assessments will be done visually; if there is thick brush or blackberries in the area, light cutting may be required, and crews will dispose of any cut vegetation. Some small flags may be placed to identify boundaries.

Biological Assessment
Crews will visually assess wildlife habitat and vegetation conditions using computers, cameras, and other hand-held equipment. No digging will be done; no flags will be placed. Work typically takes about one to three days to complete; multiple visits may be required.

Historic Building Inventory
Under Section 106 of the National Historic Preservation Act, architectural historians will survey buildings on foot, taking photos and notes to be summarized in the environmental documents and recorded in the historic resources database.

Phase 1 Environmental Site Assessments
Crews will walk the site with the property owner and interview them as part of a visual site assessment for potentially hazardous materials and contamination.

Dewatering Well(s)
This work will include the drilling, installation and decommissioning of dewatering wells. These wells are typically about four feet in diameter and up to 200 feet deep. Specific details about each dewatering well will be provided to property owners by Sound Transit staff. Any dewatering well will be covered and decommissioned in accordance with state regulations.

Potholing
To determine the precise location and depth of existing utilities, crews will use steam and equipment to evacuate soils and investigate underground conditions. Equipment used for this work will sound like a large truck running. Noise typically lasts for about two to four hours. Once the work is complete, crews will restore the ground to as close to its prior condition as possible.

Geotechnical Drilling
To study soil and groundwater conditions, a drill rig is used to bore vertically into the ground while collecting soil samples. Following the collection of soil samples, a monitoring device is installed and will be used by crews to monitor water levels on future visits. Water level readings will be taken every few months as the design phase progresses. In accordance with all local regulations, the 4- to 12-inch diameter borings will be installed carefully to avoid soil erosion and dirt or mud from leaking into surface waters, wetlands, and drainage systems. Following the completion of the work, any exposed soil will be reseeded with a native seed mix.

Bathymetric Surveys
One small boat with sonar and survey equipment will travel back and forth in a defined area to collect data to map the ground line underneath the water. Work will take place over two to four days and will not block other vessel traffic.

Learn about the project and subscribe to email updates:

soundtransit.org/ballardlink

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