SEPA Environmental Checklist

March 2021

SoundTransit

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PROJECT OVERVIEW

Sound Transit proposes to implement the SR 522/NE 145th Bus Rapid Transit (BRT) Project, providing BRT service along 9 miles of existing public roadway between Shoreline/Seattle and Bothell, including portions of NE 145th Street, State Route (SR) 522 and local arterial streets. The proposed BRT project will increase regional mobility and improve transit speed and reliability along the corridor, with interconnections to Link light rail and to other bus services.

This State Environmental Policy Act (SEPA) Environmental Checklist evaluates construction and operation of the following project components:

- Two BRT stations in Shoreline/Seattle, three BRT stations in Lake Forest Park, three BRT stations in Kenmore, and four BRT stations in Bothell
- New park-and-ride garages in Lake Forest Park, Kenmore and Bothell
- Transit queue bypass lanes, business access and transit (BAT) lanes, and bus-only lanes
- Transit signal priority (TSP) improvements at certain intersections

A variety of bicycle and pedestrian improvements are also associated with some of the above components. Other elements related to this project have been reviewed in environmental documents prepared by the Washington State Department of Transportation (WSDOT), in partnership with Sound Transit. Originally scheduled for calendar years 2023 and 2024, the construction schedule for this Sound Transit project may be redefined as part of the Sound Transit Board's COVID-related ST3 Plan Realignment.

Because the project is designed to serve existing roadway corridors, routing choices are limited. Nonetheless, Sound Transit has worked to minimize the impacts of the project on the built and natural environment by evaluating station and park-and-ride garage locations and, in some cases, moving or modifying them in response to public and agency comment. Project design has deviated in some cases from standard design widths to reduce property impacts and displacements.

Sound Transit has been engaged in public outreach since 2018, including coordination with agencies with jurisdiction along the corridor and stakeholders and public open houses to provide project updates and receive input. Staff has also met with many residential and business property owners adjacent to the project corridor who may be affected.

As a result of this input, the project design has evolved since the initial design work began in 2019, including the following:

- Changes to station locations, based on ridership potential, transit partner use, non-motorized access and community input
- Reductions in roadway widening on NE 145th Street in Seattle/Shoreline
- Shifting of the project footprint to the west on SR 522 in Lake Forest Park, to reduce property and neighborhood impacts
- Design updates in Bothell, including updated BRT route connection locations and a new bus-only lane that minimizes roadway width and avoids some adjacent property impacts

SUMMARY OF ENVIRONMENTAL ELEMENTS

As described throughout Section B of this SEPA Checklist, the SR 522/NE 145th BRT Project includes design measures, best management practices (BMPs), and compliance with Sound Transit's policies and requirements. Construction and operation of the project are not anticipated to generate significant adverse environmental impacts.

Earth

The NE 145th Street portion of the project corridor has rolling topography, with elevated areas on each side of Littles Creek and near 23rd Place NE. The portion of the corridor on SR 522 and Bothell city streets is generally flat. There are occasional steep slopes near project elements on each side of SR 522 and NE 145th Street. The steepest slope on-site (also a landslide hazard area) is a 70 percent to 100 percent downhill slope east of SR 522 in Lake Forest Park between NE 153rd Street and NE 155th Street, associated with Bsche'tla Creek.

The project corridor includes a wide range of soil types, including deposits of silt, sand, gravel, cobble and clay with varying characteristics. Fill placed as part of human activity and development is present on-site. There are no known agricultural lands or soils of long-term commercial significance on the project site.

Each project component would include some clearing, grading, filling and excavation. The project would increase the percentage of the site covered with impervious surfaces and would implement a temporary erosion and sediment control plan with BMPs to prevent or minimize erosion and the potential for discharge of silt-laden runoff to nearby bodies of water.

Minimizing the impact of road widening at the top of the steep slope east of SR 522 in Lake Forest Park between NE 153rd Street and NE 155th Street is a primary design consideration. Erosion protection appears to have been installed to retain the fill placed in front of the existing soldier pile wall constructed in 2007. However, the slope appears to have steepened below the erosion protection. Periodic slope monitoring may need to consider the long-term stability at this location.

Air

Construction-related activities would result in short-term emissions of air pollutants from worker and construction vehicle exhaust; no known off-site sources of emissions or odor would affect the project. If generators are required, the Puget Sound Clean Air Agency (PSCAA) would be consulted for the appropriate permit action. Measures to control dust during construction would be implemented in compliance with PSCAA and Sound Transit requirements. During project operation, exhaust from buses and from personal vehicles accessing transit facilities would be a source of local air pollutant emissions. Over the long-term, regionally, the project would increase the number of daily bus trips and reduce vehicle miles traveled. Once operational, the proposed project is not expected to increase greenhouse gas (GHG) emissions.

Water

Streams and wetlands occur in several locations along the project corridor. No capital improvements are proposed within surface waters, although some sections of the constructed improvements would extend over surface waters or through their regulatory buffers. Such locations include: the pedestrian bridge over McAleer Creek in Lake Forest Park; the NE 153rd Street Eastbound Platform in the Bsche'tla Creek buffer in Lake Forest Park; the Lake Forest Park Town Center Eastbound Platform curb/gutter and sidewalk construction in the Lyon Creek

buffer; a sidewalk between 45th Avenue NE and McAleer Creek on the south side of SR 522 in Lake Forest Park; and roadway widening and a retaining wall in the Wetland WBO-1 buffer at Bothell Landing Park. No in-water work, temporary or permanent fill of wetlands and streams, or surface-water withdrawals would be required. Further, the project would not preclude planned fish passage barrier improvements by WSDOT on SR 522. Work at the NE 153rd Street Eastbound Platform in the Bsche'tla Creek buffer would avoid in-water work. No capital improvements are proposed in floodplains.

The project would not withdraw groundwater from a well for any purpose and, other than potential stormwater infiltration, would not discharge waste material into the ground. For water runoff, project construction activities would be subject to construction-related stormwater permit requirements of the Clean Water Act's National Pollutant Discharge Elimination System program. For each project component, stormwater management (including drainage patterns, flow control and treatment) would be designed and implemented consistent with the adopted stormwater management code and the manual of the appropriate jurisdiction.

Plants

All of the project components are located in or adjacent to developed urban/suburban environments with patches of native vegetation mostly surviving on road edges and in protected critical areas. Existing plants and trees include street trees and commercial landscaping, native trees (deciduous and coniferous), shrubs and grass. In certain areas, wet soil and water plants are present. In many areas, invasive species and noxious weeds are present. Clearing activities during construction of some project components would remove or alter some existing vegetation. Vegetation to be removed includes trees and shrubs in WSDOT right-of-way (ROW) and private property; no threatened or endangered plant species are known to be on or near project components. Trees removed within WSDOT ROW would be replaced in compliance with WSDOT's Roadside Policy Manual (WSDOT 2015). Trees removed or altered within local jurisdictions would be replaced in compliance with local municipal codes.

Animals

Natural habitats in and near the project site are fragmented and isolated, interspersed with human development and not conducive to wildlife use. Wildlife found in natural habitats on the project site includes species that have adapted to human activity and habitat disturbance, including certain reptiles and amphibians, small mammals, and birds. The Washington Department of Fish and Wildlife (WDFW) has mapped a great blue heron breeding colony as Priority Habitat and Species (PHS). The City of Kenmore has identified this site as occurring within a wetland complex. A final Habitat Management Plan (HMP) for the great blue heron colony would be prepared to avoid and minimize potential impacts from the proposed project.

The project site is within the Pacific Flyway, which extends from Alaska to South America, for migrating birds. Three fish species or critical habitat regulated for protection under the Endangered Species Act are known to occur within the project corridor. These include Puget Sound Chinook, Puget Sound steelhead and Puget Sound bull trout. All are listed as threatened and inhabit portions of McAleer and Lyon creeks in Lake Forest Park and Swamp Creek in Kenmore, the Sammamish River, and Lake Washington. Portions of these water bodies occur on the project site. Bull trout is not expected to occur in waters overlapping the project site. Chinook and steelhead could be present in low numbers. No invasive animal species are known to be on or near the project site. Although impacts to wildlife are not anticipated, before construction clearing activities begin, Sound Transit would perform bird surveys in compliance with the Migratory Bird Treaty Act and Sound Transit policy. Stormwater management measures associated with project components would protect habitats in waters downstream.

Energy and Natural Resources

Project construction would require the use of energy and fuel. The project is not anticipated to affect the potential use of solar energy by adjacent properties. Specific features to enhance sustainability and maximize energy conservation for the project components would be determined as the design progresses. For long-term operations, all project components would require electricity for lighting and electronic systems. The project is anticipated to increase transit ridership and reduce single-occupancy vehicles in the corridor, which would be expected to reduce petroleum fuel energy consumption.

Environmental Health – Hazardous Materials

During construction, there is a likelihood of encountering soil or groundwater contamination at certain properties adjacent to the project route, with the greatest likelihood occurring near 29 properties identified as moderate or high impact sites. Potential also exists for accidental release of hazardous materials from construction equipment or activities. During operation, hazardous materials could be released into the environment unintentionally with accidental spills of fuel or vehicle fluids from buses or vehicles parked in park-and-ride garages. Regular maintenance activities for the BRT buses would occur at an off-site bus base, not at the park-and-ride garages or along the project corridor. As a result of the implementation of Sound Transit's operational BMPs, no long-term adverse effects are anticipated.

Sound Transit would conduct due diligence where needed on properties it plans to acquire as part of this project. During construction, contractors would be required to comply with all applicable health and safety regulations. Project construction specifications would include all existing site assessment data and health and safety requirements. Sound Transit would appropriately handle, clean up and monitor anticipated soil and groundwater contamination at the Lake Forest Park and Bothell park-and-ride garage locations, and would implement measures to address any unticipated contamination that may be found during construction at all project locations.

Environmental Health – Noise

All of the project components would be located in developed urban and suburban environments, as reflected in the existing noise levels. Construction of the project components would generate temporary and intermittent noise from construction equipment. No adverse construction noise or vibration impacts are anticipated to occur with the project. In the long-term, the change in noise levels with the project would be from -1 to +1 decibels (dB), an increment of change that is not discernible to most people. The analysis identified no noise impacts related to the park-and-ride garages and no vibration impacts.

Land and Shoreline Use

Most project components are on land currently used for transportation; these land uses would not change. Construction of certain other project components would require some acquisition of private land or permanent easements at private land, resulting in conversion of a small amount of residential and commercial land use to transportation use. Sound Transit expects to acquire two occupied commercial parcels in Seattle on NE 145th Street at 15th Avenue NE, potentially resulting in three business displacements and relocations. The project would require full acquisition of 3 parcels (including 1 vacant parcel) and partial acquisitions at 134 parcels. Approximately 1.1 acre of residential land (on 55 parcels) and 6.7 acres of commercial land (on 82 parcels) would be converted to transportation use through the acquisition process. No agricultural or forest land would be converted.

Demolition or relocation of structures may include the three existing commercial structures on the two parcels to be fully acquired that are occupied, the Lake Forest Park Professional Building, and other existing structures on the project site, such as signs, utility equipment, benches, mailboxes etc. Consistent with its policy, Sound Transit would relocate the three existing businesses currently operating on the southeast corner of NE 145th Street and 15th Avenue NE in Seattle and the approximately nine businesses in the Lake Forest Park Professional Building. The project components would not displace any residences.

The project components are consistent with the existing and projected land uses, as identified in local jurisdictions' comprehensive plans and zoning designations. All project components are planned to comply with the development standards of each jurisdiction's zoning code (including critical areas, setbacks, height, landscaping and other dimensional standards). If compliance is not possible, Sound Transit would coordinate with the local jurisdictions to seek variances or development agreements. Sound Transit maintenance and security staff would conduct regular visits, and bus drivers would stay with their vehicles during stops. Once the project is constructed, land uses adjacent to all of the project components would benefit from access to the BRT service, which would provide increased regional mobility and improved transit speed and reliability.

Housing

The project would not provide or eliminate any housing units.

Aesthetics

Visual change due to the project would include the addition of BAT lanes, transit queue bypass lanes and bus-only lanes; stations; sidewalks; landscaping; retaining walls; and three park-and-ride garages. The evaluation of visual changes at seven key viewpoints found that the project's overall visual impact would be neutral, because: (1) most of the project would be constructed within existing right-of-way, and (2) project components would be visually consistent and compatible with the existing visual environment. Station platform designs would be relatively uniform along the route and could create beneficial visual impacts for travelers. An adverse visual change could occur in Lake Forest Park between 38th Avenue NE and NE 165th Street due to the construction of proposed retaining walls and the removal of large trees. The extent of tree removal would be refined during final design. The project would involve three commercial building demolitions: two buildings in Seattle and one building at Lake Forest Park Town Center. Of the three proposed park-and-ride garages, the Lake Forest Park Park-and-Ride garage would be the tallest at 66 feet in height. Buildings approximately 25 feet tall surround the Lake Forest Park Park-and-Ride garage site. The Kenmore Park-and-Ride garage would be 60 feet tall. Buildings in the general vicinity of the Kenmore Park-and-Ride garage site are 15 feet to 25 feet tall. The Bothell Park-and-Ride garage would be 42 feet tall; this garage site is currently surrounded by buildings that are approximately 55 feet tall.

Light and Glare

The proposed project would produce light from new or relocated streetlights, pedestrian lighting, internally illuminated pylons at station platforms, and building and site lighting at the three park-and-ride garages. These lights would be seen at night from adjacent roadways and some nearby homes. Proposed light fixtures would include cutoff shields or hoods, so lighting is directed downward to prevent spillover into neighboring properties, and would be selected to be compatible with existing lighting fixtures. New lighting associated with the project would occur in fully developed roadway corridors with existing street and site lighting. The project is not expected to result in creation of reflective glare, because building materials would be

nonreflective or matte-finished. Moderate to tall concrete retaining walls adjacent to roadways would incorporate texture or architectural relief into vertical surfaces to eliminate the potential for reflective glare from vehicle headlights at night.

Recreation

While there are designated recreational resources in the vicinity of most project components, the project would not displace any existing recreational uses. A maintenance driveway reconstruction would occur at the northeast corner of Jackson Park Golf Course on NE 145th Street in Seattle. If required, Sound Transit would provide appropriate signage and access for golf course maintenance vehicles. Once construction is complete, the driveway would be returned to its existing use. Construction in Lake Forest Park and Kenmore would occur near, but would not affect, the Burke-Gilman Trail. The contractor would maintain access to the Burke-Gilman Trail at all times. Construction in Bothell on SR 522 would require partial acquisition (less than 1 percent of the parcel) of Bothell Landing Park, which would not affect use of the park.

Historic and Cultural Preservation

The architectural survey for the project found that of the 25 resources listed or eligible for being listed in local, state or national registers of historic places are located within the Area of Impact (AI). One such resource, the Washington Federal Savings and Loan at 14360 15th Avenue NE in Seattle, would require demolition. To address the adverse effects of this demolition, Sound Transit plans to consult with Washington Department of Archaeology and Historic Preservation (DAHP) and other interested parties, likely including the City of Seattle, regarding potential mitigation measures, such as documentation and public dissemination of the building's history, architecture and design, and additional information.

Archaeological research for this project found that two archaeological sites have been recorded in Bothell that are located within or adjacent to the AI. Site 45KI822, a historic road grade, has not been formally evaluated. Site 45KI451, a historic railroad grade, has been determined not eligible for listing in the National Register of Historic Places. The Acacia cemetery in Lake Forest Park is immediately adjacent to the AI but would not be impacted by the project. Although subsurface archaeological investigations generally demonstrated that the AI has been disturbed and has little to no archaeological potential, geoarchaeological coring at the Lake Forest Park Park-and-Ride garage location identified a buried surface with high archaeological potential. Given the presence of an ethnographically recorded village at this location, additional pre-construction archaeological investigations are recommended at this location, specifically. Elsewhere in the AI, no monitoring or additional investigations are recommended, and work should occur in accordance with an Inadvertent Discovery Plan that provides protocols to follow if potential resources are encountered during construction.

Transportation

Proposed roadway improvements, intersection improvements and park-and-ride garages would result in traffic conditions that are similar to, or improved compared to, conditions today. Proposed project improvements would generally reduce BRT and bus travel time, and improve reliability, resulting in improved service for transit riders. No adverse transportation impacts are anticipated as a result of this project. During construction, temporary impacts would occur, such as roadway closures during off-peak hours, sidewalk closures and detours on side streets, as well as temporary parking impacts during construction of park-and-ride garages. No adverse impacts are anticipated as a result of temporary project construction activities.

Along NE 145th Street, the proposed project would result in an overall decrease in average vehicle delay at most intersections and minor increases in delay for some intersections for the Future Build condition relative to the Future No-Build condition. In the Seattle/Shoreline segment, there would be an overall improvement in traffic conditions with the proposed project. In the Lake Forest Park segment on SR 522, study intersections would operate at an acceptable level of service (LOS) and operations, and the project would result in the same or improved traffic conditions compared to the Future No-Build condition (which includes a proposed roundabout to be constructed by the City of Shoreline at NE 145th Street and 5th Avenue NE).

In the Kenmore segment, on SR 522 and Kenmore city streets, the study intersections would operate at an acceptable LOS for the 2042 Build condition during the AM and PM peak hours, and the project would result in the same or improved traffic conditions compared to the Future No-Build condition. There would be an overall improvement in traffic conditions with the proposed project in the Bothell segment.

Public Services

During construction of all project components, traffic rerouting, lane closures and construction traffic could affect emergency response times and the travel times or routes for public service vehicles. The project would provide increased and improved public transit service and connections within the NE 145th Street and SR 522 corridors, in downtown Bothell and in the Puget Sound region. None of the project components is expected to increase the need for fire, police, health care or schools, because the project would not result in any unplanned or induced increases in population. The proposed project's improvements to services and addition of capital facilities would result in a minor increase in the concentration of transit riders, bicycles and pedestrians at and near proposed station locations and the concentration of transit riders, bicycles, pedestrians and vehicles at and near proposed park-and-ride garages. The increase in daytime population concentration at the stations and garages would be greatest during commute hours.

Utilities

The project is located in a highly urbanized area with many service types and providers of existing utilities on or near project component locations. Sound Transit would work with local jurisdictions and utility providers to obtain utility service as needed for the facilities and to ensure that utility lines and services are protected or relocated as needed. Utility services would be maintained during construction.

The project's components and their expected impacts on various elements of the environment are described in more detail below. The proposed project is not anticipated to generate probable significant adverse environmental impacts.

A. Background

A 1. Name of proposed project, if applicable:

SR 522/NE 145th BRT (Bus Rapid Transit) Project

A 2. Name of applicant:

Sound Transit (Central Puget Sound Regional Transit Authority)

A 3. Address and phone number of applicant and contact person:

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A 4. Date checklist prepared:

March 16, 2021

A 5. Agency requesting checklist:

Sound Transit

A 6. Proposed timing or schedule (including phasing, if applicable):

The Sound Transit Board of Directors will decide whether to advance the project into final design after completion of the environmental review process. Project components would likely be delivered through a mixture of design-bid-build and design-build methods. Construction is anticipated to have a two-year duration.

The project is currently scheduled for construction in 2023 and 2024, and to open service in late 2024. The COVID-19 pandemic is reducing the tax revenue Sound Transit relies on to expand the regional transit system. Through a process called realignment, the Sound Transit Board of Directors is working to determine which plans and timelines for ST3 projects such as this will need to change. The Board decisions on realignment, influenced by COVID-19 and increased capital estimates, may have an impact on the future project schedule.

A 7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Sound Transit has no plans for future additions or expansion of this proposed project. As Sound Transit continues to coordinate on details of the proposed project with WSDOT and the cities and other partners along the corridor (i.e., King County Metro [Metro]), project refinements or changes could be identified.

This proposed project is related to Sound Transit's proposed I-405 BRT Project, which would construct improvements along I-405 and SR 518 and operate BRT service between Burien and Lynnwood. The I-405 BRT Project would include a new transit hub, to be constructed by WSDOT within WSDOT's proposed new interchange for SR 522 and I-405. The SR 522/NE 145th BRT Project BRT service would connect with I-405 BRT service at that new transit hub. Sound Transit completed a separate SEPA environmental review for the I-405 BRT project in 2020, and WSDOT is completing environmental review of the transit hub and interchange (see response to Question A 8 below).

The proposed project is also related to Sound Transit's proposed new maintenance and operations base (Bus Base North), which would store and service the BRT buses used along the project route, along with other buses. Bus Base North is proposed to be located on property in the Canyon Park area of Bothell. Sound Transit completed a separate SEPA environmental review for the Bus Base North Project in 2020 (see response to Question A 8 below).

The proposed project is related to Sound Transit's Lynnwood Link Light Rail Extension project, as that project would provide infrastructure at the Shoreline South/148th Link light rail station, which would be the western terminus of this project's BRT route (see response to Question A 8 below).

Although not a Sound Transit project, a related project in the area is a pair of roundabouts near I-5: the City of Shoreline/WSDOT 145th Street and I-5 Interchange Project. Sound Transit's BRT project improvements on NE 145th Street have been designed to be compatible with the proposed roundabout configuration at 5th Avenue NE.

The University of Washington (UW) issued a SEPA Determination of Non-significance in January 2021 for its proposed redevelopment of Husky Village at the UW Bothell campus. Sound Transit took into account the Husky Village proposed redevelopment when locating proposed components for this project. The Husky Village redevelopment would provide residence halls, apartments, dining, gathering and office space in four new buildings (approximately 300,000 gross square feet) to replace the existing Husky Village buildings, which would be demolished (a reduction of approximately 75,000 existing gross square feet). The Husky Village redevelopment would include widening Beardslee Boulevard to two lanes, undergrounding of power lines, creation of a shared bicycle and pedestrian path, new stormwater system, incorporation of the transit platform and shelter, and a pedestrian hawk beacon on NE 185th Street for mid-block crossing.

Metro plans to add transit facilities to the ground floor of the proposed Kenmore Park-and-Ride garage. This work is currently unfunded, and Metro would conduct independent environmental review for these activities.

A 8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- Sound Transit Final Supplemental Environmental Impact Statement for the Regional Transit Long Range Plan Update, 2014
- City of Bothell Downtown Subarea Plan and Regulations Planned Action Final Environmental Impact Statement, April 2009
- Sound Transit Lynnwood Link Extension Project SEPA Final Environmental Impact Statement, April 2015 (and Addendum, 2018)
- WSDOT's I-405 - SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project Environmental Assessment, 2020 (addresses the I-405/SR 522 interchange and SR 522/I-405 Transit Hub)
- City of Lake Forest Park Town Center Vision/Plan Draft Environmental Impact Statement
- Sound Transit Bus Base North SEPA Checklist and Determination of Nonsignificance, August 2020
- I-405 Bus Rapid Transit SEPA Environmental Checklist and Determination of Nonsignificance, September 2020
- 145th Street and I-5 Interchange Project Environmental Documentation (expected to be completed by City of Shoreline and WSDOT/Federal Highway Administration in 2021-2022)

A 9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

The following projects have submitted applications or are pending approvals for work activity that directly affects property where the proposed project would be located:

City of Seattle:

- 1249 NE 145th Street, construction of alterations to a portion of the existing rooftop minor communications antenna facility, Construction Permit No. 6768112-CN issued February 18, 2020. The parcel on which this pending work would occur (number 663 230 0641) would overlap with the proposed construction of the transit queue bypass lane, shared-use path/sidewalk and planted buffer on NE 145th Street, west of 15th Avenue NE. The project would require a partial acquisition from this parcel.

City of Shoreline:

- No pending applications would overlap with proposed project construction.

City of Lake Forest Park:

- No pending applications would overlap with proposed project construction.

City of Kenmore:

- City of Kenmore SR 522 West B Improvements Project (57th Avenue NE to 61st Avenue NE) is currently in design and permitting phase. The parcel on which this pending work would occur (number 883 290 0005) could overlap with proposed construction of the 61st Avenue NE Westbound Platform. The project would require a partial acquisition from this parcel.

City of Bothell:

- Ross Road Apartments, demolition of five existing single-family residences (10504 Ross Road; 10412, 10418, 10426 NE 185th Street; 18504 104th Avenue NE) to construct a 3-story 97-unit apartment building. Site plan approved November 6, 2020 (SPR2020-15978; SEP2020-16003). The pending apartment development would occur on parcel numbers 379 800 0185, 379 800 0180, 379 800 0175, 379 800 0170 and 379 800 0165. The proposed project would require partial acquisition of four of the five parcels (numbers 379 800 0185, 379 800 0180, 379 800 0175 and 379 800 0170) for the construction of the westbound-to-northbound right-turn lane and sidewalk on NE 185th Street, beginning at Ross Road and turning onto 104th Avenue NE.

A 10. List any government approvals or permits that will be needed for your proposal, if known.

The project is expected to require permits, approvals and variances or deviations from local cities and WSDOT. **Attachment A** (Permit Matrix) lists approvals and permits that would likely be needed for this project and would be refined as discussions with appropriate jurisdictions are held. Response B 8. E discusses land use actions that could be needed.

A 11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The SR 522/NE 145th BRT Project (project) is part of a new BRT system that would provide fast, frequent and reliable bus service along the SR 522/NE 145th project corridor, with interconnections to light rail and other bus service in the region. The project would provide BRT service (to be called “Stride”) along about 9 miles of existing roadway between the Sound Transit Link light rail Shoreline South/148th Station[1] and the SR 522/I-405 Transit Hub. The transit hub is in the design phase and is being provided by the WSDOT I-405/SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project. Environmental review by WSDOT is in progress.

[1] Environmental review of the Shoreline South/148th Station occurred as part of the Sound Transit Lynnwood Link Extension Project State Environmental Policy Act Environmental Impact Statement.

The project would include business access and transit[2] (BAT) lanes, transit queue bypass lanes, signal upgrades and transit signal priority[3] (TSP) for transit speed and reliability; three new park-and-ride garages (Lake Forest Park, Kenmore and Bothell); and 12 BRT stations[4] between the Sound Transit Link light rail Shoreline South/148th Station and the SR 522/I-405 Transit Hub.

The project would also include constructing or re-constructing sidewalks where BAT lanes and transit queue bypass lanes are constructed and at some intersections in the immediate vicinity of BRT stations. Some transit queue bypass lanes and BAT lanes would result in roadway widening. Intersection and sidewalk construction would include upgrading curb ramps to current Americans with Disabilities Act (ADA) standards.

ROW acquisitions and easements would occur to allow for construction and operation of the BRT service and related access improvements. Stormwater management would be provided as needed to comply with pertinent law and codes. Utility connections would be provided as necessary.

Most BRT station platforms (e.g., the sidewalk that the bus shelter sits upon) would be double-length platforms (accommodating two 60-foot coaches) to accommodate shared use by Sound Transit with Metro and Community Transit buses (the three transit agencies operating in the corridor). BRT service would be provided with 12 three-door articulated coaches with the Stride brand, including 10 Battery Electric Buses (BEBs) and 2 diesel hybrid buses. Service headways (the amount of time between bus arrivals at a stop) would be 10 minutes, which translates to 12 total BRT vehicles per hour along the project corridor. Sound Transit would prioritize use of the BEBs for this service as much as possible, and the BEBs (rather than the diesel hybrid buses) would be the bus type used for most of the service, all day. The span of service would be 19 hours on Monday through Saturday and 17 hours on Sunday. The estimated 2042 ridership forecast for this project is approximately 8,900 riders per day.

Station shelters would have a consistent look and feel throughout the BRT system, but individual platform design would vary based on site conditions and transit integration assumptions at each location. Each station would include Stride-branded shelters and lighting, and most platforms would be elevated 9 inches to ease boarding and alighting. Platform types would be either flow-through (sidewalk passes through the platform) or pass-behind (sidewalk passes behind the platform). The project would also include intelligent transportation system elements: off-board fare payment for Sound Transit service, electronic rider information with bus arrival times, Computer-Aided Dispatch/Automatic Vehicle Location, TSP, and enhanced safety and security at certain stations.

Figure A-1 (Project Vicinity/BRT Service Route) shows the project vicinity and service route. **Figure A-2** (Proposed Project) shows the proposed project, including the route, station locations and park-and-ride garage locations. **Figure A-3** (Platform Type) shows the three options for platform configurations. **Figure A-4** (Park-and-Ride Garage Layouts) includes layouts for each

[2] A business access and transit (BAT) lane is a transit lane that allows use by vehicles other than transit vehicles to access abutting businesses.
[3] Transit signal priority (TSP) is a term for operational improvements that use technology to reduce dwell time at traffic signals for transit vehicles by holding the green signal phase longer or shortening a red signal phase.
[4] Each station proposed as part of this project includes an eastbound platform and a westbound platform.

of the three park-and-ride garages. This SEPA Checklist reflects the project as described in and as shown in **Appendix A** (Conceptual Engineering Plans).

The following is a summary of the proposed project's major elements, by segment:

- Segment 1 Seattle/Shoreline (NE 145th Street): westbound transit queue bypass lane on NE 145th Street from approximately 100 feet east of 8th Avenue NE to approximately 100 feet east of 5th Avenue NE, transit queue bypass lanes on NE 145th at 15th Avenue NE in each direction, two stations (15th Avenue NE and 30th Avenue NE), and a shared bus left-turn/general-purpose traffic through lane at the eastbound approach to SR 522.
- Segment 2 Lake Forest Park: northbound/eastbound BAT lane from approximately NE 145th Street to south of Brookside Boulevard NE; reconstructed BAT lane southbound/westbound between Beach Drive and 38th Avenue NE; a new 300-stall park-and-ride garage located at the Lake Forest Park Town Center; three stations (NE 153rd Street, NE 165th Street and Lake Forest Park Town Center); retaining walls in certain locations; and minor roadway, roadside and intersection improvements in certain locations where other improvements would occur.
- Segment 3 Kenmore: three stations (61st Avenue NE, 68th Avenue NE and the Kenmore Park-and-Ride) and a new park-and-ride garage providing 300 additional stalls at the Kenmore Park-and-Ride, including vehicle access modification.
- Segment 4 Bothell: northbound/eastbound center bus-only lane to bus-only left-turn lane along SR 522 beginning approximately 700 feet south of Hall Road (just north of the Yakima Fruit Market & Nursery) to 98th Avenue NE; four stations (98th Avenue NE at NE 182nd Street, NE 185th Street at 104th Avenue NE, Beardslee Boulevard at UW Bothell/Cascadia College, and Beardslee Boulevard near NE 195th Street); a new park-and-ride garage at a site (northwest of where 98th Avenue NE meets NE 185th Street) providing 300 net additional parking spaces with commercial frontage as required by code; new traffic signal and intersection reconstruction on NE 185th Street at 104th Avenue NE and at Beardslee Boulevard; and sidewalks, planting strips and minor intersection improvements at certain locations where other improvements would occur.

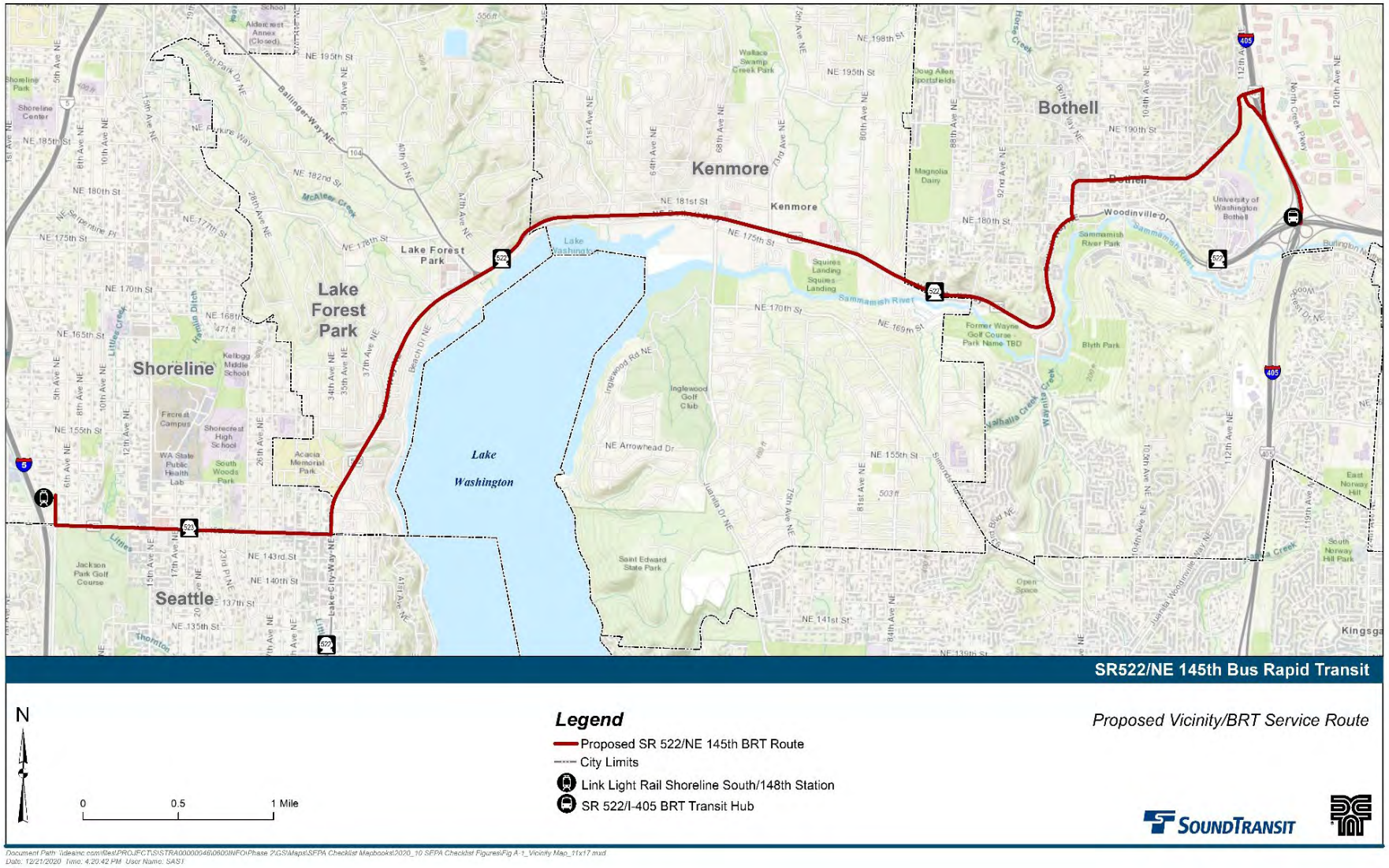

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Figure A-1 Project Vicinity/BRT Service Route

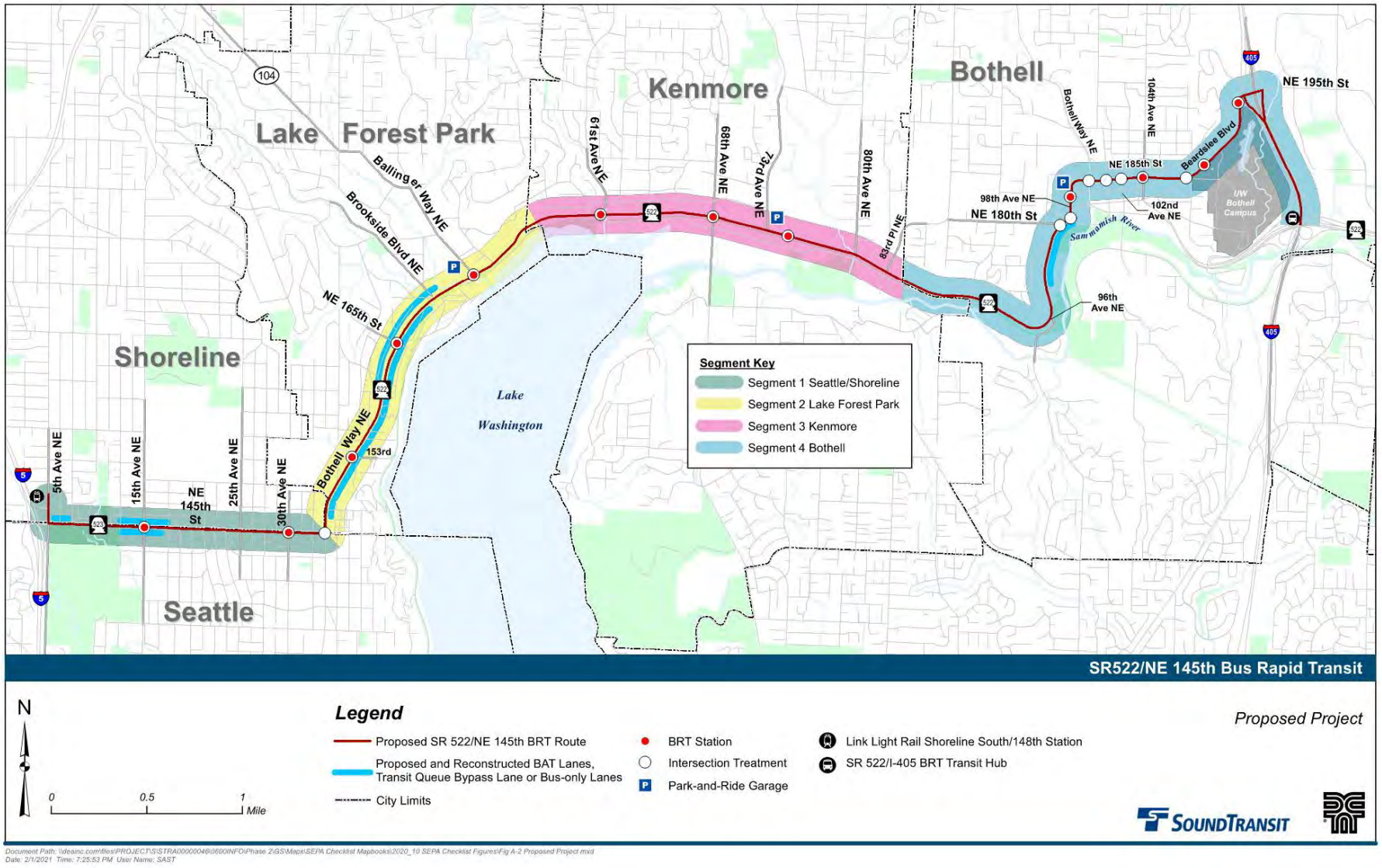
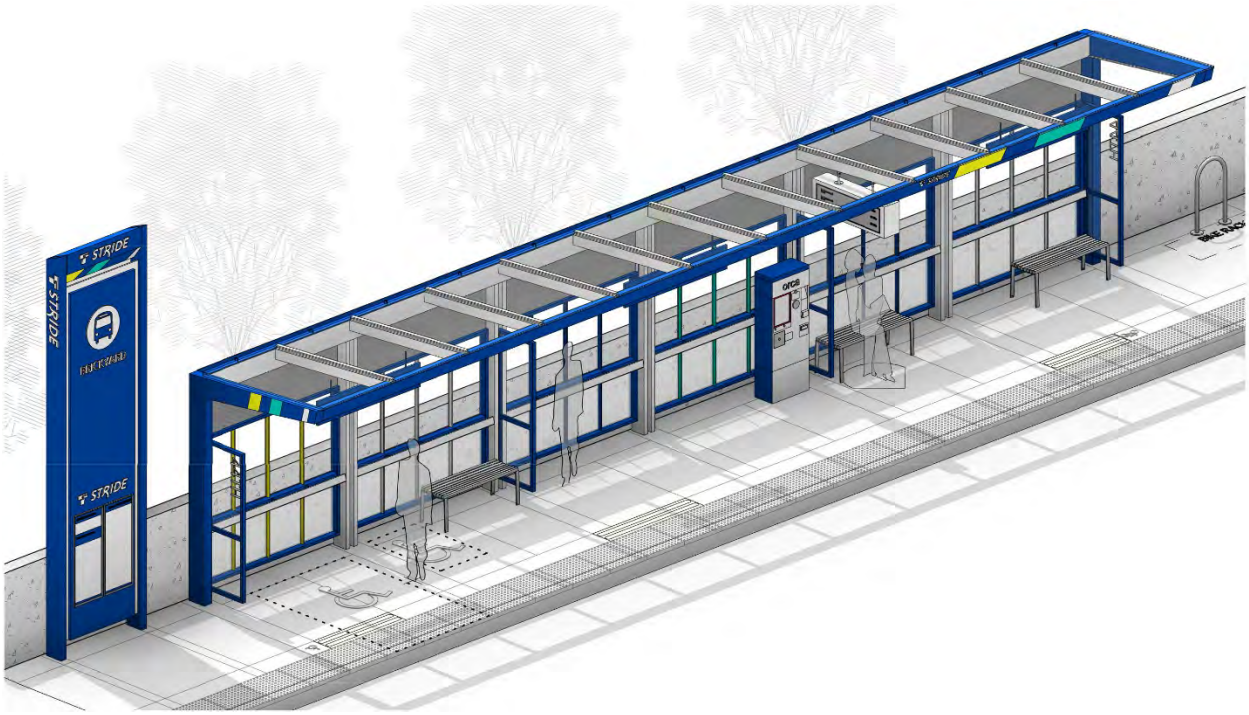


Figure A-2 Proposed Project

Double-Length Flow-Through Platform:



Double-Length Pass-By Platform:

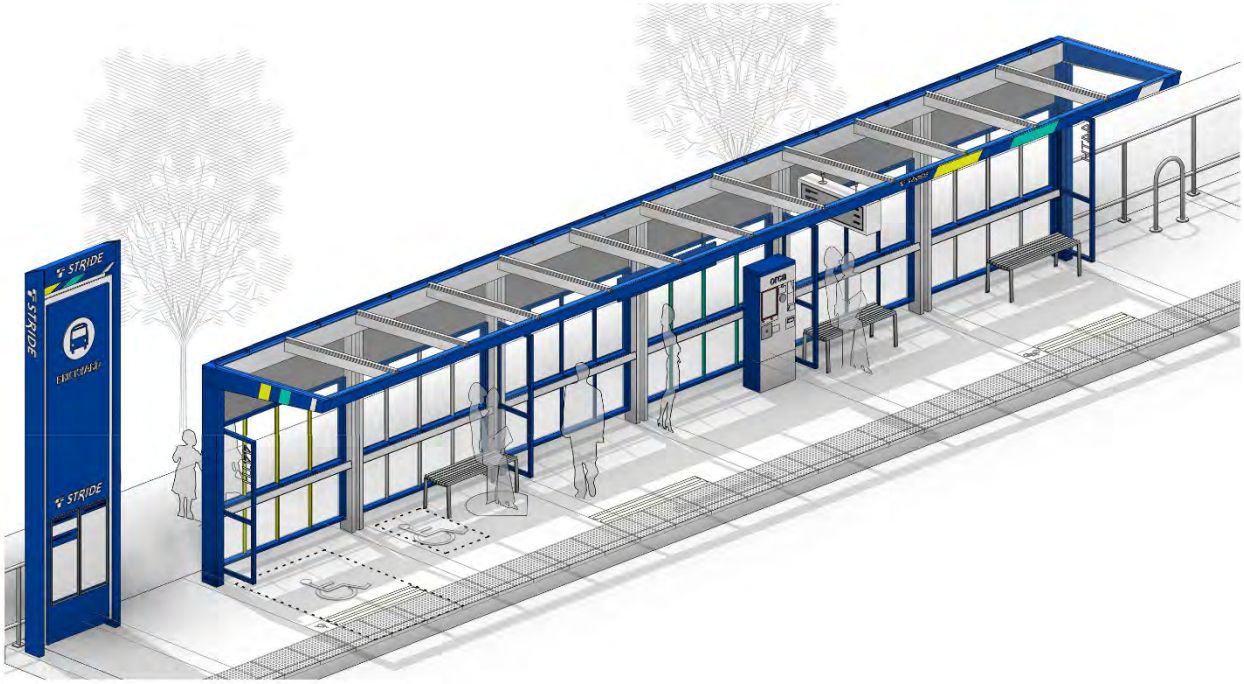


Figure A-3 Platform Type

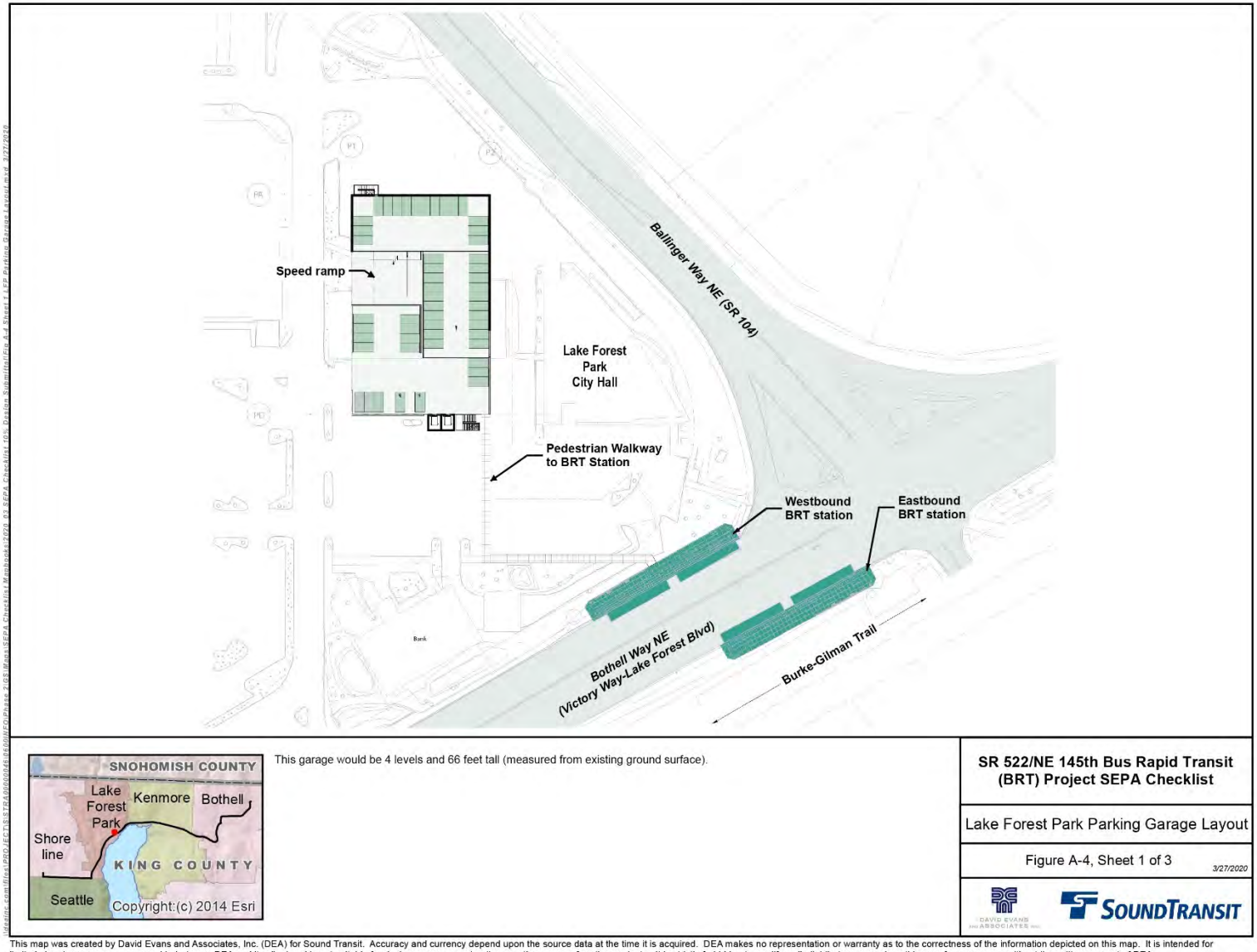


Figure A-4, sheet 1 of 3 Park-and-Ride Garage Layouts (Lake Forest Park)

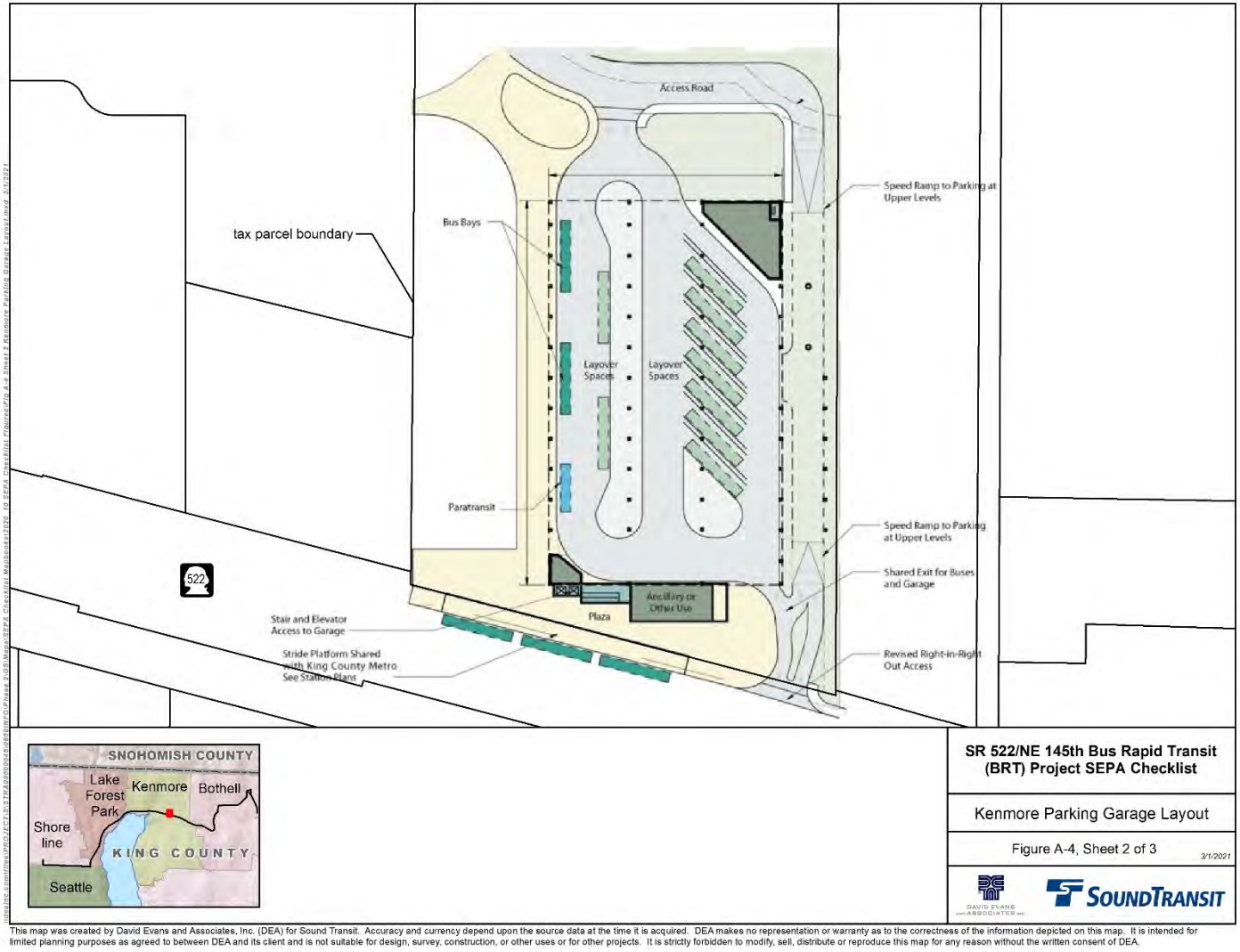


Figure A-4, sheet 2 of 3 Park-and-Ride Garage Layouts (Kenmore)

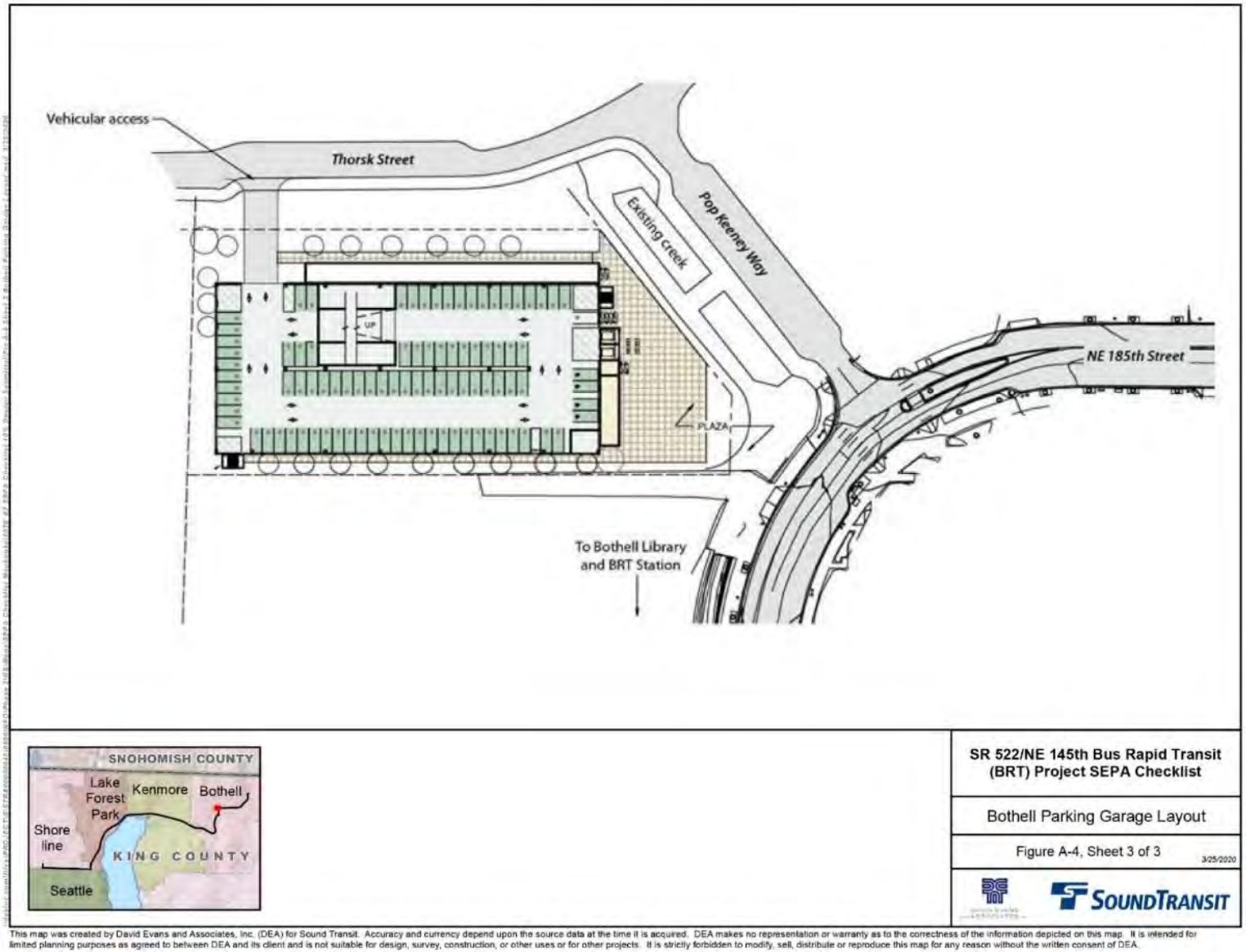


Figure A-4, sheet 3 of 3 Park-and-Ride Garage Layouts (Bothell)

The following general sequence of construction activities is anticipated:

- Install stormwater BMPs
- Place other BMPs in order to mitigate all ground-disturbing activities
- Mobilize equipment and establish construction limits and staging areas
- Implement Traffic Management Plan and shift traffic to provide space for construction
- Commence construction, beginning with major ground-disturbing activities to widen the outside roadway; install drainage; relocate utilities as needed; reconstruct driveways; and construct sidewalks, planted buffers, stations and retaining walls

Retaining wall construction could occur during any construction phase and would not require any vehicle detours, but would require closure of existing sidewalks at proposed wall locations. The contractor would maintain vehicular and non-vehicular access to properties during construction, with the exception that certain properties that currently have full access could be temporarily restricted to right-in/right-out access during construction.

As shown in **Figure A-3** (Platform Type), platforms would either be pass-by (with the sidewalk behind the platform) or flow-through (with pedestrians traveling through the platform). Four platform designs are proposed:

- Single-length platform (64-foot length, 10-foot width, 9-inch curb height) and shelter (8 feet, 8 inches height)
- Double-length flow-through platform (142-foot length, 10- to 12-foot width including wall/railing behind platform, 9-inch curb height) and shelter (8 feet, 8 inches height)
- Double-length pass-by platform (142-foot length, 10- to 12-foot width with 6- to 8-foot-wide sidewalk behind platform, 9-inch curb height) and shelter (8 feet, 8 inches height)
- Triple-length pass-by platform (216-foot length, 10- to 12-foot width including wall/railing behind platform for flow-through pedestrian traffic, 9-inch curb height) and shelter (8 feet, 8 inches height)

The project evaluated in this Checklist includes some roadway design that is narrower or otherwise different than city or WSDOT design standards would require. Sound Transit understands that variances may be required for final approval of this design. Certain responses contained in this Checklist address the rationale for narrower widths or different configurations.

The project is described below in terms of the following four segments: Segment 1 Seattle/Shoreline (**Table A-1** (Project Elements in Segment 1 (Seattle/Shoreline))), Segment 2 Lake Forest Park (**Table A-2**) (Project Elements in Segment 2 (Lake Forest Park))), Segment 3 Kenmore (**Table A-3** (Project Elements in Segment 3 (Kenmore))), and Segment 4 Bothell (**Table A-4** (Project Elements in Segment 4 (Bothell))). **Figure A-5** (Project Element Key) is a key showing the location of the project elements by their element numbers, as listed in the tables. In addition to project elements described below, modifications to stormwater infrastructure would be constructed, as described in response to Question B 3 c (1) below, in order to manage stormwater runoff in accordance with the 2019 King County Surface Water Design Manual and applicable city stormwater guidelines.

Table A-1 Project Elements in Segment 1 (Seattle/Shoreline)

Element Number	Location	Element Description
1	From approximately 90 feet east of 5th Avenue NE to 250 feet east of 8th Avenue NE, north side of NE 145th Street, only (City of Shoreline)	• Construction of an approximately 670-foot westbound transit queue bypass lane with sidewalk or shared-use path (shared-use path assumed for purposes of this analysis), 4- to 5-foot-wide planted buffer (except between 5th Avenue NE and 6th Avenue NE), curb/gutter, and ADA curb ramps. • New lane requires widening on north (Shoreline) side of NE 145th Street, and roadway reconstruction and grading (with no widening) on 8th Avenue NE north of NE 145th Street. East of 8th Avenue NE, a new sidewalk or shared-use path would tie into the existing sidewalk. Lanes would be reconfigured at 6th Avenue NE/NE 145th Street so that turns are restricted to right-in and right-out. ADA curb ramps would be upgraded to current guidelines at intersections with 6th Avenue NE and 8th Avenue NE. • TSP would be implemented where BRT passes through signalized intersections. • Driveway reconstructions are proposed at five locations. • Four retaining (cut) walls would be constructed on the north side of NE 145th Street between west of 6th Avenue NE and 8th Avenue NE. A 162-foot-long retaining (cut) wall would be constructed on the north side of NE 145th Street east of 8th Avenue NE. • Proposed stormwater activities would include removal of storm structure; connecting to existing catch basins, manholes and pipes; installation of grates, catch basins and inlets; abandoning storm pipes, plugging ends and removing pipes; and adjusting structures to curblines or grades.

Element Number	Location	Element Description
2	From approximately 600 feet west of 15th Avenue NE to approximately 550 feet east of 15th Avenue NE (both City of Shoreline and City of Seattle sides)	• **15th Avenue NE Station.** Both the eastbound platform (City of Seattle) and westbound platform (City of Shoreline) would be double-length pass-by platforms located east of 15th Avenue NE. • An eastbound transit queue bypass lane is proposed from approximately 600 feet west of 15th Avenue NE to approximately 500 feet east of 15th Avenue NE (with curb/gutter, curb ramps, sidewalk/shared-use path and planted buffer in most cases [except where very close to structures]). Westbound transit queue jump lane is proposed from approximately 550 feet east of 15th Avenue NE to 550 feet west of 15th Avenue NE (with curb/gutter, curb ramps, sidewalks and planted buffer). • New lanes would provide space for a transit queue bypass lane at the intersection and a bus pull-out at platform. • ADA curb ramps would be upgraded to current guidelines at intersections with 12th Avenue NE, 15th Avenue NE and 17th Avenue NE. • Driveway reconstructions would occur at 13 locations. • On the north (City of Shoreline) side of NE 145th Street, 4 retaining (fill) walls of varying lengths would be constructed between 12th Avenue NE and 15th Avenue NE; a retaining (cut) wall would be constructed behind the westbound platform north of 15th Avenue NE; and a retaining (cut) wall would be constructed on the northeast corner of 17th Avenue NE. On the south (City of Seattle) side, 2 retaining (fill) walls of varying lengths would be constructed between 12th Avenue NE and 15th Avenue NE; 1 retaining (fill) wall would be constructed between 15th Avenue NE and 17th Avenue NE; and 1 retaining (fill) wall would be constructed at the southeast corner of 17th Avenue NE. • Proposed stormwater improvements would include removing storm structures and pipes; abandoning storm pipes and plugging ends; installing grates, catch basins and maintenance holes; adjusting structures to grade; connecting to existing catch basins, manholes or pipes; installing a 3-inch drain line between trench drain and face of curb (at northeast corner of NE 145th Street/15th Avenue NE); installing new catch basins and grates; and reconnecting roof drains. • Construction of the eastbound platform likely would require demolition of 2 commercial buildings on the southeast corner of the NE 145th Street/15th Avenue NE intersection.

Element Number	Location	Element Description
3	Between 28th Avenue NE and 30th Avenue NE	• **30th Avenue NE Station.** Both the eastbound platform (City of Seattle) and westbound platform (City of Shoreline) would be double-length pass-by platforms, located west of 30th Avenue NE. • Sidewalks, curb/gutter and curb ramp are proposed at 28th Avenue NE (north side of NE 145th Street) and 30th Avenue NE (both sides of NE 145th Street). ADA curb ramps would be upgraded to current guidelines at intersections with 28th Avenue NE (north corners) and 30th Avenue NE. • There are no proposed driveway reconstructions. A 143-foot-long retaining (cut) wall would be constructed on the north (City of Shoreline) side. • A 143-foot-long retaining (cut) wall would be constructed on the north (City of Shoreline) side. A 266-foot-long retaining (fill) wall would be constructed on the south (City of Seattle) side. • Proposed stormwater activities would include adjusting structures to grade; connecting to existing catch basins or manholes; removing storm structures and pipes; installing new grates, maintenance holes and catch basins; and installing a 3-inch drain line between trench drain and face of curb (south side of NE 145th Street).
4	NE 145th Street and SR 522 (City of Shoreline, City of Seattle, small portion in Lake Forest Park)	• The project would convert an existing westbound lane on NE 145th Street between SR 522 and 31st Avenue NE to an additional eastbound left-turn lane on NE 145th Street. Eastbound, this results in 2 general-purpose left-turn lanes, 1 bus-only left-turn lane shared with general-purpose through traffic, and 1 general-purpose right-turn lane. Westbound, the 1 westbound lane between SR 522 and 31st Avenue NE would be retained. • Westbound NE 145th Street approaching SR 522 would include a left-turn lane, a through/right-turn lane and a center landscaped median. The northwest and northeast corners of this intersection would be “pulled back” to accommodate turning movements. ADA curb ramps would be upgraded to current guidelines. The signal would be modified and TSP implemented. • Two driveway reconstructions would occur at commercial parcels. • Stormwater improvements would include adjusting structures to grade; connecting to existing catch basins, manholes and pipes; removing storm structures; and installing grates and catch basins.

Table A-2 Project Elements in Segment 2 (Lake Forest Park)

Element Number	Location	Element Description
5	SR 522 from approximately 250 feet north of NE 145th Street to Beach Drive NE	• **NE 153rd Street Station.** Double-length flow-through platforms. Eastbound platform would be located north of NE 153rd Street, and westbound platform south of NE 153rd Street. • **NE 165th Street Station**. Double-length flow-through platforms. Eastbound platform would be located north of NE 165th Street, and westbound platform south of NE 165th Street. • Northbound BAT lane, sidewalk and buffer strip, from 200 feet south of 41st Avenue NE to Beach Drive NE to meet existing sidewalk, and to meet existing BAT lane that begins south of 41st Avenue NE. The 2-way left-turn lane would be reconfigured to a median or raised mountable curb from west of NE 155th Street to 41st Avenue NE. • Reconstruction west of SR 522 on 38th Avenue NE, 39th Avenue NE and NE 165th Street would occur, along with reconstruction east of SR 522 of 40 feet of NE 153rd Street, 70 feet of NE 155th Street, and 50 feet of NE 165th Street. • The project would construct a 100-foot-long, 9-foot-wide pedestrian bridge/sidewalk over McAleer Creek south of SR 522, with a 6-foot-wide pedestrian area and 1.5 feet on each side for railings and other bridge infrastructure. • TSP would be implemented where BRT would pass through signalized intersections. • On the west side, 1 driveway reconstruction would occur on 39th Avenue NE. Fifty-two driveway reconstructions (6 on side streets) are proposed on the east side. • Six retaining (cut) walls of various lengths would be constructed on the west side of SR 522 between the NE 153rd Street Station Platform and where 41st Avenue NE meets SR 522. Three of these would be long walls (approximately 1,000 to 1,500 feet long). On the east side of SR 522, 2 retaining (cut) walls are proposed—1 near 35th Avenue NE and another just north of NE 155th Street. Additionally, 16 retaining (fill) walls of varying lengths would be constructed between just north of NE 145th Street and 41st Avenue NE. • Stormwater improvements would include connecting to existing facilities; installing 12-inch, 18-inch and 24-inch storm sewer pipes; installing modular drainage systems and piping to daylight; replacing or installing catch basins, grates and covers; and installing a 4-cartridge catch basin stormfilter on the west side of SR 522 north of 39th Avenue NE.

Element Number	Location	Element Description
6	Lake Forest Park Town Center	• **Lake Forest Park Town Center Station**. Eastbound double-length flow-through platform proposed on south side of SR 522 and west of Ballinger Way NE. Westbound double-length flow-through platform would be on north side of SR 522 between Ballinger Way NE and Bank of America building. • The project would include a **4-level, 300-stall park-and-ride garage**, with the main ingress/egress on the west side of the garage. Park-and-ride garage construction would require demolition of a two-story commercial building. • TSP would be implemented at the intersection of SR 522 and Ballinger Way NE. • Stormwater improvements would include installation of a quarry spall pad adjacent to the west end of the eastbound platform and installation of a 4-inch-wide modular drain system with a 3-inch-diameter pipe to daylight underneath the westbound platform.

Table A-3 Project Elements in Segment 3 (Kenmore)

Element Number	Location	Element Description
7	SR 522 at 61st Avenue NE	• **61st Avenue NE Station.** Project would construct the eastbound platform east of 61st Avenue NE and the westbound platform west of 61st Avenue NE (double-length flow-through platforms). • One driveway would be reconstructed to construct the westbound platform. • TSP would be implemented at the intersection. • One 22-foot-long retaining (fill) wall would be constructed behind the 61st Avenue NE Westbound Platform. • Stormwater improvements would include installing a 4-inch-wide modular drainage system with 3-inch-diamater drain pipe to daylight, and replacing the lid with an ADA-approved lid underneath and adjacent to the east end of the 61st Avenue NE Eastbound Platform.
8	SR 522 at 68th Avenue NE	• **68th Avenue NE Station.** Eastbound platform would be located east of 68th Avenue NE, and westbound platform would be located west of 68th Avenue NE (both would be double-length flow-through platforms). • Three driveways would be closed to construct the westbound platform (each of these 3 driveways leads to a separate parcel; 2 parcels would permanently lose access, while the third would retain access using an alternate driveway). • TSP would be implemented at the intersection. • One 143-foot-long retaining (fill) wall would be constructed behind the 68th Avenue NE Eastbound Platform. Stormwater improvements would include installation of a 4-inch-wide modular drainage system with 3-inch-diamater drain pipe to daylight underneath the westbound and eastbound platforms. The westbound platform would also include replacement of an adjacent lid with an ADA-approved lid.

Element Number	Location	Element Description
9	SR 522 at existing Kenmore Metro lot	• **Kenmore Park-and-Ride Station.** The project would include constructing the eastbound double-length flow-through platform east of 73rd Avenue NE and the westbound triple-length pass-by platform east of 73rd Avenue NE, adjacent to the park-and-ride lot. • The 2 driveways to the Kenmore Metro park-and-ride lot would be reconstructed. • The **3-level, 300-stall park-and-ride garage** would include Metro operations on ground level and vehicle access on the north and south. Metro operations are currently unfunded and are not part of this proposed project. • TSP would be implemented at the intersection of SR 522/73rd Avenue NE. • Stormwater improvements would include installation of a 4-inch-wide modular drainage system with 3-inch-diameter drain pipe to daylight underneath the eastbound platform. Proposed facilities underneath or adjacent to the westbound platform would include installation/connection of a 12-inch-diameter storm sewer pipe; new catch basins, grates and metal covers; a 4-inch-wide modular drainage system with 3-inch-diamater drain pipe to daylight; and replacement of lid with an ADA-approved lid. Proposed facilities at the east corner of the vehicle access driveway on SR 522 would include installation and connection of a new 12-inch-diameter storm sewer pipe, and new catch basins and grates.

Table A-4 Project Elements in Segment 4 (Bothell)

Element Number	Location	Element Description
10	SR 522 from end of existing BAT lane at 96th Avenue NE to 98th Avenue NE	• A bus-only eastbound center lane would be constructed on SR 522 from south of Hall Road, through the NE 180th Street intersection to 98th Avenue NE, where it would become a bus-only left-turn lane, including sidewalks and planted buffer on each side of SR 522. • There would be 11 driveway reconstructions. • TSP would be implemented where BRT would pass through signalized intersections. • A 288-foot-long retaining (fill) wall would be constructed on the east side of SR 522. • Stormwater improvements would include removing existing storm structures and pipes, connecting new storm structures to existing structures, installing solid and grated covers to existing and proposed structures, respectively, and installing Types I and II catch basins.
11	98th Avenue NE at NE 183rd Street	• **98th Avenue NE Station**. The project would include a southbound double-length flow-through platform south of NE 183rd Street. • Northbound bus stops would remain in place and serve BRT. • The intersection of 98th Avenue NE/NE 183rd Street would be converted to 2-way stop control, with stop signs on NE 183rd Street. • Stormwater improvements would include connecting new storm structures to existing structures, installing grated covers on proposed structures and installing Type I catch basins.
12	98th Avenue NE and NE 185th Street between NE 183rd Street and NE Bothell Way, including site in the southwest quadrant of 98th Avenue NE and Pop Keeney Way	• The project would include widening the 98th Avenue NE travel lane to allow for BRT service, including reconstructing curb and gutter with a painted buffer between the through lane and parking lane, starting east of Pop Keeney Way to Bothell Way NE, and modifying the existing raised median. • A **4-level, 300-stall park-and-ride garage** would be constructed at a site in the southwest quadrant of 98th Avenue NE and Pop Keeney Way, with ingress/egress from Thorsk Street. • TSP would be implemented at the signalized intersection. • Stormwater improvements would include connecting new storm structures to existing structures, installing solid and grated covers on existing and proposed structures, respectively, and installing Types I and II catch basins.

Element Number	Location	Element Description
13	Intersection of NE 185th Street/101st Avenue NE	• The project would convert the 185th Avenue NE/101st Avenue NE intersection from a 4-way stop to 2-way stop control, including pedestrian crossing treatments. Stop signs would be installed on 101st Avenue NE.
14	Intersection of NE 185th Street/102nd Avenue NE	• A right-turn pocket on eastbound NE 185th Street to 102nd Avenue NE would be constructed. • Stormwater improvements would include connecting new storm structures to existing structures, installing solid and grated covers on existing and proposed structures, respectively, and installing Types I and II catch basins.
15	Intersection of NE 185th Street/104th Avenue NE	• **104th Avenue NE Station.** The eastbound platform east of 104th Avenue NE and westbound platform west of 104th Avenue NE would be double-length flow-through platforms. • A right-turn pocket eastbound on NE 185th Street to southbound 104th Avenue NE would be added, as well as a westbound-to-northbound right-turn lane on NE 185th Street to 104th Avenue NE (lane begins at Ross Road). • A new traffic signal with TSP would be added. • Stormwater improvements would include installing a 4-inch-wide modular drainage system with 3-inch-diamater drainpipe to daylight underneath each platform and, at each platform, installation and connection of a new 12-inch-diameter storm sewer pipe, and installing new catch basins, grates and metal covers. The westbound platform would have Types I and II catch basins and include the installation of a 24-inch-diameter storm sewer pipe.

Element Number	Location	Element Description
16	Beardslee Boulevard from approximately Beardslee Place/NE 185th Street extending northeast to east end of Husky Village	• The project would include installing a new traffic signal with TSP, crosswalks and a traffic island at NE 185th Street and Beardslee Boulevard and a northbound left-turn pocket for the fire station, east of intersection. The northbound-to-westbound left turn from Beardslee Boulevard onto NE 185th Street would be restricted. • **UW Bothell/Cascadia College Station.** The eastbound platform would be an in-lane double-length flow-through platform located mid-block near Husky Village that would be constructed in coordination with road widening performed by UW Bothell as part of its future Husky Village redevelopment. A pedestrian hawk beacon would be installed for mid-block crossing. The project would include a temporary westbound Metro bus shelter (in-lane, double-length stop) without Stride elements due to future plans by the City of Bothell to widen Beardslee Boulevard. The temporary station would be relocated if and when the westbound roadway is widened as part of future Husky Village redevelopment. • In both directions, stormwater improvements would include removal of existing structures and pipes. In the eastbound direction, improvements would include installing and connecting new 12-inch-diameter and 18-inch-diameter storm sewer pipe; installing a 4-inch-wide modular drainage system with 3-inch-diamater drainpipe to daylight underneath the eastbound station; installing new catch basins (Types I and II), grates and metal covers; and constructing a 46-foot-long by 15-foot-wide by 7-foot-high detention vault. In the westbound direction, stormwater improvements would include connecting newly installed 18-inch-diameter storm sewer pipe to existing pipe and installing a Type II catch basin with a vaned grate.
17	Beardslee Boulevard south of NE 195th Street/I-405	• **Beardslee Boulevard Station**. The eastbound and westbound platforms would both be single-length pass-by. • The curb would be reconstructed to accommodate in-lane BRT stops. • Existing bike lanes would be moved behind stations. • Stormwater improvements would include installation of a 4-inch-wide modular drainage system with 3-inch-diamater drainpipe to daylight underneath the eastbound platform. Proposed improvements for the eastbound platform would include installation and connection of a new 12-inch-diameter storm sewer pipe and new catch basins (Type I in eastbound direction, and Types I and II for westbound direction), grates and metal covers.

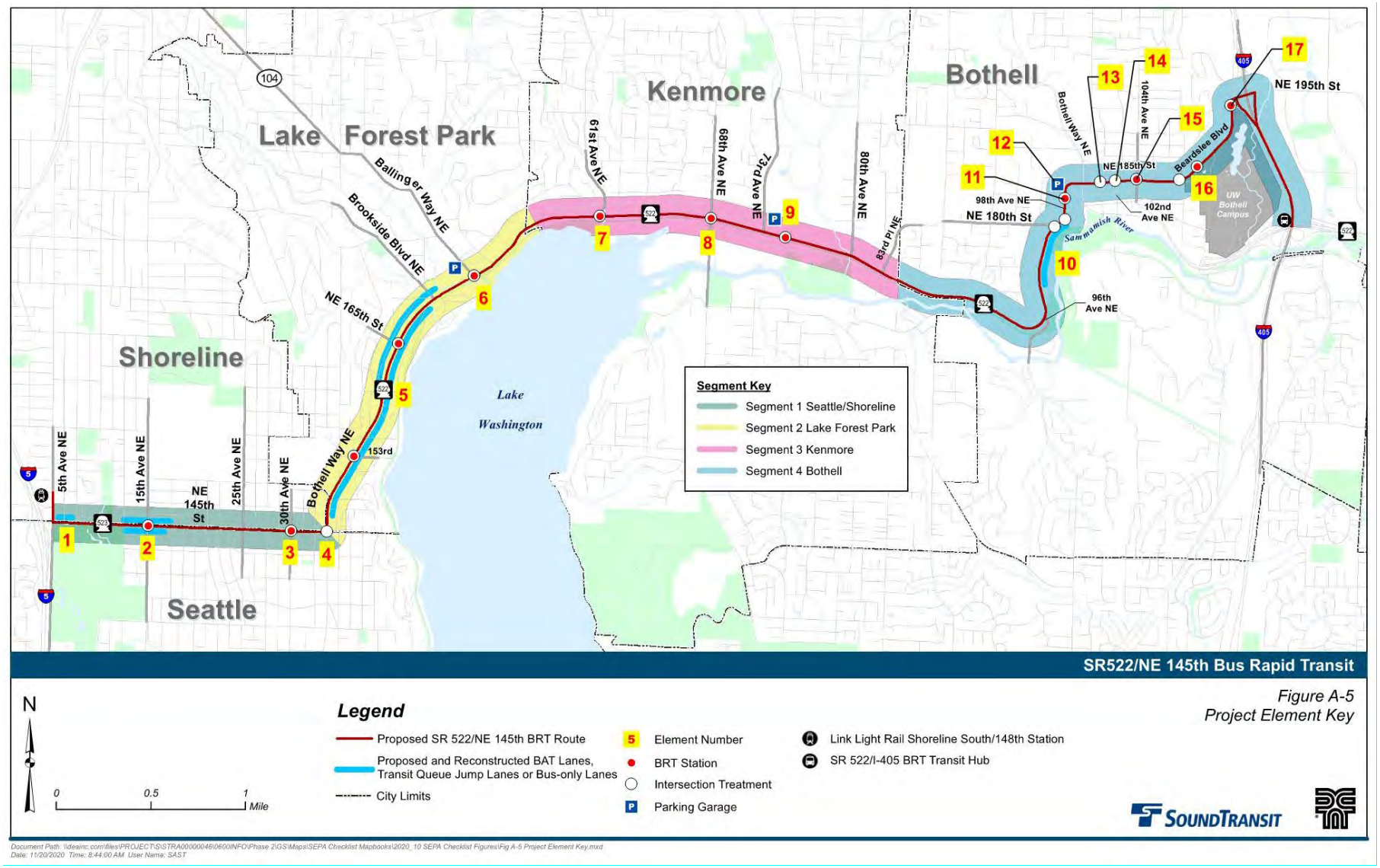


Figure A-5
Project Element Key

Figure A-5 Project Element Key

A 12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project elements along NE 145th Street and SR 522 and on Bothell city streets would provide for BRT service from the Shoreline South/148th Station on 5th Avenue NE to the SR 522/I-405 Transit Hub. The 12 proposed new stations would be located on NE 145th Street, SR 522 and Bothell city streets, and the 3 new park-and-ride garages would be located near the BRT route in Lake Forest Park, Kenmore and Bothell. **Figure A-1** (Project Vicinity/BRT Service Route), **Figure A-2** (Proposed Project) and **Appendix A** (Conceptual Engineering Plans) show the project location and the locations of each proposed element. See also **Table A-1** (Project Elements in Segment 1 (Seattle/Shoreline)) through **Table A-4** (Project Elements in Segment 4 (Bothell)), which provide some location information as part of descriptions for each element. **Table A-5** (Nearest Streets and Highways, and Section/Township Range by Element) lists nearby cross streets or highways for the proposed stations and park-and-ride garages, as well as the Quarter Section, Section, Township and Range for all elements described in **Table A-1** through **Table A-4**.

Table A-5 Nearest Streets and Highways, and Section/Township Range by Element

Element Number	Nearest Streets and Highways, Section/Township/Range
1	NE 145th Street, 6th Avenue NE, 8th Avenue NE. Township 26N Range 4E, SE Quarter of Section 17, NE Quarter of Section 20.
2	NE 145th Street, 12th Avenue NE, 15th Avenue NE, 17th Avenue NE. Township 26N Range 4E, SE Quarter of Section 17, NE Quarter of Section 16, NE Quarter of Section 20, NW Quarter of Section 21.
3	NE 145th Street, 28th Avenue NE, 30th Avenue NE. Township 26N Range 4E, SE Quarter of Section 16 and NE Quarter of Section 21.
4	NE 145th Street, SR 522. Township 26N Range 4E, SE Quarter of Section 16 and NE Quarter of Section 21.
5	SR 522, NE 147th Street, NE 153rd Street, NE 155th Street, NE 155th Place, NE 158th Lane, 39th Avenue NE, NE 165th Street, 41st Avenue NE, Beach Drive NE. Township 26N Range 4E, SE Quarter of Section 16, SW and NW Quarters of Section 15, SW Quarter of Section 10.
6	SR 522, Ballinger Way, NE 175th Street. Township 26N Range 4E, SE Quarter of Section 10.
7	SR 522, 61st Avenue NE/NE 175th Street. Township 26N Range 4E, NW Quarter of Section 11.
8	SR 522, 68th Avenue NE. Township 26N Range 4E, NE Quarter of Section 11, NW Quarter of Section 12.
9	SR 522, 73rd Avenue NE, NE 181st Street. Township 26N Range 4E, NW Quarter of Section 12.
10	SR 522, Hall Road, NE 180th Street, 98th Avenue NE. Township 26N Range 5E, SE and NE Quarters of Section 7.
11	98th Avenue NE, NE 183rd Street. Township 26N Range 5E, NE Quarter of Section 7.
12	98th Avenue NE, NE 185th Street, Pop Keeney Way, Thorsk Street. Township 26N Range 5E, NE Quarter of Section 7.
13	NE 185th Street, 101st Avenue NE. Township 26N Range 5E, NW Quarter of Section 8.
14	NE 185th Street, 102nd Avenue NE, 103rd Avenue NE. Township 26N Range 5E, NW Quarter of Section 8.
15	NE 185th Street, 104th Avenue NE, 103rd Avenue NE, Ross Road. Township 26N Range 5E, NW Quarter of Section 8.
16	NE 185th Street, Beardslee Boulevard, 108th Avenue NE, Township 26N Range 5E, SW and SE Quarters of Section 5, NW Quarter of Section 8.
17	Beardslee Boulevard. Township 26N Range 5E, SE Quarter of Section 5.

B. Environmental Elements

B 1. Earth

B 1 a. General description of the site:

Flat, rolling, hilly, steep slopes, mountainous, other _____

The NE 145th Street portion of the project corridor has rolling topography, with elevated areas on each side of Littles Creek and near 23rd Place NE. The portion of the corridor on SR 522 and Bothell city streets is generally flat. There are occasional steep slopes near project elements on each side of SR 522 and NE 145th Street.

B 1 b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope on the site is east of and adjacent to SR 522 in Lake Forest Park (Segment 2, Element 5) at NE 153rd Street and NE 155th Street. Steep slopes are defined as having a total vertical relief of more than 10 feet. They are typically included within Landslide Hazard Areas for the various areas of jurisdiction. Landslide Hazard Areas have been mapped in some locations along the project corridor, and are areas that are known to be susceptible to slope failure due to a combination of geologic, topographic and hydrologic factors. **Table B-1** (Steep Slope/Landslide Hazard Area Locations) provides a summary of the locations of steep slopes/Landslide Hazard Areas relative to the proposed project for each segment.

Table B-1 Steep Slope/Landslide Hazard Area Locations

Segment/ Jurisdiction	Steep Slope[1]/Landslide Hazard Area Locations	Project Element Number
1/Seattle, Shoreline	Potential Landslide Hazard Area due to presence of steep slopes. Based on desktop data, steep slopes exist on the project site on the north side of NE 145th Street both west and east of 8th Avenue NE and west of 28th Avenue NE (City of Shoreline) and on the south side of NE 145th Street west of 30th Avenue NE (City of Seattle).	1, 2, 3
2/Lake Forest Park	Potential Landslide Hazard Area due to presence of steep slopes. West of the project site, the west side slope of SR 522 between NE 153rd Street and NE 155th Street is retained by an existing wall about 10 feet tall with a 65 percent slope that extends another 10 feet above the wall.	5
	Mapped Landslide Hazard Area combined with the presence of steep slopes. East of the project site, on the east side of SR 522 at the ravine near the stream between NE 153rd Street and NE 155th Street, SR 522 is retained by a wall up to 9 feet tall. Below the wall, the topography slopes downhill at slopes ranging from 70 percent to 100 percent and heights of 60 to 80 feet. Previous studies of the site note indications that the slope has been experiencing ongoing slope creep and has a mapped historic landslide location about 100 feet east of the site.	5
	Potential Landslide Hazard Area due to presence of steep slopes. Steep slope areas exist on the west side of 38th Avenue NE and 39th Avenue NE where each street meets SR 522. Along and adjacent to the west side of SR 522 between 38th Avenue NE and 41st Avenue NE, several areas along the alignment of proposed walls are classified as steep slopes. From the initial site survey, there are a series of block walls and rockeries supporting the slopes that are up to about 10 feet tall. Above the walls, slopes are estimated to be 5 to 15 feet tall and range from flat up to about 70 percent.	5
3/Kenmore	Potential Landslide Hazard Area due to presence of steep slopes. South of the 61st Avenue NE Eastbound Platform and adjacent to SR 522 at 61st Avenue NE, a slope extends downhill about 25 to 30 feet. Site survey indicates that the slope ranges from 25 to 80 percent.	7
4/Bothell	Mapped Landslide Hazard Area combined with the presence of steep slopes. Several walls and steep slopes exist north and west of (and adjacent to) the SR 522 corridor, beginning at Wayne's Curve and extending north to its intersection with Hall Road. Overall slope height in this area is approximately 75 feet, and slopes are 60 percent to 100 percent. Project elements would not overlap the Landslide Hazard Area in this area, but design may need to consider if the improvements impact the Landslide Hazard Area buffer. The closest project components would be the proposed bus-only eastbound center lane in the roadway and the curb on the east side of the newly configured SR 522, which would be approximately 80 feet from this slope.	10

Segment/ Jurisdiction	Steep Slope[1]/Landslide Hazard Area Locations	Project Element Number
	Potential Landslide Hazard Area due to the presence of steep slopes. About midway between Wayne's Curve and NE 180th Street, steep slopes exist east of SR 522 that are approximately 10 to 25 feet tall and are estimated to be 25 percent to 60 percent. The eastern lanes of SR 522 are supported by a wall for part of this section and are within Element 10.	10

[1]Steep slopes are those 40 percent or greater and more than 10 feet in height.

B 1 c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The predominant mapped geologic units and soil types in the area of the project elements are summarized in **Table B-2** (Description of Soils) below.

Table B-2 Description of Soils

Geologic/Soil Unit	Description	Project Element Number
Fill	Very soft to stiff, or very loose to dense, gravel, sand, silt, concrete, garbage, slag and other materials, placed as a direct result of human activity.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 (All)
Alluvium	Loose to dense, or soft to stiff, sand, silt, gravel and cobbles deposited by streams and running water. Predominately sandy and horizontally bedded, fine-grained and coarser-grained lenses. May include landslide debris and colluvium at margins. Locally contains very soft peat lenses.	3, 6, 7, 8, 9, 10, 13, 14, 15, 16, 17
Recessional Outwash	Loose to dense, stratified sand and gravel, moderately graded to poorly graded, and less common silty sand and silt. Horizontally bedded to cross-bedded, uniformly to well-graded; channelized, coarse lag deposits common. Deposited in outwash channels that carried glacial meltwater during ice retreat.	5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17
Recessional Lacustrine	Very soft to stiff, laminated silt and clay, low to high plasticity, with local sand layers, peat and other organic sediments, deposited in slow-flowing water and ephemeral lakes. Horizontally bedded. Locally includes high-plasticity clay with swell potential.	7, 8, 9

Geologic/Soil Unit	Description	Project Element Number
Vashon Till	Medium dense to very dense, compact diamict of silt and sand, consisting of a nonsorted mixture of mud, sand, pebbles, cobbles and boulders. It was deposited directly from the ice as it advanced over bedrock and older Quaternary sediment. Its compactness partly results from the weight of the ice, which was hundreds of feet thick when it overrode the till.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 (All)
Advance Outwash	Dense to very dense, poorly graded sand and gravel deposited by streams issuing from advancing ice sheet. Predominately medium-grained sand, horizontally bedded to cross-bedded. Hard silt beds common throughout. Silt lenses locally present in upper part and common in lower part. Generally, unoxidized to only slightly oxidized.	5, 7, 8, 9
Glaciolacustrine	Very stiff to hard, laminated to massive silt, clayey silt and silty clay with scattered dropstones deposited in lowland proglacial lakes. Vertical fractures, fine sand partings and woody debris common near top and bottom of unit.	6
Pre-Vashon Nonglacial Deposits	Interbedded silt, sand, gravel and diamicts of indeterminate age and origin. Lightly to heavily oxidized. Discriminated from texturally similar younger deposits, particularly Advance Outwash, based stratigraphic position, oxidation and commonly heterogeneous grain size. Above the coastline of Puget Sound, mainly thinly laminated gray silt with neither organics nor dropstones overlying, and interbedded with oxidized sand and sandy gravel.	5, 10, 11, 12
Pre-Vashon Nonglacial Fluvial	Very dense, sand and gravel, clean to silty, with some silt layers, and peat and tephra layers. Lightly to moderately oxidized, with localized iron-oxide cemented layers. A part of a larger category of Pre-Fraser nonglacial deposits, which include sand, gravel, silt, clay and organic deposits of inferred nonglacial origin based on the presence of peat, paleosols and tephra layers.	6, 8

SOURCE: HWA 2018.

Geotechnical borings conducted at the three proposed park-and-ride garage locations yielded more specific soil information, and geotechnical data from other nearby projects was also consulted to obtain soils information pertinent to this proposed project, as explained below.

Lake Forest Park Park-and-Ride Garage Location – Description of Soils (Element 6):

A boring designated BH-8 (provided in **Appendix B** (Geotechnical Borings Results), was drilled on July 6, 2020, for the Lake Forest Park Park-and-Ride garage. The boring encountered 5 feet of loose fill at the surface, medium dense alluvium from 5 to 16 feet below ground surface (bgs), dense advance outwash from 13 to 40 feet bgs, very stiff glaciolacustrine clay and silt from 40 to 51 feet bgs, and very dense glaciofluvial poorly graded silty sands and gravels from 51 feet to its termination depth at 76 feet bgs. Given the proximity of this location to Lyon Creek, the

elevation of shallow groundwater at the park-and-ride garage location would likely coincide with the water level in the creek and is expected to be within about 5 feet of the ground surface throughout the year. Data from a previous boring MW-9 (provided in **Appendix B** (Geotechnical Borings Results) located about 800 feet southwest of the site encountered a confined aquifer under significant artesian pressure below a recessional lacustrine clay layer observed at about 27 feet bgs. Based on this information, the boring BH-8 was drilled using mud-rotary and an installed vibrating wire piezometer. Rather than the recessional lacustrine layer seen in MW-9 at 27 feet, BH-8 encountered a very stiff to hard glaciolacustrine layer at 40 feet. Therefore, this layer is likely the aquitard at the location of the park-and-ride garage. Future readings of the piezometer would need to be made to determine whether an artesian water condition exists at this location.

Kenmore Park-and-Ride Garage – Description of Soils (Element 9):

Boring BH-9 was drilled to a depth of 91 feet bgs at the Kenmore Park-and-Ride garage location on April 20 and 21, 2020 (results provided in **Appendix B** (Geotechnical Borings Results). A layer of fill (asphalt and crushed base course) was encountered at the surface to a depth of 2.5 feet bgs. Loose to dense recessional outwash materials were observed to a depth of 85 feet, consisting of loose to dense sand and gravel. Below 85 feet, to the termination depth of 91 feet, the material became very dense and is likely at the transition from recessional outwash to underlying advance outwash or Pre-Vashon glaciofluvial deposits. Saturated soils were observed at 12.5 feet and 20 feet during drilling and correlate to the approximate elevation of Swamp Creek to the northeast.

Bothell Park-and-Ride Garage – Description of Soils (Element 12):

At a site in the southwest quadrant of 98th Avenue NE and Pop Keeney Way, borings conducted by geotechnical engineers in 1989, 2006, 2011 through 2013, and 2016 indicate that loose to medium-dense fill, alluvium and recessional outwash overlie dense to very dense glacial till and advance outwash. Fill was observed at the site and had thicknesses ranging from 0.5 foot to 13 feet. Observed fill was thinner in the north and west areas of this location and thicker in the south and east areas. The fill encountered in borings consisted of loose to medium-dense, silty sand and locally contained burnt organics and construction debris. Some areas at the proposed park-and-ride garage site have been dug out recently and backfilled with engineered fill as part of a contaminated site remediation project (see response to Question B 7 a (1) for additional information). As a result, the fill is highly variable in composition, density and consistency. The soils underlying fill at this location consist of layers of alluvium or recessional outwash (loose to medium-dense silty sand) overlying advance outwash and glacial till. The alluvium and recessional outwash layers were thin, with the dense to very dense advance outwash and glacial till encountered within about 7 feet to 13 feet of the ground surface at the site. The boring logs indicated that the ground water table was encountered at depths ranging from 2 feet to 11 feet deep. Where glacial till was encountered in the borings, groundwater was found to be perched above the till, and the soil immediately overlying the till was saturated.

No agricultural land of long-term commercial significance is located on the project site, and no agricultural soils would be removed.

B 1 d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

One location on the project site shows signs of instability: the Landslide Hazard Area east of SR 522 at NE 153rd Street and NE 155th Street (Element 4 in Segment 2 Lake Forest Park). The steep slope and Landslide Hazard Area below the existing wall east of SR 522 within the ravine

between NE 153rd Street and NE 155th Street are marginally stable. The trees on the slope are "button hooked," meaning that the trunks curve as much as 90 degrees at the base and straighten to vertical or nearly vertical for the remainder of the tree's height. Button hooked trees are indicative of slope creep. Crooked trees and uneven topography indicate that minor slumps have likely occurred along portions of the slope.

B 1 e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Table B-3 (Fill and Excavation) shows estimated fill and excavation that would occur for this project in each jurisdiction, including the area, volume and purpose. A local, Sound Transit-approved supplier would provide the fill. Types of fill would include gravel backfill for pipe zone bedding, crushed surfacing, concrete pavement and hot mix asphalt (HMA) pavement. In total, approximately 53,440 cubic yards of fill would be placed in areas along the project corridor, totaling approximately 22 acres. Approximately 86,400 cubic yards of material would be excavated as part of this project, over areas along the project corridor that total approximately 24 acres.

Table B-3 Fill and Excavation

Jurisdiction/ Segment Number	Approximate Fill (area [square feet], amount [cubic yards], and purpose)	Approximate Excavation (area [square feet], amount [cubic yards], and purpose)
Seattle/Segment 1	11,800 sf; 640 cy of fill for roadway widening, cross street reconstruction, HMA overlay, sidewalk, grading, retaining wall, driveway reconstruction, utility trenching, stormwater infrastructure and wall thickness.	142,800 sf; 7,800 cy of cut for roadway widening, cross street reconstruction, HMA overlay, sidewalk, grading, retaining wall, driveway reconstruction, utility trenching, stormwater infrastructure and wall thickness.
Shoreline/Segment 1	55,300 sf; 1,600 cy of fill for roadway widening, cross street reconstruction, HMA overlay, sidewalk, grading, retaining wall, driveway reconstruction, utility trenching, stormwater infrastructure and wall thickness.	20,700 sf; 600 cy of cut for roadway widening, cross street reconstruction, HMA overlay, sidewalk, grading, retaining wall, driveway reconstruction, utility trenching, stormwater infrastructure and wall thickness.
Lake Forest Park/Segment 2	695,000 sf; 34,000 cy (rounded to nearest 1,000) for construction activities such as roadway widening, side street reconstruction, new planter and sidewalk, stations, grading, retaining wall, driveway reconstruction, utility trenching, stormwater infrastructure and wall thickness.	695,000 sf; 56,000 cy (rounded to nearest 1,000) for construction activities such as roadway widening, side street reconstruction, new planter and sidewalk, stations, grading, retaining wall, driveway reconstruction, utility trenching, stormwater infrastructure and wall thickness.
Kenmore/Segment 3	40,000 sf (rounded to nearest 1,000 sf); 7,200 cy (rounded to nearest 100 cy). Construction of new station platforms and sidewalk, replacement of roadway pavement adjacent to stations, utility trench backfill (for installation and/or relocation of water, storm, sewer, electrical), park-and-ride driveway reconstruction, and grading of landscape areas. These estimates reflect all known utility connections at this level of design. These estimates include retaining wall, driveway reconstruction, utility trenching, stormwater infrastructure and wall thickness.	40,000 sf (rounded to nearest 1,000 sf); 6,000 cy (rounded to nearest 1,000 cy). Removal of existing sidewalk and roadway pavement, utility trenching (for installation and/or relocation of water, storm, sewer, electrical), removal of park-and-ride parking lot pavement for driveway reconstruction and station improvements, and grading of landscape areas. These estimates include retaining wall, driveway reconstruction, stormwater infrastructure and wall thickness.
Bothell/Segment 4	152,000 sf; 10,000 cy (rounded to nearest 1,000) for construction activities such as roadway widening, side street reconstruction, new planter and sidewalk, station, grading, retaining wall, driveway reconstruction, utility trenching, stormwater infrastructure and wall thickness.	152,000 sf; 16,000 cy (rounded to nearest 1,000) for construction activities such as roadway widening, side street reconstruction, new planter and sidewalk, station, grading, retaining wall, driveway reconstruction, stormwater infrastructure, utility trenching and wall thickness.

cy = cubic yards, sf = square feet.

B 1 f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion could occur during construction. Based on King County mapping, the areas known to be most susceptible to erosion on-site generally coincide with steep slope areas described in response to Question B 1 b above. The contractor must comply with applicable city and county development standards, and would prepare site preparation plans and Temporary Erosion and Sediment Control Plans (TESCPs) before the start of ground-disturbing activities, both for local permits and National Pollutant Discharge Elimination System (NPDES) permitting as needed. With application of BMPs in accordance with the TESCP, erosion potential at all areas would be minimal, and any sedimentation that would occur would be properly controlled and managed.

Construction Best Management Practices (BMPs) would likely include but would not be limited to silt fences, straw wattles, drainage inlet protection, site hydroseeding, keeping staging and travel areas clean and free from track-out, covering work areas and stockpiled soils when not in use, and completing earth work during dry weather and dry site conditions if possible. Drainage design for all project elements would ensure that stormwater is directed away from steep slopes. Erosion and sediment control measures would be constructed and operational before any ground disturbance occurs, and would remain in place until construction is complete. Stormwater runoff would be managed and BMPs employed in accordance with the Ecology 2019 Stormwater Management Manual for Western Washington or other stormwater regulations as applicable.

The project requires more than 1 acre of ground disturbance, which means that a Construction Storm Water General Permit under Section 402 of the Clean Water Act NPDES would be required. Maintaining cover measures atop disturbed ground typically would provide the greatest reduction to the potential generation of turbid runoff and sediment transport. During the local wet season, exposed soil should not remain uncovered for more than two days unless it is being actively worked. Cover measures for disturbed ground could include erosion control matting, plastic sheeting, straw mulch, crushed rock, or recycled concrete or mature hydroseed.

B 1 g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Table B-4 (Impervious Surface Estimates) shows the net percentage of the site that would likely be covered with impervious surface after construction, for each segment.

Table B-4 Impervious Surface Estimates

Segment/Jurisdiction	Total Area (acres)	Existing % Impervious	Likely % Final Impervious
1/Shoreline (improvements north of NE 145th Street)	3.34	84%	97%
1/Seattle (improvements south of NE 145th Street)	1.96	86%	95%
1/Lake Forest Park (NE corner of SR 522 and NE 145th Street)	0.04	82%	100%
2/Lake Forest Park	18.36	77%	84%
3/Kenmore	5.63	78%	80%
4/Bothell	10.58	75%	81%

Shoreline estimates include the unincorporated King County area which is managed by WSDOT (the northern half of NE 145th Street). For Lake Forest Park, Kenmore and Bothell, newly converted areas from impervious to pervious were accounted for in these estimates.

B 1 h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

No measures are expected to be needed other than those described in response to Question B 1 f. The one specific area that would require consideration during design for impacts to slopes is the steep slope and Landslide Hazard Area in Lake Forest Park at Element 5. The impact of road widening at the top of the steep ravine between NE 153rd Street and NE 155th Street would be a primary design concern. Below SR 522, the ravine is steep and approximately 75 feet deep. Previous observations during design of the existing wall indicate that the slope is inclined from 1.4H:1V to 1V:1V (H = horizontal and V = vertical) (WSDOT 2006). Observations made at the top of the slope for this analysis indicate that erosion protection was installed to retain the fill placed in front of the soldier pile wall installed in 2007; however, the slope appears to have steepened below the erosion protection. The project design would consider the long-term stability at this location as needed.

B 2. Air

B 2 a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During project construction, there is a potential for short-term increases in particulate matter (from vehicles and fugitive dust on sites), carbon monoxide, volatile organic compounds and nitrogen oxide emissions These increases would come from the operation of construction equipment, hauling materials, diesel fired generators and construction workers accessing the site. Construction of each project element may last 2 to 10 months. During construction, the contractor would be required to follow the Puget Sound Clean Air Agency (PSCAA) implementation of BMPs, which would minimize the impacts of fugitive dust resulting from construction activities. Standard practices to control emissions of particulate matter, carbon monoxide, volatile organic compounds and nitrogen oxides would also be implemented during construction. If emergency generators are required at any facility during construction, PSCAA would be consulted for the appropriate permit action. Emergency combustion engines rated less

than 500 horsepower are assumed to have a negligible contribution to pollutant emissions. Disruption of traffic during construction (such as a temporary reduction of roadway capacity and increased queue lengths) could result in short-term, elevated concentrations of pollutants from slowed or idling vehicles. Once construction is completed, these short-term increases would no longer occur.

During project operation, the project would use a new fleet of 12 buses, 10 of which would operate with Battery Electric Bus, or BEB, propulsion. The other two buses would operate with diesel hybrid propulsion with the most current pollution control systems. Exhaust from the two diesel buses and from personal vehicles accessing stations and park-and-ride garages would be a source of air pollutant emissions. Common air pollutants from vehicle exhaust are carbon monoxide, nitrogen oxides, volatile organic compounds, particulate matter and mobile source air toxics (MSATS). The project may increase localized air pollutant emissions near park-and-ride garages from vehicle trips generated by garage users, vehicles that pick up or drop off transit passengers, maintenance staff and coach drivers. Although the park-and-ride garage would have 300 spaces, the associated increase in trips would likely be less than 300 trips, because many of the trips are likely local, and therefore already part of existing average annual daily traffic (AADT).

MSATS (mobile source air toxics) emissions from vehicles along the route could decrease in the future as a result of the US Environmental Protection Agency (EPA) national control programs, which are projected to reduce annual MSATS emissions by more than 90 percent between 2010 and 2050. Therefore, future emissions along the project route would likely be lower than current levels, even with the added trips associated with the project.

Proposed project BRT trips would total approximately 220 trips per day. The project should also decrease the vehicle miles traveled due to passenger vehicles by attracting new riders to transit. Project operations would not result in air quality impacts, due to the relatively small number of additional trips (including trips associated with the two diesel buses and with the 900 net total new spaces at the park-and-ride garages) relative to the existing 40,000 to 53,000 AADT.

The project is located in an area designated by EPA as in attainment for all criteria pollutants. Therefore, (1) a transportation conformity analysis is not required to demonstrate compliance with EPA's National Ambient Air Quality Standards, and (2) the localized increases in vehicle activity from buses are not likely to cause or contribute to a potential exceedance of the National Ambient Air Quality Standards.

Once operational, the proposed project is not expected to increase GHG emissions. The project would provide a high-capacity alternative to personal vehicles for transportation and thus has the potential to reduce overall GHG levels. The project's air quality analysis did not estimate GHG emissions using a worksheet similar to the one King County has developed and the City of Seattle plans to use. The King County GHG Emissions Worksheet calculates GHG emissions based on categories of construction types for residential and commercial buildings. The construction types for this project, including roadway improvements, stations and garages, do not match any of the categories in the worksheet; therefore, GHG emissions were not quantitatively estimated using the King County GHG Emissions Worksheet.

B 2 b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No off-site sources of emissions or odors have been identified that could affect the project.

B 2 c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Sound Transit would prepare an Environmental Management Plan to track regulatory compliance and address air quality during construction activities. To reduce air emissions during construction, the contractor would implement some or all of the following measures, as appropriate:

- Spraying exposed soil with a dust control agent, such as water, as necessary to reduce emissions of PM10 (particulate matter 10 micrometers or smaller in diameter) and the deposition of particulate matter.
- Covering all transported loads of soil and wet materials before transport or providing adequate freeboard (i.e., space from the top of the material to the top of the truck) to reduce emissions of PM_{10} and the deposition of particulates during transport. The current requirement allows for a freeboard of 6 inches; however, it is possible that the law will be updated this year (2020) and could require covering all loads. Therefore, regulatory requirements would be reviewed and included as necessary in the contract specifications.
- Providing wheel washes, where feasible, to reduce dust and mud that would be carried off-site by vehicles and to decrease PM on area roadways and remove dust and mud that are deposited on paved, public roads.
- Routing and scheduling high volumes of construction traffic, where practicable, to reduce additional congestion during peak travel periods and reduce carbon monoxide, nitrogen oxide and carbon dioxide emissions.
- Requiring appropriate emissions-control devices on all construction equipment powered by gasoline or diesel fuel to reduce carbon monoxide and nitrogen oxide emissions in vehicular exhaust.
- Using well-maintained heavy equipment to reduce carbon monoxide and nitrogen oxide emissions, which may also reduce greenhouse gas emissions.
- Covering and installing mulch or plant vegetation as soon as practicable after grading to reduce windblown particulates in the area.
- Following Sound Transit's specifications for age of contractor equipment and contractor's use of and reporting on EPA-rated Tier 2 and 3 equipment.
- Implementing idling restrictions for construction trucks.
- Locating construction equipment and truck-staging zones away from sensitive receptors (e.g., residences or medical or long-term care facilities), as practicable, and in consideration of other factors such as noise and safety.
- Complying with PSCAA regulations requiring the best available measures to control air emissions in the use of stationary equipment used for construction activities.

Implementation of the type of best practices listed above would reduce construction air emissions, and no further actions would be needed to address air emissions.

Operations of the project are not expected to result in any new air quality impacts or worsen the severity of any existing exceedances of any applicable air quality regulations. Therefore, no measures to reduce or control emissions or other impacts to air are proposed. See **Appendix C** (Air Quality Technical Report) for more information.

B 3. Water

B 3 a. Surface Water

B 3 a (1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The project site is within Water Resource Inventory Area number 8, Cedar-Sammamish. **Table B-5** (Surface Water) lists surface water bodies by jurisdiction that come within 200 feet of the project. **Appendix D** (Ecosystem Resources Technical Report) contains additional details about these surface water bodies.

Table B-5 Surface Water

Segment/ Jurisdiction	Stream Name	Type	Receiving Surface Water Body
Segment 1			
Shoreline	Littles Creek	Fish-bearing	Thornton Creek/Lake Washington
Shoreline	Hamlin Creek	Seasonal non-fish-bearing	Thornton Creek/Lake Washington
Seattle	Littles Creek	Fish-bearing	Lake Washington
Seattle	Hamlin Creek	Seasonal non-fish-bearing	Thornton Creek/Lake Washington
Seattle	Littlebrook Creek	Seasonal non-fish-bearing	Lake Washington
Seattle	Wetland WSE-1	Category II, Depressional, PFO/PUB	Not applicable
Segment 2			
Lake Forest Park	Bsche'tla Creek	Fish-bearing	Lake Washington
Lake Forest Park	McAleer Creek	Fish-bearing	Lake Washington
Lake Forest Park	Lyon Creek	Fish-bearing	Lake Washington
Lake Forest Park	Wetland WLFP-1	Category III, Riverine, PSS/PEM	Not applicable
Lake Forest Park	Wetland WLFP-2	Category III, Riverine, PSS/PEM	Not applicable
Lake Forest Park	Wetland WLFP-3	Category III, Depressional, PEM	Not applicable
Segment 3			
Kenmore	Cat Whisker Creek	Fish-bearing	Sammamish River/Slough
Kenmore	Swamp Creek	Shoreline of the State	Sammamish River/Slough
Kenmore	Lake Washington	Lake of statewide significance	Puget Sound
Kenmore	WKE-1	Category I, Riverine, PFO/PSS/PEM	Not applicable
Kenmore	WKE-2	Category III, Depressional, PSS/PEM	Not applicable
Segment 4			
Bothell	Horse Creek	Fish-bearing	Sammamish River

Segment/ Jurisdiction	Stream Name	Type	Receiving Surface Water Body
Bothell	Sammamish River	Shoreline of the State	Lake Washington
Bothell	SBO-1	Seasonal non-fish-bearing	Sammamish River
Bothell	SBO-2	Seasonal non-fish-bearing	Sammamish River
Bothell	North Creek	Shoreline of the State	Sammamish River
Bothell	WBO-1	Category II, Depressional, PFO/PSS/PEM	Not applicable
Bothell	WBO-2	Category I, Riverine, PUB/PEM/PSS/PFO	Not applicable

PFO (palustrine forested), PSS (palustrine scrub-shrub), PEM (palustrine emergent), PUB (palustrine consolidated bottom).Categories I, II and III refer to the wetland categories.

B 3 a (2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No work is proposed in surface waters. A pedestrian bridge would be constructed over McAleer Creek in Segment 2.

The area of work that would occur within 200 feet of surface waters is listed in **Table B-6** (Surface Water Buffer Impacts). These project actions involve:

- Segment 2: within the regulatory buffer of Bsche'tla Creek, construct the NE 153rd Street Eastbound Platform, sidewalk, curb/gutter and retaining wall
- Segment 2: within a portion of the regulatory buffer of Lyon Creek, construct the Lake Forest Park Town Center Eastbound Platform, with curb/gutter and sidewalk construction
- Segment 2: within the regulatory buffers of both McAleer Creek and WLFP-3, construct a sidewalk and pedestrian bridge between 45th Avenue NE and McAleer Creek
- Segment 4: within the regulatory buffer of WBO-1 at Bothell Landing Park, widen the road and construct a retaining wall, sidewalk and planted buffer

Appendix D (Ecosystem Resources Technical Report) contains more information on the work proposed at these locations.

Table B-6 Surface Water Buffer Impacts

Segment/Jurisdiction	Surface Water Name	Permanent Buffer Impact	Temporary Buffer Impact
1/Shoreline	Not applicable	None	None
1/Seattle	Not applicable	None	None
2/Lake Forest Park	WLFP-3	926 sf	544 sf
2/Lake Forest Park	Bsche'tla Creek	1,655 sf	1,639 sf
2/Lake Forest Park	McAleer Creek	2,819 sf	1,924 sf
2/Lake Forest Park	Lyon Creek	1,477 sf	1,548 sf
3/Kenmore	Not applicable	None	None
4/Bothell	WBO-1	1,562 sf	3,073 sf
4/Bothell	SBO-2	1,140 sf	600 sf

sf = square feet.

B 3 a (3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No fill would be placed in surface water or wetlands as part of this project. Additionally, no dredge material would be removed from surface water or wetlands as part of this project.

B 3 a (4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

This project would not require surface water withdrawals or diversions.

B 3 a (5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No work would occur in floodplains. Areas of 100-year floodplain exist near the proposed project in two areas: the immediate areas surrounding (1) Lyon Creek in Lake Forest Park, and (2) Swamp Creek at approximately 80th Avenue NE in Kenmore.

B 3 a (6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No, the project would not involve discharge of waste materials to surface water. All construction activities would follow BMPs to avoid unintentional discharge of waste materials into surface waters. Once constructed, the only potential source of discharge to surface water from the project's park-and-ride garages, transit stations and roadway improvements would be via stormwater, which would be managed to prevent waste discharges, as described in response to B 3 c below.

B 3 b. Ground Water:

B 3 b (1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Groundwater would not be withdrawn from a well for drinking water or other purposes during construction or operation of the project, and no water would be discharged to groundwater.

Based on available subsurface conditions data, described in response to Question B 1 above, most construction activities along the corridor (except at Bsche'tla Creek and upland areas along NE 145th Street) could encounter groundwater within about 10 to 20 feet of the ground surface. This groundwater is typically an unconfined groundwater table that is likely hydraulically connected to the streams or other water bodies adjacent to the site. Anticipated construction elements that would extend into this type of shallow groundwater table are soldier piles required for retaining walls or deep foundations that may be required for the park-and-ride garages.

However, at three locations mentioned in B 1 c above, specific groundwater depths have been determined via field investigations. The Lake Forest Park Park-and-Ride garage (within Element 6) is underlain at depth by the Lake Forest Park aquifer (AESI 2016). Boring BH-8 encountered a glaciolacustrine layer that is interpreted to be the aquitard that lies above this aquifer at 40 feet bgs. The contractor would determine foundation methods; however, the preferred foundation option would not likely extend to a depth that would require that groundwater be withdrawn from the aquifer. Construction at the Kenmore Park-and-Ride garage location (Element 9) is expected to encounter groundwater at approximately 12 feet below ground surface in certain locations. At the Bothell Park-and-Ride garage site (Element 12), groundwater may be encountered at depths of 2 to 11 feet below ground surface.

B 3 b (2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

This project would not result in the discharge of waste material into the ground from septic tanks or other sources during construction or operation. The project is expected to require the full acquisition of three parcels, as described in responses to B 8 and B 9 below. None of these parcels utilizes a septic system.

B 3 c. Water runoff (including stormwater):

B 3 c (1) Describe the source of runoff (including stormwater) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Table B-7 (Water Runoff Characteristics) describes methods of stormwater runoff collection and disposal, drainage system or outfall location, Threshold Discharge Areas (TDAs),[5] new or altered existing stormwater infrastructure, and whether the project would change the discharge point.

[5] Threshold Discharge Area (TDA) is a term defined in the WSDOT Highway Runoff Manual as an on-site area draining to a single natural discharge location, or multiple natural discharge locations that combine within 0.25 mile downstream. Based on the existing and proposed drainage patterns, TDAs are delineated to help determine the applicable drainage requirements for the project.

Stormwater runoff would be managed (collected and disposed of) in accordance with the 2019 King County Surface Water Design Manual and applicable city stormwater guidelines, depending on location and as described below. Relevant stormwater manuals for the project include the following:

- Sound Transit: Sound Transit Design Criteria Manual Revision 5, February 2020
- WSDOT: WSDOT Highway Runoff Manual, M31-16.05, April 2019; WSDOT Hydraulics Manual M23-03.06, April 2019
- Ecology: 2019 Stormwater Management Manual for Western Washington –19-10-021, Amended July 2019
- Seattle: Seattle Public Utilities, Client Assistance Memo 1180 – Design Guidelines for Public Storm Drain Facilities, July 2017; City of Seattle Municipal Code – 22.800 (an updated version of the City of Seattle Stormwater Manual is scheduled to be released in mid-2021; relevant updates to the manuals and codes would be incorporated as the project design progresses)
- Shoreline: City of Shoreline Municipal Code. Specifies compliance with the effective version of the Stormwater Management Manual for Western Washington published by Ecology, the Western Washington Phase II Municipal Stormwater Permit and the City of Shoreline Engineering Development Manual
- Lake Forest Park: City of Lake Forest Park Municipal Code – 16.24. Specifies the adoption of the King County Surface Water Design Manual and King County Stormwater Pollution Prevention Manual
- Kenmore: City of Kenmore Municipal Code – 13.35 specifies the adoption of the 2016 King County Surface Water Design Manual and Kenmore Addendum to the 2016 King County Surface Water Design Manual
- Bothell: City of Bothell Municipal Code – 18.02 specifies the City of Bothell 2020 Surface Water Design Manual, which modifies the 2016 King County Surface Water Design Manual

Table B-7 Water Runoff Characteristics

Element Number	Existing	Proposed
1	Runoff in this area is collected in the following TDAs: 5th Avenue NE/North TDA (City of Seattle), 5th Avenue NE/South TDA (City of Seattle), and Jackson Park Golf Course TDA (City of Seattle). Runoff from the street and sidewalk is collected and conveyed in the gutter along the street. Flow is intercepted by a catch basin located at 5th Avenue NE/NE 145th Street. Flow is conveyed south after collection on-site in a closed storm drain system. Moving east, runoff from the street and sidewalk flows westerly; flow from 6th Avenue NE flows south, is intercepted by catch basins located on the east and west side of the street, and is conveyed into a catch basin located on NE 145th Street. Then the flow is conveyed south in a closed storm drain system. Runoff from 8th Avenue NE flows south towards NE 145th Street, mingling with NE 145th Street flow. These flows run along the gutter to the lowpoint, where they are intercepted by an existing catch basin and conveyed south in a closed conveyance system. This drainage system discharges to Lake Washington.	5th Avenue NE/North TDA (City of Seattle): Street runoff would be collected via a proposed storm system that ties into the existing catch basin at 5th Avenue NE/NE 145th Street. Flow would be conveyed south after collection on-site in a closed stormdrain system. 5th Avenue NE/South TDA (City of Seattle): Flow west of the highpoint along NE 145th Street would be picked up by a series of catch basins and storm pipes. Flow from 6th Avenue NE would be intercepted by catch basins located both sides of the street and detained in a detention vault east of 6th Avenue NE/NE 145th Street. The detention vault would discharge into a storm system along NE 145th Street, eventually tying into an existing catch basin. Jackson Park Golf Course TDA (City of Seattle): Moving east, flow east of the highpoint along NE 145th Street would be picked up by catch basins and conveyed to the low point along the street. The catch basins are proposed to reduce the flooding on the street. Flow from 8th Avenue NE would be intercepted by catch basins located on east and west side of the street and detained in a detention vault east of 8th Avenue NE/NE 145th Street. The detention vault would discharge into the storm system along NE 145th Street, eventually tying into the existing catch basin at the lowpoint. No changes to discharge points would occur.

Element Number	Existing	Proposed
2	Runoff in this area is collected in the following TDAs: 15th Avenue NE TDA (City of Seattle) and 17th Avenue NE TDA (City of Seattle). 12th Ave NE slopes south towards NE 145th Street; no drainage system is present. Along 15th Ave NE: North of NE 145th Street, the road is crowned in the center and slopes south toward NE 145th Street. One catch basin on the west side of the street and two catch basins on the east side of the street intercept runoff and connect to the system that flows south to Seattle. South of NE 145th Street, the road is crowned in the center and slopes south and has no catch basins. 17th Avenue NE is crowned and slopes toward NE 145th Street. No catch basins intercept flows; runoff flows into NE 145th Street. Catch basins near 15th Avenue NE on NE 145th Street discharge into a storm system flowing south towards Seattle. Catch basins along the gutterline intercept flows and connect to the system draining south.	15th Avenue NE TDA (City of Seattle): At 12th Avenue NE, 1 catch basin is proposed north of the sidewalk to improve safe pedestrian crossing. At 15th Avenue NE north of NE 145th Street, 2 catch basins are proposed on the west side of 15th Avenue NE to intercept flows north of the walkway ramp to keep the flooding within the allowable spread width. 17th Avenue NE TDA (City of Seattle): On the east side of 15th Avenue NE, 1 new catch basin is proposed to reduce flooding at the pedestrian crossing. On 17th Avenue NE north of NE 145th Street, 1 catch basin is proposed just north of the pedestrian crosswalk ramp on both the east and west sides of the road to reduce runoff entering NE 145th Street and to reduce flooding at the ramp. Catch basins are proposed along the gutter and would discharge into a proposed stormwater detention vault south of the sidewalk, to mitigate runoff from the road. Catch basins are proposed along the gutter to reduce flooding on the road and would discharge into existing catch basins that flow south onto 15th Avenue NE. Two oil control units are proposed upstream of the intersection. New or replacement catch basins would be installed to treat additional runoff and keep the flooding flow width within permissible limits. No changes to discharge points would occur.
3	Runoff in this area is collected into the 30th Avenue NE TDA (City of Seattle). NE 145th Street in this area slopes west to east. Runoff from north of the crown is picked up by 2 catch basins that drain into the system to the south toward Seattle. Runoff from south of the crown is picked up by a catch basin that drains into a culvert to the south. 28th Avenue NE slopes toward NE 145th Street. There is no existing storm system to capture the flow before it enters NE 145th Street. 30th Avenue NE slopes south; north of NE 145th Street, an existing catch basin picks up flow on the west side of the road, and runoff from the east side of the road flows into NE 145th Street. South of NE 145th Street, an existing catch basin located along west side of 30th Avenue intercepts the runoff and discharges into a culvert under the road.	30th Avenue NE TDA (City of Seattle): Runoff from north of the crown of NE 145th Street would be picked up by proposed catch basins along NE 145th Street to reduce flooding and to comply with allowable spread width. These would connect to the existing catch basin at 30th Avenue NE/NE 145th Street. Proposed catch basins along the curb and gutter would intercept runoff from south of the crown; the runoff would discharge into an existing culvert located on 30th Avenue NE. The project would involve installing a detention vault along 28th Avenue NE to mitigate peak runoff from 28th Avenue NE. Two catch basins are proposed along 28th Avenue NE to reduce runoff into 145th Avenue NE and would be connected to new catch basins along the north side of NE 145th Street. At 30th Avenue NE, north of NE 145th Street, catch basins are proposed to reduce runoff entering NE 145th Street and would connect to the existing system. No changes to discharge points would occur.

Element Number	Existing	Proposed
4	Runoff in this area is collected into the following TDAs: Lake City Way NE TDA (City of Shoreline) and Bothell Way NE TDA (City of Lake Forest Park). Runoff from NE 145th Street flows towards the intersection, wraps around the corner to the north, and is picked up by a catch basin located along the curb connected to a City of Shoreline system that flows north away from the intersection. Runoff from the east of the intersection north of the crown flows into Lake Forest Park. Runoff from the west and east of the intersection south of the crown flows into Seattle. Runoff from NE 145th Street flows towards the intersection, wraps around the corner and is picked up by a catch basin along the curb that connects south to the City of Seattle system.	Lake City Way NE TDA (City of Shoreline): Runoff from west of the intersection north of the crown would flow into Shoreline; 2 new catch basins would be installed along NE 145th Street to capture flow and prevent flooding near the walk path ramp, and 1 new catch basin would be installed against the revised gutter line to connect to the existing catch basin. Flow captured would continue to be conveyed north to Shoreline. One new catch basin would be installed north along SR 522 to reduce flooding. Bothell Way NE TDA (City of Lake Forest Park): Runoff from NE 145th Street east of the intersection would flow towards the intersection. Three new catch basins would be installed to prevent flooding and would connect to the existing system to the north and then flow into the City of Lake Forest Park system. Runoff south of the crown would flow into Seattle. This high-use intersection would require an oil control BMP to comply with city code, that would be located on the sidewalk and would connect back into the existing catch basin and storm system toward Seattle. No changes to discharge points would occur.
5	This element overlaps with Lake Forest Park TDAs 1, 2 and 3. Lake Forest Park TDA 1 is located 250 feet north of NE 145th Street/NE 153rd Street. Stormwater flows north, and the 4 discharge points from the roadway (4 separate conveyance systems on the east side of SR 522 located at 500 feet north of NE 145th Street, across SR 522 from 35th Avenue NE, 300 feet south of NE 153rd Street, and at NE 153rd Street) convene at NE 151st Street/37th Avenue NE. These discharge points flow east through humanmade conveyance systems and outfall to Lake Washington, 420 feet south of the intersection, between NE 152nd Street and the Burke-Gilman Trail. Lake Forest Park TDA 2 is between NE 153rd Street and NE 155th Street, with discharge points at 3 locations on top of the Bsche'tla Creek bridge deck and outfalling first to Bsche'tla Creek and then to Lake Washington 1,000 feet downstream to the east. Lake Forest Park TDA 3 is between NE 155th Street and Beach Drive and directs stormwater north. Discharge points are on the north and south sides of SR 522 at Brookside Boulevard NE, outfalling to McAleer Creek and then to Lake Washington 1,000 feet downstream to the southeast.	In Lake Forest Park TDA 1, existing storm conveyance systems would be used with catch basins moved to the edge of curb. A water quality unit is proposed 150 feet north of NE 149th Street/SR 522 on the east side of the road. Existing storm conveyance from NE 147th Avenue to the proposed water quality unit would be replaced with 12-inch-diameter pipe at the edge of curb. Proceeding north, existing conveyance systems would be maintained, tying into catch basins at the edge of curb. At all three Lake Forest Park TDAs (1, 2 and 3), proposed improvements would include connecting to existing facilities; installing 12-inch, 18-inch and 24-inch storm sewer pipes; installing modular drainage systems and piping to daylight; and replacing or installing catch basins, grates and covers. Discharge and outfall locations of these Lake Forest Park TDAs would not change with the proposed work. At Lake Forest Park TDA 3, at the northwest corner of 39th Avenue NE/SR 522, a 90-foot-long by 40-foot-wide by 7-foot-deep detention vault is proposed to capture equivalent impervious surface. Upstream of the vault, a 4-cartridge catchbasin StormFilter is proposed to treat added pollution-generating impervious surface. Downstream of the vault, existing storm conveyance systems on the west side of SR 522 would be replaced with 18-inch-diameter storm sewer pipe at the edge of curb to 200 feet south of SR 522/41st Avenue NE. On the east side of SR 522, from NE 165th Street to the outfall at McAleer Creek, existing storm conveyance would be replaced with 18-inch-diameter storm sewer pipe at the edge of curb. No changes to discharge points would occur.

Element Number	Existing	Proposed
6	This element overlaps with Lake Forest Park TDA 4. Stormwater within Lake Forest Park TDA 4 between Beach Drive NE and 47th Avenue NE flows southwest, discharging at the northwest corner of SR 522/Ballinger Way NE. This discharge directly outfalls to Lyon Creek and then to Lake Washington 500 feet downstream to the southeast.	Stormwater improvements within Lake Forest Park TDA 4 would include installing a quarry spall pad adjacent to the west end of the eastbound platform; installing a 4-inch-wide modular drain system with a 3-inch-diameter pipe to daylight underneath the westbound platform; making connections to existing facilities; installing 12-inch, 18-inch and 24-inch storm sewer pipes; installing modular drainage systems and piping to daylight; replacing or installing catch basins, grates and covers; and installing a 4-cartridge catch basin on the west side of SR 522 north of 39th Avenue NE. No changes in stormwater conveyance, discharge points or outfall locations are proposed at this time.
7	This element overlaps with Kenmore TDA 2. Within Kenmore TDA 2 at Harbor Village, 61st Avenue NE is the low point where stormwater convenes after entering catch basins on each side of SR 522. Stormwater discharges from SR 522 to the south into a ditch where it continues to Harbor Village Marina and outfalls into Lake Washington.	Stormwater improvements would include installing a 4-inch-wide modular drainage system with 3-inch-diamater drainpipe to daylight, and replacing the lid with an ADA-approved lid underneath and adjacent to the east end of the 61st Avenue NE Eastbound Platform. Discharge and outfall locations would not change.
8	This element overlaps with Kenmore TDA 4. Within Kenmore TDA 4, stormwater convenes 400 feet west of 68th Avenue NE after entering catch basins on each side of SR 522. Stormwater is conveyed south from SR 522 via existing closed storm systems and outfalls into the Sammamish River.	Stormwater improvements would include installing a 4-inch-wide modular drainage system with 3-inch-diamater drainpipe to daylight underneath both platforms. An ADA-approved lid would replace the lid adjacent to the westbound platform. Discharge and outfall locations of this TDA would not change.
9	This element overlaps with Kenmore TDA 4 (see description for Element 8)	Stormwater improvements would include installing a 4-inch-wide modular drainage system with 3-inch-diamater drainpipe to daylight underneath the eastbound station. Underneath or adjacent to the westbound platform, the project would include installing and connecting a new 12-inch-diameter storm sewer pipe, new catch basins, grates and metal covers; installing a 4-inch-wide modular drainage system with 3-inch-diamater drain pipe to daylight; and replacing a lid with an ADA-approved lid. At the east corner of the vehicle access driveway on SR 522, the project would include installing and connecting a new 12-inch-diameter storm sewer pipe, new catch basins and grates. Discharge and outfall locations of this TDA would not change.

Element Number	Existing	Proposed
10	This element overlaps with Bothell TDAs 1, 2 and 3. Within Bothell TDAs 1 and 3, stormwater flows north along the curb on both sides of SR 522 and enters catch basins. Stormwater crosses SR 522 west to east, convenes within a catch basin, and is directed through closed storm systems or pipes east to outfall into the Sammamish River. Within Bothell TDA 2, stormwater flows north along the curb on the west side of SR 522, enters catch basins, then crosses SR 522 through concrete storm pipe and enters a ditch that flows east to outfall to the Sammamish River. Stormwater within the roadway flows north on the west side of SR 522 and enters concrete storm pipe that directs it beneath SR 522 to the east to outfall to the Sammamish River wetland/riparian zone.	Stormwater improvements would include removing several existing storm structures and pipes; connecting new storm structures to existing storm structures; and installing solid and grated covers on existing and proposed structures, respectively. Types I and II catch basins would be installed. Discharge and outfall locations of this TDA would not change.
11	This element overlaps with Bothell TDA 4. Within Bothell TDA 4, stormwater enters catch basins on both sides of 185th Avenue NE, flowing west toward Bothell Way NE. Once reaching Bothell Way NE, stormwater continues to enter catch basins on both curb lines and flow south. Stormwater along 98th Avenue NE flows south, entering catch basins on both sides of the road. At SR 522, stormwater from 98th Avenue NE and Bothell Way NE convenes, and then leaves SR 522 to flow south through closed storm systems and outfalls into the Sammamish River.	Stormwater improvements would include connecting new storm structures to existing storm structures and installing grated covers on proposed structures. A Type I catch basin would be installed. Discharge and outfall locations of this TDA would not change.
12	This element overlaps with Bothell TDA 4 (see description under Element 11)	Stormwater improvements would include connecting new storm structures to existing storm structures and installing solid and grated covers on existing and proposed structures, respectively. Types I and II catch basins would be installed. Discharge and outfall locations of this TDA would not change.
13	This element overlaps with Bothell TDA 4 (see description under Element 11).	There are no proposed stormwater infrastructure changes at this location. Discharge and outfall locations of this TDA would not change.

Element Number	Existing	Proposed
14	This element overlaps with Bothell TDA 4 (see description under Element 11).	Stormwater improvements would include connecting new storm structures to existing storm structures and installing solid and grated covers to existing and proposed structures, respectively. Types I and II catch basins would be installed. Discharge and outfall locations of this TDA would not change.
15	This element overlaps with Bothell TDA 5. Within Bothell TDA 5, stormwater enters catch basins on both sides of Beardslee Boulevard and flows southwest. Stormwater also flows north via catch basins and closed storm pipe. These flows convene at Beardslee Boulevard/NE 185th Street and continue to flow west through storm pipe in the center of the road. On NE 185th Street, stormwater flows east via catch basins on both sides of the road. Stormwater from Beardslee Boulevard flows east to NE 185th Street. Off-site, stormwater leaves NE 185th Street and enters closed storm systems that convey it south to the Bothell Park-and-Ride garage and ultimately the Sammamish River.	Stormwater improvements would include installing a 4-inch-wide modular drainage system with 3-inch-diamater drainpipe to daylight underneath each platform. The project would involve installing and connecting a new 12-inch-diameter storm sewer pipe, and new catch basins, grates and metal covers at each platform. The westbound platform would have Types I and II catch basins and include the installation of a 24-inch-diameter storm sewer pipe. All of these upgrades would connect to the existing drainage system and be conveyed to the same discharge point for the current system.
16	This element overlaps with Bothell TDA 6. At Bothell TDA 6, stormwater enters catch basins on both sides of Beardslee Boulevard and flows northeast via closed storm pipe on the north side of road. Storm system conveys runoff south onto 110th Avenue NE, where it continues south onto the UW Bothell/Cascadia College campus. Then the storm system turns east, enters an existing detention vault and discharges into a tributary area/wetland associated with North Creek.	Stormwater improvements would include removal of existing structures and pipes. In the eastbound direction, activities would include installing and connecting new 12-inch-diameter and 18-inch-diameter storm sewer pipe; installing a 4-inch-wide modular drainage system with 3-inch-diamater drainpipe to daylight underneath the eastbound station; installing new catch basins (Types I and II), grates and metal covers; and constructing a 46-foot-long by 15-foot-wide by 7-foot-high detention vault. In the westbound direction, stormwater improvements would include connecting newly installed 18-inch-diameter storm sewer pipe to existing pipe and installing a Type II catch basin with a vaned grate. Discharge and outfall locations of this TDA would not change.

Element Number	Existing	Proposed
17	This element overlaps with Bothell TDA 7. At Bothell TDA 7, stormwater enters catch basins on both sides of Beardslee Boulevard and flows south, where it leaves the roadway and enters a detention vault. Upon leaving the vault, stormwater flows through a ditch to the south into a tributary area/wetland associated with North Creek. Runoff also flows north via storm pipe and catch basins on the south side of Beardslee Boulevard, then leaves the roadway and enters a ditch to the east that outfalls to a tributary area/wetland associated with North Creek.	Stormwater improvements would include installing a 4-inch-wide modular drainage system with 3-inch-diamater drainpipe to daylight underneath the eastbound station. At the eastbound platform, the project would involve installing and connecting a new 12-inch-diameter storm sewer pipe; and new catch basins (Type I for eastbound direction, and Types I and II for westbound direction), grates and metal covers. Discharge and outfall locations of this TDA would not change.

BMPs would be employed in accordance with the drainage manuals described at the beginning of this response. Based on information presented in response to Question B 1 g above, the project would result in approximately 2.7 acres of additional impervious surface. The source of runoff in this area is precipitation flowing off impervious surfaces such as the roadway, parking areas and other developed properties. Additional runoff would occur on the project site due to the increase in impervious surface.

B 3 c (2) Could waste materials enter ground or surface waters? If so, generally describe.

Waste materials are not likely to enter ground or surface waters. During construction, the contractor would use all known, available and reasonable source control BMPs, as described in response to Question B 1 f, to prevent spills from reaching storm drains or water bodies. Once the project is constructed, runoff would be managed as described in response to Question B 3 c (1).

B 3 c (3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Some drainage systems and patterns would be altered, as described in **Table B-7** (Estimated Amount of Vegetation Removal/Alteration). The final drainage outfall locations would not change from existing conditions.

B 3 d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

The proposed project would update the drainage system to account for components of the project constructed along the corridor, including stations, newly paved areas for lanes and sidewalks/shared-use paths, and garages. These drainage system updates would ensure that the drainage system along the corridor remains compliant with municipal stormwater codes, as well as WSDOT and Ecology stormwater regulations. Coordination with corridor cities is in process, and final drainage improvements would be confirmed in final design. As described in response to Question B 1 f, the contractor would be required to use all known, available and reasonable source control BMPs to prevent spills from reaching the storm drain during construction. No additional measures are anticipated to be needed.

B 4. Plants

B 4 a. Check the types of vegetation found on the site:

__x __deciduous tree: alder, maple, aspen, other

__x__ evergreen tree: fir, cedar, pine, other

__x__ shrubs

__x__ grass

_____ pasture

_____ crop or grain

_____ orchards, vineyards or other permanent crops.

__x__ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

__x__ water plants: water lily, eelgrass, milfoil, other

__x__ other types of vegetation

B 4 b. What kind and amount of vegetation will be removed or altered?

Various vegetation types are found along the project corridor. The project corridor is primarily a heavily developed urban corridor with patches of native vegetation mostly located in parks, road edges and protected critical areas. Below are brief descriptions of vegetation for each segment and jurisdiction, followed by information on what would likely be removed or altered.

Segment 1/Shoreline. Vegetation in Shoreline is largely limited to street landscaping that consists of a mixture of native and non-native trees and shrubs, as well as a mixture of native and ornamental vegetation in adjacent residential yards. Exceptions to this include several parcels with large stands of native vegetation, including at three parcels 670 430 0040, 663 290 0830 and 162 604 9047 (St. Joseph's Carmelite Monastery).

Segment 1/Seattle. The Seattle side of NE 145th Street is heavily developed, similar to the Shoreline side, and has similar vegetation. The only significant areas of native vegetation are located on Jackson Park Golf Course.

Segment 2/Lake Forest Park. Lake Forest Park supports more diverse vegetation types than Seattle or Shoreline. Large grass areas are present at Acacia Memorial Park (parcel number 162 604 9013). Native stands of mixed conifer-deciduous trees are present in riparian areas such as Bsche'tla Creek, McAleer Creek and Lyon Creek. Additionally, a mix of native and non-native vegetation is present along the Burke-Gilman Trail and in the relatively wide ROW along SR 522. Some large trees are present on both sides of SR 522 in various parcels.

Segment 3/Kenmore. Vegetation in Kenmore is relatively limited along the heavily developed SR 522 corridor and is dominated by native and ornamental landscaping. The exception is some large native trees within the Kenmore Metro park-and-ride lot (parcel number 011 410 0920), as well as significant areas of native upland and wetland vegetation associated with the Swamp Creek riparian corridor and its associated large wetland complex.

Segment 4/Bothell. Vegetation in Bothell is characterized mostly by ornamental and planted landscaping vegetation along SR 522 and in the densely developed downtown core. Large areas of native forest and shrub habitat are found at the Bothell Landing Park, on the slopes west of SR 522, and in the large wetland and stream complex associated with North Creek east of the UW Bothell campus.

The types of vegetation that may be removed or altered include deciduous trees, conifers, shrubs and landscape plants that exist along the project corridor. The number of shrubs and trees that would likely require removal or alteration are listed by segment and element in **Table B-8** (Estimated Amount of Vegetation Removal/Alteration). Approximate removals by jurisdiction are:

- Seattle: 60 shrubs, 50 deciduous trees, 10 conifers
- Shoreline: 90 shrubs, 21 deciduous trees, 31 conifers
- Lake Forest Park: 550 shrubs, 236 deciduous trees, 203 conifers
- Kenmore: 120 shrubs, 25 deciduous trees, 10 conifers
- Bothell: 450 shrubs, 104 deciduous trees, 37 conifers

Table B-8 Estimated Amount of Vegetation Removal/Alteration

Segment/Jurisdiction	Element Number	Estimated Amount of Vegetation to Be Removed or Altered		
		No. of Shrubs	No. of Deciduous Trees (6+ in. dbh)	No. of Conifers (6+ in. dbh)
1/Seattle	2	60	19	3
1/Seattle	3	2	29	7
1/Seattle	4	0	2	0
1/Shoreline	1	30	2	28
1/Shoreline	2	60	9	3
1/Shoreline	3	0	10	0
1/Shoreline	4	0	0	0
1/Lake Forest Park	4	2	0	0
2/Lake Forest Park	5	500	228	195
2/Lake Forest Park	6	50	8	8
3/Kenmore	7	20	4	0
3/Kenmore	8	1	2	0
3/Kenmore	9	100	19	10
4/Bothell	10	200	41	3
4/Bothell	11	0	5	0
4/Bothell	12	0	0	0
4/Bothell	13	0	0	0
4/Bothell	14	0	6	1
4/Bothell	15	40	13	12
4/Bothell	16	200	28	21
4/Bothell	17	10	11	0

Segments 1 and 2 estimates are based on the arborist survey. Segments 3 and 4 estimates are based on a desktop count using remote data and rounding. The acronym dbh means "diameter at breast height."

Some of the anticipated vegetation removal would occur within critical areas or their buffers, as described in **Appendix D** (Ecosystem Resources Technical Report).

B 4 c. List threatened and endangered species known to be on or near the site.

No plants of federal, state or local significance were mapped by an agency, or were identified during site visits. **Appendix D** (Ecosystem Resources Technical Report) contains a general characterization of wetlands, wetland buffers and stream corridors.

B 4 d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The proposed project is located in a heavily developed corridor with limited native vegetation. Remaining undeveloped areas are dominated by a mix of native and non-native plants. In many areas, invasive species dominate the vegetation. Vegetation would be removed only where necessary. Much of the vegetation that would be removed would be within existing planting strips and other landscaped areas. Wherever possible, retaining walls and other design components would be used to minimize property acquisitions and associated vegetation removal. Project design also minimizes vegetation (including tree) removal within the roadway ROW to the extent feasible.

Vegetation and landscaping would be provided within proposed planters or planting strips in Shoreline, Seattle, Lake Forest Park, Kenmore and Bothell. In addition, the project would install vegetation in a planting buffer adjacent to the proposed Bothell Park-and-Ride garage and potentially as part of surface treatments on exterior garages walls (Lake Forest Park, Kenmore and Bothell Park-and-Ride garages). Native plants would be used to the extent practicable in buffer areas, and in coordination with local native planting codes and Sound Transit policies. Sound Transit Design Criteria Section 10.4 requires that plant material selection be limited to native and adaptive plants suitable for the Northwest climate. New planting would comply with Section 10.4, including Section 10-10 Standard Plant List, of the Sound Transit Design Criteria. See **Appendix D** (Ecosystem Resources Technical Report) for more information. Tree alteration or removal would need to comply with the appropriate city's municipal code regarding tree protection and removal:

- Seattle: Tree and Vegetation Management in Public Places Ordinance (The Street Tree Ordinance) (Seattle Municipal Code 15.43)
- Shoreline: City of Shoreline Tree Regulations (Shoreline Municipal Code 20.50.290-370), Hazardous Trees (Shoreline Municipal Code 20.50.310(A)(1)(c))
- Lake Forest Park: Tree Canopy Preservation and Enhancement (Lake Forest Park Municipal Code 16.14)
- Kenmore: Tree Management and Protection (Kenmore Municipal Code 18.57)
- Bothell: Tree Retention and Landscaping (Bothell Municipal Code 12.18)

B 4 e. List all noxious weeds and invasive species known to be on or near the site.

Given the urban setting of the project, a wide variety of noxious weeds and invasive species are present on the project site. Some of the most common noxious plant species observed during site surveys include Himalayan blackberry, English ivy, reed canarygrass and Japanese knotweed. See **Appendix D** (Ecosystem Resources Technical Report) for more information.

B 5. Animals

B 5 a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Natural habitats near the project site are fragmented and isolated, interspersed with human development, often dominated by invasive plant species and not conducive to wildlife use. Habitat on the project site includes mixed conifer-hardwood forest, shrub-dominated areas, riparian corridors, lawns, streams and wetlands.

Beginning at the west end of the project corridor, a forest and riparian corridor exists along Littles Creek within Segment 1 (Seattle/Shoreline). The Jackson Park Golf Course, south of NE 145th Street provides grass, shrub and forest habitat. A small stand of second growth forest exists adjacent to NE 145th Street at the St. Joseph's Carmelite Monastery between 22nd Avenue NE and 23rd Avenue NE.

Habitat in Lake Forest Park includes a narrow and steep forested corridor along Bsche'tla Creek, open space at Acacia Memorial Park, and the narrow riparian corridors of McAleer Creek and Lyon Creek.

In Kenmore, habitat includes a narrow stand of forest associated with a ravine on the north side of SR 522 near the western city limit, a large intact riparian corridor along Swamp Creek with a large wetland complex north of the project site, and a large protected area south of SR 522 to the Sammamish River.

In Bothell, habitat includes a narrow band of upland forest on the steep slopes north of SR 522, and patches of upland forest, wetland and open space along the Sammamish River. A Category I wetland complex exists along North Creek on the UW Bothell/Cascadia College campus. See **Appendix D** (Ecosystems Resources Technical Report) for more detail.

Wildlife found in and around these remaining natural habitats typically includes species that have adapted to tolerate a high level of human activity and habitat disturbance, often referred to as "generalist" species. Herpetofauna species likely to occur in upland and riparian/wetland areas near the project site include species of reptiles (common garter snake, northwestern garter snake, western terrestrial garter snake, western fence lizard, northern alligator lizard, slider and painted turtle) and amphibians (long-toed salamander, northwestern salamander, pacific treefrog, red-legged tree frog and western redback salamander). Small mammals that could be found in and near the project site include rat, mouse, vole, raccoon, opossum, Eastern gray squirrel, skunk, bat species, beaver, coyotes, muskrat and river otter. Historically, large mammals such as deer, elk, black bear, mountain lion and coyote are native to the area. Red fox and other small mammals including snowshoe hare, porcupine and weasel were also present. None of these species are common in the study area in the present day due to the high level of human activity and development.

Bird species known to use the project corridor or that were observed on the project site include starling, spotted towhee, house sparrow, white-crowned sparrow, song sparrow, northern flicker, American robin, American crow, dark-eyed junco, black-capped chickadee and marsh wren. Waterfowl were observed in wetlands and rivers along the project corridor (mallards, buffleheads, Canada geese and common goldeneyes). Raptors expected to occur in and near the project site include red-tailed hawk, osprey and bald eagles. Bald eagles utilize the Lake Washington corridor for forage and nesting, and nests or communal roosts identified in or near the project site would be protected, per Kenmore Municipal Code (KMC) 18.55.530(A). No bald eagle nests were observed in or near the project site.

A great blue heron breeding colony is mapped by WDFW as PHS and by the City of Kenmore within the WKE-1 wetland complex.

See **Appendix D** (Ecosystem Resources Technical Report) for more information. Notable areas of wildlife habitat in and near the project sites are mapped in Figure 4-3 in **Appendix D**.

B 5 b. List any threatened and endangered species known to be on or near the site.

Appendix D (Ecosystem Resources Technical Report) lists special status species (including state and federal listed, sensitive, priority and local importance species) that may occur in the project corridor. With the exception of great blue herons at the great blue heron colony (Kenmore Heron Rookery), no wildlife are identified by WDFW as PHS within the project corridor. However, priority species such as pileated woodpecker would be expected to occur in any forest patches within the project corridor, such as the Paramount Open Space. The response to Question B 5 d addresses herons.

Three fish species or critical habitat as listed in the Endangered Species Act are known to occur within the project corridor: Puget Sound Chinook, Puget Sound steelhead and Puget Sound bull trout, all of which are listed as threatened and inhabit portions of McAleer and Lyon creeks (Segment 2) and Swamp Creek (Segment 3); the Sammamish River; and Lake Washington. Portions of these water bodies cross the project corridor. Bull trout is very rare in the Lake Washington watershed. Only a few isolated records of bull trout and/or Dolly Varden, which is similar in appearance, have been observed in the last decade and are, therefore, not expected to occur in water bodies near the project site. Fall Chinook are documented to occur within Lyon Creek and McAleer Creek (Segment 2), but in very low numbers. It is also possible that juvenile Chinook could rear in the lower reaches of these streams, as well as in Horse Creek in Segment 4/Bothell. Similarly, winter steelhead are known to occur in Lyon and McAleer creeks and could occur in the lower reach of Cat Whisker Creek (Segment 3) or Horse Creek (Segment 4). Swamp Creek (Segment 3) also supports both Chinook and steelhead.

Critical habitat is designated for both steelhead and Chinook in Puget Sound and the Lake Washington and Sammamish River basins, including Lake Washington proper and the Cedar River. The Magnuson-Stevens Act protects Essential Fish Habitat (EFH) for federally managed species of Pacific salmon. Specifically, this includes Chinook salmon, pink salmon and coho salmon. EFH includes “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” Chinook and coho are present within portions of the corridor. Pink salmon are not mapped along the corridor. Chinook and coho are mapped in Lake Washington; Bsche’tla, McAleer and Lyon creeks (Segment 2); and Swamp Creek (Segment 3).

B 5 c. Is the site part of a migration route? If so, explain.

The project occurs within the Pacific Flyway, a migratory corridor consisting of the western coastal areas of South, Central and North America. Wetlands, lakes and vegetated areas in the project vicinity serve as foraging or resting grounds for migratory and resident bird species. Streams discussed in response to Question B 5 b that support listed anadromous fishes are also migration routes for those fish species.

B 5 d. Proposed measures to preserve or enhance wildlife, if any:

A Draft Habitat Management Plan (HMP) has been prepared for the Kenmore Heron Rookery adjacent to the Kenmore park-and-ride lot. Potential mitigation measures to reduce impacts to the heron colony in Kenmore (including those from noise) are listed in Section 9 of the Great Blue Heron Colony Draft Habitat Management Plan, which is included in **Appendix D**

(Ecosystem Resources Technical Report). This Draft HMP was developed with input from WDFW and the City of Kenmore to assist in early site layout and planning efforts, and to help understand the needs of and potential risks to the herons. The proposed site layout includes limiting use of an existing site access road (NE 181st Street) to help avoid an increased intensity of human use nearest the colony. The potential mitigation measures in the Draft HMP include the following:

- Avoid construction traffic (particularly heavy trucks) on the north access road
- Use artificial screening (temporary walls or sheeting) to block lights, noise and disturbance during construction
- Conduct any pile installation (whether impact driving or vibratory) that may be required outside of the nesting season
- Maximize retention of vegetation, particularly mature trees, at the park-and-ride lot, to maintain screening and foraging and roosting habitat
- Improve vegetative screening by planting native trees and shrubs wherever possible around the periphery of the new park-and-ride garage
- Establish and maintain a native vegetation buffer of 900 feet from the outermost nest tree per KMC 18.55.530(B)
- Orient the garage and/or incorporate structural screening features into the garage to limit noise and light spillage toward the rookery

Sound Transit would prepare a Final HMP and would consult with WDFW and the City of Kenmore to identify and confirm all final avoidance and minimization measures.

B 5 e. List any invasive animal species known to be on or near the site.

Invasive animal species known or expected to occur on the project site include Eastern gray squirrel, house sparrow, European starling, American bullfrog and domestic pets that have become feral. New Zealand mudsnails have been reported to occur in McAleer Creek.

B 6. Energy and Natural Resources

B 6 a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The project would require electricity for lighting and power for electronics such as signage, ticket vending machines and security cameras at stations and park-and-ride garages. Electricity would likely be used to power street lighting and traffic signals along areas of road and intersection improvements. Use of photovoltaic (solar) panels at the proposed parking garages is also possible.

The bus fleet serving this BRT service would use both diesel fuel and electricity to operate. Of the 12 new buses that would operate to initiate BRT service, 10 buses would operate with battery electric propulsion, and 2 buses would operate with diesel hybrid propulsion. The State of Washington’s primary electricity source is hydroelectric power, followed by natural gas-fired power (EIA 2020).

B 6 b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The transit stations, roadway improvements and bus service would not affect the potential use of solar energy by adjacent properties. Proposed park-and-ride garage locations and potential heights were reviewed, and no impact to solar energy generation or use by adjacent properties was identified.

B 6 c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

The use of primarily BEB vehicle types on this project route would avoid the use of petroleum fuel supplies. Both the diesel hybrid and BEB buses used for this BRT project would have rheostatic (regenerative) braking, an energy recovery mechanism that would slow the bus by converting kinetic energy back into a form that can be captured by the onboard batteries for reuse.

Specific features to enhance sustainability and maximize energy conservation for the project elements would be determined as design progresses. Sound Transit follows the Seattle Energy Code and employs a sustainability checklist to evaluate opportunities for sustainable design measures for each project component. For project components that require building permits from local jurisdictions, Sound Transit would also comply with required building codes, including those related to energy conservation. For proposed park-and-ride garages, additional features may include design and construction for future photovoltaics and electric vehicle charging infrastructure.

All efforts that Sound Transit would undertake to minimize air pollutants and GHG emissions during construction have the benefit of reducing energy use. In addition, once constructed, the project would provide improved transit service in the area, which is anticipated to increase transit ridership and reduce single-occupancy vehicles in the corridor, and thereby is expected to reduce energy consumption.

B 7. Environmental Health

B 7 a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

During construction, there is potential to encounter hazardous materials from contaminated soils or water. Sources of contamination could involve areas within the project limits or adjoining properties, either of which could result in risks of exposure to toxic chemicals. Review of environmental regulatory-listed properties indicates that the likelihood of encountering contamination is greatest in the vicinity of properties considered to be moderate or high risk impact sites, as noted in **Appendix C** (Air Quality Technical Report) and further discussed in the response to Question B 7 a (1) below. Potential also exists for the accidental release of hazardous materials to the environment, either by construction activities in locations where hazardous materials already exist, or from release of hazardous materials utilized during construction. Encountering or accidental release of hazardous materials during construction could result in near-term risks to human health or the environment, or could create potential long-term liabilities. The most likely types of hazardous materials that could potentially be encountered during construction include petroleum hydrocarbons, metals, solvents and pesticides.

Unintentional releases of hazardous materials utilized during the construction process can occur from the improper handling, transfer and storage of fuels; spills that occur during refueling of equipment; or heavy equipment malfunction (e.g., hydraulic or fuel line ruptures). Waste materials from heavy equipment, such as oil and grease, have the potential to enter stormwater runoff from the project site. Contaminated stormwater runoff has the potential to affect soil or groundwater, particularly where impermeable surfaces are not present. Hazardous materials including paints, acids for cleaning, solvents, raw concrete and concrete-curing compounds, could be utilized during construction activities and may enter the environment if not managed correctly. In addition, heavy construction equipment or vehicles could potentially track and spread contaminated soils off-site, unless properly managed. The response to Question B 7 a (3) below provides information on potential hazardous material or waste exposure. If not contained or properly managed, any spills or releases of hazardous materials could reach local surface waters or groundwaters, with potential for hazards to human health and the environment. Overall, the potential for these types of hazards to occur would be minimized or avoided with BMPs and the safety measures that would be implemented, as discussed in the response to Question B 7 a (5) below.

Risk of fire or explosion is extremely unlikely, but fire or explosion could theoretically occur in the event of unanticipated utility interactions, such as damaged power lines interacting with flammable materials, such as oil or gasoline.

Operation and maintenance of the project are not expected to generate environmental health hazards. Hazardous materials could be released into the environment unintentionally if accidental spills of fuel or vehicle fluids from buses, vehicles parked in garages or maintenance vehicles occurred. Maintenance work or equipment malfunction such as fluid refills, leaking fluids, or hydraulic or fuel line ruptures could involve spills of fuels, lubricants, solvents etc., which could potentially migrate to surface water, soil or groundwater via stormwater drainage infrastructure. However, most or all of the maintenance activities for the BRT buses would occur at Bus Base North, not at the park-and-ride garages or along the route. Maintenance of the garages themselves could involve paints, acids for cleaning, solvents, raw concrete and concrete-curing compounds. Because of Sound Transit's operational BMPs, described below in response to Question B 7 a (5), no long-term adverse effects are anticipated with regard to project operation and maintenance.

B 7 a (1) Describe any known or possible contamination at the site from present or past uses.

The potential for presence of contamination from current or historical property uses is summarized below. A hazardous materials analysis of the project was completed in 2019 and documented in the *Draft Hazardous Materials Analysis* (HWA 2019). As part of this analysis, Environmental Data Resources, Inc. (EDR) compiled information from national, state and local regulatory databases, resulting in a database report for the project corridor that lists specific properties where known or suspected adverse environmental conditions might exist and locations where past adverse environmental conditions may have existed. The database report was assessed to locate known or suspected contamination on or adjacent to the project site. In addition, site reconnaissance and review of historical documents were conducted to further identify potential sources of contamination not listed in the EDR database report. Evidence of potentially hazardous material conditions involving soil or groundwater of properties along the project corridor was identified in the *Draft Hazardous Materials Analysis* (HWA 2019). Of the 513 regulatory-listed properties identified on multiple regulatory databases, the 19 properties considered moderate impact and the 10 properties considered high impact are anticipated to either pose a risk of contamination being encountered during construction of any subsurface

improvements in those areas, or create potential liability through property acquisition. **Attachment C** (Properties with High or Moderate Hazardous Materials Risk) lists properties considered to be potentially of high or moderate impact to the project.

Research documented in a *Technical Memorandum: Draft Hazardous Materials Analysis* (HWA 2018) was completed for the three park-and-ride garage locations. The 2018 and 2019 hazardous material analysis reports identified a dry-cleaning facility that was previously located northwest of the proposed Lake Forest Park Town Center Park-and-Ride garage. The location of this former dry-cleaning facility relative to the footprint of the proposed garage places the north portion of the garage at an approximate cross-gradient location (approximately perpendicular to the flow of groundwater) and the south portion of the garage as down-gradient (within the direction of the flow of groundwater) from the former facility. Documentation related to this former dry-cleaning facility indicates that adverse environmental impacts have resulted from its prior operations. Soils previously contaminated with halogenated organics from this dry cleaner have been reportedly remediated but are confirmed to remain above cleanup levels in groundwater at the Lake Forest Park Town Center property. Groundwater contamination from this former dry-cleaning facility has a high potential to have migrated to portions of the park-and-ride garage site.

From review of historical aerial photographs dating from 1952 to 1977, it appears a gasoline station may have been located in the southern portion of the Kenmore Park-and-Ride garage location. Although a former gasoline station was not identified on any regulatory databases, one may have existed on this portion of the Kenmore Park-and-Ride garage location. If such a facility did exist there, it may have resulted in the release of contaminants, which may have entered the soil and/or groundwater. Contaminants typically associated with gas stations include petroleum hydrocarbons, solvents and metals. In addition, a historical lumberyard northwest and adjacent to the park-and-ride (no longer in operation) was identified during review of reverse city directories dating from 1972 to 2000. Although this historical lumberyard was not identified on any regulatory databases, the property may contain contaminants associated with the historical land use, including petroleum hydrocarbons and metals. Potential groundwater contamination from the historical lumberyard has a moderate potential to have migrated to the proposed Kenmore Park-and-Ride garage site.

The Bothell Park-and-Ride garage site is a regulatory-listed property (included in **Attachment C** (Properties with High or Moderate Hazardous Materials Risk)). Designated as a high impact property, it has known impacts due to soil and groundwater contamination. This site was previously used as the Northshore School District bus maintenance facility and has known residual impacts to groundwater from petroleum hydrocarbons (diesel-range total petroleum hydrocarbons and oil-range total petroleum hydrocarbons), and potential residual soil impact areas.

B 7 a (2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

Hazardous chemicals or conditions that could affect project development and design include those discussed in response to Question B 7 a (1), above. The known and suspected contamination described in response to Question B 7 a (1) would be assessed before or during construction. If project construction involves these properties, design measures would be implemented to prevent unintentional alteration of contaminant migration pathways. The project design also would include specifications for handling of impacted soil and groundwater and for ongoing monitoring, as needed. Project design could also include engineering controls such as vapor intrusion mitigation and/or monitoring. Sound Transit would conduct due diligence, where

needed, on properties it plans to acquire as part of this project. Sound Transit would complete environmental site assessments, especially for property acquisitions in areas where known contamination has been identified on or adjacent to the project site. The contaminants with highest probability to be associated with the historical or current property uses on the garage sites include metals, solvents and petroleum hydrocarbons. Activities specific to the Bothell Park-and-Ride garage location are discussed below in response to Question B 7 a (5).

An underground hazardous liquid or gas transmission pipeline (owned and operated by Olympic Pipeline Company) runs north-south and crosses underneath SR 522 approximately 0.5 mile east of its interchange with I-405. The project does not extend east of I-405, so this pipeline is not expected to affect or be affected by project design, construction or operation.

B 7 a (3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

During construction, vehicles may be refueled or maintained on-site, creating the potential for spills due to the storage and use of potentially toxic or hazardous chemicals. Storage and on-site transfer of petroleum products, oil or grease could occur. Heavy equipment malfunctions, such as hydraulic or fuel line ruptures, could occur. Hazardous materials, including but not limited to paints, acids for cleaning, solvents, raw concrete and concrete-curing compounds, would likely be used during construction activities. Construction equipment or vehicles could potentially track and spread contaminated soils off-site, unless properly managed.

During demolition of buildings, the possibility exists of encountering: (1) lead-based paint (LBP) in buildings constructed before 1978 (year the United States enacted a ban on LBP), or (2) asbestos-containing building materials (ACBM) in buildings constructed before 1989 (the year EPA issued a full ban on ACBM). The possibility also exists that LBP and ACBM could be encountered in younger buildings if contractors continued to utilize LBP and ACBM after the ban of these products. To determine whether LBP or ACBM are present in buildings, an LBP/ACBM survey would be conducted prior to demolition. For buildings where LBP or ACBM have been identified or suspected, a proper abatement plan should be completed before demolition.

No toxic or hazardous chemicals would be stored, used or produced on the project site during project operation. Vehicle maintenance would not occur at the park-and-ride garages or along the route.

B 7 a (4) Describe special emergency services that might be required.

No special emergency services are expected to be required as a result of project construction or operation. Material storage areas would be secured by fencing or a similar method during construction. During operations, none of the project components would have security fencing or other infrastructure that would complicate emergency service access, and no hazardous materials would be stored that might require specialized fire response. In accordance with National Fire Protection Association 13 (edition 2013), International Fire Code 903 (edition 2018), and current local municipal codes, the three proposed park-and-ride garage structures would be properly equipped with sprinklers and standpipes for firefighting purposes. A minimum of one standpipe also would be installed for use during construction.

B 7 a (5) Proposed measures to reduce or control environmental health hazards, if any:

Sound Transit would reduce the potential for environmental health hazards associated with hazardous materials by following due diligence processes that would evaluate and, as necessary, mitigate potential impacts identified. Sound Transit would conduct due diligence, where needed, on properties it plans to acquire as part of this project. Sound Transit would complete environmental site assessments, especially for property acquisitions in areas where known contamination has been identified on or adjacent to the project site.

The project is subject to Sound Transit's safety and security certification process, which includes an evaluation of hazardous materials used during construction, testing and commissioning of facilities, as well as ongoing operations. Sound Transit has a policy to meet or exceed federal safety and security process requirements on all projects, which includes measures for controlling hazardous material usage during construction as well as during operation and maintenance of the project.

During construction, contractors would be required to comply with all applicable health and safety regulations, including State of Washington Department of Labor and Industries General Occupational Health Standards, Chapter 296-62 Washington Administrative Code (WAC), and General Safety and Health Standards, Chapter 296-24 WAC. Project construction specifications would include all existing site assessment data and health and safety requirements. Before the start of construction, the contractor would be required to:

- Institute a corporate health and safety program; when required based on site conditions, utilize workers who are trained in hazardous waste site health and safety issues in accordance with 29 Code of Federal Regulations (CFR) 1910.120 of the Federal Register and Chapter 296-62 of the WAC; and also supply personal protective equipment for employees as needed.

- Identify hazards and develop and implement an appropriate project-specific Health and Safety Plan for all activities involving contaminated materials (the Health and Safety Plan should include information on potential hazardous materials that may be encountered, the appropriate personal protective equipment to be used, worker safety procedures for handling of media and hazardous materials, exclusion zone procedures, and training or certification requirements for workers).

- Follow procedures and requirements for implementing BMPs for stormwater and erosion control. The TESCP described in response to Question B 1 f would identify BMPs to be used during construction to prevent or minimize stormwater transport of potential contaminants to surface water or groundwater.

- Develop and implement a Spill Plan to address the use, handling, storage and disposal of hazardous materials that could be used during construction, and prevention of and response to potential releases of hazardous materials used or encountered during project staging and construction. During construction, all potentially hazardous construction materials used would be handled and stored in accordance with state and federal hazardous materials handling requirements, and in accordance with the Spill Plan. The Spill Plan would comply with the Model Toxics Control Act Cleanup Regulation (WAC 173 340) to minimize human exposure and to provide for the proper removal and treatment or disposal of contaminated materials in soils or groundwater.

- Develop a contaminated media management plan and project specifications that outline proper testing, handling, transfer and disposal of any contaminated soil or water encountered during project construction. Project specifications may include WSDOT Standard Specifications, general special provisions or project-specific special provisions if needed. Typically, special provisions are added to the construction contract when contamination is predicted but not known. Special provisions are used for known contamination. These specifications inform the contractor of known or potential contaminants, and the investigative reports are made available for the contractor's review.

During construction, the contractor would be required to follow Ecology's Underground Storage Tank (UST) reporting and removal regulations, if abandoned or unreported regulated USTs are encountered. Accordingly, such USTs would be removed or protected and maintained (if allowed and feasible). During operation, if abandoned USTs are encountered at any site, Sound Transit would follow applicable regulations from Ecology on UST reporting and removal.

During excavation, appropriate health and safety measures would be required where contaminated soils, sediment, surface water or groundwater could be present, including measures such as the following where appropriate:

- Preparing a site-specific health and safety plan specific to the potentially contaminated area where excavation would occur
- Monitoring air quality
- Using protective and decontamination measures
- Providing worker training and certification
- Reviewing the available environmental data for the site and inspecting the site to identify potential hazards that could pose risks for workers
- Conducting visual and olfactory screening of soils and groundwater for indications of contamination
- If suspect soils or groundwater are encountered, or where work is conducted in areas of known contamination, performing sampling and laboratory analysis to characterize the materials for proper management, handling and disposal in accordance with the Spill Plan

Before start of any proposed building demolition, Sound Transit would conduct appropriate surveys for LBP and ACBM before their removal. Sound Transit would also evaluate electrical components for the presence of equipment containing polychlorinated biphenyls or mercury. If these materials are identified prior to demolition, Sound Transit would remove and dispose of them in accordance with regulations.

Throughout project construction, procedures would be implemented to identify, characterize, manage, handle, store and dispose of contaminated soil and groundwater that are encountered. If unanticipated soil or groundwater contamination are encountered, remediation of those materials would occur as needed and in coordination with Ecology. The Spill Plan mentioned above would include developing protocol and selecting areas for field screening, sampling and laboratory analysis based on the evaluation of adjoining known contaminated sites.

The Bothell Park-and-Ride garage location and the Lake Forest Park Park-and-Ride garage location have environmental issues related to soil and groundwater contamination that PLIA/Ecology have determined either need further remedial action or are undergoing

environmental monitoring. Because construction would occur at these properties, Sound Transit would include design measures to prevent unintentional alteration of contaminant migration pathways (e.g., use of utility trenches with permeable backfill and check dams installed below the groundwater table at selected intervals or down-gradient of known or encountered contamination). As described in general above, construction at these two specific properties would include specifications for handling impacted soil and groundwater, and for ongoing monitoring, as needed. Sound Transit may need to coordinate with City of Bothell, City of Lake Forest Park, PLIA and/or Ecology to ensure compliance with any institutional controls (environmental covenants) on the property. Project design may also require engineering controls such as vapor intrusion prevention or monitoring, or both. The elimination of hazardous or contaminated materials during construction would reduce potential future adverse effects to human health and the environment from exposure at those locations or from potential future migration of contamination through groundwater or surface waters.

B 7 b. Noise

B 7 b (1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The project corridor is an established major arterial route with high levels of existing traffic. Noise sources other than traffic include general commercial and light industrial activities, unrelated construction and miscellaneous residential activities. These noise levels would not affect the project. See **Appendix E** (Noise and Vibration Technical Report) for more information.

B 7 b (2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

In the short term, noise would occur due to construction. Construction is expected to occur mainly during daytime hours, although some limited night work is possible due to the high traffic volumes on this corridor. Most work would occur at contained locations near specific intersections; therefore, most construction would likely require only partial lane closures. No significant construction noise impacts are anticipated to occur with the project.

Operational noise over the long term would include noise from the new fleet of BRT buses, which includes 10 BEBs and 2 diesel hybrid propulsion buses, along with engine shrouds and other noise control systems included with most modern fleets of buses. The change in noise levels at modeled noise receivers with the project would range from -1 dB to +1 dB, a change not discernible to most people. The change in noise levels would be small due to the mostly electric fleet of buses and the high existing noise levels along the corridor. Using BEBs for this project would benefit noise receivers near the bus stops, stop signs and signal intersections, because the electric propulsion on a BEB can be approximately 10 dB quieter than a comparable diesel bus. In some locations, slight realignment of the roadway could result in a slight decrease in total noise, resulting in the -1 dB reduction projected by the noise analysis conducted for the project.

A noise analysis of the three proposed park-and-ride garages was also performed. Results of the analysis were compared to the Federal Transit Administration's noise criteria as well as to each local jurisdiction's noise control code. The analysis identified no noise impacts related to the park-and-ride garages, due in part to the limited vehicle capacity of each garage (300 stalls) and the noise reduction provided by the walls of the park-and-ride garage structures.
See **Appendix E** (Noise and Vibration Technical Report) for more information.

The potential for noise to impact the great blue herons using the rookery adjacent to the proposed Kenmore Park-and-Ride garage location is discussed in response to Question B 5 d and in the Habitat Management Plan for the heron rookery.

B 7 b (3) Proposed measures to reduce or control noise impacts, if any:

The construction of the proposed project and operation of the new park-and-ride garages would comply with the appropriate municipal codes for Seattle, Shoreline, Lake Forest Park, Kenmore and Bothell. Municipal code noise regulations typically relate to limiting noise levels from construction during nighttime hours. In most cases, daytime construction noise is exempt from municipal codes. **Appendix E** (Noise and Vibration Technical Report) contains construction-related noise regulations for each jurisdiction along the project corridor. Mitigation for construction would be based on the local jurisdictional requirements.

Sound Transit would require the contractor to develop (before construction) a Noise and Vibration Control Plan that would include best practices to reduce construction-related noise at nearby properties and would require adherence to all local noise control ordinance and regulations. Any potential nighttime or weekend construction could require a noise variance from appropriate jurisdictions. The contractor would have the flexibility of prohibiting certain noise-generating activities during nighttime hours, providing additional noise control measures to meet noise limits, or seeking a variance. Sound Transit would encourage its contractors to undertake the following types of measures as needed to avoid or abate construction noise:

- Install construction site sound walls for work adjacent to noise-sensitive receivers
- During nighttime work, use smart backup alarms that automatically adjust or lower the alarm level or tone based on the background noise level
- Use low-noise emission equipment
- Implement noise-deadening measures for truck loading and operations
- Conduct monitoring and maintenance of equipment to meet noise limits
- Use sound-deadening material to line or cover storage bins, conveyors and chutes
- Use acoustic enclosures, shields or shrouds for equipment and facilities
- Prohibit or limit the use of jack-hammering during nighttime hours
- Minimize the use of generators or use quiet generators to power equipment

The project noise analysis did not identify any long-term operational noise impacts or traffic noise impacts; therefore, no operational noise mitigation is proposed.

B 8. Land and Shoreline Use

B 8 a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Although the project would be consistent with land use plans along the corridor (see response to Question B 8 f) and would therefore not have a negative land use impact, the current design of the project would affect existing uses on some adjacent properties. In some locations, the

project footprint would extend into private property, requiring full or partial parcel acquisition, permanent easements or temporary easements for construction. Advanced project design would determine the final property acquisition needs.

Table B-9 (Existing Land Uses Along the Project Corridor) describes the existing land uses on and adjacent to the project site, by element, including adjacent uses such as residential, recreational, utilities, services, restaurants, retail sales, wholesale sales, storage facilities, churches, a preschool and UW Bothell/Cascadia College, parking, a fire station and vacant area. Land use types that would experience full or partial acquisition or permanent easement include residential (single-family and multifamily), office, services (health care, restaurant, automotive, gas station, car rental, library), retail sales, parking, open space (rookery, park, or trail), city government, a fire station, and vacant. Approximately 1.1 acre of residential land (on 55 parcels) and 6.7 acres of commercial land (on 82 parcels) would be converted to transportation use through the acquisition process. The project would require full acquisition of 3 parcels (including 1 vacant parcel) and partial acquisitions at 134 parcels. **Attachment B** (Property Acquisitions) lists parcels that would be fully or partially acquired.

Table B-9 Existing Land Uses Along the Project Corridor

Element Number	Jurisdiction	Existing Land Uses on and Adjacent to Project Site
1	Shoreline	Transportation, Single-Family Residential, Retail (including restaurant), Office, Services
2	Seattle	Transportation, Multifamily Residential, Retail (including restaurant), Services
2	Shoreline	Transportation, Single-Family Residential, Retail (including restaurant), Office, Services
3	Seattle	Transportation, Services
3	Shoreline	Transportation, Multifamily Residential
4	Seattle	Transportation, Retail (including restaurant)
4	Shoreline	Transportation, Retail (including restaurant)
4	Lake Forest Park	Transportation, Retail (including restaurant)
5	Lake Forest Park	Transportation, Retail (including restaurant), Services, Office (Lake Forest Park Town Center), Multifamily Residential, Single-Family Residential
6	Lake Forest Park	Transportation, Services, Retail (including restaurant), Office
7	Kenmore	Transportation, Services, Retail (including restaurant),
8	Kenmore	Transportation, Services, Recreation (Burke-Gilman Trail)
9	Kenmore	Transportation, Retail (including restaurant), Office, Recreation (Burke-Gilman Trail), Metro Kenmore park-and-ride lot
10	Bothell	Transportation, Services, Retail (including restaurant), Office, School, Open Space
11	Bothell	Transportation, Library, Single-Family Residential, Multifamily Residential
12	Bothell	Transportation, Services, Retail (including restaurant), Multifamily Residential
13	Bothell	Transportation, Services, Office (including Government), Multifamily Residential
14	Bothell	Transportation, Church, Services, Office, Multifamily Residential, Single-Family Residential
15	Bothell	Transportation, Services, Office, Multifamily Residential, Single-Family Residential
16	Bothell	Transportation, Services (including Fire Station), Multifamily Residential, Single-Family Residential, School
17	Bothell	Transportation, Services, Retail (including restaurant), Office, Multifamily Residential, Single-Family Residential, Open Space

The project would require full acquisition of 3 commercial properties (1 that is currently vacant), partial acquisitions of 134 parcels, as listed by segment and jurisdiction in **Table B-10** (Acquisition) and shown in **Figure B-1** (Acquisitions and Community Facilities). The three parcels Sound Transit expects to fully acquire include two commercial parcels located at the southeast intersection of NE 145th Street and 15th Avenue NE in Seattle (parcel numbers 663 230 280 and 663 230 282) and one vacant parcel in Bothell in the southwest quadrant of 98th Avenue NE and Pop Keeney Way (parcel number 072 605 9498). Temporary construction easements would be requested in some locations along the project corridor. The need for property acquisition or easements may be refined during final design.

Table B-10 Acquisition

Element No.	Jurisdiction	No. of Full Acquisitions	No. of Partial Acquisitions
1	Shoreline	0	10
2	Seattle	2	9
2	Shoreline	0	11
3	Seattle	0	1
3	Shoreline	0	1
4	Seattle	0	0
4	Shoreline	0	1
4	Lake Forest Park	0	1
5	Lake Forest Park	0	58
6	Lake Forest Park	0	3
7	Kenmore	0	2
8	Kenmore	0	4
9	Kenmore	0	3
10	Bothell	0	7
11	Bothell	0	1
12	Bothell	1	0
13	Bothell	0	0
14	Bothell	0	3
15	Bothell	0	8
16	Bothell	0	8
17	Bothell	0	3
Total	-	3	134

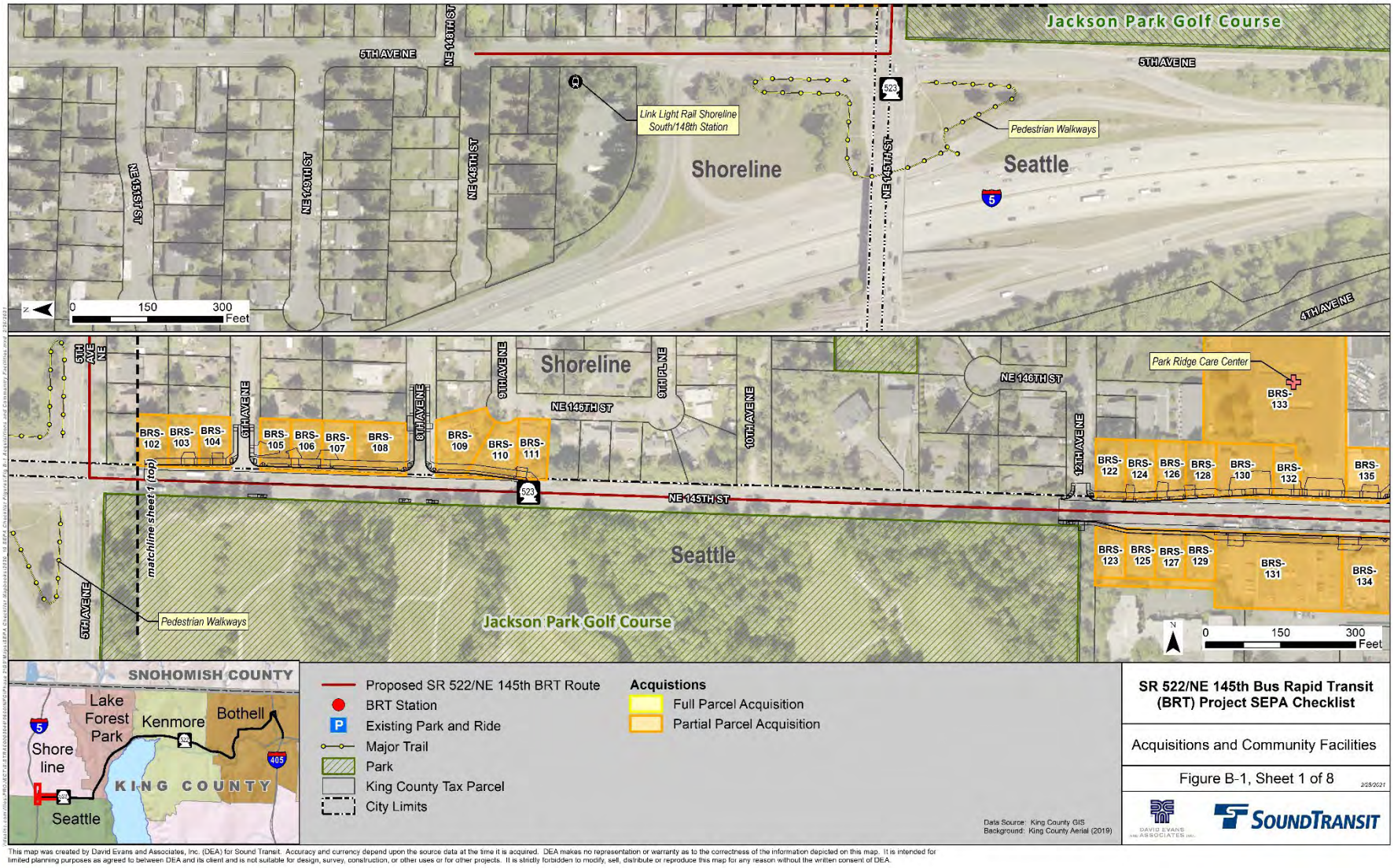


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Figure B-1, sheet 1 of 8 Acquisitions and Community Facilities

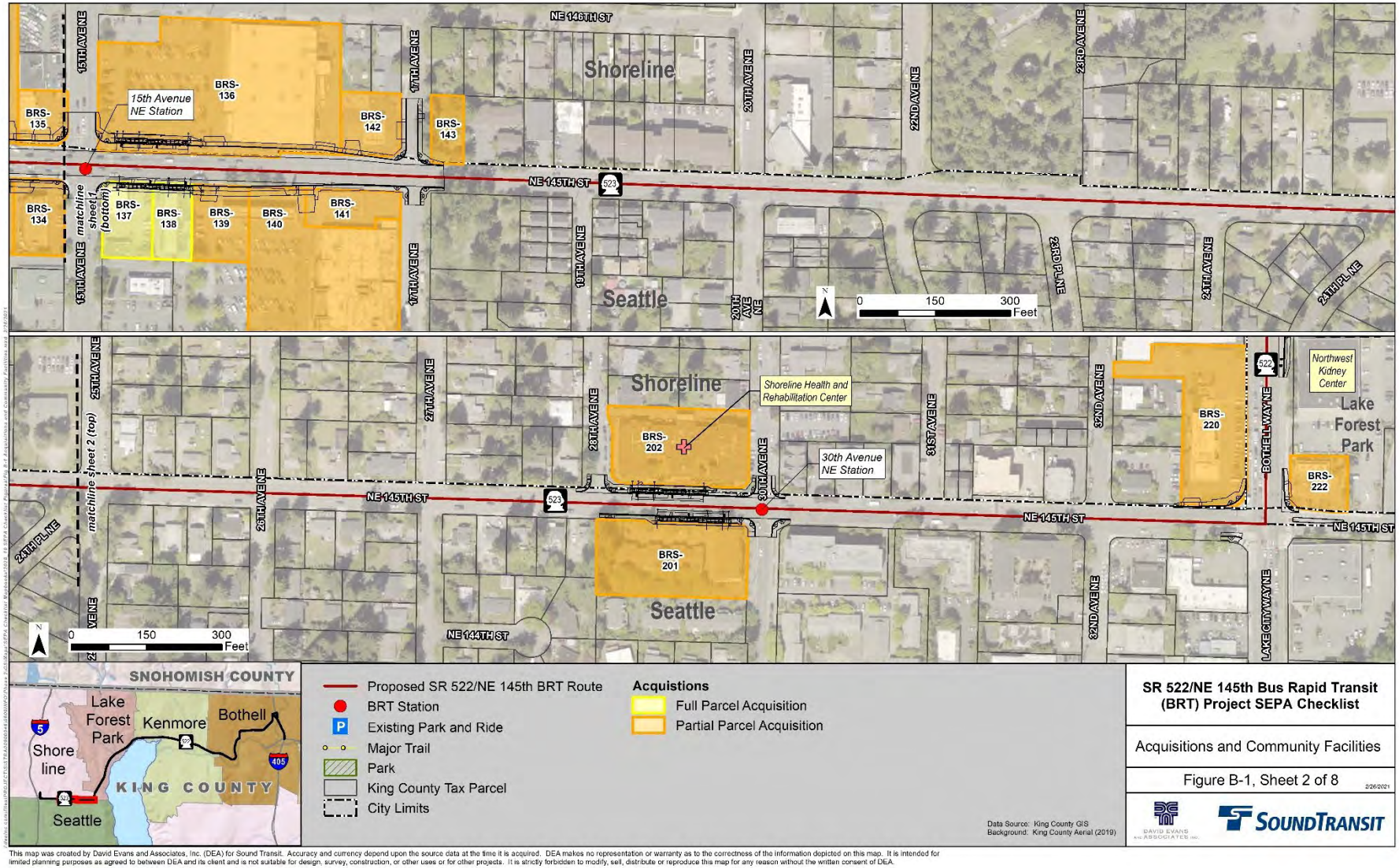

Figure B-1, sheet 2 of 8 Acquisitions and Community Facilities

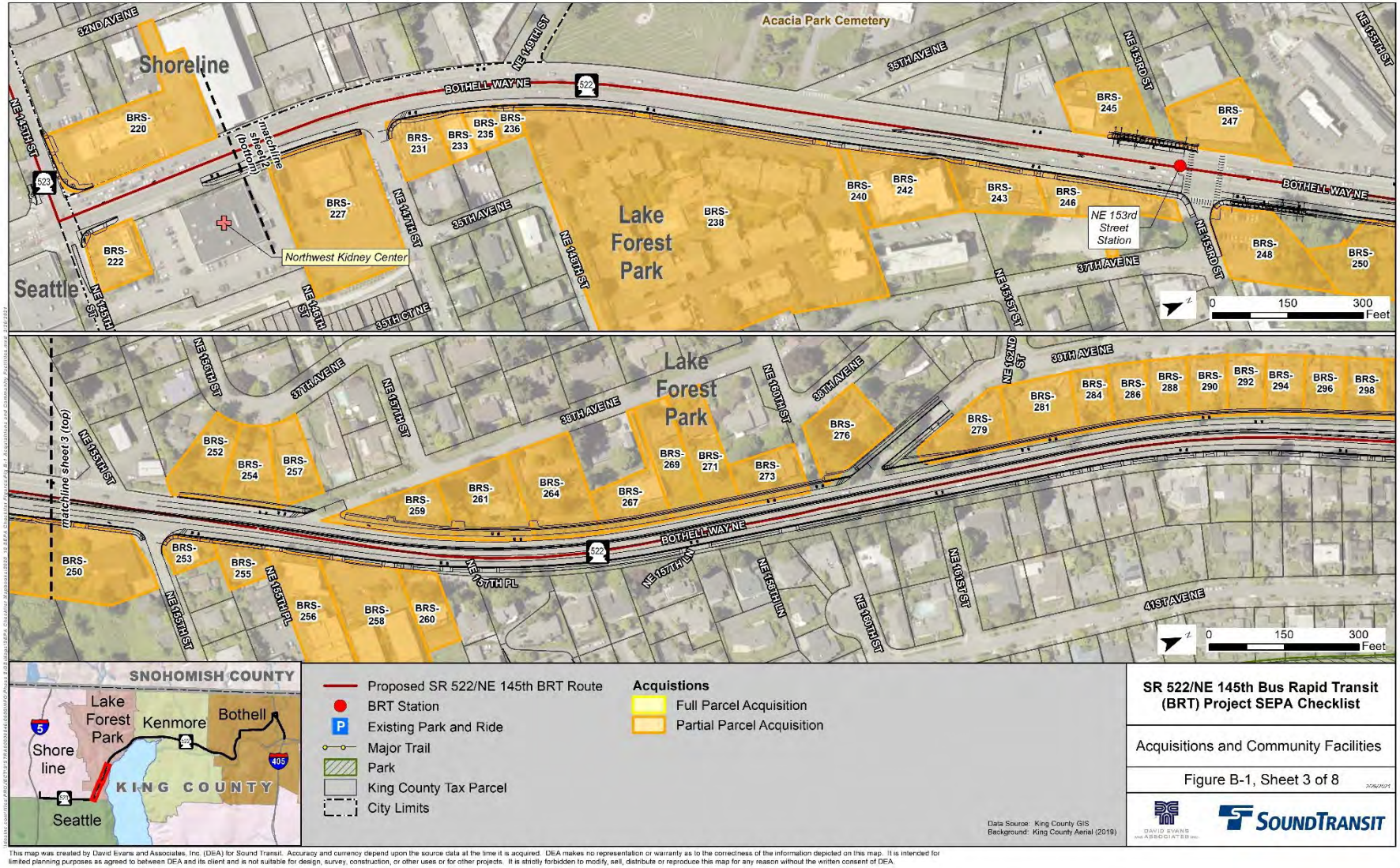

Figure B-1, sheet 3 of 8 Acquisitions and Community Facilities

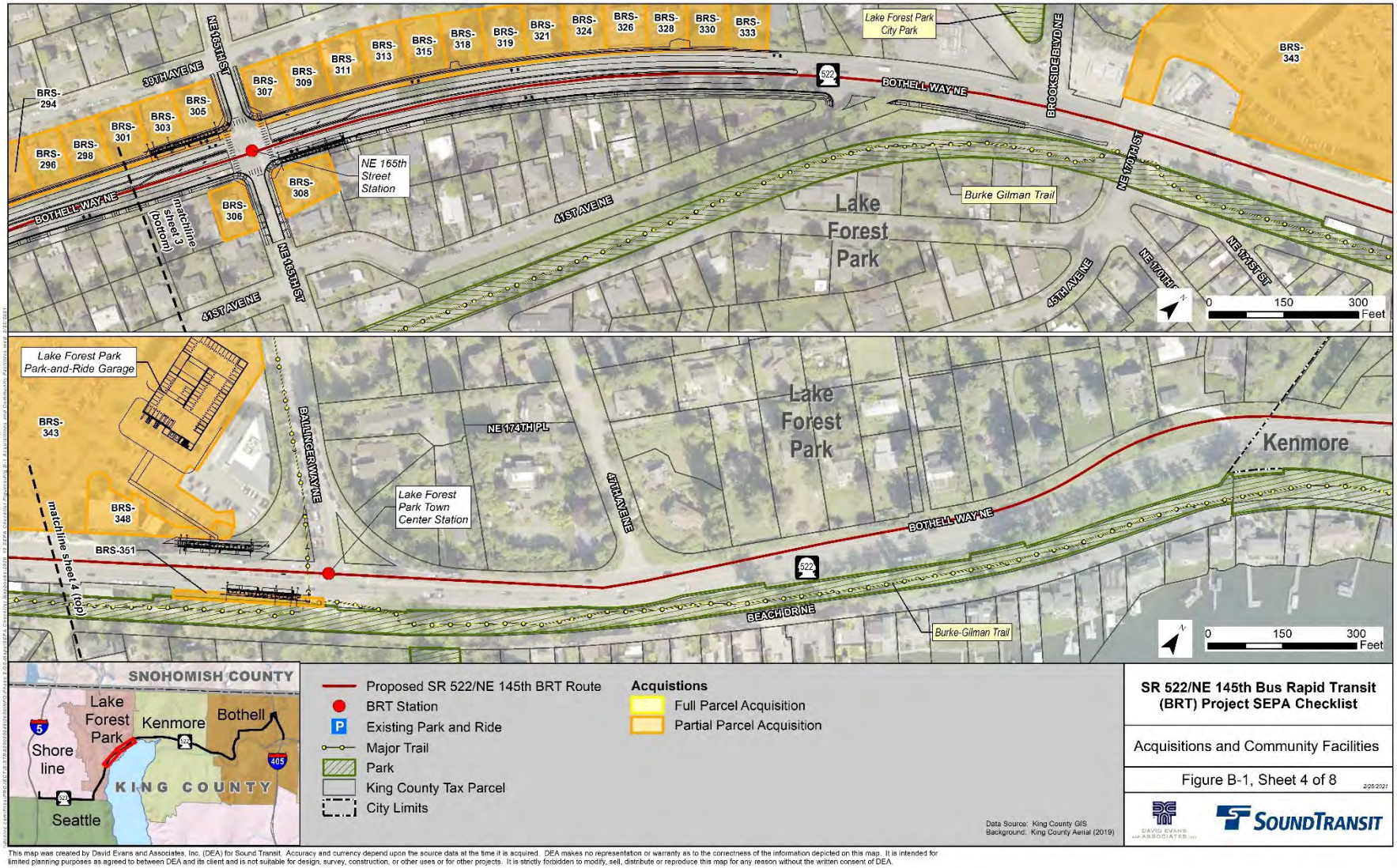

Figure B-1, sheet 4 of 8 Acquisitions and Community Facilities

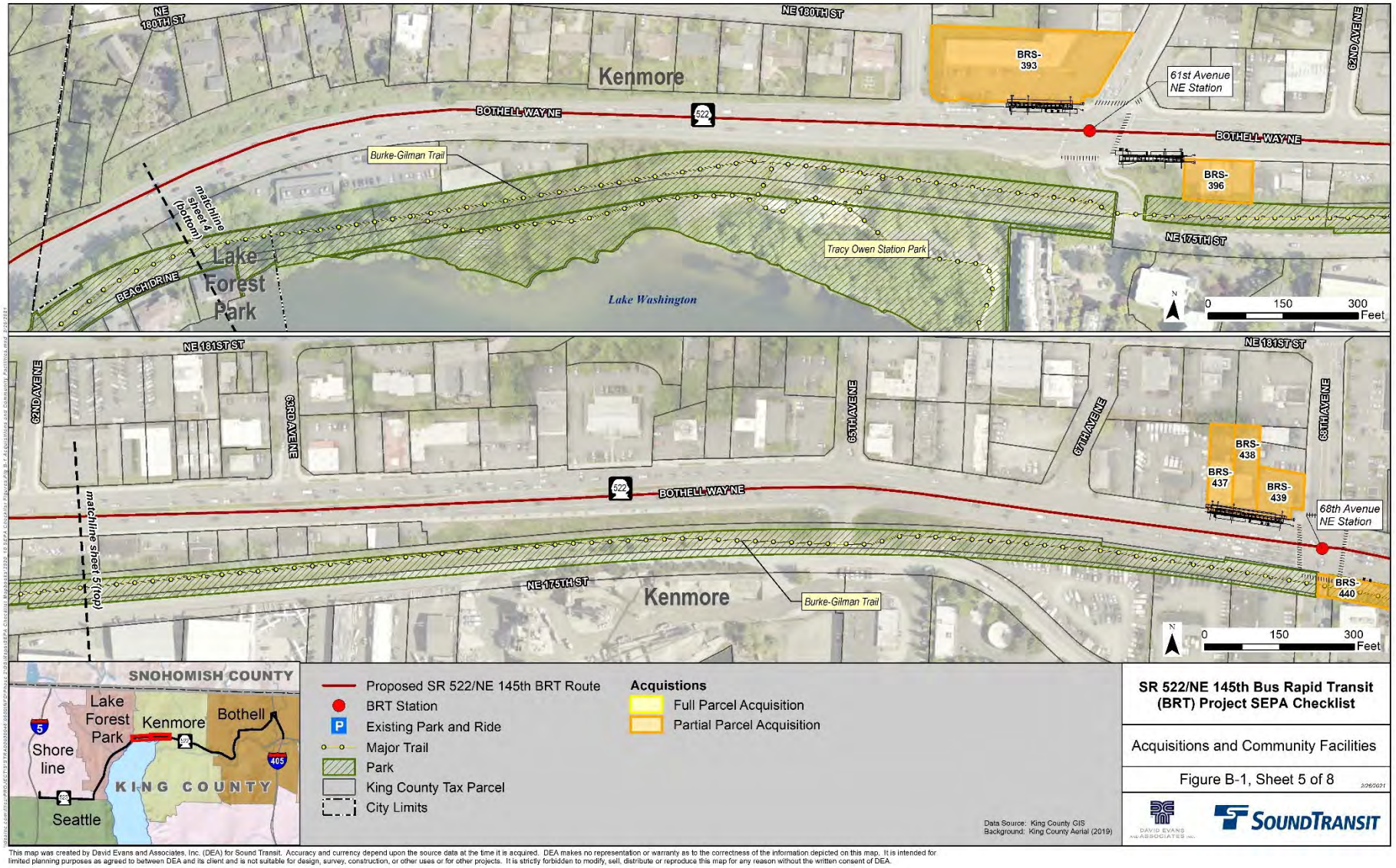

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Figure B-1, sheet 5 of 8 Acquisitions and Community Facilities

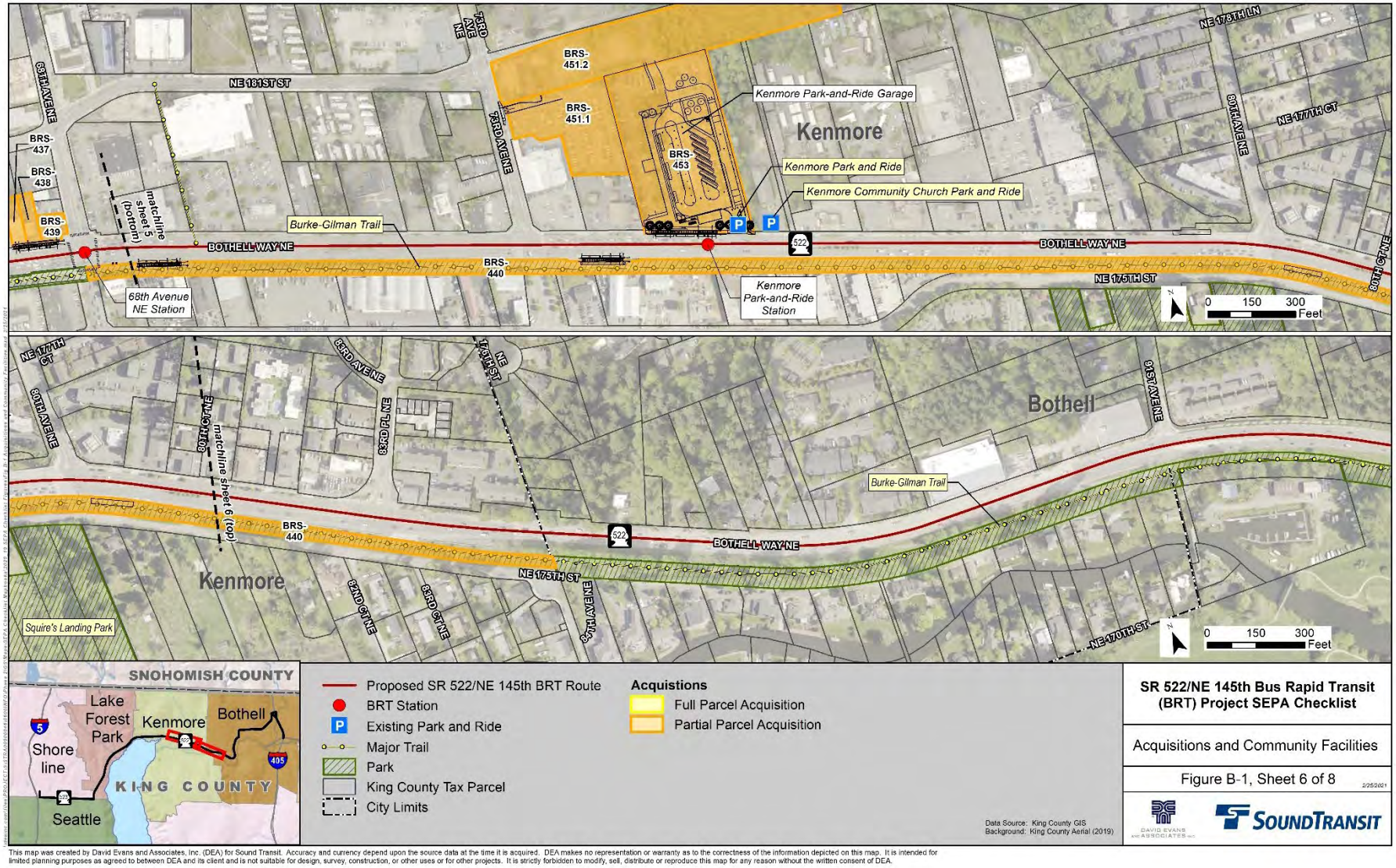

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Figure B-1, sheet 6 of 8 Acquisitions and Community Facilities

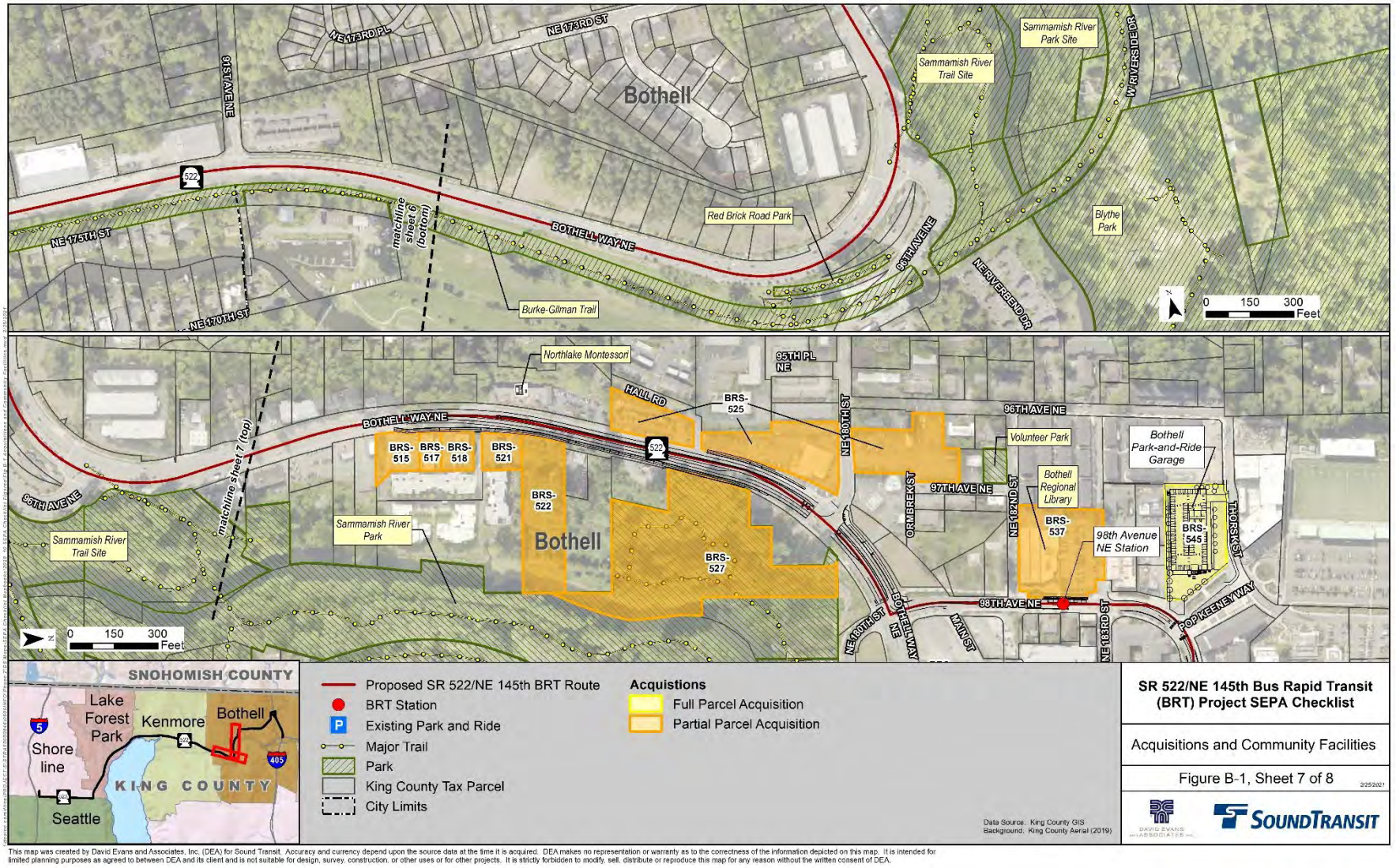

Figure B-1, sheet 7 of 8 Acquisitions and Community Facilities

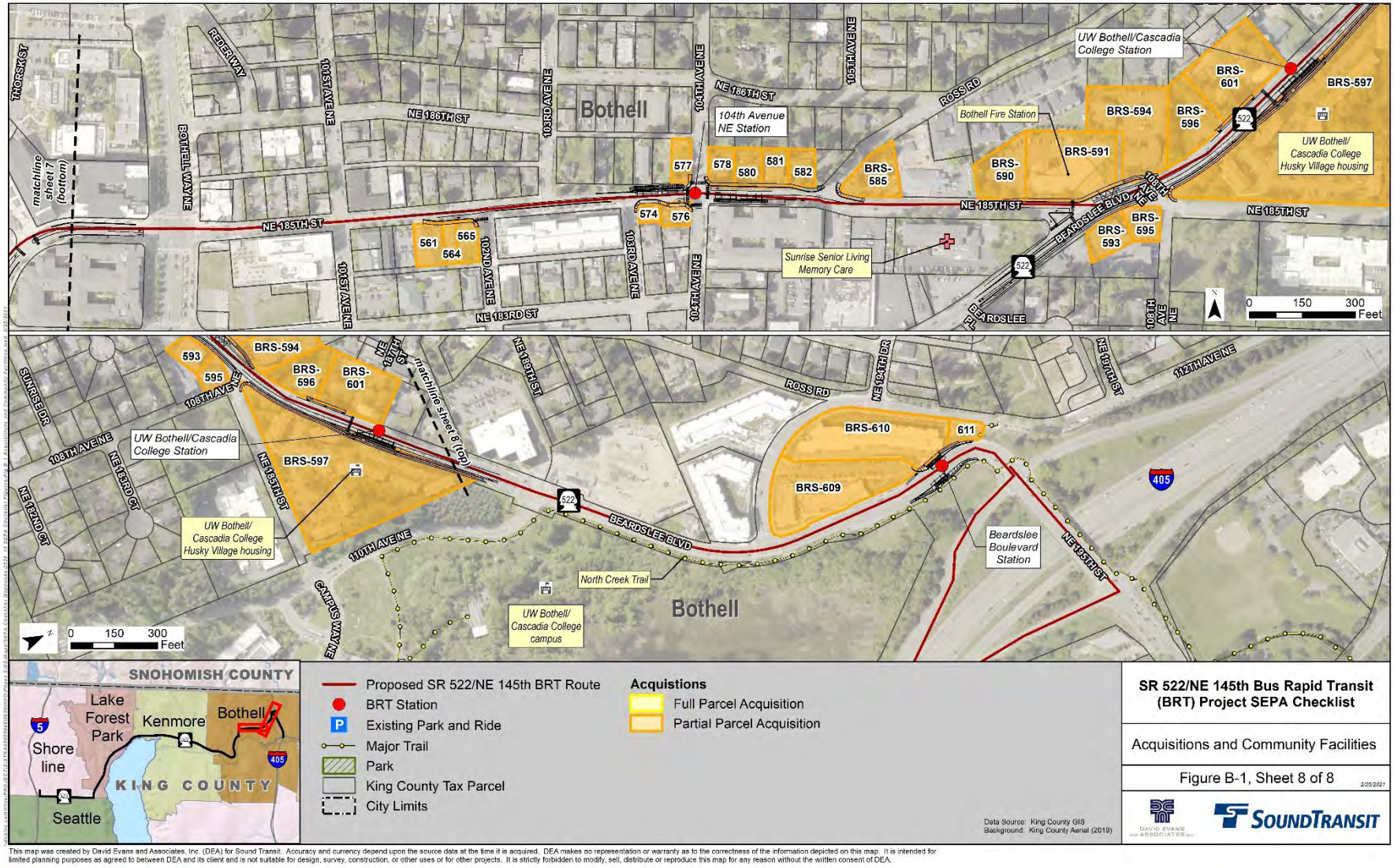

Figure B-1, sheet 8 of 8 Acquisitions and Community Facilities

Construction staging areas would likely include the Washington Federal Savings and Loan property and the Brown Bear property on the southeast corner of NE 145th Street/15th Avenue NE (parcels to be fully acquired, see Sheet 2 of **Figure B-1** (Acquisitions and Community Facilities), and the Lake Washington Heights multifamily condominium complex, located on the east side of SR 522 across from Acacia Memorial Park (see Sheet 3 of **Figure B-1** (Acquisitions and Community Facilities)). Additional areas for staging could include the other parcel expected to be fully acquired, a site in the southwest quadrant of 98th Avenue NE and Pop Keeney Way for the Bothell Park-and-Ride garage.

At proposed park-and-ride garage locations, staging areas would be adjacent to the proposed garage footprints. Sound Transit would minimize temporary construction easements and consolidate on-site storage of materials to the extent possible along the corridor. Sound Transit would prioritize use of fully acquired (purchased) parcels for staging, although Sound Transit would not purchase or modify use of any property solely for staging purposes. Sound Transit would compensate property owners fairly for use of sites for staging through the legal/temporary construction easement process.

During construction, Sound Transit and the contractor would ensure access is retained to properties not being altered or located adjacent to or near properties that are expected to have acquisition or easements.

B 8 b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or non-forest use?

The project site has not been used in recent history as working farmlands or working forest lands. The area surrounding the project corridor was logged from the 1870s to around 1900, when a conversion to farmland began. By the 1930s, much of the area was rural farm, dairy and orchard land, and development existed along known transportation routes and along the shoreline. Suburban development began in the 1940s and 1950s. Much of the existing commercial development along the corridor was developed in the 1940s or later. No agricultural or forest land of long-term commercial significance would be converted to other uses as a result of this project.

B 8 b (1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

With no working farms or forests on or near the project site, there would be no such impacts to or by the project.

B 8 c. Describe any structures on the site.

Table B-11 (Existing Structures on the Project Site (Segment 1)) through **Table B-14** (Existing Structures on the Project Site (Segment 4)) list structures that exist on the project site, by segment and element.

Table B-11 Existing Structures on the Project Site (Segment 1)

Element Number	Existing Structures - Shoreline	Existing Structures - Seattle	Existing Structures - Lake Forest Park
1	Roadway signs: 5, Bus stop signs: 1, Utility poles: 5, Guy anchors: 3, Fire hydrants: 2, Mailboxes: 5, Utility cabinets: 1, Standpipes: 2, Concrete utility markers: 1, Rockery: 3, Fences: 6, Gate posts: 7	None	None
2	Roadway signs: 8, Commercial signs: 4, Bus stop signs: 1, Posts/bollards: 9, Utility poles: 13, Guy anchors: 4, Light poles: 1, Pedestrian signal poles: 1, Pedestrian push button poles: 1, Flag poles: 1, Fire Hydrants: 5, Standpipes: 2, Benches: 3, Trash cans: 2, Concrete walls: 3, Handrails: 1, Fences: 6	Buildings: 2 (commercial, private), Roadway signs: 5, Commercial signs: 4, Bus stop signs: 1, Bus stop structures: 1, Posts/bollards: 5, Statues: 2, Utility poles: 2, Guy anchors: 1, Light poles: 2, Luminaires: 2, Pedestrian signal poles: 1, Pedestrian push button poles: 2, Fire hydrants: 2, Utility cabinets: 1, Standpipes: 1, Benches: 1, Trash cans: 1, Concrete walls: 1, Buildings: 4, Handrails: 1	None
3	Roadway signs: 3, Bus stop signs: 1, Bus stop structures: 1, Utility poles: 3, Guy anchors: 1, Signal poles: 2, Pedestrian push button poles: 1, Benches: 1, Trash cans: 1, Concrete walls: 1, Carsonite utility markers: 2	Utility poles: 1, Guy anchors: 1, Signal poles: 2, Pedestrian push button poles: 1, Fire Hydrants: 1, Carsonite utility markers: 1, Fences: 1	None
4	Roadway signs: 1, Commercial signs: 2, Utility poles: 2, Guy anchors: 1, Signal poles: 1, Pedestrian push button poles: 1, Fire hydrants: 1, Concrete wheelchair ramp: 1, Handrails: 1	Signal poles: 1, Pedestrian push button poles: 1	Signal poles: 1, Pedestrian push button poles: 1, Luminaires: 1, Concrete ramp for wheelchair: 1, Handrails: 1

Table B-12 Existing Structures on the Project Site (Segment 2)

Element Number	Existing Structures
5	Utility poles: 35, Light poles: 8, Traffic signal poles: 6, Pedestrian signal poles: 1, Traffic sensor poles: 2, Guy anchors: 7, Utility cabinets: 12, Fire hydrants: 14, Utility risers: 2, Standpipes: 3, Luminaires: 4, Carsonite utility markers: 3, Roadway signs: 29, Parking signs: 4, Other signs: 4, Bus stop signs: 6, Bus stop shelters: 4, Benches: 7, Trash cans: 3, Bollards: 15, Posts (miscellaneous): 6, Mailboxes: 16, Fences: 21, Retaining walls: 16, Rockery: 7, Parking overhangs: 4, Hand rails: 3, Guard rails: 4, Stairways: 1
6	Buildings: 1 (commercial, private), Utility poles: 1, Traffic sensor poles: 1, Utility cabinets: 1, Roadway signs: 2, Posts: 1, Light poles: 1, Parking signs: 2, Bike racks: 1, Trash cans: 1, Mailboxes: 1

Table B-13 Existing Structures on the Project Site (Segment 3)

Element Number	Existing Structures
7	Light poles: 2, Utility cabinets: 1, Fire hydrants: 1, Roadway signs: 1, Bus stop signs: 1, Bus stop shelters: 1, Benches: 1, Trash cans: 1
8	Light poles: 2, Commercial signs: 1, Bus stop signs: 1, Bus stop shelters: 1, Benches: 1, Trash cans: 1, Handrails: 1, Retaining walls: 1
9	Light poles: 18, Bus stop signs: 6, Bus stop shelters: 2, Benches: 10, Trash cans: 1, Fire hydrants: 1, Roadway signs: 4, Parking signs: 56, Lockers: 6, Newspaper racks: 6, Bike racks: 1, Handrails: 4

Table B-14 Existing Structures on the Project Site (Segment 4)

Element Number	Existing Structures
10	Utility poles: 9, Light poles: 12, Signal poles: 1, Guy anchors: 2, Fire hydrants: 5, Utility risers: 1, Carsonite utility markers: 1, Bollards: 2, Guardrails: 1, Handrails: 4, Wood deck/walkway: 1, Stairway: 1, Retaining walls: 2, Roadway signs: 2, Commercial signs: 4, Bus stop signs: 1, Sign posts: 2, Trash cans: 2, Concrete planters: 1, Concrete barrier blocks: 1, Rock sculptures: 1
11	Light poles: 2, Fire hydrants: 1, Roadway signs: 1, Handrails: 2, Bollards: 1
12	Utility cabinets: 1, Utility meters: 1
13	No design linework
14	*(Includes sidewalk between 102nd Avenue NE and 103rd Avenue NE)* Light poles: 8, Crosswalk signal poles: 1, Fire hydrants: 2, Utility risers: 2, Transformers: 1, Building overhangs: 1, Awnings: 1, Stairways: 1, Handrails: 1, Roadway signs: 4, Other signs: 3
15	Utility poles: 7, Fire hydrants: 3, Light poles: 2, Guy anchors: 2, Standpipes: 1, Roadway signs: 10, Parking signs: 1, Other signs: 2, Bus stop signs: 1, Mailboxes: 4, Retaining walls: 2, Rockery: 2, Handrails: 1
16	Utility poles: 8, Guy anchors: 6, Crosswalk signal poles: 1, Utility risers: 5, Luminaires: 1, Fire hydrants: 2, Roadway signs: 17, Parking signs: 11, Commercial signs: 2, Bus stop signs: 3, Mailboxes: 8, Fire department connections: 1, Handrails: 1.
17	Outlets: 6, Light poles: 4, Roadway signs: 1, Bus stop shelters: 1, Bus stop signs: 1, Trash cans: 1

B 8 d. Will any structures be demolished? If so, what?

Structures that could be demolished as a result of the proposed project include those listed in **Table B-11** (Existing Structures on the Project Site (Segment 1)) through **Table B-14** (Existing Structures on the Project Site (Segment 4)), including buildings on Seattle parcel 663 230 0280 (Washington Federal Savings and Loan and Pizza Hut), Seattle parcel 663 230 0282 (Brown Bear Car Wash) and Lake Forest Park parcel 401 930 1655 (Lake Forest Park Town Center). Sound Transit would acquire the full parcel on which Washington Federal Savings and Loan and Pizza Hut are located. Only the bank building overlaps with the project footprint; future options for Pizza Hut could include Pizza Hut leasing the building from Sound Transit as an alternative to demolition and relocation of the restaurant. The Brown Bear Car Wash would likely be demolished, at least in part. Sound Transit would acquire the full parcel on which this business is located; however, only one to three car wash bays would overlap with the proposed project. A future option could include Brown Bear Car Wash leasing the building from Sound Transit, then demolishing the northernmost bays that overlap the project footprint and rebuilding them. A final decision about demolition would be made through negotiations between the property owner and Sound Transit. The two-story commercial building at 17191 Bothell Way NE within Lake Forest Park Town Center would be demolished, because the proposed Lake Forest Park Park-and-Ride garage would be built in its place. This building (named the Lake Forest Park Professional Building) appears to house the following operating businesses: Chase Bank, Forest Park Insurance, UW Medicine Northwest Primary Care Lake Forest Park Clinic, YouthCare non-profit youth resource center, Lake Forest Park Dog Detection Center, Yen Design Inc., Seattle Engraving Center, Northwest Foot & Ankle, and Minahan Dental.

Property acquisitions would be completed and relocation assistance would be provided in compliance with Sound Transit's Real Property Acquisitions and Relocation Policy, Procedures and Guidelines and Revised Code of Washington (RCW) 8.26 Relocation Assistance – Real Property Acquisition Policy, which requires entities acquiring properties through eminent domain to pay just compensation for the property. In addition to payment, RCW 8.26 requires that persons displaced from the property receive relocation assistance, including assistance with moving costs, costs of reestablishing businesses or other similar costs.

B 8 e. What is the current zoning classification of the site?

Figure B-2 (Zoning) shows zoning along the project corridor. Where proposed project components may be considered inconsistent with zoning, land use actions such as variances or deviations may be requested from the appropriate jurisdictions. The project selected by the Sound Transit Board will be an "essential public facility" (also referred to as an "EPF"), and the requirements of RCW 36.70A.200 will apply. The siting and location of the project will be consistent with these requirements, which provide that no local comprehensive plan or development regulation may preclude the siting of essential public facilities.

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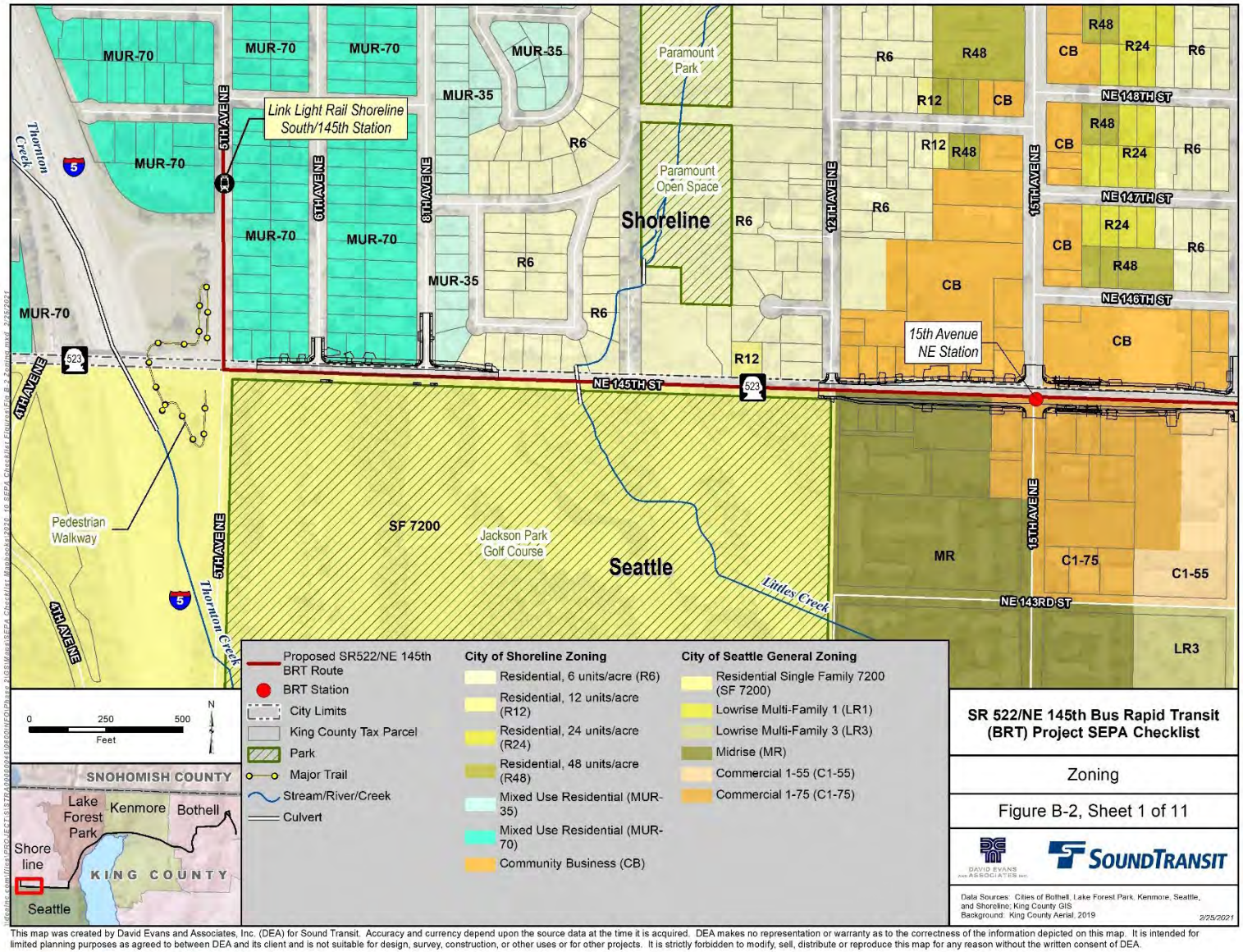

Figure B-2, sheet 1 of 11 Zoning

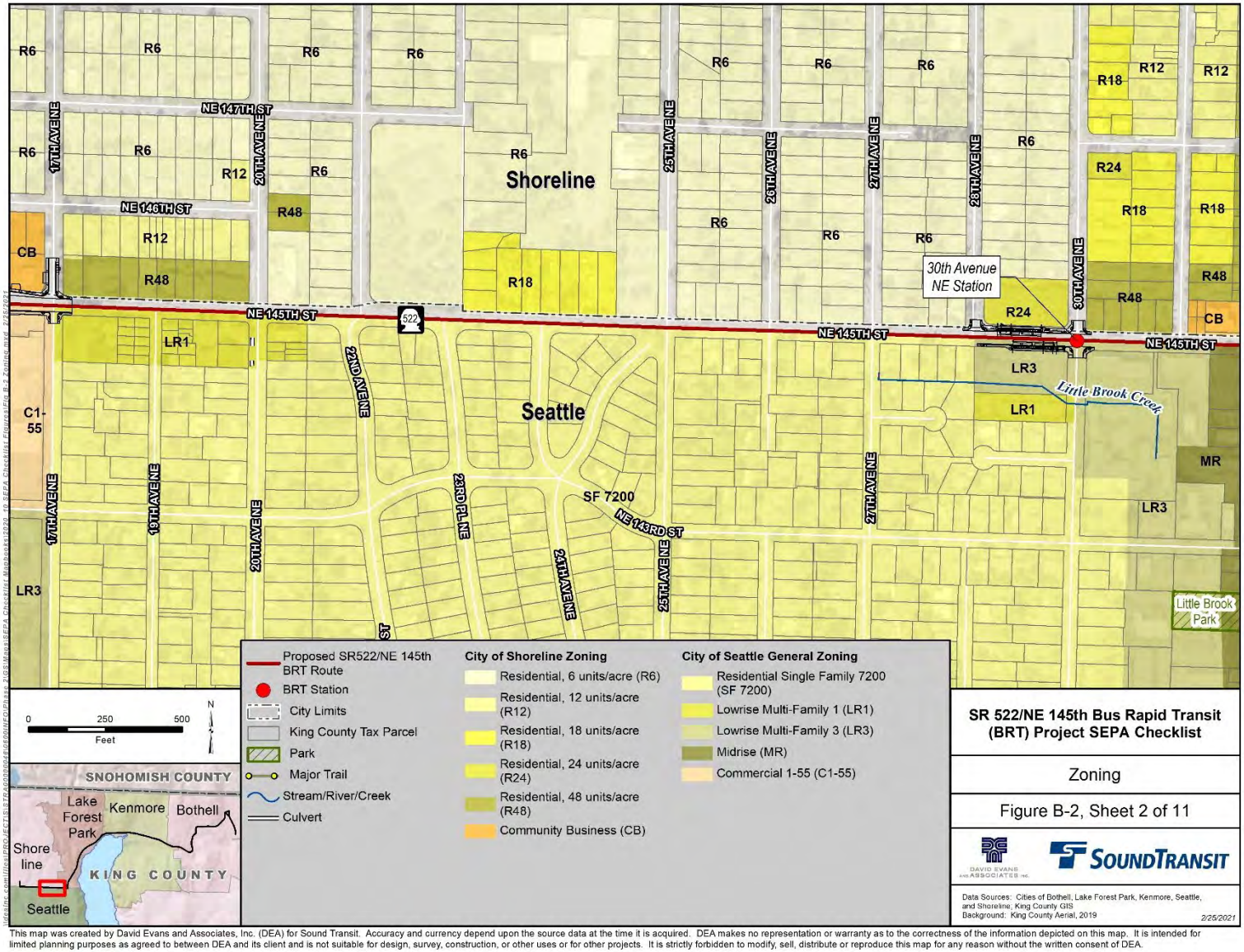

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Figure B-2, sheet 2 of 11 Zoning

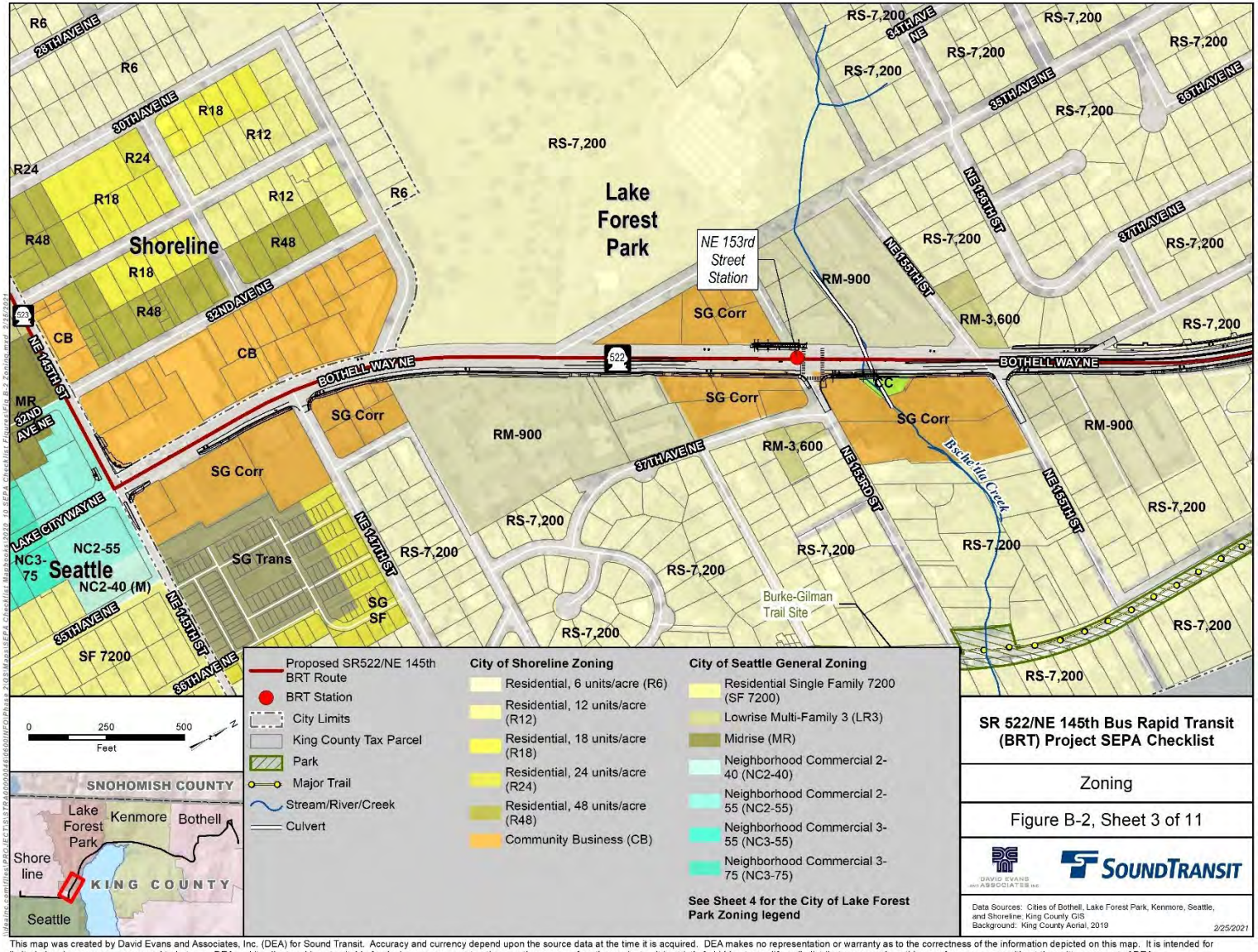

Figure B-2, sheet 3 of 11 Zoning

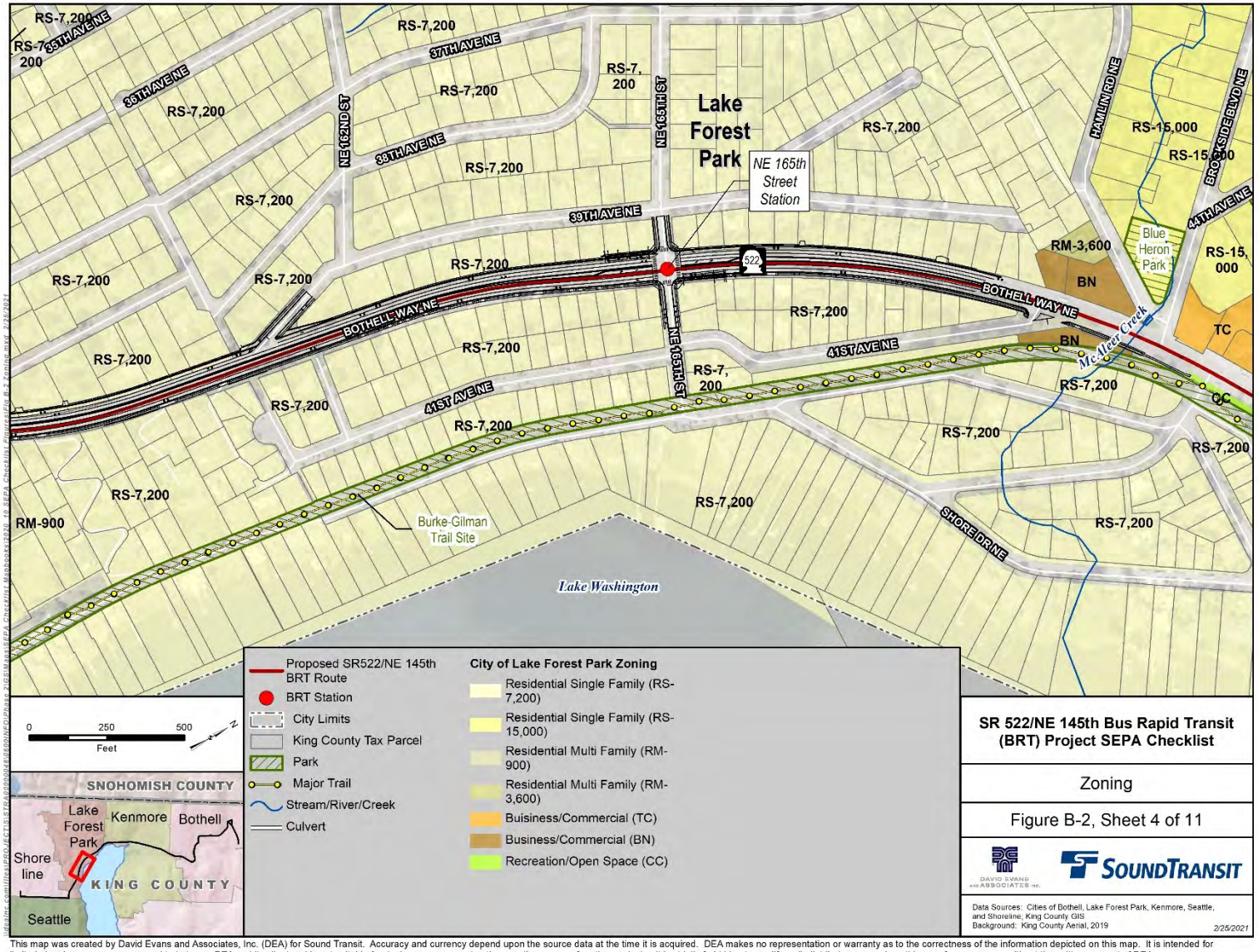

Figure B-2, sheet 4 of 11 Zoning

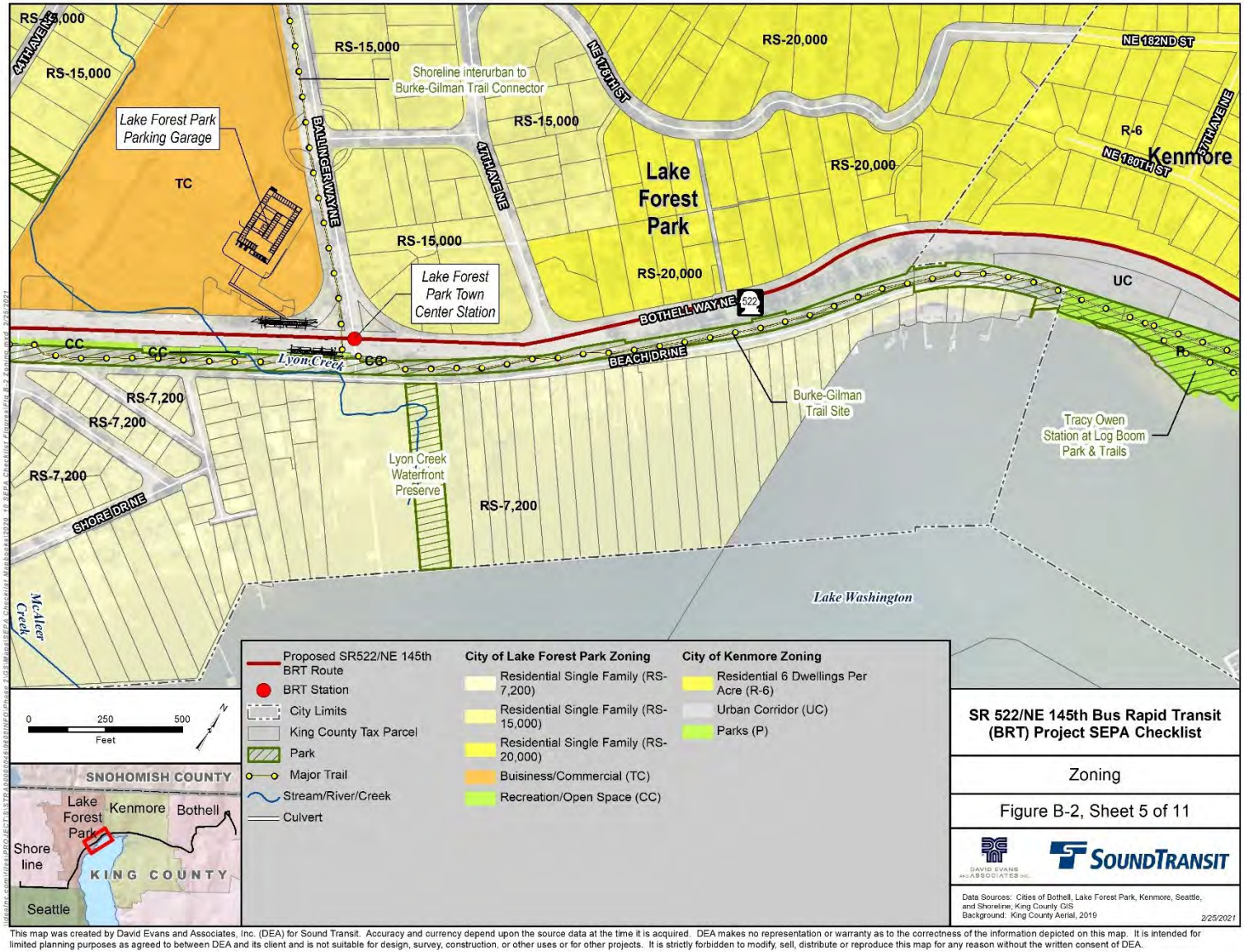

Figure B-2, sheet 5 of 11 Zoning

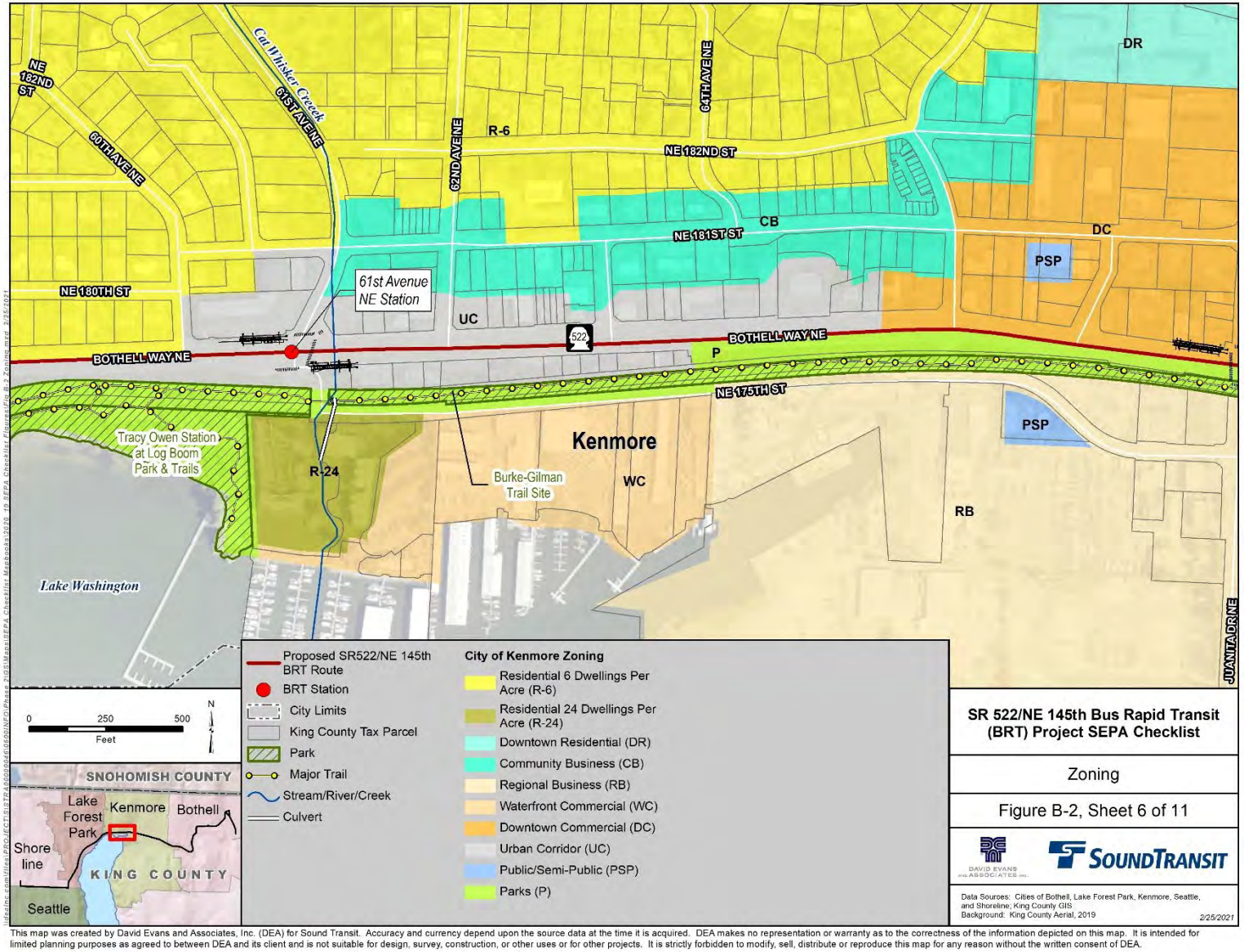

Figure B-2, sheet 6 of 11 Zoning

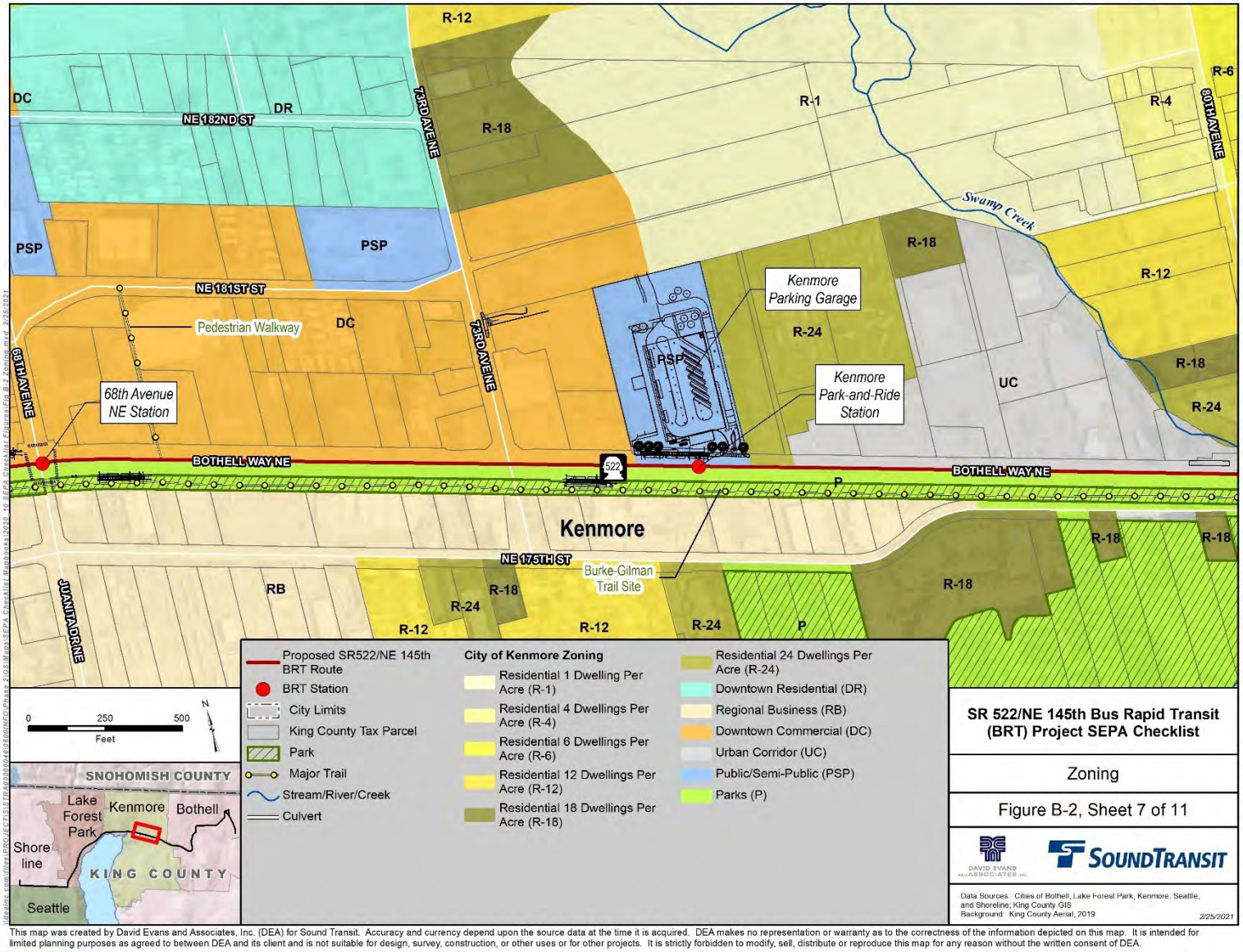

Figure B-2, sheet 7 of 11 Zoning

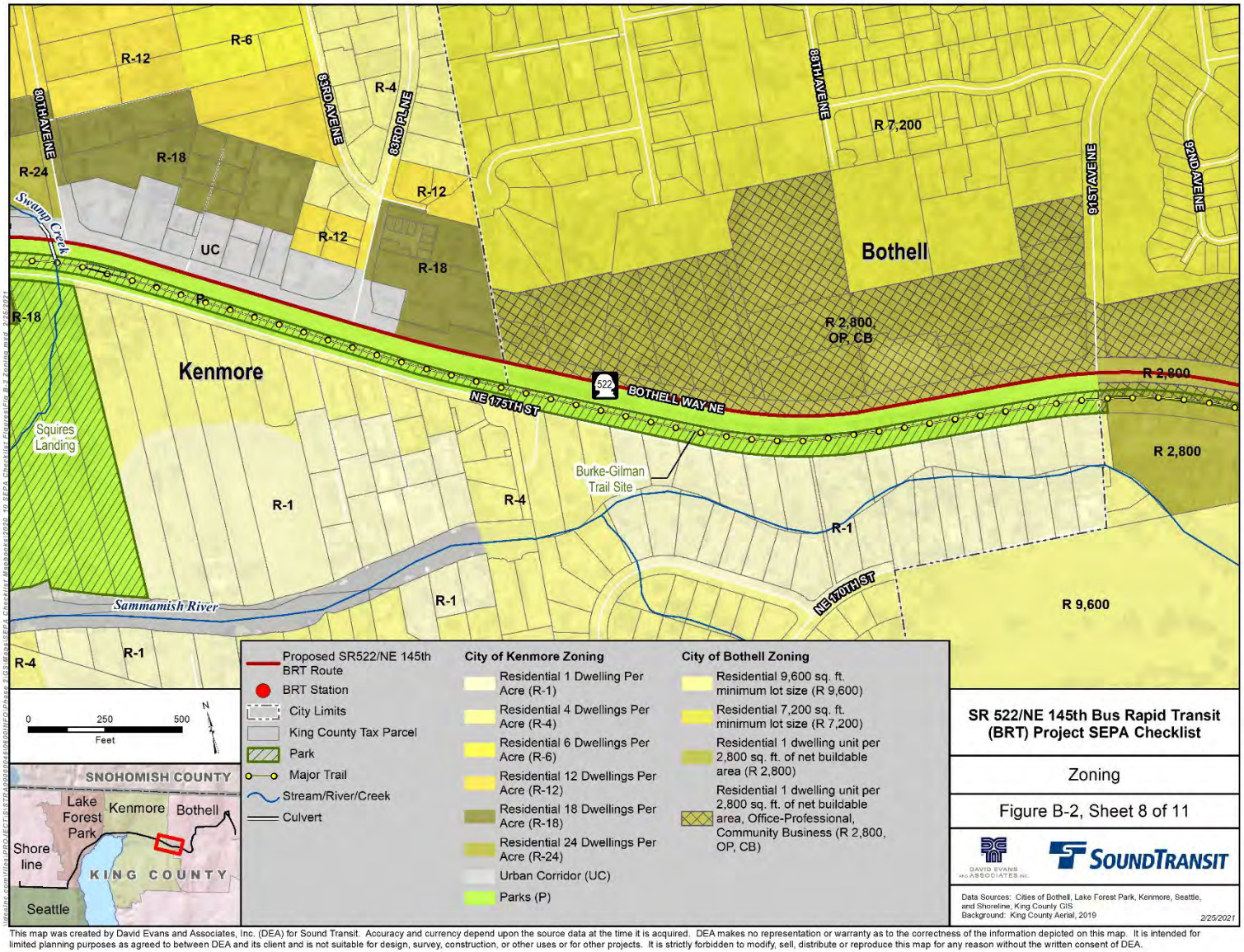

Figure B-2, sheet 8 of 11 Zoning

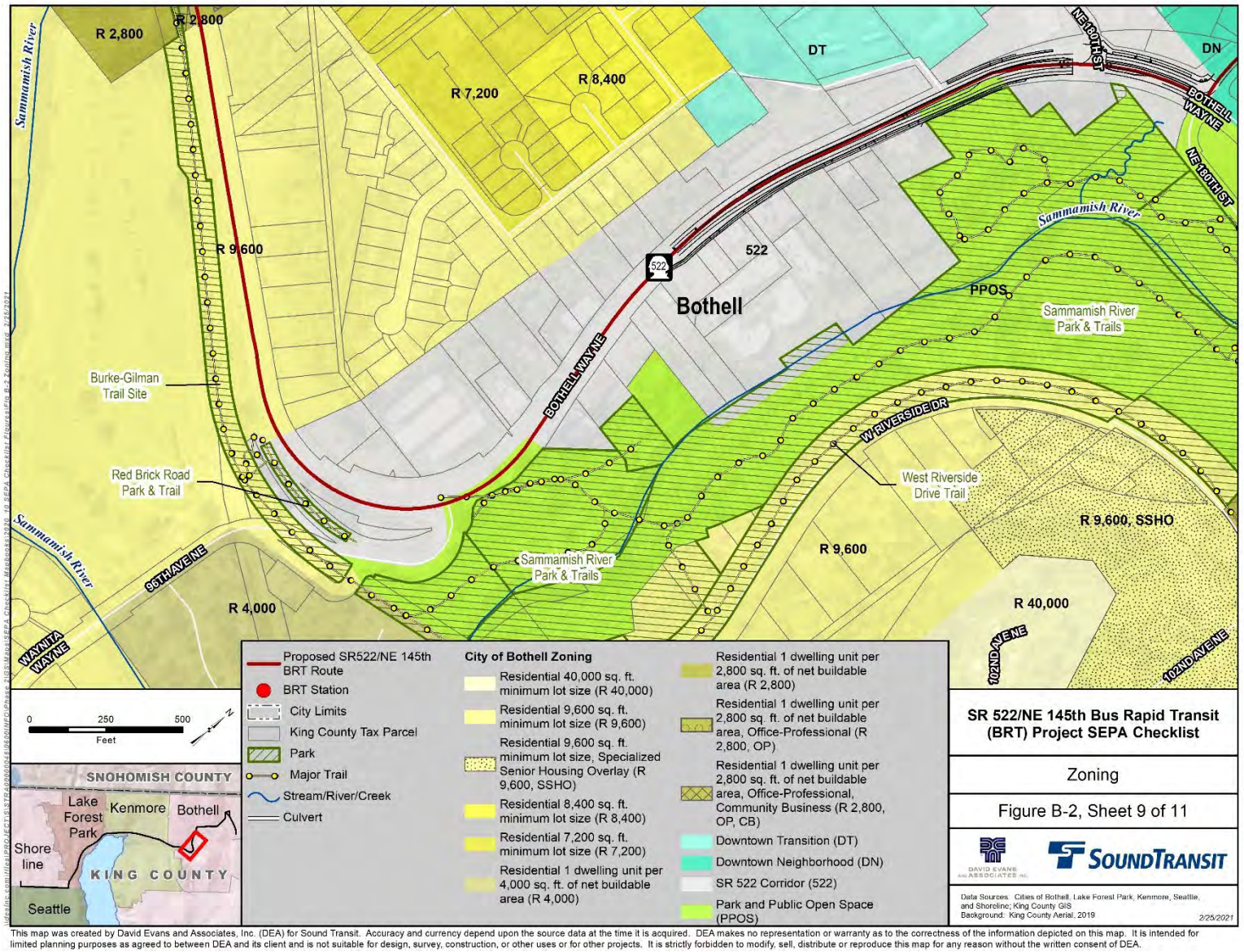

Figure B-2, sheet 9 of 11 Zoning

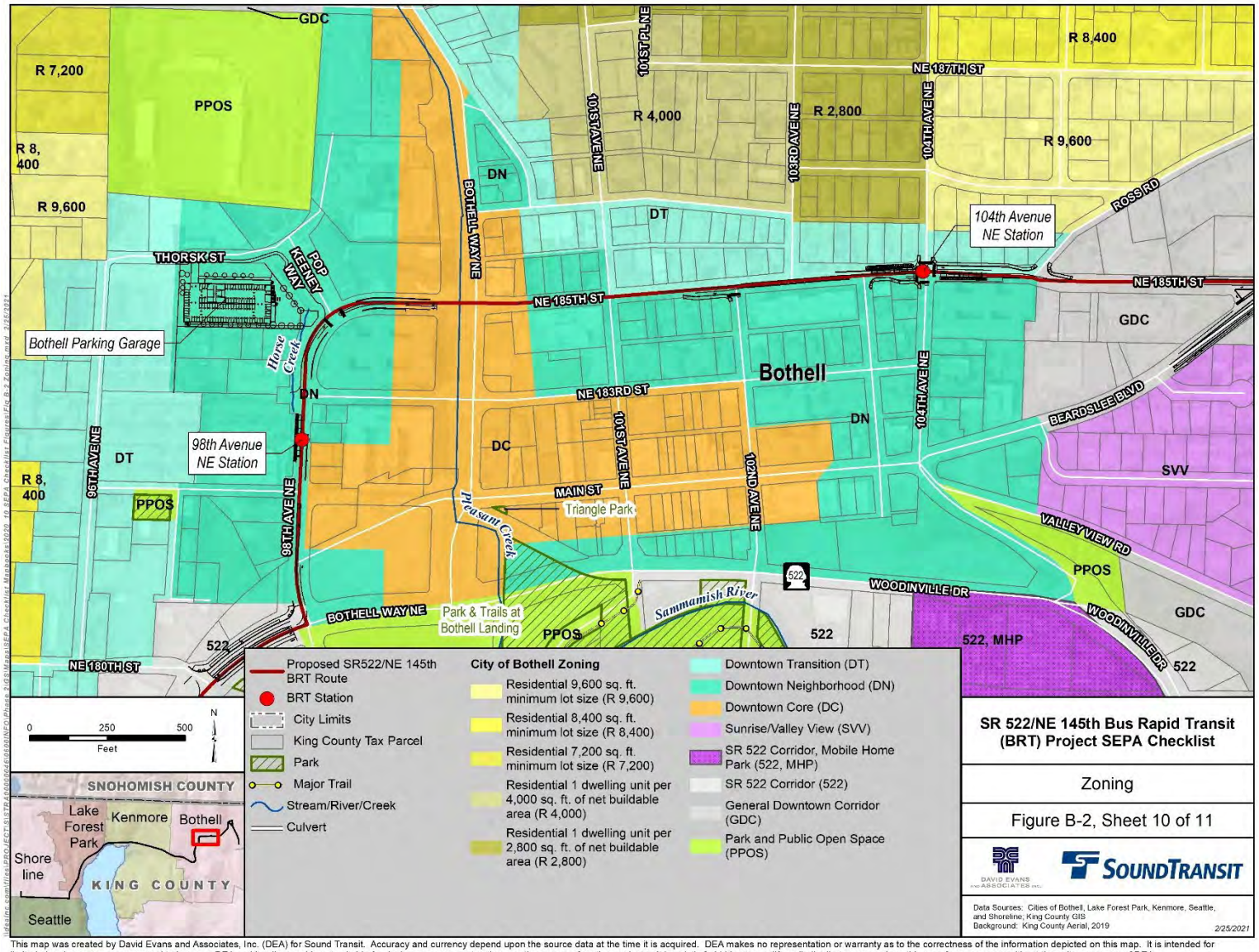

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Figure B-2, sheet 10 of 11 Zoning

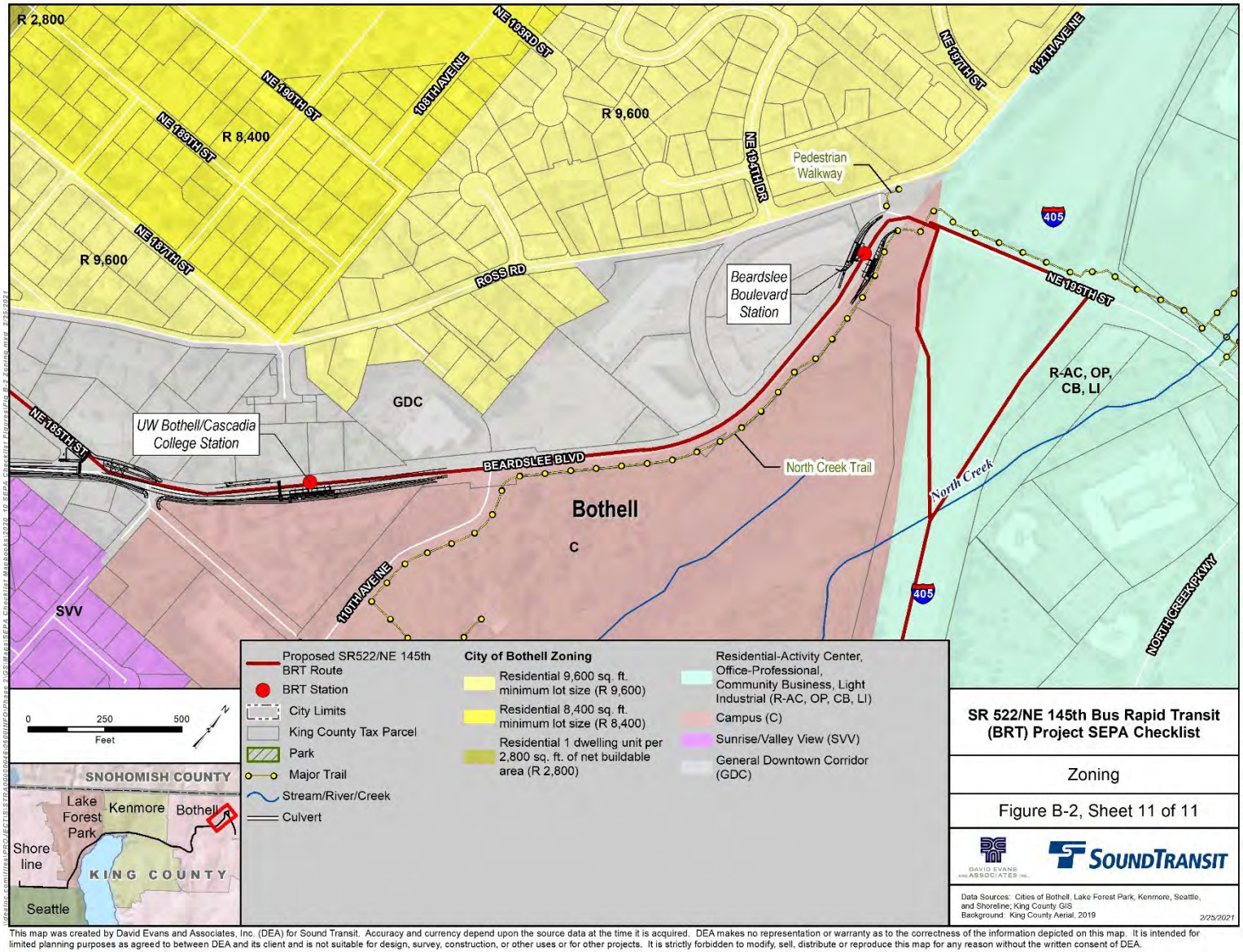


Figure B-2, sheet 11 of 11 Zoning

Sound Transit is preparing Land Use Permitting Work Plans (Work Plans) for the project to facilitate coordination with each agency with permit or approval authority along the corridor, and to confirm required permit or land use entitlement processes. Work Plans will be developed for each agency having jurisdiction in order to identify: (1) project activities that could require approvals or permits, (2) triggers for the permits, (3) relevant regulations regarding permits and approvals, and (4) processes for obtaining the permits and approvals. **Attachment A** (Permit Matrix) lists permits and approvals that could be required throughout the life of the project. Sound Transit expects to obtain approvals in the following four categories:

1. Data Collection permits, including permits necessary for geotechnical, engineering and cultural resource-related survey, drilling and sampling.

2. Land Use permits and approvals, including Use Permits, design review and agreements, or other approvals.

3. Technical permits for construction for demolition, clearing, grading and staging.

4. Environmental Permits and approvals, including Critical Area Permits and stormwater/drainage approvals.

B 8 f. What is the current comprehensive plan designation of the site?

Figure B-3 (Comprehensive Plan Designations) and **Table B-15** (Project Site Comprehensive Plan Designations and Descriptions) show comprehensive plan designations on the project site.

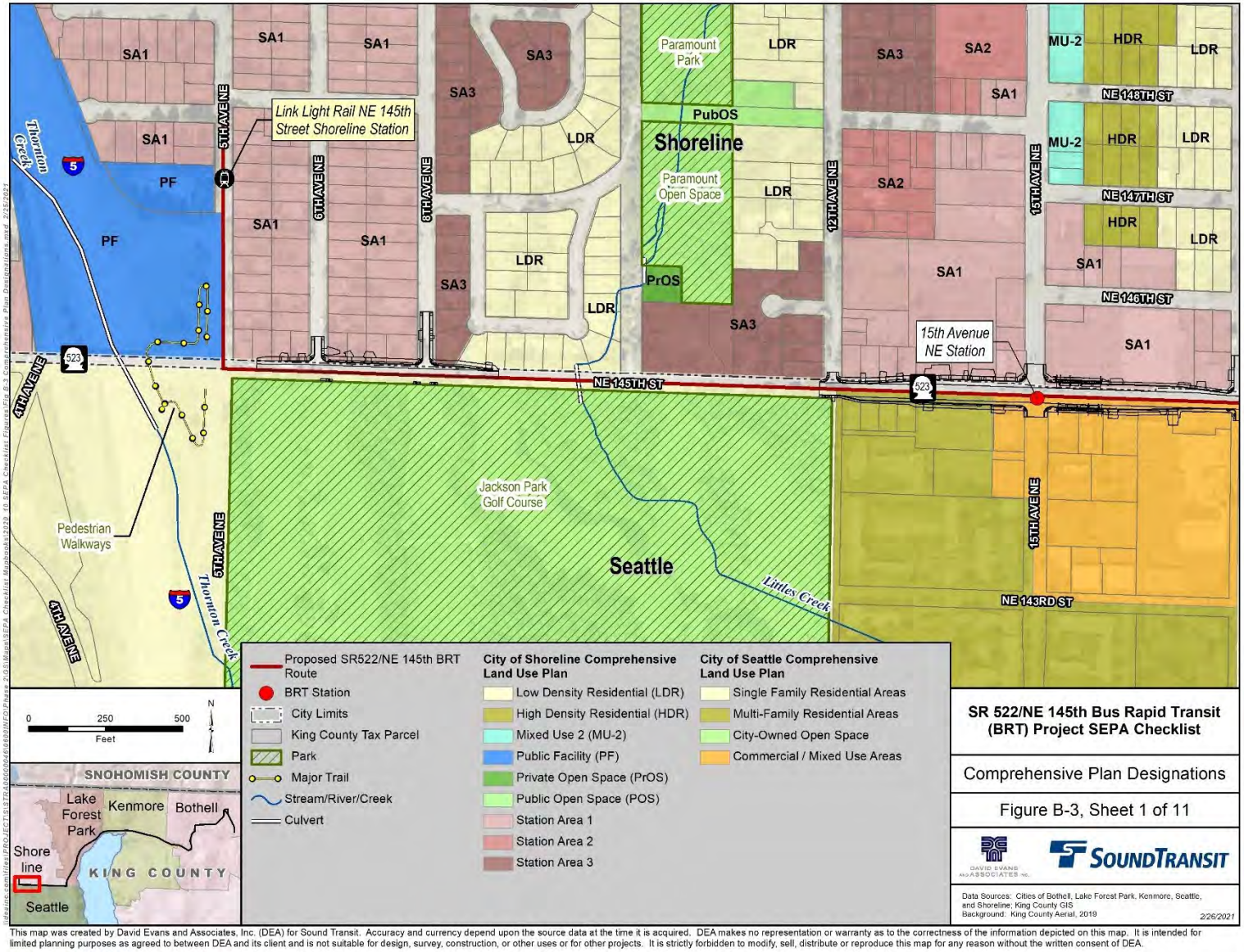


Figure B-3, sheet 1 of 11 Comprehensive Plan Designations

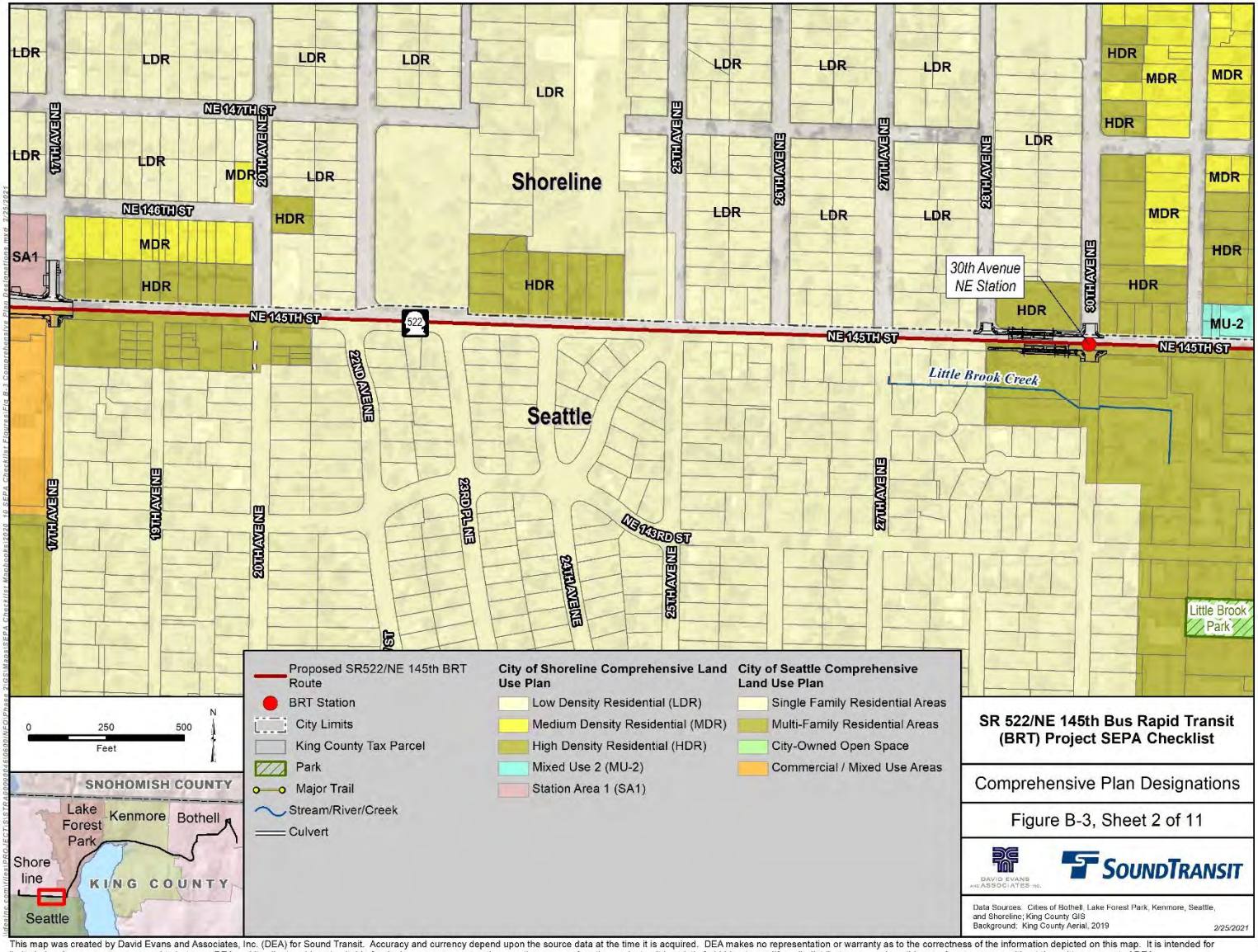
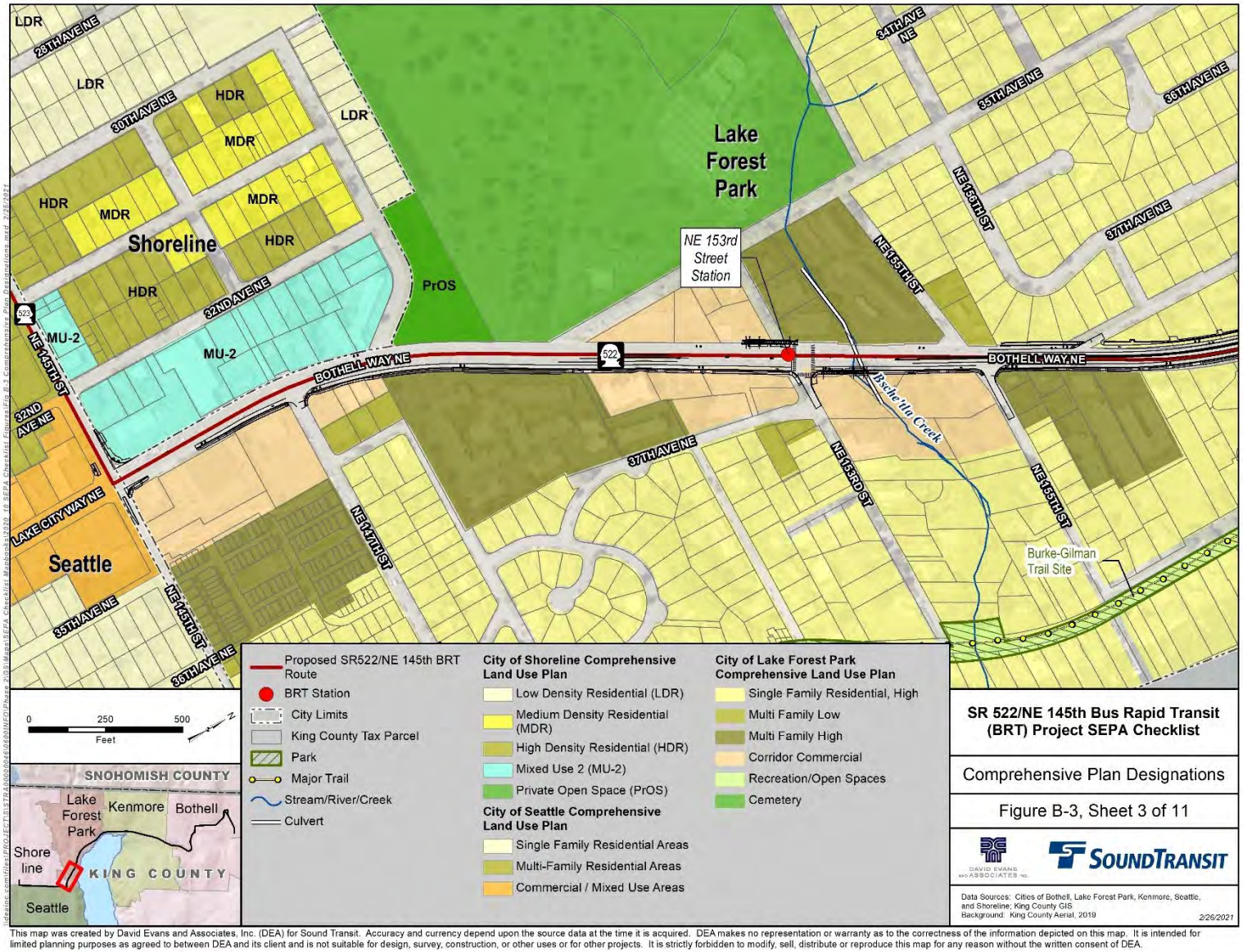


Figure B-3, sheet 2 of 11 Comprehensive Plan Designations



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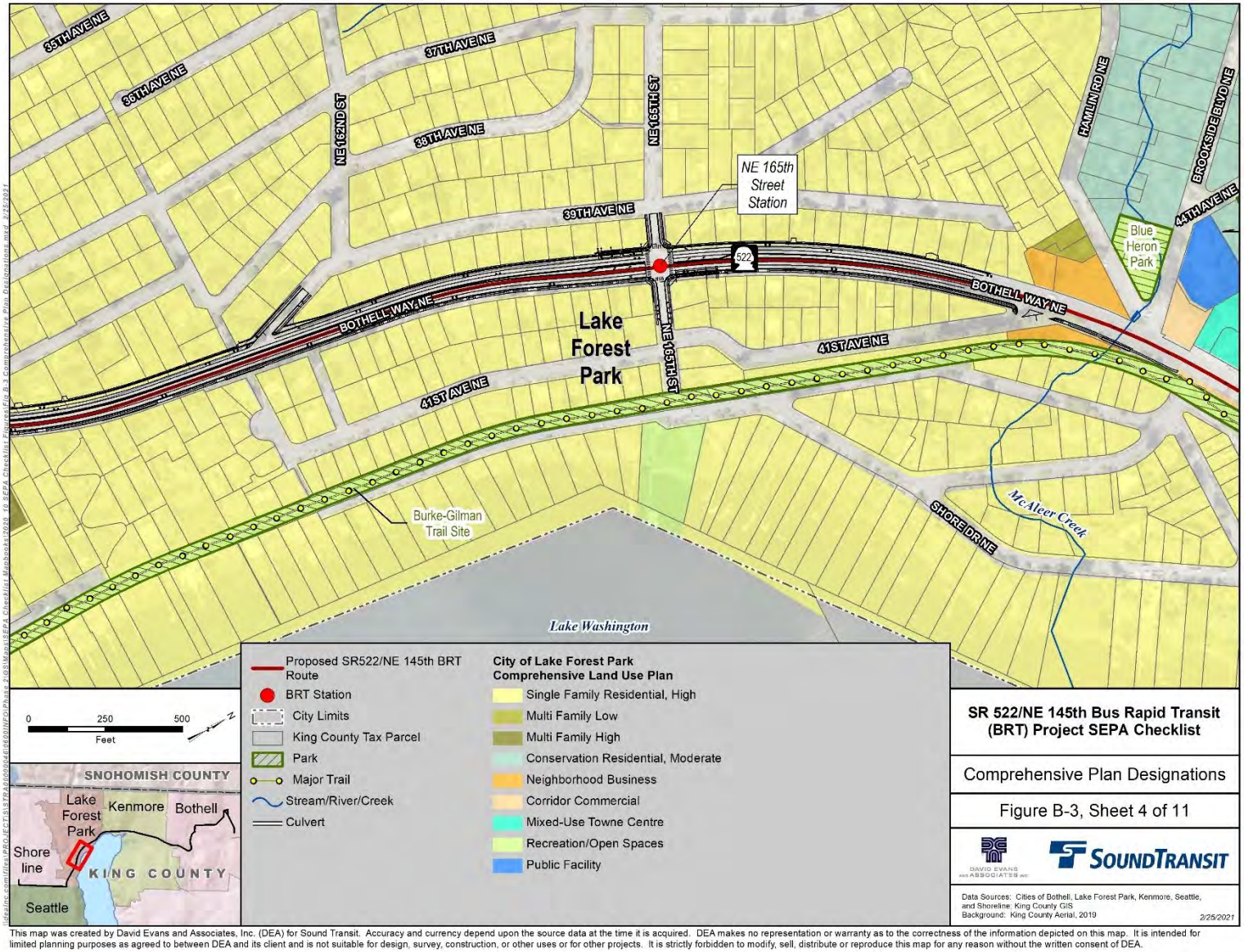

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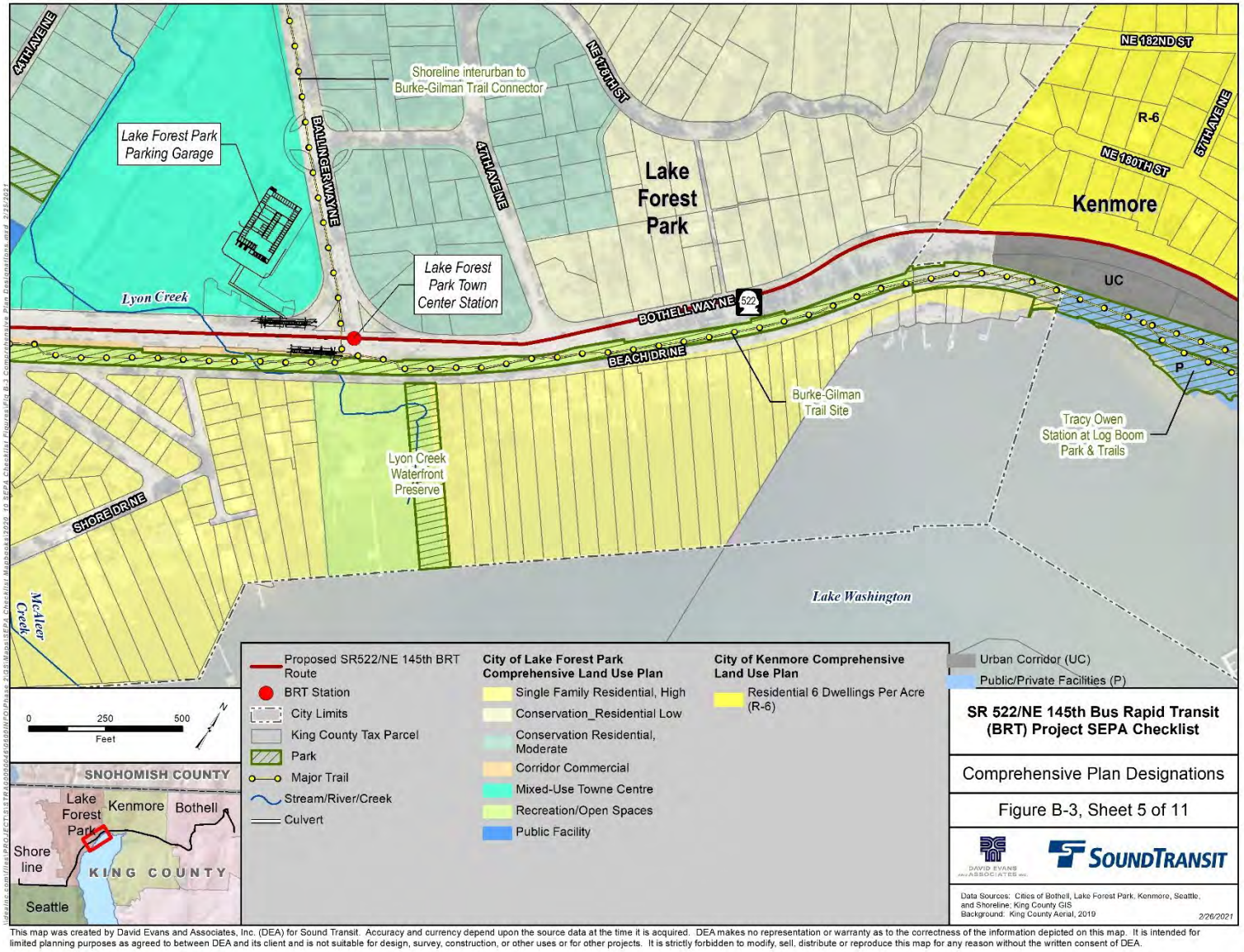

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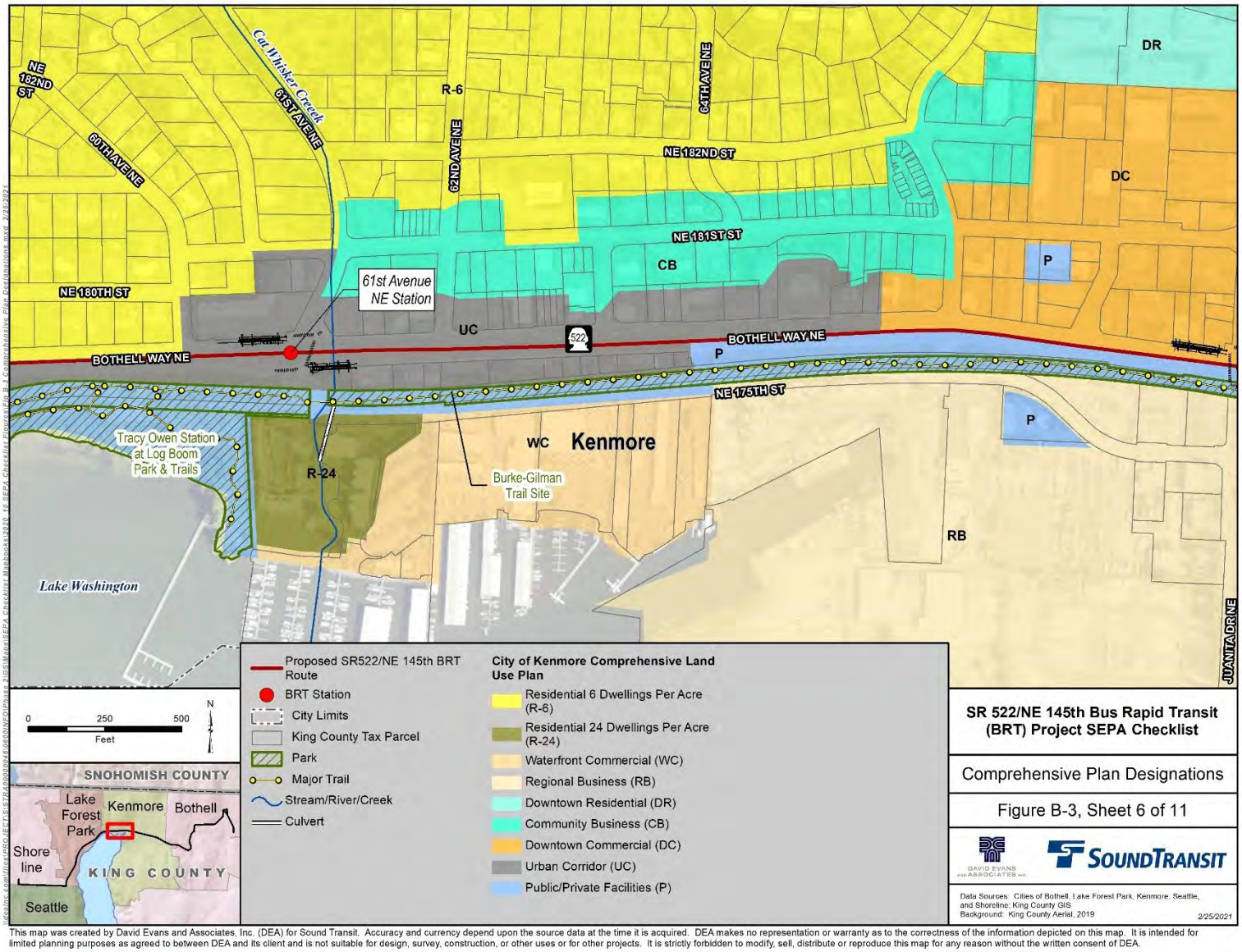

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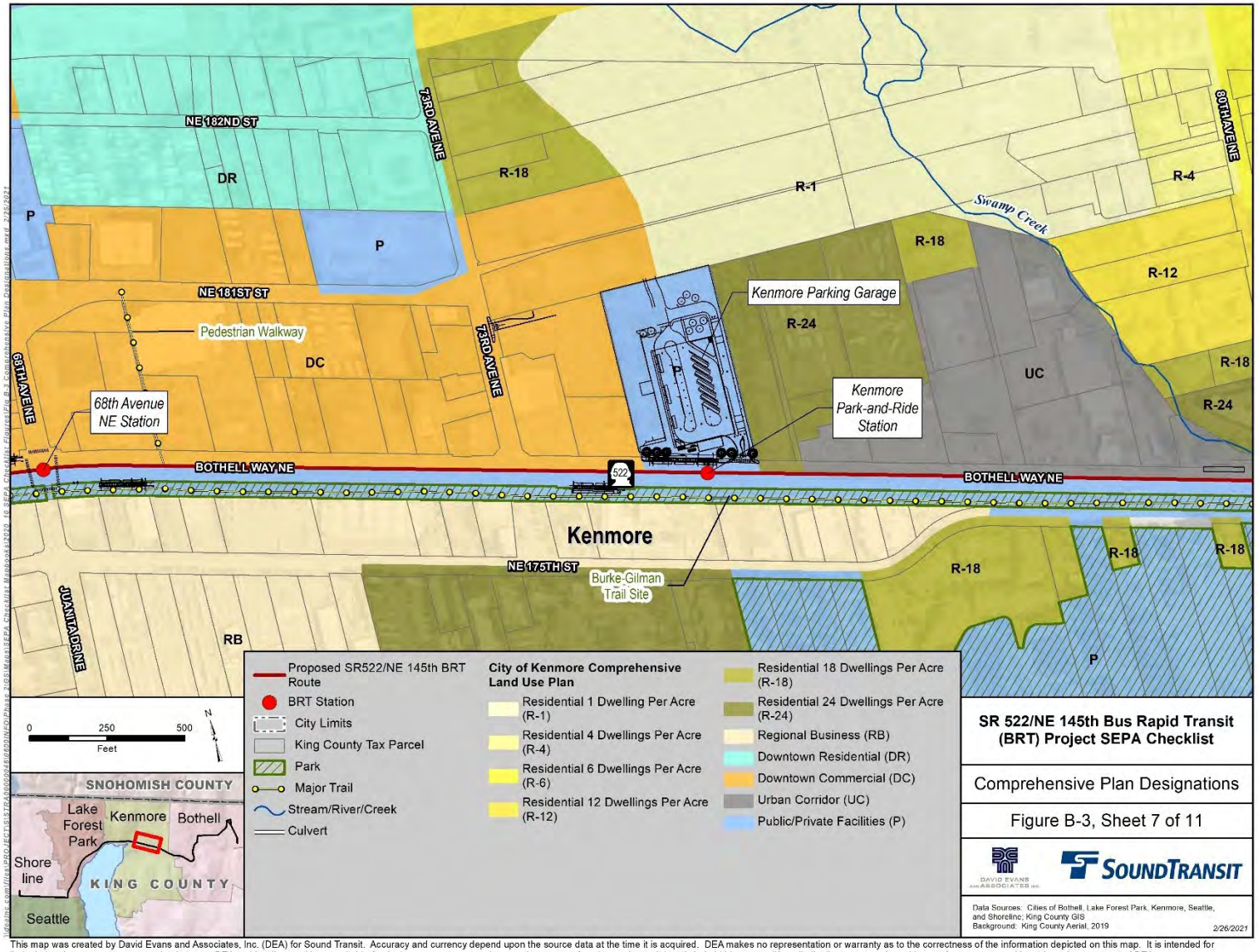

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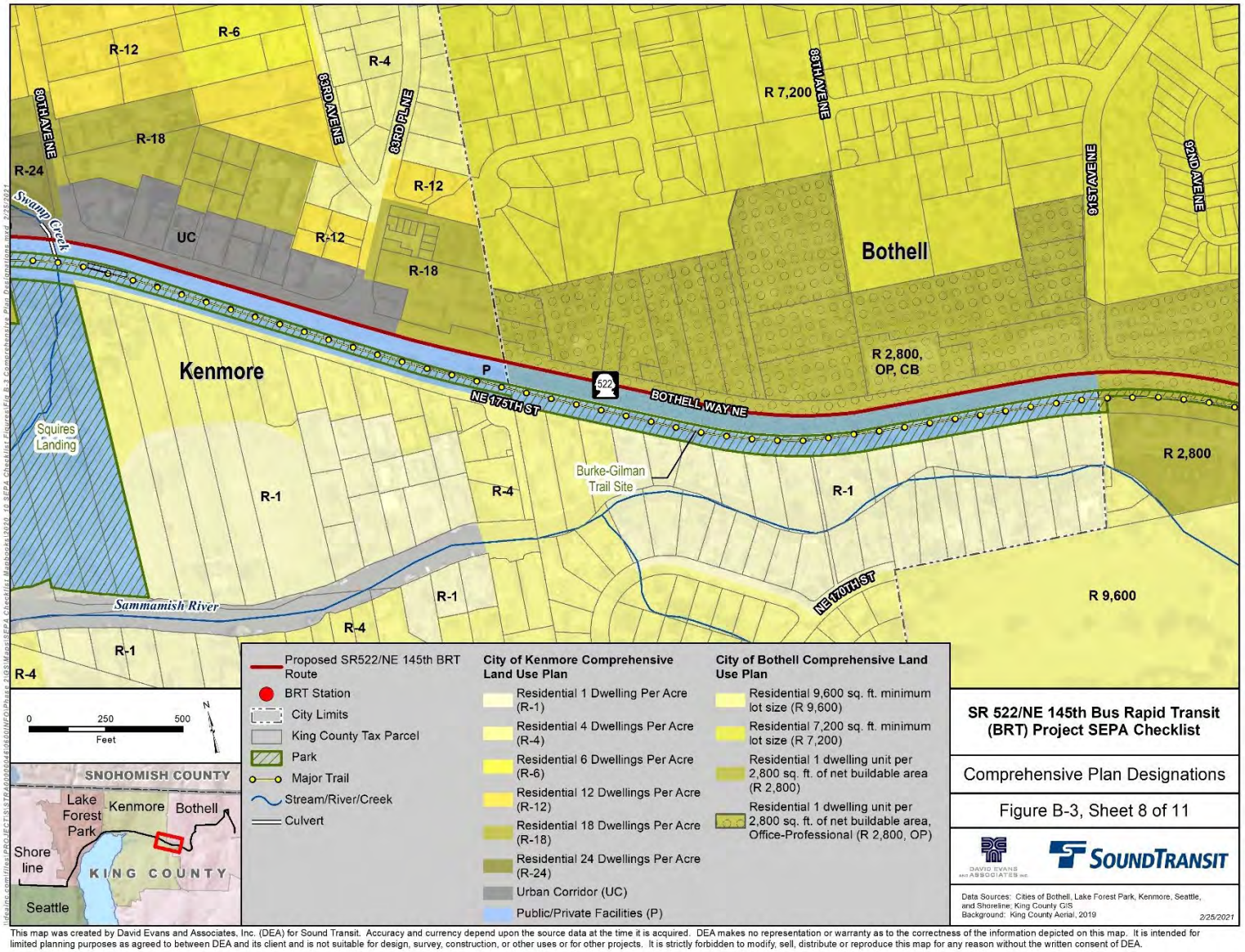
Figure B-3, sheet 7 of 11 Comprehensive Plan Designations



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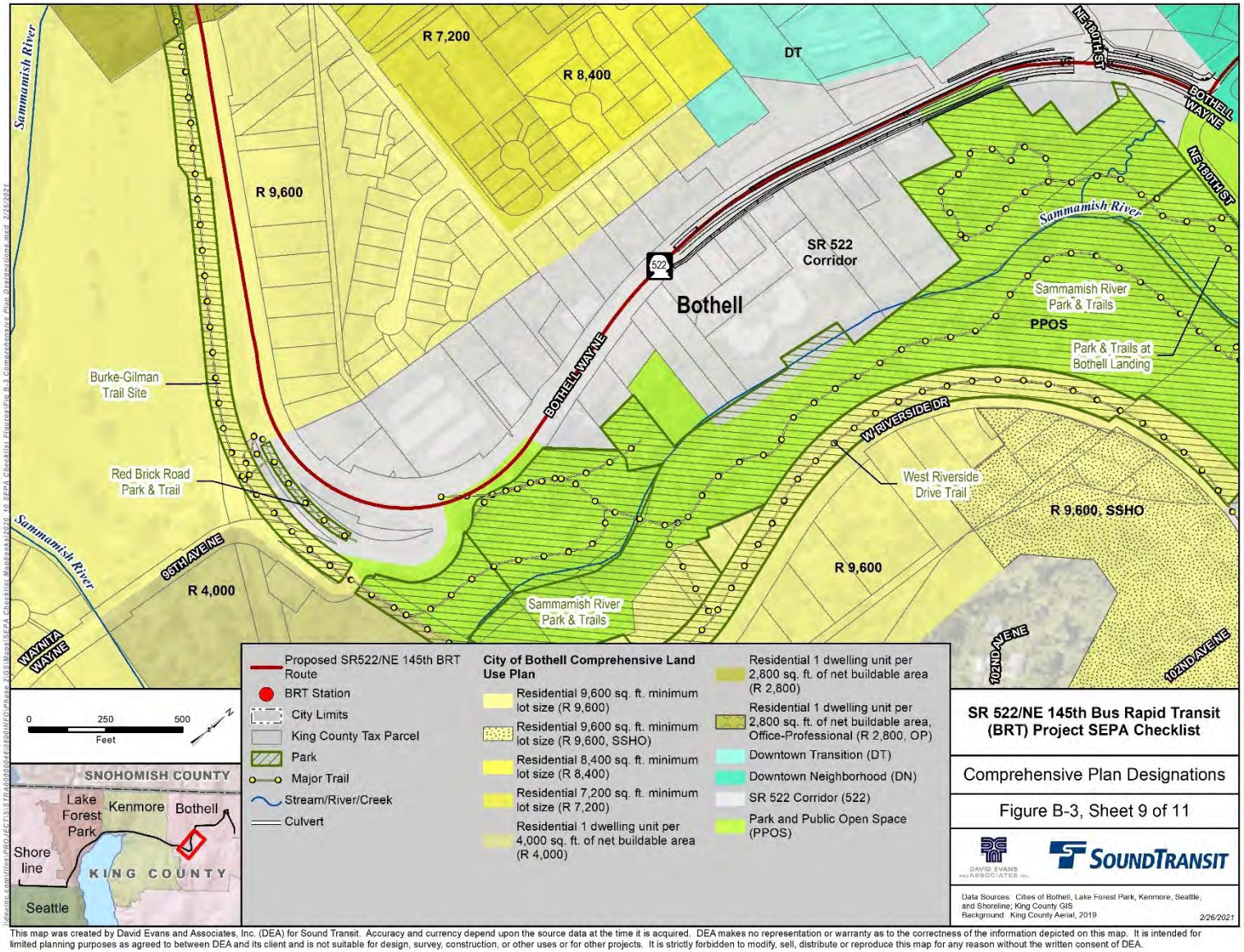

Figure B-3, sheet 9 of 11 Comprehensive Plan Designations

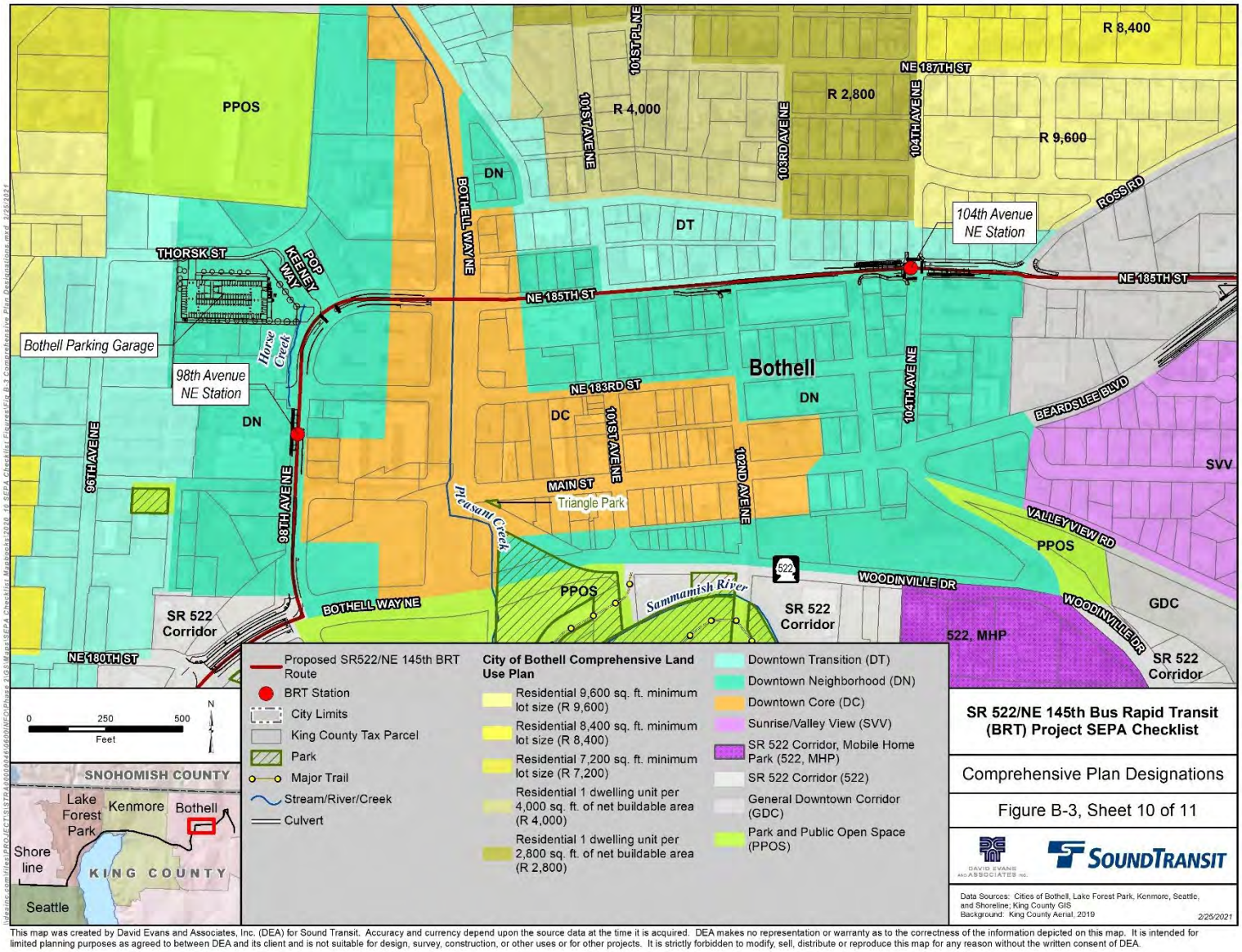

Figure B-3, sheet 10 of 11 Comprehensive Plan Designations

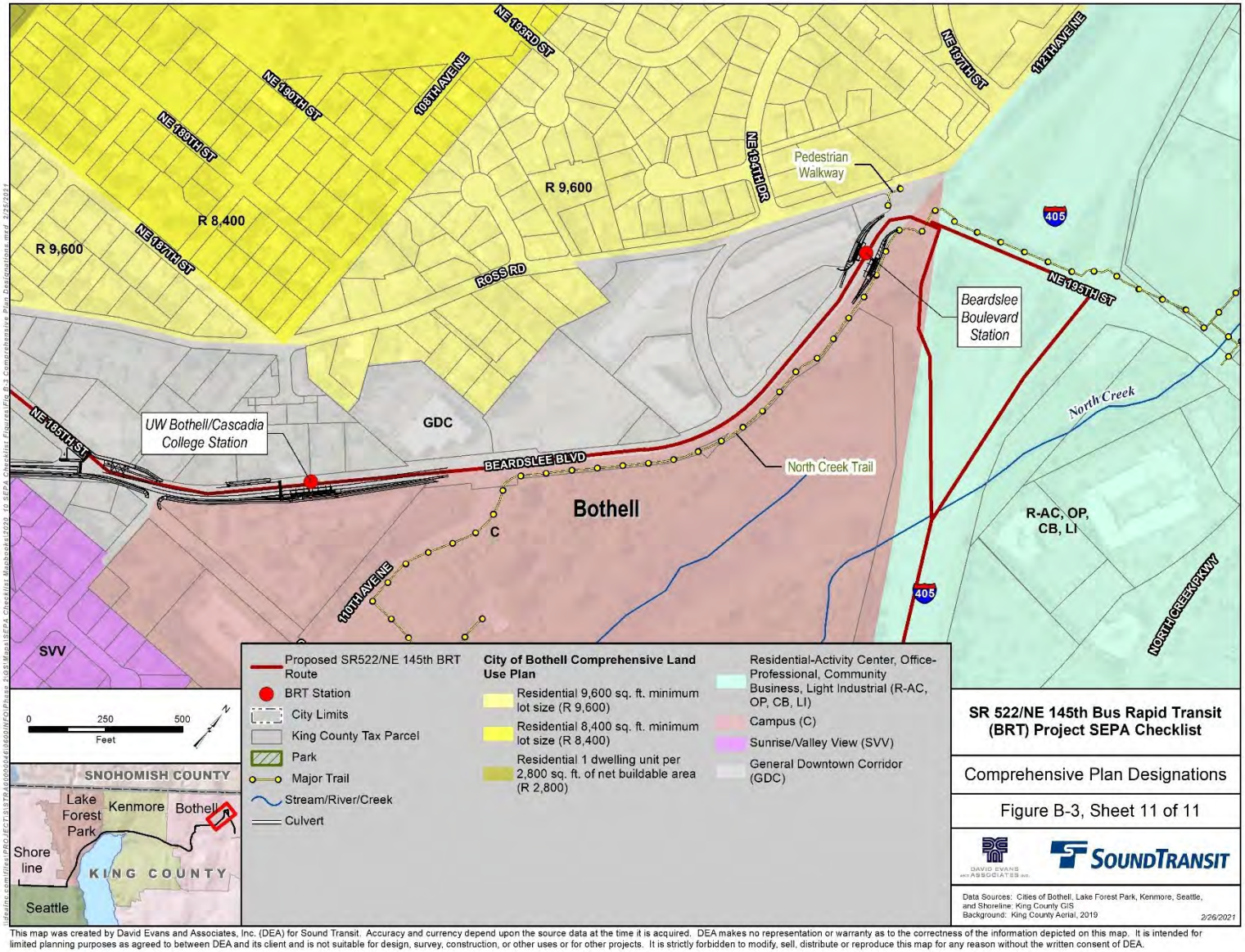

Figure B-3, sheet 11 of 11 Comprehensive Plan Designations

Table B-15 Project Site Comprehensive Plan Designations and Descriptions

Element Number	Segment/ Jurisdiction	Comprehensive Plan Designations and Descriptions
1	1/Shoreline	**Station Area 1 (SA-1):** SA-1 designation encourages transit-oriented development (TOD) in proximity to the future light rail stations at I-5 and NE 185th Street and I-5 and NE 145th Street. The SA-1 designation is intended to support high density residential, a mix of uses, reduced parking standards, public amenities, and commercial and office uses that support the stations and residents of the light rail station areas. The MUR-70' Zone is considered conforming to this designation. **Station Area 3 (SA-3):** SA-3 designation encourages TOD in the area surrounding the future light rail stations at I-5 and NE 185th Street and I-5 and NE 145th Street. The SA-3 designation is intended to provide a transition from the SA-1 and SA-2 designations; transitions to lower density designations; and encourages the development of medium density residential uses, some neighborhood commercial uses, increased housing choices and transitions to low density single-family homes. The MUR-35' Zone is considered conforming to this designation. **Low-density Residential (LDR):** LDR designation allows single-family detached dwelling units. Other dwelling types such as duplexes, single-family attached, cottage housing and accessory dwellings may be allowed under certain conditions. The permitted base density for this designation may not exceed 6 dwelling units per acre.
2	1/Seattle	**Multi-family Residential:** The city's multifamily areas contain a variety of housing types, including duplexes, town houses, walk-up apartments and high-rise towers. These structures may be occupied by owners or renters, and they tend to offer more choices for living styles and income levels. Seattle's goal for multifamily residential area is to "(a)llow a variety of housing types and densities that is suitable for a broad array of households and income levels, and that promotes walking and transit use near employment concentrations, residential services, and amenities." **Commercial/Mixed Use**: Commercial/mixed-use zones are places meant to provide jobs and services, and in certain instances, housing (stand-alone or with commercial space). Mixed-use areas contain residential and commercial uses. Seattle's Land Use Code identifies different types of commercial zones meant to create communities with a variety of activities. Seattle's goal for commercial/mixed-use area is to "(c)reate and maintain successful commercial/mixed-use areas that provide a focus for the surrounding neighborhood and that encourage new businesses, provide stability and expansion opportunities for existing businesses, and promote neighborhood vitality, while also accommodating residential development in livable environments."

Element Number	Segment/ Jurisdiction	Comprehensive Plan Designations and Descriptions
2	1/Shoreline	**Station Area 1 (SA1):** SA1 designation encourages TOD in proximity to the future light rail stations at I-5 and NE 185th Street and I-5 and NE 145th Street. The SA1 designation is intended to support high density residential, a mix of uses, reduced parking standards, public amenities, and commercial and office uses that support the stations and residents of the light rail station areas. The MUR-70' Zone is considered conforming to this designation. **Station Area 3 (SA-3):** SA-3 designation encourages TOD in areas surrounding the future light rail stations at I-5 and NE 185th Street and I-5 and NE 145th Street. The SA-3 designation is intended to provide a transition from the SA-1 and SA-2 designations; transitions to lower density designations; and encourages the development of medium density residential uses, some neighborhood commercial uses, increased housing choices, and transitions to low density single-family homes. The MUR-35' Zone is considered conforming to this designation. **High Density Residential:** This designation is intended for areas near employment and/or commercial areas, where high levels of transit service are present or likely. This designation creates a transition between commercial uses and lower intensity residential uses. Some commercial uses may also be permitted. The permitted base density for this designation may not exceed 48 dwelling units per acre.
3	1/Seattle	**Multi-family Residential:** The city's multifamily areas contain a variety of housing types, including duplexes, town houses, walk-up apartments and high-rise towers. These structures may be occupied by owners or renters, and they tend to offer more choices for living styles and income levels. Seattle's goal for multifamily residential area is to "(a)llow a variety of housing types and densities that is suitable for a broad array of households and income levels, and that promotes walking and transit use near employment concentrations, residential services, and amenities."
3	1/Shoreline	**Low-density Residential (LDR):** LDR designation allows single-family detached dwelling units. Other dwelling types such as duplexes, single-family attached, cottage housing and accessory dwellings may be allowed under certain conditions. The permitted base density for this designation may not exceed 6 dwelling units per acre. **High Density Residential:** HDR is intended for areas near employment and/or commercial areas, where high levels of transit service are present or likely. This designation creates a transition between commercial uses and lower intensity residential uses. Some commercial uses may also be permitted. The permitted base density for this designation may not exceed 48 dwelling units per acre.
4	1/Seattle	**Commercial/Mixed Use**: Commercial/mixed-use zones are places meant to provide jobs and services, and in certain instances, housing (stand-alone or with commercial space). Mixed-use areas contain residential and commercial uses. Seattle's Land Use Code identifies different types of commercial zones meant to create communities with a variety of activities. Seattle's goal for commercial/mixed-use area is to "(c)reate and maintain successful commercial/mixed-use areas that provide a focus for the surrounding neighborhood and that encourage new businesses, provide stability and expansion opportunities for existing businesses, and promote neighborhood vitality, while also accommodating residential development in livable environments."

Element Number	Segment/ Jurisdiction	Comprehensive Plan Designations and Descriptions
4	1/Shoreline	**Mixed Use 2 (MU-2):** MU-2 designation encourages the development of walkable places with architectural interest that integrate a wide variety of retail, office and service uses. It does not allow more intense uses, such as manufacturing and other uses that generate light, glare, noise or odor that may be incompatible with existing and proposed land uses. This designation may provide retail, office and service uses, and greater residential densities than are allowed in low-density residential designations, and promotes pedestrian connections, transit and amenities.
4	1/Lake Forest Park	**Corridor Commercial:** Corridor commercial includes commercial development including the type of development that currently exists along Ballinger Way and Bothell Way. This designation is intended to take advantage of transit facilities and be compatible with surrounding land use designations and environmentally sensitive areas. New development or redevelopment of these commercial areas strives for a clustered retail and pedestrian-friendly design as opposed to strip or lineal development. Residential uses may be allowed as part of mixed-use development, consistent with adopted development standards.
5	2/Lake Forest Park	**Corridor Commercial:** Corridor commercial includes commercial development including the type of development that currently exists along Ballinger Way and Bothell Way. It is sited to take advantage of transit facilities and be compatible with surrounding land use designations and environmentally sensitive areas. New development or redevelopment of these commercial areas strives for a clustered retail and pedestrian-friendly design as opposed to strip or lineal development. Residential uses may be allowed as part of mixed-use development, consistent with adopted development standards. **Multi-family High:** These categories should serve as the city's highest density multifamily residential categories. Densities may be increased with the inclusion of special needs or senior housing where appropriate. Uses within these categories should be located in proximity to major arterials and transit routes. Limited commercial and business uses may be allowed in this classification as part of mixed-use development, consistent with adopted development standards. **Single Family Residential High:** Residential development within this category shall be single-family residential and allow for low density housing alternatives to the single-family detached house (such as accessory or mother-in-law apartment). **Neighborhood Business:** Business development in this category shall be at a smaller scale, pedestrian-oriented where possible and serve the needs of the more suburban residential area. Included in this category are specialty shops and professional and business offices, and small merchandise and food stores. These businesses should not add significant amounts of traffic on state arterials or city streets. Residential uses may be allowed in this classification as part of mixed-use development, consistent with adopted development standards. **Recreation/Open Space:** This category includes areas devoted to public recreational facilities such as parks, pedestrian trails and bicycle trails. This category also includes public open space, private and semi-private community clubs, and other similar public uses.

Element Number	Segment/ Jurisdiction	Comprehensive Plan Designations and Descriptions
6	2/Lake Forest Park	**Corridor Commercial:** Corridor commercial includes commercial development including the type of development that currently exists along Ballinger Way and Bothell Way. It is sited to take advantage of transit facilities and be compatible with surrounding land use designations and environmentally sensitive areas. New development or redevelopment of these commercial areas strives for a clustered retail and pedestrian-friendly design as opposed to strip or lineal development. Residential uses may be allowed as part of mixed-use development, consistent with adopted development standards. **Mixed Use Town Center:** Development in this category shall continue to be pedestrian oriented. A diversity of housing, business, commercial, civic, recreation and employment opportunities that complement the primary commercial use should be encouraged. It is not the intent of the city to mandate or require that housing be included in any development proposals concerning the Town Center, but rather to encourage it as an option. As applied to the town center category, pedestrian orientation means continued provision of sidewalks; landscaped parking areas; and attractive, safe and convenient access between the center and adjacent bus stops and pedestrian access routes.
7	3/Kenmore	**Urban Corridor:** Overall vision is to convert the area on the south side of the highway from a commercial strip corridor to an area of primarily office and multifamily development, taking advantage of lake views and proximity to transit. On the north side of the highway, west of downtown, the area would continue to be a mix of restaurant, retail and service uses, with additional opportunities for office and mixed-use multifamily development. New auto-oriented businesses would be prohibited throughout the district.
8	3/Kenmore	**Downtown Commercial:** This district contains a mix of private and public uses designed to create a small-town feel and pedestrian-friendly environment. Key features are public places, sidewalks, landscaping, transit-orientation, shared or structured parking, and protection of environmentally sensitive areas. Permitted uses emphasize mixed or multiple use developments, and include high-density housing, civic and governmental, offices, small-scale commercial and retail, and locally oriented professional and personal services. Park-and Ride/Transit Centers are promoted along SR 522, particularly in the northwest quadrant of the 68th Avenue NE/SR 522 intersection. **Public and Private Facilities:** The purpose of this district is to identify and retain public and private lands primarily utilized for parks, recreation, schools, medical facilities (e.g., hospitals, clinics and medical districts), non-profit service uses and organizations, utilities, government buildings, and other administrative or institutional uses.
9	3/Kenmore	**Public and Private Facilities:** The purpose of this district is to identify and retain public and private lands primarily utilized for parks, recreation, schools, medical facilities (e.g., hospitals, clinics and medical districts), non-profit service uses and organizations, utilities, government buildings, and other administrative or institutional uses. **Downtown Commercial:** This district contains a mix of private and public uses designed to create a small-town feel and pedestrian-friendly environment. Key features are public places, sidewalks, landscaping, transit-orientation, shared or structured parking, and protection of environmentally sensitive areas. Permitted uses emphasize mixed or multiple use developments, and include high-density housing, civic and governmental, offices, small-scale commercial and retail, and locally oriented professional and personal services. Park-and Ride/Transit Centers are promoted along SR 522, particularly in the northwest quadrant of the 68th Avenue NE/SR 522 intersection.

Element Number	Segment/ Jurisdiction	Comprehensive Plan Designations and Descriptions
10	4/Bothell	**SR 522 Corridor:** This area is envisioned to continue to provide opportunities for existing and future businesses and sites for corridor-configured lodging, workplace, mixed-use and residential buildings. The portion of SR 522 from Hall Road to 98th Avenue NE currently exhibits intense strip development and has the least visible presence of nearby forested lands and the greatest visual dominance of auto-oriented development character. The city plans a street tree planting to establish a continuous foliage canopy with the appropriate tree species and density, to maintain business visibility and provide a softening of place character, sharpen the distinction between the more urbanized Downtown Core and its forested suburban surroundings, and strengthen Downtown Bothell's unique identity in the region. **Park and Public Open Space:** This area includes natural forest and river environment that forms the City of Bothell Downtown Subarea's southern and eastern edges, including the Sammamish River and North Creek corridors, North Creek wetlands and trail, Sammamish River Trail and the Park at Bothell Landing.
11	4/Bothell	**Downtown Neighborhood:** This urban area contains downtown buildings (close together and close to sidewalks) with a mix of uses. Buildings will typically (but not exclusively) be single-use. Urban housing and offices in Downtown Neighborhood buildings will often extend to the ground level. Downtown Neighborhood provides transitions among Downtown districts and a transition between the Downtown Core and the Riverfront Overlay and Park at Bothell Landing areas. **Downtown Core:** This district is centered on connected segments of Main Street and SR 527, and contains a clustered mix of ground floor shops, restaurants, cafes, entertainment venues and personal services. This district is walkable, with well-lit sidewalks along small blocks. Public facilities and gathering spaces occur in this district, along with historic buildings.
12	4/Bothell	**Downtown Neighborhood:** This urban area contains downtown buildings (close together and close to sidewalks) with a mix of uses. Buildings will typically (but not exclusively) be single-use. Urban housing and offices in Downtown Neighborhood buildings will often extend to the ground level. Downtown Neighborhood provides transitions among Downtown districts and a transition between the Downtown Core and the Riverfront Overlay and Park at Bothell Landing areas. **Downtown Core:** This district is centered on connected segments of Main Street and SR 527, and contains a clustered mix of ground floor shops, restaurants, cafes, entertainment venues and personal services. This district is walkable, with well-lit sidewalks along small blocks. Public facilities and gathering spaces occur in this district, along with historic buildings.

Element Number	Segment/ Jurisdiction	Comprehensive Plan Designations and Descriptions
13	4/Bothell	**Downtown Neighborhood:** This urban area contains downtown buildings (close together and close to sidewalks) with a mix of uses. Buildings will typically (but not exclusively) be single-use. Urban housing and offices in Downtown Neighborhood buildings will often extend to the ground level. Downtown Neighborhood provides transitions among Downtown districts and a transition between the Downtown Core and the Riverfront Overlay and Park at Bothell Landing areas. **Downtown Transition:** This district includes areas of transitional development character between the denser Downtown Core and Downtown Neighborhood Districts and adjacent lower density existing residential neighborhoods outside of the City's Downtown Subarea. Development is within walking distance of cafes, restaurants, entertainment, services and transit. Larger developments include new public open spaces and a mix of residential building types and compatible office uses.
14	4/Bothell	**Downtown Neighborhood:** This urban area contains downtown buildings (close together and close to sidewalks) with a mix of uses. Buildings will typically (but not exclusively) be single-use. Urban housing and offices in Downtown Neighborhood buildings will often extend to the ground level. Downtown Neighborhood provides transitions among Downtown districts and a transition between the Downtown Core and the Riverfront Overlay and Park at Bothell Landing areas. **Downtown Transition:** This district includes areas of transitional development character between the denser Downtown Core and Downtown Neighborhood Districts and adjacent lower density existing residential neighborhoods outside of the Plan Area. Development is within walking distance of cafes, restaurants, entertainment, services and transit. Larger developments will include new public open spaces and a mix of residential building types and compatible office uses. **General Downtown Corridor:** This district is similar to those in the SR 522 Corridor district, except with narrower streets and therefore fewer impacts from the transportation facility, more sensitive uses, restricted surface parking at buildings and more types of smaller-scale residential building entrances. This district has street edge tree planting and special setbacks and height limits to provide a transition between corridor development and adjacent residential neighborhoods outside of the downtown plan area.

Element Number	Segment/ Jurisdiction	Comprehensive Plan Designations and Descriptions
15	4/Bothell	**Downtown Neighborhood:** This urban area contains downtown buildings (close together and close to sidewalks) with a mix of uses. Buildings will typically (but not exclusively) be single-use. Urban housing and offices in Downtown Neighborhood buildings will often extend to the ground level. Downtown Neighborhood provides transitions among Downtown districts and a transition between the Downtown Core and the Riverfront Overlay and Park at Bothell Landing areas. **Downtown Transition:** This district includes areas of transitional development character between the denser Downtown Core and Downtown Neighborhood Districts and adjacent lower density existing residential neighborhoods outside of the Plan Area. Development is within walking distance of cafes, restaurants, entertainment, services and transit. Larger developments include new public open spaces and a mix of residential building types and compatible office uses. **General Downtown Corridor:** This district is similar to those in the SR 522 Corridor district, except with narrower streets and therefore fewer impacts from the transportation facility, more sensitive uses, restricted surface parking at buildings, and more types of smaller-scale residential building entrances. This district has street edge tree planting and special setbacks and height limits to provide a transition between corridor development and adjacent residential neighborhoods outside of the downtown plan area.
16	4/Bothell	**General Downtown Corridor:** This district is similar to those in the SR 522 Corridor district, except with narrower streets and therefore fewer impacts from the transportation facility, more sensitive uses, restricted surface parking at buildings, and more types of smaller-scale residential building entrances. This district has street edge tree planting and special setbacks and height limits to provide a transition between corridor development and adjacent residential neighborhoods outside of the downtown plan area. **Campus:** The co-located UW Bothell/Cascadia College campus overlooks the North Creek wetlands and contains modern buildings, a park-like setting and open space that serves as a buffer to adjacent districts. In the long term, the frontage along Beardslee Boulevard between NE 108th Avenue and NE 110th Avenue will be redeveloped as a more urban “front door” to the campus.
17	4/Bothell	**General Downtown Corridor:** This district is similar to those in the SR 522 Corridor district, except with narrower streets and therefore fewer impacts from the transportation facility, more sensitive uses, restricted surface parking at buildings, and more types of smaller-scale residential building entrances. This district has street edge tree planting and special setbacks and height limits to provide a transition between corridor development and adjacent residential neighborhoods outside of the downtown plan area. **Campus:** The co-located UW Bothell/Cascadia College campus overlooks the North Creek wetlands and contains modern buildings, a park-like setting, and open space that serves as a buffer to adjacent districts. In the long term, the frontage along Beardslee Boulevard between NE 108th Avenue and NE 110th Avenue will be redeveloped as a more urban “front door” to the campus.

SOURCE: Bothell 2015; Bothell 2017; Kenmore 2015; Lake Forest Park 2016; Seattle 2018; Shoreline 2012.

B 8 g. If applicable, what is the current shoreline master program designation of the site?

Seattle, Shoreline and Lake Forest Park: No portion of the project site overlaps with shoreline jurisdiction designated in the City of Seattle Shoreline Master Program (SMP), the City of Shoreline SMP, or the City of Lake Forest Park SMP (Seattle 2018; Shoreline 2012; Lake Forest Park 2016).

Kenmore: The proposed project overlaps slightly with City of Kenmore SMP-designated Urban Conservancy shoreline jurisdiction at the north end of the proposed Kenmore Park-and-Ride garage location, as shown in **Figure B-4** (Shoreline Master Plan Designations) (Kenmore 2015).

Bothell: The proposed project overlaps slightly with City of Bothell SMP-designated Urban Conservancy shoreline jurisdiction on the east side of SR 522, across from Hall Road, at Bothell Landing Park, shown in **Figure B-4** (Shoreline Master Plan Designations) (Bothell 2015).

B 8 h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Table B-16 (Critical Areas on the Project Site) lists critical areas on the project site within the cities of Shoreline, Seattle, Lake Forest Park, Kenmore and Bothell. No critical areas occur at Elements 2 and 4 (Seattle, Shoreline and Lake Forest Park); Element 8 in Kenmore, and Elements 13, 14, 15 and 16 in Bothell.

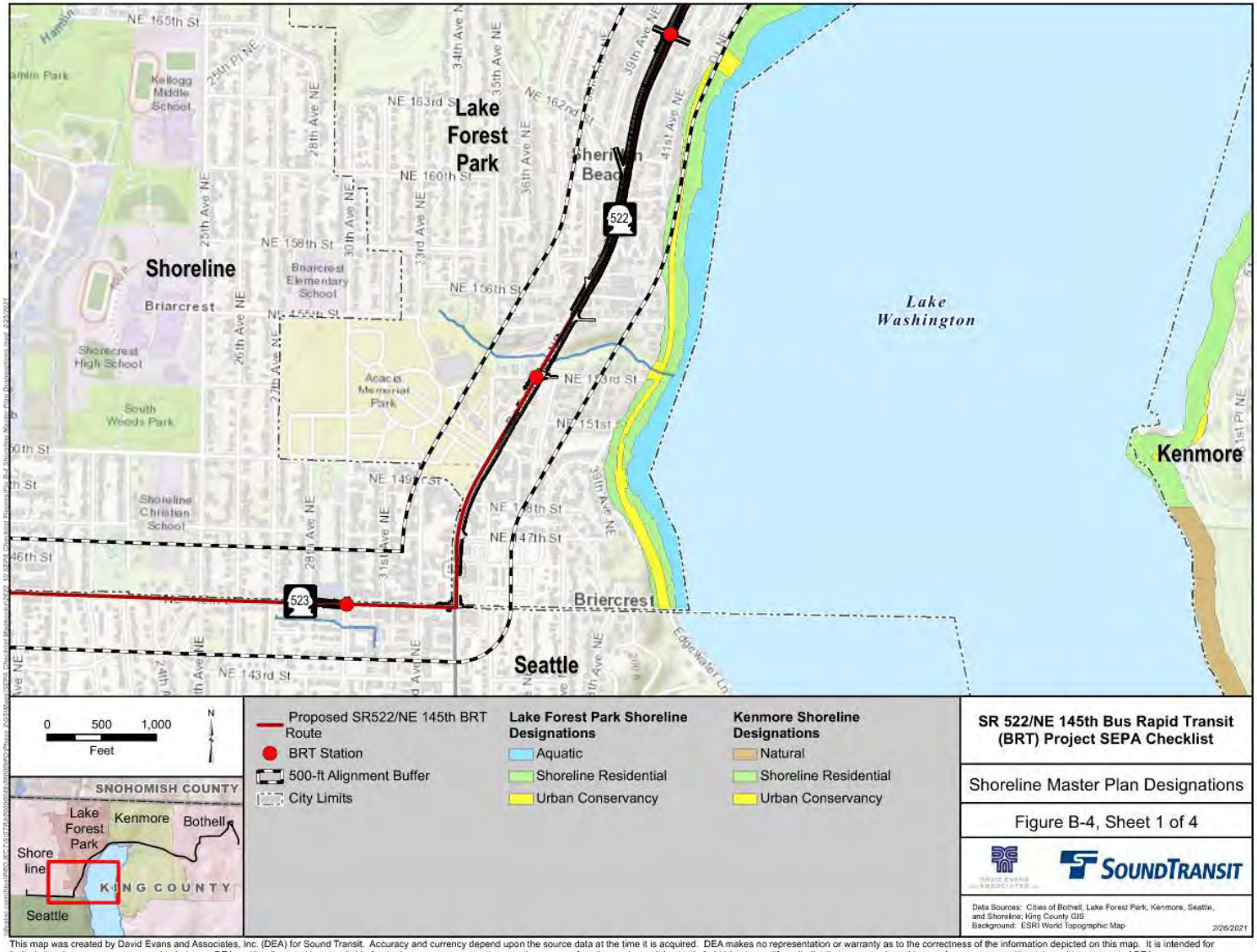

Figure B-4, sheet 1 of 4 Shoreline Master Plan Designations

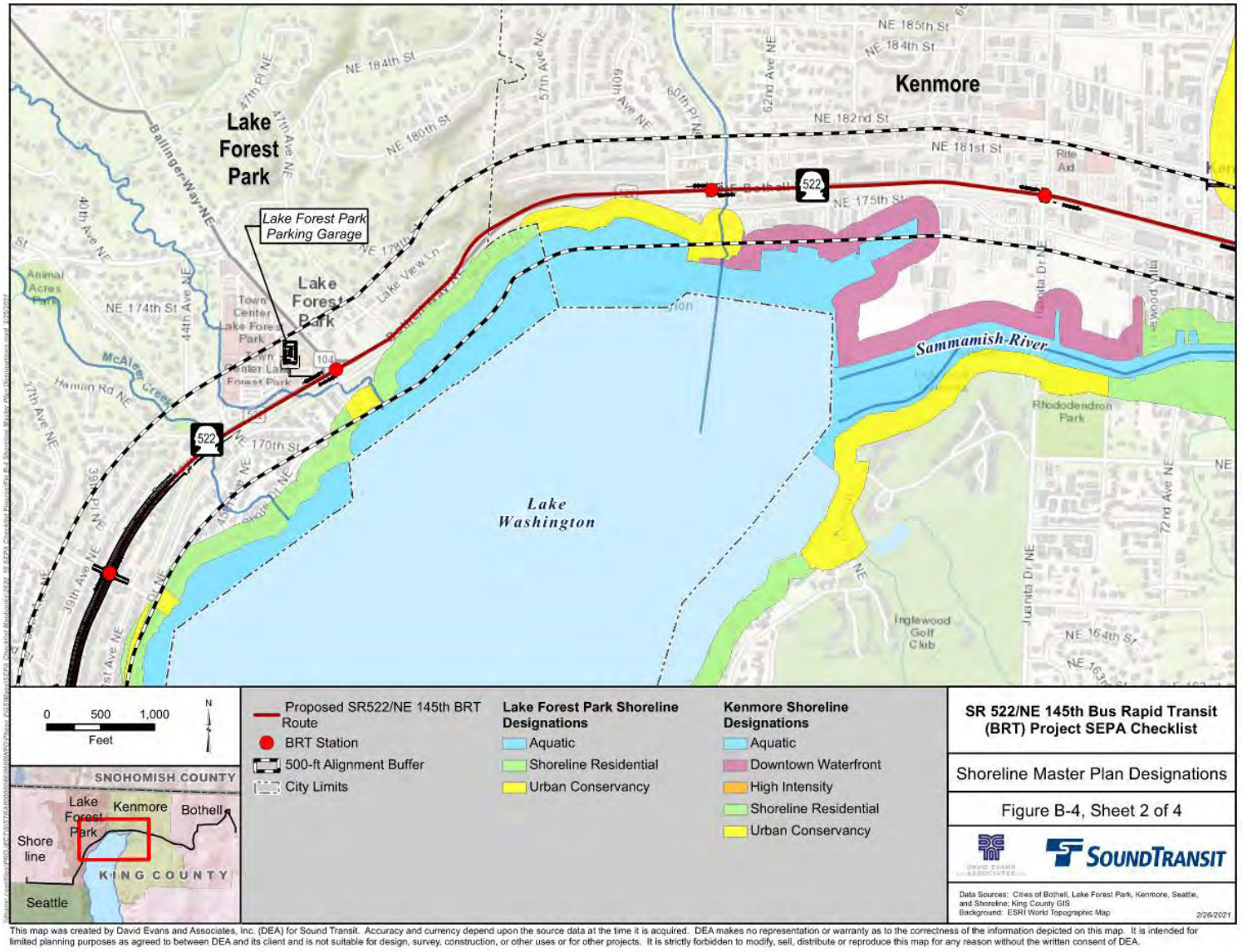

Figure B-4, sheet 2 of 4 Shoreline Master Plan Designations

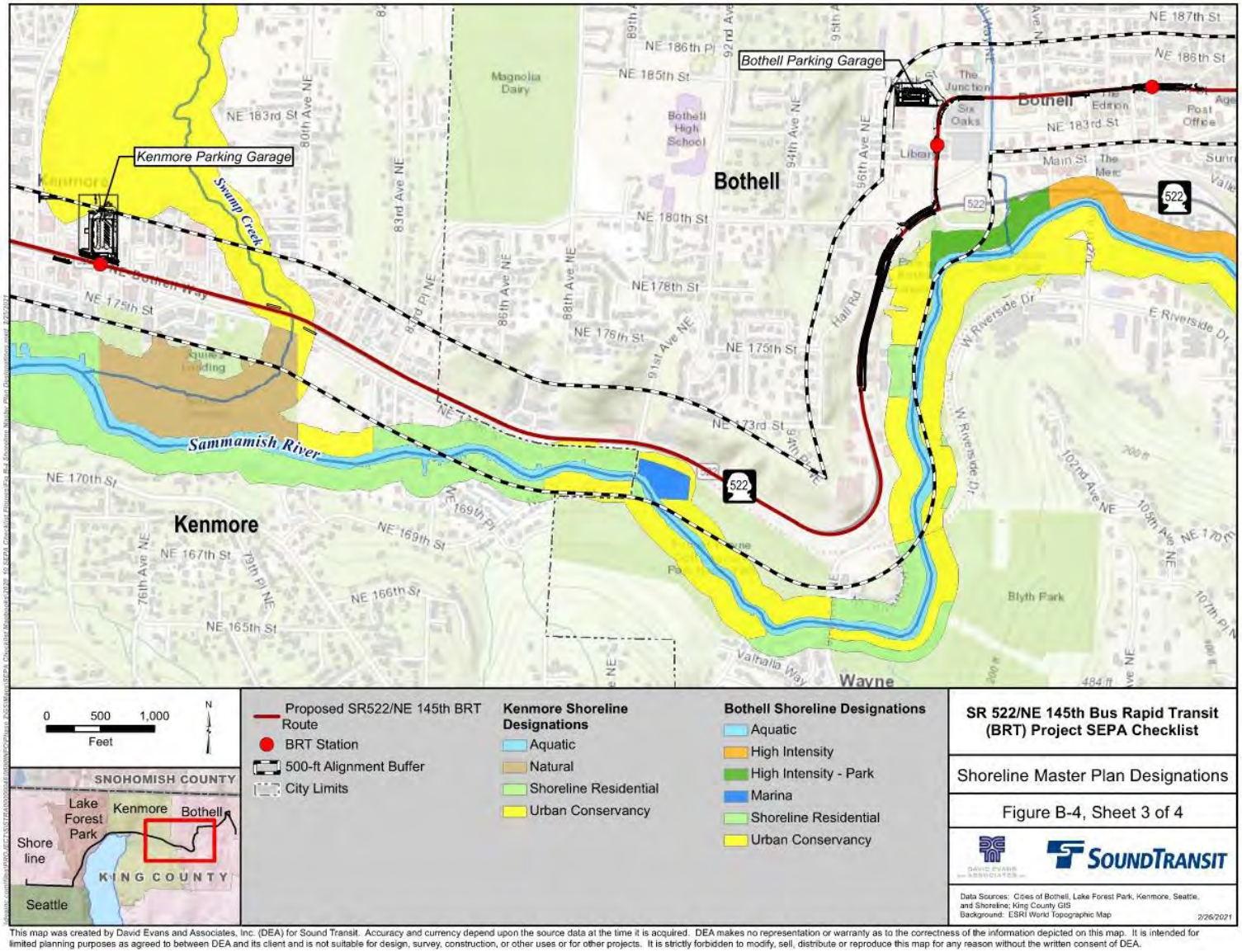

Figure B-4, sheet 3 of 4 Shoreline Master Plan Designations

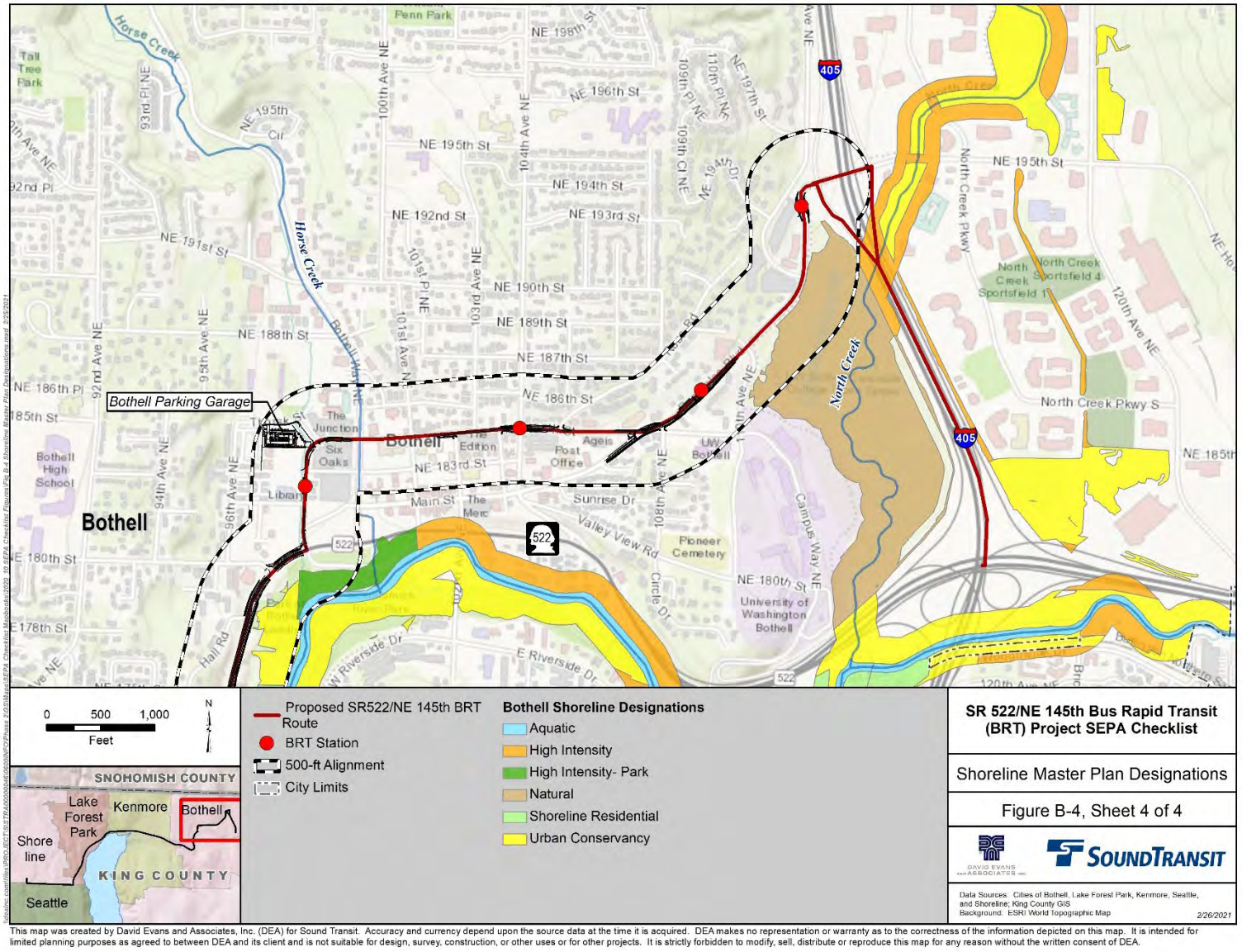

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Figure B-4, sheet 4 of 4 Shoreline Master Plan Designations

Table B-16 Critical Areas on the Project Site

Element Number/Jurisdiction	Critical Area Overlapping or Adjacent (Name)
1/Shoreline	**Landslide Hazard (Due to Steep Slopes)/Erosion Hazards:** steep slopes exist on the north side of NE 145th Street both west and east of 8th Avenue NE.
3/Seattle, Shoreline	**Landslide Hazard (Due to Steep Slopes)/Erosion Hazards:** steep slopes exist on the north side of NE 145th Street west of 28th Avenue NE (City of Shoreline) and on the south side of NE 145th Street west of 30th Avenue NE (City of Seattle).
5/Lake Forest Park	**Landslide Hazard/Erosion Hazards:** Landslide Hazard Areas on the east and west sides of SR 522 from approximately 140 feet south of NE 153rd Street to approximately 200 feet south of NE 155th Street. Isolated areas of steep slopes (estimated to be more than 40 percent) west of and adjacent to SR 522 between approximately 200 feet south of 38th Avenue NE and 41st Avenue NE. **Seismic Hazard:** Potential for liquefaction to occur at Bsche'tla Creek between NE 153rd Street and NE 155th Street, and at McAleer Creek west of the intersection with Brookside Boulevard NE, based on borings completed at these locations. **Streams/Wetlands/Floodplain:** Bsche'tla Creek (stream with fish habitat) and associated stream buffer on northeast corner of SR 522/NE 153rd Street. McAleer Creek (stream with fish habitat) and associated stream buffer approximately 250 feet south of 45th Avenue NE on southern (eastbound) side of SR 522. Wetland WLFP-3 on eastern side of SR 522 south of 45th Avenue NE and east of McAleer Creek. Federal Emergency Management Agency 100-year floodplain extending approximately 200 feet from McAleer Creek north to the intersection at 45th Avenue NE.
6/Lake Forest Park	**Seismic Hazard:** Potential for liquefaction to occur within proposed parking garage building footprint, based on borings completed at the site. **Streams/Wetlands/Floodplain:** Lyon Creek (stream with fish habitat) crosses SR 522 south of project footprint; associated stream buffer extends along southern edge of SR 522 and eastbound BRT station to Ballinger Way NE. Numerous riparian wetlands are associated with Lyon Creek in this area, including WLFP-2 and WLFP-10. These wetlands overlap the Ordinary High Water Mark of Lyon Creek.
7/Kenmore	**Landslide Hazard (Due to Steep Slopes)/Erosion Hazards:** Steep slopes associated with Cat Whisker Creek south of the proposed 61st Avenue NE Eastbound Platform. **Streams/Wetlands/Floodplain:** Cat Whisker Creek and associated stream buffer at southeast corner of SR 522/61st Avenue NE.
9/Kenmore	**Seismic Hazard**: Potential for liquefaction to occur within proposed Kenmore Park-and-Ride garage footprint, based on geotechnical boring performed at the site. **Streams/Wetlands/Floodplain:** WKE-1 and WKE-2 and forested wetlands associated with Swamp Creek located to the north/northeast of the proposed Kenmore Park-and-Ride garage location. **Fish and Wildlife**: Kenmore Great Blue Heron Rookery adjacent to proposed Kenmore Park-and-Ride garage location. Proposed garage footprint within designated heron disturbance zones.

Element Number/Jurisdiction	Critical Area Overlapping or Adjacent (Name)
10/Bothell	**Landslide Hazard/Erosion Hazards:** Likely within buffers for the mapped Landslide Hazard Area west of SR 522 at Wayne's Curve. Steep slopes east of and adjacent to SR 522 between Wayne's Curve and NE 180th Street. **Streams/Wetlands/Floodplain:** Stream SBO-1 and Wetland WBO-1 and their buffers are on the east side of SR 522 across from Hall Road in Bothell Landing Park.
11/Bothell	**Streams/Wetlands/Floodplain:** Horse Creek crosses SR 522 and runs parallel to NE 98th Avenue. It is immediately adjacent to the proposed southbound station platform on 98th Avenue NE. There is no regulatory buffer on this daylighted reach of Horse Creek.
12/Bothell	**Seismic Hazard:** Potential for liquefaction to occur within proposed park-and-ride garage footprint, based on previous borings at this site.
17/Bothell	**Streams/Wetlands/Floodplain:** Wetland WBO-2 is within the City of Bothell SMP jurisdiction and adjacent to the proposed location for the Beardslee Boulevard Eastbound Platform.

Note: No critical areas occur at Elements 2 and 4 (Seattle, Shoreline and Lake Forest Park); Element 8 in Kenmore; and Elements 13, 14, 15 and 16 in Bothell.

B 8 i. Approximately how many people would reside or work in the completed project?

No inhabitable residential or commercial structures would be constructed as part of the project.

B 8 j. Approximately how many people would the completed project displace?

No residential displacements would occur. The project's expected three full commercial parcel acquisitions would result in approximately 36 employee displacements in Seattle. These include an estimated 7 employees at Washington Federal Savings and Loan (2,200-square-foot commercial building [Codigo 2017]), 19 employees at Pizza Hut (1,500-square-foot commercial building [store average based on 300,000 employees and 15,600 stores worldwide] [Smith 2017]); and 10 employees at Brown Bear Car Wash (3,500-square-foot commercial building). Sound Transit expects to fully acquire the site in the southwest quadrant of 98th Avenue NE and Pop Keeney Way, which is vacant and therefore houses no employees. The Lake Forest Park Professional Building would also be demolished and, as a result, the employees at the approximately nine operating businesses at this location would be displaced. Assuming an estimated 10 employees per business, based generally on size and type of business, approximately 90 employees would be displaced. If the appraisal process results in closure of the two commercial businesses near the proposed 68th Avenue NE Westbound Platform due to loss of driveway access, employees at the businesses could be displaced.

B 8 k. Proposed measures to avoid or reduce displacement impacts, if any:

Deviations from standard design widths have been included in the proposed project design to reduce property impacts. Sound Transit would request city code design deviations from jurisdictions, including narrowing the sidewalk in certain locations and removing the planted buffer. Additional information is provided in response to Question B 9 c below. Sound Transit would coordinate with jurisdictional authorities to apply for permits (see **Attachment A** (Permit Matrix)) and request design deviations and variances as needed to further minimize property impacts and displacements.

B 8 l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The project would be consistent with land use plans and would support land use goals and policies of local jurisdictions. Sound Transit would proceed through each jurisdiction's land use approval processes for project design elements as needed, which would ensure project consistency with land use plans, goals and policies.

The majority of the land that would be utilized for the project is within public ROW. The portion that is not within public ROW would be either permanently acquired by Sound Transit or placed into a permanent or temporary easement for the purposes of the project. **Figure B-2** (Zoning) shows existing zoning, **Figure B-3** (Comprehensive Plan Designations) shows comprehensive plan land use designations, and **Figure B-4** (Shoreline Master Plan Designations) shows shoreline master program designations for the corridor. Sound Transit is developing Permitting Work Plans for each appropriate jurisdiction to be utilized throughout the permitting process. Development agreements with appropriate jurisdictions may also be implemented to guide project development.

B 8 m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

No measures are needed, because no such lands are found near the project and there would be no such impacts.

B 9. Housing

B 9 a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Except as discussed in terms of relocations, in response to Question B 9 c below, no housing units would be provided as part of this project.

B 9 b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

The proposed project would not result in elimination of any housing units.

B 9 c. Proposed measures to reduce or control housing impacts, if any:

Deviations from standard design widths, including narrowing sidewalks or removing the planted buffer, were implemented to reduce property acquisitions and avoid housing impacts. The project design team has minimized impacts to housing by adjusting design where feasible to avoid property impacts. Property acquisitions would be completed in compliance with Sound Transit's Real Property Acquisitions and Relocation Policy, Procedures and Guidelines and RCW 8.26 Relocation Assistance – Real Property Acquisition Policy, which requires entities acquiring properties through eminent domain to pay just compensation for the property.

B 10. Aesthetics

B 10 a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The three park-and-ride garages would be the tallest proposed structures. Of the three proposed park-and-ride garages, the Lake Forest Park Park-and-Ride garage would be the tallest at 66 feet in height. Buildings approximately 25 feet tall surround the Lake Forest Park Park-and-Ride garage site. The Kenmore Park-and-Ride garage would be 60 feet tall. Buildings in the general vicinity of the Kenmore Park-and-Ride garage site are 15 feet to 25 feet tall. The Bothell Park-and-Ride garage would be 42 feet tall; this garage site is currently surrounded by buildings that are approximately 55 feet tall. The principal materials used for the exterior of the park-and-ride garages would include concrete, glass and metal or other noncombustible cladding or screening. See **Appendix F** (Visual and Aesthetic Resources Technical Report) for more information, including visual simulations.

B 10 b. What views in the immediate vicinity would be altered or obstructed?

Views along Segments 1, 3 and 4 (Seattle/Shoreline, Kenmore and Bothell) would not be substantially altered, because project elements would be compatible with: (1) the existing visual character of the area of visual effect, and (2) the reasonably foreseeable future development (for example, the potential TOD in Kenmore). Near the proposed Bothell Park-and-Ride garage site, views from private development to the west and south toward the existing vacant lot would change as a result of garage construction. The garage would be similar to and compatible with existing neighborhood buildings and the mixed-use visual character. In specific locations along

Segment 2 (Lake Forest Park), where residential neighbors and travelers would have direct, line-of-sight views toward large project changes, such as park-and-ride garage and wall construction in conjunction with mature tree removal, views would be altered (see discussion of viewpoint 3 in **Appendix F** (Visual and Aesthetic Resources Technical Report)). The extent of tree removal may be refined during final design. Sound Transit will implement measures listed in the response to Question B 10 c to reduce effects on neighboring residences along Segment 2 in Lake Forest Park.

See **Appendix F** (Visual and Aesthetic Resources Technical Report) for more information.

B 10 c. Proposed measures to reduce or control aesthetic impacts, if any:

Sound Transit will implement the following measures to reduce aesthetic effects on neighboring residences in Lake Forest Park:

- Preserve mature trees to the extent practicable between the proposed sidewalk and existing residences along SR 522 between 38th Avenue NE and NE 165th Street in conjunction with local municipal codes.

- For all proposed retaining walls, provide architectural finishes on the vertical faces, in conjunction with WSDOT and stakeholder coordination. Options for concrete wall treatments include variations to texture, color and/or pattern.

- Where feasible, as determined in coordination with local jurisdictions, include planter strips in front of concrete retaining walls.

- In conjunction with local tree preservation municipal codes, where feasible, provide tree replacement with large stature street trees in the planter strips along SR 522 where road widening would introduce new views from residential properties toward the roadway.

Sound Transit conducted Interagency Group[6] coordination with stakeholders and public open houses to provide project updates and receive input. This early coordination during project planning and design has helped to avoid and minimize the project's overall effects on visual quality. Also, **Appendix F** (Visual and Aesthetic Resources Technical Report) contains **Appendix B** (Parking Structure Potential Aesthetic and Visual Treatments), which illustrates aesthetic features associated with existing Sound Transit facilities that could be used for this project. Concept and final aesthetic treatment design for the park-and-ride garages would be presented to the public and local agencies for design review, where required, before construction.

In addition to the avoidance and minimization measures described above, for potential impacts to the visual character of SR 522 in Lake Forest Park, where large retaining walls are proposed in conjunction with the removal of mature trees, the following strategies for mitigation would be implemented, if authorities with jurisdiction in this segment of the corridor approve:

[6] The Interagency Group was established at the beginning of project planning and design and is composed of agencies having jurisdiction over the project site, including the cities of Seattle, Shoreline, Lake Forest Park, Kenmore, Bothell and Woodinville; WSDOT; King County Metro; UW Bothell/Cascadia College; and Community Transit. Interagency Group meetings were held regularly throughout planning, design and environmental review.

- Install climbing vine plant species either above, or at the base of, retaining walls using small "cut-out" planting pockets in the sidewalk for soil. With time, climbing vines would soften the potentially stark appearance of tall retaining walls by providing a "green over gray" effect.

- Where space allows within permanent easements, install conifer trees for additional screening behind retaining walls. Coordination with individual residential property owners adjacent to SR 522 could extend these plantings into private property if desired. With time, some trees would grow to be seen in the foreground and middle ground from the SR 522 corridor.

See **Appendix F** (Visual and Aesthetic Resources Technical Report) for more information.

B 11. Light and Glare

B 11 a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Proposed sources of light would come from new (or relocated) streetlights, where required, in conjunction with new or reconstructed lanes, pedestrian lighting and internally illuminated pylons at new station platforms, and building and site lighting at the park-and-ride garages (located in Lake Forest Park, Kenmore and Bothell). These lights would be seen at night from adjacent roadways (though park-and-ride garage lights may operate 24 hours a day for safety). All proposed light fixtures would include cutoff shields or hoods, so lighting is directed downward to prevent spillover into neighboring properties. Proposed lighting would be selected to be compatible with, or potentially match, the types of lighting fixtures currently present in the corridor. In addition, all new lighting associated with the project would occur in fully developed roadway corridors with existing street lighting and commercial and residential site lights.

The project is not expected to produce reflective glare, because building materials would be nonreflective or matte-finished. Specifically, for moderate to tall concrete retaining walls adjacent to roadways, incorporating texture or architectural relief into vertical surfaces would eliminate the potential for reflective glare from vehicle headlights at night.

B 11 b. Could light or glare from the finished project be a safety hazard or interfere with views?

No. Proposed lighting would be consistent with existing fixture types along the project route. All proposed light fixtures would include cutoff hoods or shields to direct lighting downward to prevent spillover into neighboring properties. See **Appendix F** (Visual and Aesthetic Resources Technical Report) for more information.

B 11 c. What existing off-site sources of light or glare may affect your proposal?

No existing off-site sources of light or glare would affect the proposed project.

B 11 d. Proposed measures to reduce or control light and glare impacts, if any:

In addition to use of cutoff shields or hoods, compatible fixtures and dark/matte finishes, the contractor would implement the following types of measures to reduce light or glare:

- Use of warm-only light tones and avoidance of cool or blue tone lighting, especially when LED fixtures are proposed

- Use of light levels that are as low as possible, while still adhering to applicable standards for safety and visibility

B 12. Recreation

B 12 a. What designated and informal recreational opportunities are in the immediate vicinity?

Designated and informal recreational opportunities in the immediate vicinity of the project include the Jackson Park Golf Course (in Seattle), the Burke-Gilman Trail (in Lake Forest Park, Kenmore and Bothell), Log Boom Park (in Kenmore), and The Park at Bothell Landing (in Bothell).

B 12 b. Would the proposed project displace any existing recreational uses? If so, describe.

The project would not permanently displace any recreational uses. The project would result in acquisition of property adjacent to the Burke-Gilman Trail in three locations and at one location at Bothell Landing Park:

- The Lake Forest Park Town Center Station, eastbound platform, would require partial acquisition of parcel number 403 010 0350, which is adjacent to the Burke-Gilman Trail. The parcel taxpayer is BNSF Railway Company, and the address as 17400 Bothell Way NE. The acquired portion of the parcel would be used to add a small area of planted buffer and sidewalk to connect to the platform. The parcel is zoned Community Commercial/Park, could include significant trees, covers 0.1 acre, and slightly overlaps with the Burke-Gilman Trail at the northeast end of the parcel. The project would not require any permanent or temporary trail detour or closure and would not affect the recreational use of the trail.

- Construction of the 68th Avenue NE Eastbound Platform and the Kenmore Park-and-Ride Eastbound Platform would require two areas of partial acquisition of parcel number 122 604 9014 in Kenmore. This parcel is near the Swamp Creek buffer, near the floodplain and transit stops. The taxpayer is listed as King County Parks and the use as railroad ROW. The Burke-Gilman Trail (recreational use) is located on the approximately 40-foot-wide parcel and extends the length of the parcel, from 68th Avenue NE to the Bothell city limits. The parcel is zoned Parks and covers 5.7 acres in total. The use of the trail would not be affected; no temporary or permanent detours or closures would be required.

- Construction of the sidewalk, planted buffer and retaining (fill) wall on the east side of SR 522 south of NE 180th Street in Bothell would require a small strip of partial acquisition from parcel 072 605 9054, which is part of Bothell Landing Park. The area to be acquired is 0.4 percent of the approximately 6-acre parcel, which is adjacent to additional areas of park and open space, including Sammamish River Park. The parcel is zoned Park and Public Open Space. The use of Bothell Landing Park would not be affected; the area to be acquired is not an active recreation area.

The project would include reconstruction of an existing driveway at the northeast corner of Jackson Park Golf Course, resulting in temporary construction impacts, such as noise, dust and truck traffic. The driveway would be reconstructed to tie into the proposed sidewalk along the south side of NE 145th Street in this area and would not expand or widen the existing driveway. The proposed sidewalk would be constructed within public ROW and would require a temporary construction easement. The driveway reconstruction would not affect usage of or permanent access to Jackson Park Golf Course. The contractor would coordinate driveway reconstruction

and sidewalk construction with Seattle Parks Department to avoid conflicts with maintenance or other activities that involve this driveway and the attached road leading into the golf course.

B 12 c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

The proposed project does not include constructing or operating additional recreational opportunities. Although certain project components would be adjacent to the Burke-Gilman Trail, the use of the trail would be maintained. In general, nonmotorized transportation opportunities would increase due to this project, which may enhance use of the Burke-Gilman Trail.

B 13. Historic and cultural preservation

B 13 a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

The project Area of Impact (AI) represents 9 miles of roadway from the Shoreline South/148th Station to the SR 522/I-405 Transit Hub. The AI also includes parcels adjacent to the BRT route, which accounts for visual impacts to potentially historic buildings and structures and ground-disturbing actions that may impact archaeological deposits. Sound Transit contracted for an architectural survey of the AI, which found that 23 resources are potentially eligible for listing in City of Seattle as a Seattle City Landmark (SCL), City of Bothell in the City of Bothell Register of Historic Landmarks (COBRHL), King County in the King County Register of Historic Places (KCRHP), Washington state in the Washington Heritage Register (WHR), or National Register of Historic Places (NRHP) (**Table B-17** (Built Environment Resources in the AI Recommended Eligible for Listing in the NRHP or Local Registers)). Additionally, background research and archaeological field survey by Historical Research Associates, Inc. identified two resources in the AI that were previously found eligible for listing in the COBRHL and/or the WHR and the NRHP (**Table B-18** (Built Environment Resources in the AI Listed or Determined Eligible for the Bothell Register of Historic Landmarks, Washington Heritage Register (WHR) or NRHP)). No resources within the AI have been previously listed as an SCL or in the KCRHP.

Table B-17 Built Environment Resources in the AI Recommended Eligible for Listing in the NRHP or Local Registers

No.	Parcel	Street Address	City	Build Date	Resource Type	Eligibility Recommendation
1.	2026049004	1000 NE 135th Street	Seattle	1930	Jackson Park Golf Course	NRHP/WHR: Eligible under Criteria A and C; Local Register: Eligible as SCL under Criteria A and C
2.	6632900010	1250 NE 145th Street	Shoreline	1964	Park Ridge Care Center	NRHP/WHR: District eligible under Criterion C; Local Register: Eligible for KCRHP under Criterion 3
3.	6632300641	1249 NE 145th Street	Seattle	1948	CenturyLink telecommuni-cations	NRHP/WHR: Eligible under Criteria A and C; Local Register: Eligible as SCL under Criteria A and C
4.	6632300280	14360 15th Avenue NE	Seattle	1975	Washington Federal Savings and Loan	NRHP/WHR: Eligible under Criteria A and C; Local Register: Eligible as SCL under Criteria C, D and E
5.	7663700391	14378 30th Avenue NE	Seattle	1970	Jackson Park House apartments	NRHP/WHR: Eligible under Criteria A and C; Local Register: Eligible as SCL under Criteria A, C and D
6.	649300250	2818 NE 145th Street	Shoreline	1965	Shoreline Health and Rehab Center	NRHP/WHR: Eligible under Criterion C; Eligible for the KCRHP under Criterion 3
7.	6744700360	15530 Bothell Way NE	Lake Forest Park	1965	Multifamily housing: “Thundalarra”	NRHP/WHR: Eligible under Criterion C
8.	7740100025	16210 39th Avenue NE	Lake Forest Park	1953	Residence	NRHP/WHR: Eligible under Criterion C
9.	7738500451	16154 Bothell Way NE	Lake Forest Park	1955	Residence	NRHP/WHR: District eligible under Criterion C
10.	7738500460	16242 Bothell Way NE	Lake Forest Park	1952	Residence	NRHP/WHR: District eligible under Criterion C
11.	7738500115	16709 41st Avenue NE	Lake Forest Park	1954	Residence	NRHP/WHR: Eligible under Criterion C
12.	7738500090	16747 41st Avenue NE	Lake Forest Park	1950	Residence	NRHP/WHR: District eligible under Criterion C
13.	4030100016	17228 Beach Drive	Lake Forest Park	1947	Residence	NRHP/WHR: Eligible under Criterion C

No.	Parcel	Street Address	City	Build Date	Resource Type	Eligibility Recommendation
14.	403010TRCT	17301 Beach Drive NE	Lake Forest Park	1967	Lake Forest Park Civic Club	NRHP/WHR: Eligible under Criteria A and C
15.	4022300005	17430 Ballinger Way	Lake Forest Park	1925	Residence	NRHP/WHR: Eligible under Criteria A, B and C
16.	7946300210	6512 NE Bothell Way	Kenmore	1964	Commercial building	NRHP/WHR: District eligible under Criterion C; Local Register: Eligible for KCRHP under Criterion 3
17.	7946300205	6522 NE Bothell Way	Kenmore	1963	Commercial building	NRHP/WHR: District eligible under Criterion C; Local Register: Eligible for KCRHP under Criterion 3
18.	4164100135	7304 NE 175th Street	Kenmore	1950	Kenmore Community Club	Remains Local Register eligible: Eligible for KCRHP under Criterion 1
19.	726059091	17909 NE Bothell Way	Bothell	1948	Commercial auto showroom	NRHP/WHR: Eligible under Criteria A and C; Local Register: Eligible for COBRHL under Criteria A, B, D and G
20.	2374200025	18204 98th Avenue NE	Bothell	1947	Residence	NRHP/WHR: Eligible under Criterion C; Local Register: Eligible for COBRHL under Criterion D
21.	2374200016	18212 98th Avenue NE	Bothell	1955	Residence	Local Register: Eligible for COBHRL under Criterion D
22.	0626059121	9815 NE 188th Street	Bothell	1968	Grandstand	Local Register: Eligible for COBHRL under Criteria B and G
23.	9567800030	10304 NE 185th Street	Bothell	1900s	Residence	NRHP/WHR: District eligible under Criterion C; Local Register: Eligible for COBRHL under Criteria D and G

Table B-18 Built Environment Resources in the AI Listed or Determined Eligible for the Bothell Register of Historic Landmarks, Washington Heritage Register (WHR) or NRHP

	Parcel	Resource Name/Street Address	City	Build Date	Listing Status
1.	526059057	Dr. Reuben Chase House: 17819 113th Avenue NE	Bothell	1885	DAHP No. 675286: Listed in the NRHP, 1990
2.	626059052	W. A. Anderson Building (McMenamins Anderson School): 18607 Bothell Way NE	Bothell	1931	DAHP No. 40483: Transportation Improvement Board Determined Eligible, 2015

Washington State Department of Archaeology and Historic Preservation (DAHP).

B 13 b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

The archaeological and architectural survey included background research in DAHP's Washington Information System for Architectural and Archaeological Records Data (WISAARD) to locate previous studies conducted and resources recorded in the vicinity of the project. According to this search, 61 cultural resource studies have been conducted within the 0.5-mile search radius of the AI. Many of these studies focused on the SR 522 transportation corridor and historic structure surveys of the cities of Shoreline and Kenmore around the north shore of Lake Washington. Several surveys were conducted directly in or adjacent to the AI. See **Appendix G** (Historic and Cultural Preservation Technical Report) for more information.

Based on the DAHP WISAARD research, evidence of Indian or historic use or occupation, materials, artifacts or area of cultural importance includes two archaeological sites recorded in previous studies in Bothell and located within or adjacent to the AI:

- Site 45KI822, a historic road grade, has not been formally evaluated.
- Site 45KI451, a historic railroad grade, has been determined not eligible for listing in the NRHP.

The Acacia Memorial Park cemetery in Lake Forest Park is immediately adjacent to and outside of the AI.

Archaeological fieldwork included a pedestrian survey and a small number of shovel probes, where feasible. An area of cultural importance (an ethnographically recorded village) is present at the proposed Lake Forest Park Park-and-Ride garage location. Geoarchaeological coring at this location identified a buried surface with high archaeological potential. No new archaeological resources were recorded as a result of the archaeological survey conducted for the project.

B 13 c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Methods used to assess potential impacts to cultural and historic resources included a DAHP WISAARD database search, county parcel research to identify buildings and structures older than 45 years of age, soil surveys review to identify landforms with higher potential for the presence of subsurface archaeological deposits, and field studies conducted in 2019 and 2020. Field studies included archaeological pedestrian survey and shovel probes, analysis of archaeological cores taken at two of the proposed park-and-ride garages, and inventory and evaluation of buildings and structures throughout the AI.

The architectural survey identified 25 historic-period, built-environment resources that are either listed in or eligible for listing in local, state or national registers of historic places. Only one is subject to significant environmental impacts under the project due to the limited changes that would occur from the project's proposed improvements. The one historic building that is subject to significant environmental impacts is the Washington Federal Savings and Loan building at 14360 15th Avenue NE in Seattle. The building would be demolished as part of this project. Generally, buildings are not considered eligible for listing in the NRHP until they reach the age of 50 years. The Washington Federal Savings and Loan building may reach the age of 50 years before the project is completed. Demolition of an NRHP-eligible building would result in an adverse environmental impact.

Additionally, the survey identified one potentially eligible archaeological site (Site 45KI822, the historic road grade) that may be impacted by the current design of the project; this resource has not been formally evaluated. Geoarchaeological coring at the Lake Forest Park Park-and-Ride garage location identified a buried surface with high archaeological potential; an ethnographically recorded village is present at this location, as described in the response to Question B 13 b. See **Appendix G** (Historic and Cultural Preservation Technical Report) for more information on resources identified, evaluation and assessment of project impacts.

B 13 d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

The project would adversely impact one architectural resource recommended as eligible for listing in local, state and national registers of historic places. Avoidance of demolition of the Washington Federal Savings and Loan building at 14360 15th Avenue NE is not feasible due to design constraints. Proposed mitigation measures that Sound Transit will apply include additional documentation and recordation in advance of demolition. Documentation may include, for example, interior and exterior photography, a historic context, or documentation to the Historic American Buildings Survey or the Historic American Engineering Record standards.

One unevaluated archaeological site (45KI822) is within the project AI and may be affected. Site 45KI822 should be formally evaluated and, if found register-eligible, mitigation measures should be proposed in consultation with appropriate agencies. At the Lake Forest Park Park-and-Ride garage location, additional pre-construction archaeological investigations are recommended due to the ethnographically recorded village and the buried surface with high archaeological potential. Elsewhere in the AI, no monitoring or additional investigations are recommended, and work should occur in accordance with an Inadvertent Discovery Plan that provides protocols to follow if potential resources are encountered during construction.

B 14. Transportation

B 14 a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Table A-5 (Nearest Streets and Highways, and Section/Township Range by Element) lists public streets and highways serving the BRT site, by element. These streets and highways (shown in **Figure A-2** (Proposed Project)) currently provide and would continue to provide access to the existing street system that comprises the project site and corridor. Proposed access to the existing street system would change slightly due to the reconstructed driveways and accesses to new park-and-ride garages. **Appendix A** (Conceptual Engineering Plans) contains site plans, which show specific access points. **Figure A-4** (Park-and-Ride Garage Layouts) shows proposed vehicle and pedestrian accesses to park-and-ride garages. The proposed BRT route is on 5th Avenue NE between the Sound Transit Link light rail Shoreline South/148th Station and NE 145th Street in Shoreline/Seattle, on NE 145th Street between 5th Avenue NE and SR 522, on SR 522 between NE 145th Street and 98th Avenue NE, and then on 98th Avenue NE, NE 185th Street and Beardslee Boulevard in Bothell. The BRT route is the same in both directions (see **Figure A-2**).

The BRT route continues between NE 195th Street and the SR 522/I-405 Transit Hub within the I-405 ROW. The westbound and eastbound access routes into and out of the SR 522/I-405 Transit Hub would differ slightly: in the eastbound direction at the NE 195th Street/I-405 southbound on-ramp, BRT would use the on-ramp and then a proposed new transit-only roadway diverging from the on-ramp (to be constructed by WSDOT) that would extend to the SR 522/I-405 Transit Hub, where riders could transfer to I-405 BRT service or continue with (non-BRT) bus service to Woodinville.

The three proposed park-and-ride garages would use SR 522 and local streets for access: the Lake Forest Park Park-and-Ride garage access would be to/from (1) NE 175th Street/Ballinger Way NE, and (2) an existing driveway on SR 522; the Kenmore Park-and-Ride garage access would be to/from 73rd Avenue NE at the northern driveway to the existing Kenmore Park-and-Ride lot access, and the NE 181st Street entrance would be limited to one-way eastbound (Metro buses would continue to use NE 181st Street); and the Bothell Park-and-Ride garage access would be from Thorsk Street. **Appendix A** (Conceptual Engineering Plans) shows design plans, including access points for the park-and-ride garages, and **Appendix H** (Transportation Technical Memorandum) contains further details about transportation and traffic.

B 14 b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The project corridor is currently served by three transit agencies: Sound Transit, Metro and Community Transit. **Appendix H** (Transportation Technical Memorandum) presents the location of each proposed BRT station, the transit service providers at each station, and changes to bus stops with the proposed station locations. The proposed project includes capital improvements to provide for speed and reliability of BRT service. BRT station spacing would be from 0.4 mile to 0.6 mile apart, except for the two BRT stations on NE 145th Street, which would be 0.75 mile apart with two Metro stops between the stations. Metro plans to share BRT stations and is currently planning for Metro bus stop consolidation with the new BRT stations. Community Transit would use existing Community Transit stops. **Appendix H** contains further details about transportation and transit operations.

B 14 c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

At each of the three park-and-ride garages (in Lake Forest Park, Kenmore and Bothell) 300 park-and-ride stalls would be added, for a total of 900 net new spaces of park-and-ride capacity. The project would also permanently remove a total of 333 parking spaces from commercial or multifamily properties, as shown in **Table B-14** (Existing Structures on Project Site (Segment 4)). The City of Bothell would not require mitigation for the permanent displacement of parking spaces on NE 185th Street, east of Bothell Way. Sound Transit is currently working with the City of Bothell to identify strategies for replacing certain on-street parking stalls where required per development agreements. No other cities would experience displacement of on-street parking spaces resulting from the project.

Table B-19 Long-term Loss of Parking at Commercial or Multifamily Properties

Element/ Jurisdiction	Number of Spaces Displaced (type of property)
2/Seattle	6 off-street spaces at 663 230 0643 (commercial)
2/Shoreline	Total of 31 off-street spaces: 2 spaces at 663 290 0141 (commercial); 5 spaces at 663 290 0012 (multifamily residential); 4 spaces at 663 290 0015 (multifamily residential); 4 spaces at 663 290 0010 (multifamily residential); 10 spaces at 663 290 0011 (commercial); 6 spaces at 367 050 0335 (commercial)
5/Lake Forest Park[1]	69 off-street spaces, various businesses (commercial)[2]
6/Lake Forest Park	161 surface spaces at Lake Forest Park Town Center (of approximately 931 available spaces) (commercial)
8/Kenmore	2 off-street spaces (one each at parcels 794 630 0115 and 794 630 0110) (commercial)
11 and 13/Bothell	Total of 15 on-street spaces: 6 on-street spaces displaced on the southeast side of 98th Avenue NE between NE 183rd Street and around the curve to NE 185th Street; 9 on-street spaces displaced on the north (westbound) side of NE 185th Street west of Bothell Way
16/Bothell	Total of up to 49 on-street spaces: Up to 11 on-street parking spaces on NE 185th Street between 101st Avenue NE and Ross Road (7 on the south side and 4 on the north side); 17 on-street spaces at NE 185th Street/Beardslee Boulevard; 21 on-street spaces on southside NE 185th Street mid-block near Husky Village (a portion of these spaces may be due to the Husky Village redevelopment project)

[1] Not included in Lake Forest Park estimates are informal parking areas on SR 522, such as on shoulders used periodically as informal parking in front of homes. These areas are within WSDOT ROW and typically on the east side, where fronts of homes face SR 522 and where wide shoulders exist.

[2] Sound Transit will address the loss of these parking spaces through the real estate acquisition negotiation process.

During construction, temporary displacement of parking would occur at the following locations:

- Approximately 78 parking spaces at Lake Forest Park Town Center (of 931 existing off-street spaces) for the purpose of park-and-ride garage construction.
- 39 surface spaces at the Kenmore Park-and-Ride lot for the purpose of station and park-and-ride garage construction. These spaces would be returned to use after completion of construction.
- 259 spaces at the Kenmore Park-and-Ride lot that are located on the proposed footprint for the new Kenmore Park-and-Ride garage. These spaces would be replaced with spaces in the new garage. The new garage would provide 561 total spaces (including spaces on the Metro level), which would account for replacing the existing 259 spaces and the increase of approximately 300 spaces.

These spaces would be returned to use after construction. The response to Question B 14 h below addresses management of the temporary parking displacements during construction.

B 14 d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

Yes, improvements would be as described in response to Question A 11 above and shown in **Figure A-2** (Proposed Project) and **Appendix A** (Conceptual Engineering Plans). The project would include new BAT lanes on NE 145th Street and SR 522, signal upgrades where intersections are reconstructed, and transit priority movements (i.e., TSP) at 24 signalized intersections along the BRT route. These improvements would provide for the transit speed and reliability needed to provide BRT service on the corridor, as well as for pedestrian safety.

The project would also include sidewalk improvements along the length of new bus-only lanes and BAT lanes and where new transit stations would be constructed. NE 145th Street improvements would include some new shared-use pedestrian/bicycle facilities along portions of the street. Intersection improvements would occur where BAT lanes are constructed (see **Figure A-2** (Proposed Project)). Roadway improvements as part of this project would also result in traffic operational improvements for general-purpose traffic.

B 14 e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The western terminus of this project's BRT route is near Sound Transit's Lynnwood Link Light Rail Extension project. The BRT route would connect to Lynnwood Link at the Shoreline South/148th Link light rail station. Proposed Element 1 of the project is the construction site nearest the Shoreline South/148th Link light rail station and would be located approximately 700 feet southeast of the light rail station.

There are no water or air transportation facilities in the immediate vicinity of the proposed project, although a seaplane transportation company (Kenmore Air) is located at 6321 NE 175th Street in Kenmore, approximately 0.1 mile south of SR 522. The nearest project component to Kenmore Air would be the eastbound platform at 61st Avenue NE, which is two blocks to the west on SR 522 from the Kenmore Air entrance and 0.2 mile northwest of the Kenmore Air building. The project would not affect this facility or access to it.

B 14 f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

BRT service headways would be 10 minutes between I-5 and Bothell. The span of service would be 19 hours on Monday through Saturday and 17 hours on Sunday. The estimated ridership forecast for the project's BRT service in 2042 is approximately 8,900 riders per day, and the proposed project's BRT trips would total approximately 220 trips per day. The BRT project would result in some passenger vehicle trips along SR 522 and NE 145th Street shifting to BRT service, which is accounted for in the Puget Sound Regional Council regional travel demand model and traffic forecasts. The completed project is not likely to generate any new nonpassenger (truck) trips.

Traffic analysis for the AM and PM peak hours is based on future regional model traffic forecasts. Synchro and Vissim models were used to report the Highway Capacity Manual level of service and delay definitions. The Vissim model was used in Segment 1, and the Synchro model was used in Segments 2, 3 and 4. Intersection level of service is expected to be the same or better with the project as it would be without it in the future. Detailed traffic analysis information, including anticipated intersection level of service information, is provided in **Appendix H** (Transportation Technical Memorandum).

The proposed park-and-ride garages would generate additional vehicle trips at the park-and-ride garage accesses. The highest volume would occur during the PM peak hour. Net new PM peak hour trips entering and exiting each park-and-ride garage are shown in the figures below. The methodology and detailed analysis of park-and-ride garage traffic are presented in **Appendix H** (Transportation Technical Memorandum).

Lake Forest Park

At the Lake Forest Park Park-and-Ride garage, approximately 141 new vehicle trips would be generated by the park-and-ride garage during the PM peak hour. The entering and exiting trips and the assignment to the surrounding street network are shown in **Figure B-5** (Lake Forest Park Park-and-Ride Garage PM Peak Hour Traffic Assignment). An estimated 10 new trips would exit to the west along SR 522; 99 new trips would exit along SR 522 to the east; and 14 new trips would exit north on SR 104. Seventeen new trips to the garage would enter from the east along SR 522; one new trip would enter from the west on SR 522; and one new trip would enter from the north on SR 104.

Figure B-5 Lake Forest Park Park-and-Ride Garage PM Peak Hour Traffic Assignment

Kenmore

At the Kenmore Park-and-Ride garage, approximately 143 PM peak hour trips would be generated by the park-and-ride garage. Trips exiting the garage would include an estimated 116 trips to 73rd Avenue NE (81 trips to the north and 35 trips to the south) and 8 trips to SR 522 westbound. For trips entering the garage, 6 trips would enter from westbound SR 522; 5 trips would enter from 73rd Avenue NE; and 8 trips would enter from NE 181st Street. The traffic assignment to the street network is shown in **Figure B-6** (Kenmore Park-and-Ride Garage PM Peak Hour Traffic Assignment).

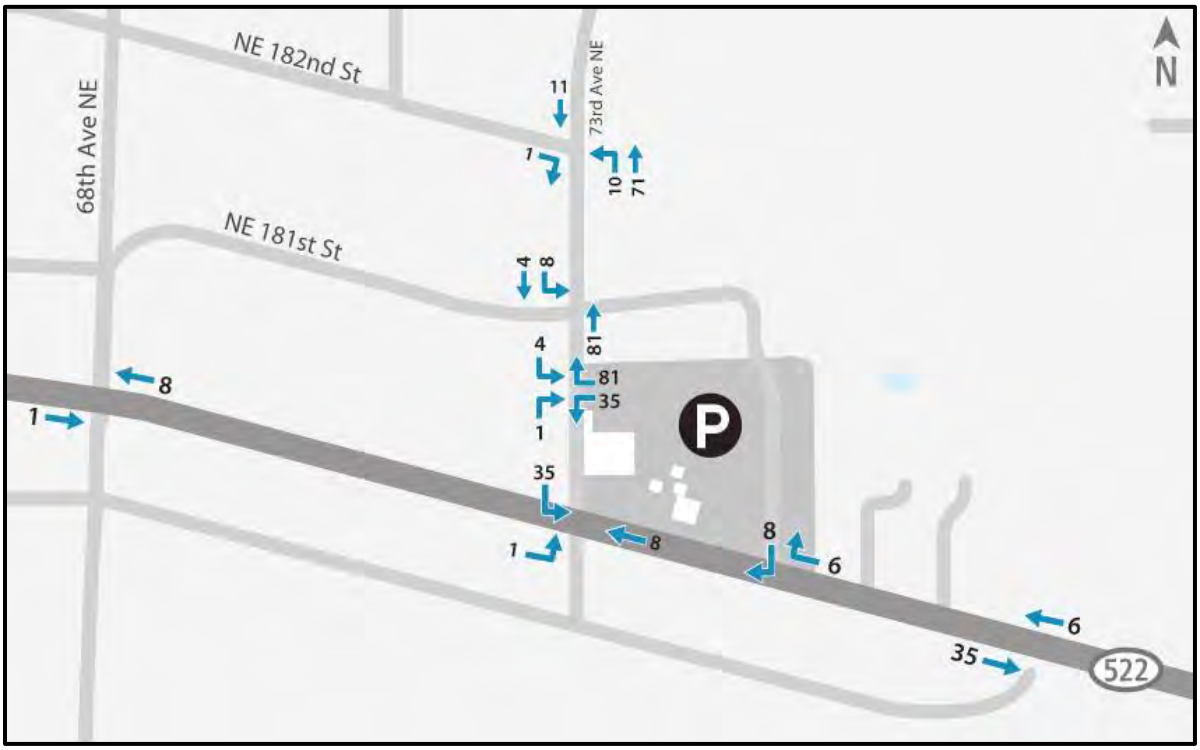

Figure B-6 Kenmore Park-and-Ride Garage PM Peak Hour Traffic Assignment

Bothell

At the Bothell Park-and-Ride garage, approximately 141 new PM peak hour trips would be generated by the park-and-ride garage. An estimated 3 trips would exit to the west on Thorsk Street; 120 new trips would exit to the east on Thorsk Street and then to Pop Keeney Way. Nineteen new trips would enter the park-and-ride garage from Pop Keeney Way to enter from Thorsk Street. The PM peak hour traffic assignment to the surrounding street network is shown in **Figure B-7** (Bothell Park-and-Ride Garage PM Peak Hour Traffic Assignment).

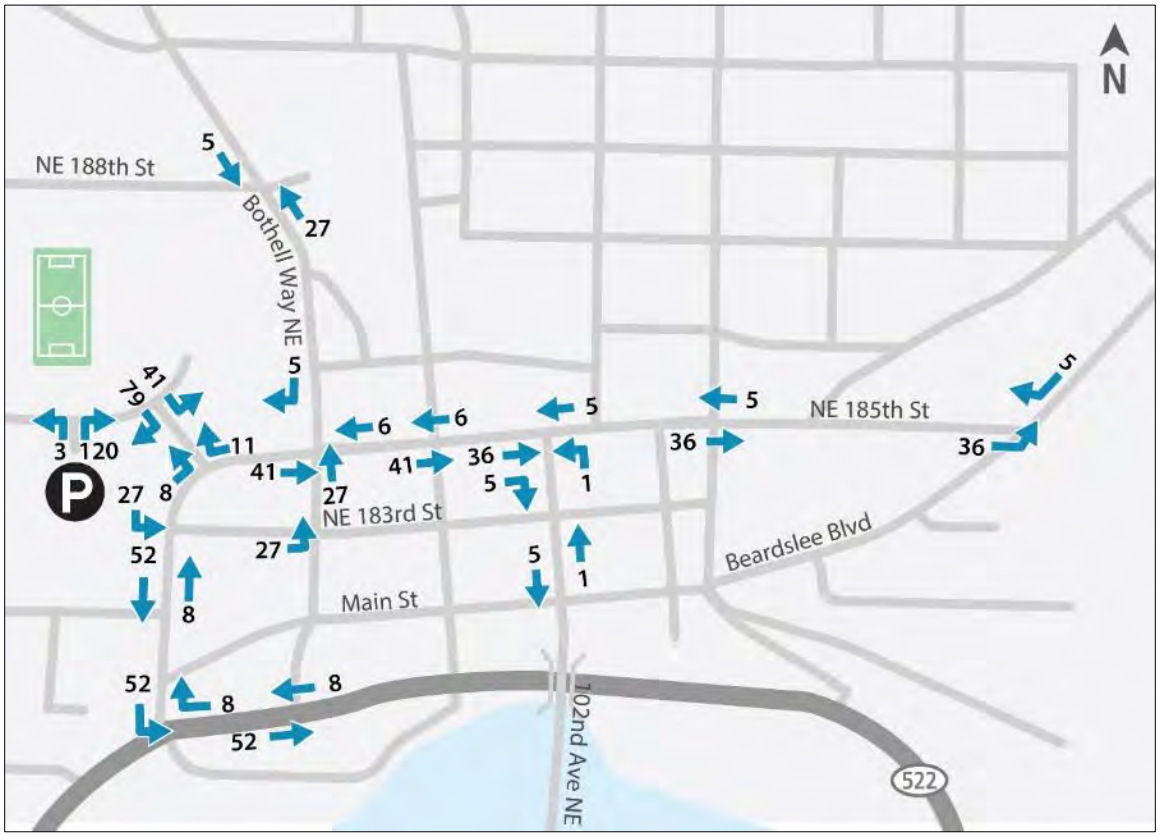

Figure B-7 Bothell Park-and-Ride Garage PM Peak Hour Traffic Assignment

The proposed project would result in an overall decrease in average vehicle delay at most intersections and minor increases in delay for some intersections for the Future Build condition compared to the Future No-Build condition. There would be an overall improvement in traffic conditions with the proposed project along Segment 1 (Seattle/Shoreline).

Along Segment 2 (Lake Forest Park), the study intersections would operate at an acceptable level of service (LOS) and operations, and the project would result in the same or improved traffic conditions compared to the Future No-Build condition (without the project).

Along Segment 3 (Kenmore), on SR 522 and Kenmore city streets, the study intersections would operate at an acceptable LOS for the 2042 Build condition during the AM and PM peak hours, and the project would result in the same or improved traffic conditions compared to the Future No-Build condition.

There would be an overall improvement in traffic conditions with the proposed project in Segment 4 (Bothell).

B 14 g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No. The proposed project would not affect freight movement. Accordingly, there would be no effect on the movement of agricultural and forest products on roads and streets in the area of the proposed project. **Appendix H** (Transportation Technical Memorandum) provides freight classifications of project roadways.

B 14 h. Proposed measures to reduce or control transportation impacts, if any:

The proposed project roadway and intersection improvements would result in similar or improved conditions in the 2042 Build condition. No mitigation is proposed.

Sound Transit would comply with all conditions of street use or haul permits issued by local jurisdictions and would work in accordance with an approved detour plan. Assuming one truck hauls 15 cubic yards of material, fill activities would require approximately 3,600 trucks, and excavation activites would require approximately 5,800 trucks over the course of the construction period. Emergency vehicle access would be maintained at all times through work areas. Access to businesses and residences adjacent to project activities would be retained. Temporary impacts during construction of roadway and intersection improvements such as temporary closures and detours during off-peak hours, as well as temporary parking impacts during construction of park-and-ride garages, would be managed through permits and coordination with cities. Proposed project-construction-related measures to address temporary impacts are described in **Appendix H** (Transportation Technical Memorandum). The contractor would prepare and implement a Traffic Management Plan to mitigate traffic impacts during construction.

Parking displaced during construction would be mitigated based on parking conditions and utilization of parking at each park-and-ride garage site. Construction staging could necessitate temporary use of existing Lake Forest Park Town Center parking spaces in addition to the portion of the parcel acquired for construction of the garage in Lake Forest Park. Adequate surplus parking capacity exists in the north section of Lake Forest Park Town Center surface parking (approximately 281 surplus parking spaces) to manage the temporary parking space displacement that would occur during construction in Lake Forest Park. **Appendix H** (Transportation Technical Memorandum) includes an analysis of parking supply and demand at Lake Forest Park Town Center.

In the fourth quarter of 2017 (the time period for which the most recent data is available), 99 percent of parking at the Kenmore Metro Park-and-Ride lot was utilized (King County Metro 2017); parking spaces displaced during construction would be replaced with leased spaces. Temporary park-and-ride spaces could be leased in the vicinity of the existing Metro bus stops at 68th Avenue NE. At the site in the southwest quadrant of 98th Avenue NE and Pop Keeney Way, there is no existing parking activity; therefore, construction of the new park-and-ride garage would not necessitate temporary replacement parking.

B 15. Public Services

B 15 a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

During construction of all project components, traffic rerouting, lane closures and construction traffic may affect emergency response times and the travel times or routes for public service

vehicles. Once operational, the project would provide increased and improved public transit service and connections within the NE 145th Street and SR 522 corridors, in downtown Bothell and in the Puget Sound region. None of the project components is expected to increase the need for fire, police, health care or schools, because the project would not result in any unplanned or induced increases in population. The proposed project's improvements to services and addition of capital facilities would result in a minor increase in the concentration of transit riders, bicycles and pedestrians at and near proposed station locations and the concentration of transit riders, bicycles, pedestrians and vehicles at and near proposed park-and-ride garages. The increase in daytime population concentration at the stations and garages would be greatest during commute hours. In addition, Sound Transit has examined the potential for crime to increase at transit facilities such as transit stations and park-and-ride lots and garages, and has found that crime at these facilities generally reflects the conditions in the surrounding neighborhoods.

B 15 b. Proposed measures to reduce or control direct impacts on public services, if any.

Sound Transit would work with contractors, service providers and the appropriate jurisdiction to minimize disruption and ensure that appropriate access through or around construction areas is retained. The contractor would prepare and implement a Traffic Management Plan to mitigate traffic impacts during construction, including the potential temporary delays that could affect critical response times for fire, police and other emergency vehicles. Once constructed, the three park-and-ride garages would comply with local building and fire codes to allow emergency response personnel to conduct proper responses and alleviate pressure on emergency services in case of an emergency.

During operations, Sound Transit contracts with local law enforcement and security contractors to provide security services at its facilities. The project's design would incorporate Crime Prevention Through Environmental Design (referred to as "CPTED") principles. Sound Transit also conducts threat and vulnerability assessments for all new projects to identify and address potential security concerns.

B 16. Utilities

B 16 a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,

other _____

B 16 b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

During construction, the contractor would work with and coordinate with the utility providers to ensure that the project would either avoid utility infrastructure or relocate it, as necessary. If the proposed project work affects above-ground utilities (utility poles, fire hydrants, street lamps, signal poles etc.), the utilities would be moved to the proposed planter strip wherever possible, and if not possible, the utilities would be moved behind the proposed stormwater facilities. Some underground vaults, electricity lines and fiber communication lines would likely require relocations. Utility services would be maintained during construction.

Project construction may potentially affect utilities with buried infrastructure if franchise agreements are in place relative to the placement, operation and maintenance of their facilities where they cross the existing ROW. New or replaced utility infrastructure in Bothell and Kenmore would be underground. New or replaced infrastructure in Seattle, Shoreline and Lake Forest Park would remain above ground. Utility placement, replacement or relocation would be accomplished in compliance with appropriate city and utility requirements.

Table B-20 (Utility Providers Along the Project Route), below, lists the utility providers along the project route. The existing utility providers would continue to serve areas along the project route after project construction. During project operation, Puget Sound Energy would provide power to project-related amenities requiring electricity, such as roadway, station and park-and-ride garage illumination. Utilities that are along the project corridor include overhead power, overhead communication and overhead telephone lines connected to utility poles; underground power, underground communication and underground telephone lines; underground water supply lines, water meters and fire hydrants; underground sanitary sewer lines; underground stormwater lines; underground gas supply lines; signal poles; electrical boxes; and red light cameras.

Table B-20 Utility Providers Along the Project Route

Service	Seattle	Shoreline	Lake Forest Park	Kenmore	Bothell
Water	Seattle Public Utilities	Seattle Public Utilities, North City Water District	Lake Forest Park Water District, North City Water District, Seattle Public Utilities	Northshore Utility District	City of Bothell
Sanitary sewer	Seattle Public Utilities	Ronald Wastewater District	City of Lake Forest Park	Northshore Utility District	City of Bothell
Stormwater	Seattle Public Utilities	City of Shoreline	City of Lake Forest Park	City of Kenmore	City of Bothell
Power/ electricity	Seattle City Light, WSDOT (signalized intersections along route)	Seattle City Light, WSDOT (signalized intersections along route)	Seattle City Light (above ground), Puget Sound Energy (some below ground), WSDOT (signalized intersections along route)	Puget Sound Energy, WSDOT (signalized intersections along route)	Snohomish County Public Utility District, Puget Sound Energy; WSDOT, City of Bothell, Snohomish County (signalized intersections along route)
Natural gas	Puget Sound Energy	Puget Sound Energy	Puget Sound Energy	Puget Sound Energy	Puget Sound Energy
Garbage/ recycling	Seattle Public Utilities	Recology/ Cleanscapes	Republic Services	Republic Services	Recology/ Cleanscapes
Internet/ cable/ communi-cation	Comcast/ Wave	Century Link, Comcast, Frontier	Century Link, Comcast, Frontier/Ziply Fiber, Verizon, University of Washington, WSDOT	Comcast, Frontier/Ziply Fiber, Frontier Espanol, Century Link, Dish Network, DirectTV Espanol	Century Link, Comcast, Frontier/Ziply Fiber, Wave

Proposed utility work includes the following:

- Seattle:
    - South side of NE 145th Street at 6th Avenue NE: Southeast ADA ramp replacement; utility pole would be relocated behind the curb line and out of the ADA ramp.
    - Southwest corner of NE 145th Street and 12th Avenue NE: Utility pole would be relocated behind the curb line to meet ADA clearance.
    - South side of NE 145th Street, east of 15th Avenue NE, parcel number 663 230 0281: Utility pole would be added to feed into the eastbound BRT station at this location as well as the property behind the Stride station.
    - South side of NE 145th Street at 28th Avenue NE, southeast corner: Utility pole would feed into the eastbound BRT station at this location.
    - Other utility poles within the proposed ROW would be protected in place.
- Shoreline:
    - North side of NE 145th Street between 6th Avenue NE and 8th Avenue NE: Three utility poles would be relocated to planter strips.
    - North side of NE 145th Street at 8th Avenue NE, northwest corner: This transmission pole is proposed to be converted to a single pole (Seattle City Light would make final decision).
    - North side of NE 145th Street, west of 8th Avenue NE: Utility pole would be realigned 3 feet to the west in the planter strip to avoid a sharp deviation in the overhead line, thus avoiding the need for a guy wire at this pole.
    - North side of NE 145th Street, east of 12th Avenue NE at parcel number 663 290 0144: Utility pole would be relocated behind the curb line to begin the overhead line transition, potentially requiring a guy wire support.
    - North side of NE 145th Street, east of 12th Avenue NE at parcel number 663 290 0140: Utility pole would be relocated behind to curb line.
    - North side of NE 145th Street, east of 12th Avenue NE at parcel number 663 290 0012: Utility pole would be relocated behind the curb line, placed in the southwest corner of the adjacent property. An alley arm would be required to avoid running the overhead line over the property.
    - Northwest corner, 15th Avenue NE and NE 145th Street, center of proposed westbound station location: Utility pole would be moved behind the curb line and fed into the BRT station at this location.
    - Northwest corner, 15th Avenue NE and NE 145th Street: Light pole would be placed between the curb ramps.
    - Northeast corner, 15th Avenue NE and NE 145th Street: Utility poles would be moved behind the curb line to avoid any sharp deviation in overhead line path.

- North side of NE 145th Street, east of 15th Avenue NE, Goodwill parking lot: Utility pole would be moved behind curb line to maintain overhead line path. An alley arm is recommended to help with the transition.
- North side of NE 145th Street, east of 15th Avenue NE, near southwest corner driveway of Goodwill building: Utility pole would be moved to the east side of the driveway behind the curb line, and an alley arm would be added to avoid the overhead line crossing the adjacent property.
- NE 145th Street, near southeast corner of Goodwill building: Utility pole would be relocated behind the curb line to southeast corner of building, with an alley arm.
- North side of NE 145th Street at 17th Avenue NE, northwest corner: Utility pole would be relocated behind the curb line, with an alley arm and potentially a guy wire.
- North side of NE 145th Street at 17th Avenue NE northeast corner: Utility pole would be relocated behind the curb line.
- North side of NE 145th Street east of 17th Avenue NE: A guy wire would be added to this utility pole at parcel number 364 760 0000.
- North side of NE 145th Street at 30th Avenue NE: Utility pole at northwest corner would feed into the westbound BRT station at this location.
- North side of NE 145th Street, midway between 32nd Avenue NE and SR 522: Utility pole would be relocated behind the curb line.
- NE 145th Street and SR 522, northwest corner: Utility pole would be relocated behind the ADA ramp, including guy wire installation.
- NE 145th Street and SR 522, northeast corner: A guy wire would be added to this utility pole.
- Other utility poles within the proposed ROW would be protected in place.

- Lake Forest Park:
  - Most of the utility work would take place along SR 522 between NE 145th Street and Ballinger Way NE. There may be some utility work required on the side streets due to regrading; however, the specifics of those impacts are unknown at this time.
  - Along the east side, between NE 145th Street and NE 155th Street:
    - Seven utility poles would be relocated to the proposed planter strip.
    - Stormwater catch basins would need to be relocated to the proposed curb and gutter.
    - Water meters, fire hydrants and a streetlight would be relocated to the proposed planter strip.
    - Utilities in the existing street would need to be adjusted to grade.
    - Signal equipment on the east side of the intersection of NE 153rd Street would be relocated behind the sidewalk.

- Along the east side, between NE 155th Street and NE 165th Street:
  - Sixteen utility poles would be relocated to the proposed planter strip.
  - Storm catch basins would need to be relocated to the proposed curb and gutter.
  - Water meters and fire hydrants would be relocated to the proposed planter strip.
  - Utilities in the existing street would need to be adjusted to grade.
  - Signal equipment on the east side of the intersection of NE 165th Street would be relocated behind the sidewalk.
  - Fiber optic, electric and Telco vaults or manholes would need to be relocated to the proposed planter strip.
- Along the west side, between NE 155th Street and NE 165th Street:
  - Four utility poles would be relocated between the proposed concrete barrier and cut retaining wall.
- Along the east side, between NE 165th Street and 41st Avenue NE:
  - Four utility poles would be relocated to the proposed planter strip.
  - Water meters and fire hydrants would be relocated to the proposed planter strip.
  - Electric vaults would need to be relocated to the proposed planter strip.
- Along the west side, between NE 165th Street and 41st Avenue NE:
  - Two utility poles would be relocated between the proposed concrete barrier and the cut retaining wall.
- Along the east side, between 41st Avenue NE and Ballinger Way NE:
  - Three utility poles would be relocated to the proposed planter strip and 1 utility pole would be relocated to the existing roadway shoulder.
  - A traffic camera would be relocated to the utility pole in the existing roadway shoulder.
- A water meter would be relocated to the proposed planter strip.
- Utility work would also be required at the stations located at NE 153rd Street, NE 165th Street and Lake Forest Park Town Center. The new stations would require connection to water and electrical services, removal and/or relocation of existing luminaires, installation of new storm conveyance from the bus shelter roof, and removal and/or relocation of existing stormwater catch basins to the proposed curb and gutter.

- Kenmore:
    - New connections to water and electrical services, removal or relocation of existing luminaires, installation of new storm conveyance from bus shelter roof, removal or modification of existing storm structures in roadway to suit new curb and gutter at proposed station locations (westbound and eastbound platforms at 61st Avenue NE, westbound and eastbound platforms at 68th Avenue NE, and westbound and eastbound platforms at 73rd Avenue NE/Kenmore Metro park-and-ride lot.
- Bothell:
    - Utility work would occur along SR 522 starting north of the eastbound Metro station at 96th Avenue NE and ending at 98th Avenue NE. Improvements would also take place in segments throughout Bothell. The utility work would occur at the curve near Pop Keeney Way, NE 185th Street between 101st Avenue NE and just east of Ross Road, the redesign of the NE 185th Street and Beardslee Boulevard intersection, the station on Beardslee Boulevard in front of Husky Hall, and the station on Beardslee Boulevard near NE 195th Street.
    - In addition, 11 overhead utility poles, 7 fire hydrants, 13 luminaires and 8 underground utility vaults/boxes of unknown ownership would be relocated to the proposed planter buffer along SR 522. Utility counts have not been done and extent of work has not been designed for the roadway improvement areas inside the City of Bothell.
    - The intersection at NE 185th Street/104th Avenue NE is being converted from a four-way stop to a signalized intersection and would need corresponding utility work done.
    - The intersection at NE 185th Street and Beardslee Boulevard is also being modified to include a new traffic signal.
    - Additional utility work would be required at the four stations located at 98th Avenue NE/NE 183rd Street, NE 185th Street/104th Avenue NE, Beardslee Boulevard near Husky Hall, and Beardslee Boulevard near NE 195th Street. The new stations would require connection to water and electrical services, removal or relocation of existing luminaires, installation of new storm conveyance from the shelter roof, and removal or relocation of existing stormwater catch basins to the proposed curb and gutter.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Kathy Fendt

Name of Signee: Kathleen G. Fendt

Position and Agency/Organization: East Corridor Environmental Manager, Sound Transit

Date Submitted: March 18, 2021

ATTACHMENT A

Permit Matrix

SR 522/NE 145th BRT Project - Permits and Approvals	
State	
Authority Having Jurisdiction (AHJ)	**Permit/Approval Name**
Washington Department of Fish and Wildlife	Hydraulic Project Approval
Washington State Department of Transportation	Hydraulic/Stormwater/Drainage Approval
Washington State Department of Transportation	Right of Way Use Permit (approval to operate bus rapid transit [BRT] in existing business access and transit [BAT] lanes)
Washington State Department of Transportation	Signage permit
Washington Department of Archaeology and Historic Preservation	Governor's Executive Order (GEO) 0505 Cultural Resources
Washington State Department of Ecology	Shoreline Master Program Permit (Ecology involvement required if Shoreline Conditional Use Permit)
Washington State Department of Ecology	National Pollutant Discharge Elimination System Construction Stormwater General Permit Coverage
Local	
Authority Having Jurisdiction (AHJ)	**Permit/Approval Name**
King County	Utility Permit
King County	Construction Industrial Wastewater Permit
City of Seattle	Utilities permits (Seattle Department of Transportation [SDOT]/Seattle Public Utilities, Seattle City Light)
City of Seattle	Noise Variance (Seattle Department of Construction & Inspections [SDCI])
City of Seattle	Master Use Permit (SDCI)
City of Seattle	Street Improvement Permit (SDOT)
City of Seattle	Site Development Permit (SDCI)
City of Seattle	Right of Way Use Permit (approval to operate Sound Transit BRT in existing BAT lanes) (SDOT)
City of Seattle	Demolition permits (SDCI)
City of Seattle	Construction permit (SDCI)
City of Seattle	Street Tree Removal (SDOT)
City of Seattle	Environmentally Critical Area (ECA) Master Use Permit
City of Shoreline	Demolition permits
City of Shoreline	Site Development Permit
City of Shoreline	Building permit
City of Shoreline	Tree removal permit
City of Shoreline	Utility Permits

Authority Having Jurisdiction (AHJ)	Permit/Approval Name
City of Shoreline	Noise Variances
City of Shoreline	Right of Way Use Permit
City of Shoreline	Critical Areas approval
City of Lake Forest Park	Conditional Use Permit(s)/Development Agreement
City of Lake Forest Park	Critical Areas Permit
City of Lake Forest Park	Demolition permits
City of Lake Forest Park	Noise variance
City of Lake Forest Park	Clearing grading permit
City of Lake Forest Park	Building permit
City of Lake Forest Park	Tree removal permit
City of Lake Forest Park	Utilities permits
City of Lake Forest Park	Right of Way Use Permit
City of Kenmore	Conditional Use Permit
City of Kenmore	Critical areas approval
City of Kenmore	Development Agreement
City of Kenmore	Shoreline master program permit
City of Kenmore	Demolition permits
City of Kenmore	Noise variance
City of Kenmore	Clearing grading permit
City of Kenmore	Building permit
City of Kenmore	Tree removal permit
City of Kenmore	Essential public facility approval or discussion
City of Kenmore	Utilities permits
City of Kenmore	Right of Way Use Permit
City of Bothell	Conditional Use Permits
City of Bothell	Critical Areas Alteration Permit
City of Bothell	Demolition permits
City of Bothell	Noise variance
City of Bothell	Clearing grading permit
City of Bothell	Building permit
City of Bothell	Tree removal permit
City of Bothell	Utilities permits
City of Bothell	Right of Way Use Permit

ATTACHMENT B

Property Acquisitions

Property Acquisitions

Segment	Element	Jurisdiction	BRS No.	Parcel No.	Parcel Sq. Ft.	Sq. Ft. to be Acquired (Residential)	Sq. Ft. to be Acquired (Commercial)	Acquisition %
1	1	SHORELINE	BRS-102	7568700775	6,405	-	467	7%
1	1	SHORELINE	BRS-103	7568700770	6,402	1,004	-	16%
1	1	SHORELINE	BRS-104	7568700765	6,399	1,081	-	17%
1	1	SHORELINE	BRS-105	7568700640	6,394	1,503	-	24%
1	1	SHORELINE	BRS-106	7568700635	6,391	1,504	-	24%
1	1	SHORELINE	BRS-107	7568700626	6,700	1,634	-	24%
1	1	SHORELINE	BRS-108	7568700625	10,670	2,652	-	25%
1	1	SHORELINE	BRS-109	6703700070	11,254	1,637	-	15%
1	1	SHORELINE	BRS-110	6704300070	8,205	1,964	-	24%
1	1	SHORELINE	BRS-111	6704300065	7,411	638	-	9%
1	2	SEATTLE	BRS-123	6632300644	6,000	-	375	6%
1	2	SEATTLE	BRS-125	6632300645	6,000	-	778	13%
1	2	SEATTLE	BRS-127	6632300646	6,000	-	784	13%
1	2	SEATTLE	BRS-129	6632300647	6,000	-	871	15%
1	2	SEATTLE	BRS-131	6632300641	43,377	-	5,103	12%
1	2	SEATTLE	BRS-134	6632300643	14,258	-	1,995	14%
1	2	SEATTLE	BRS-137	6632300280	15,105	-	15,105	100%
1	2	SEATTLE	BRS-138	6632300282	12,106	-	12,106	100%
1	2	SEATTLE	BRS-139	6632300281	17,077	-	2,827	17%
1	2	SEATTLE	BRS-140	6632300290	170,005	-	2,398	1%
1	2	SEATTLE	BRS-141	6632300291	13,250	-	1,064	8%
1	2	SHORELINE	BRS-122	6632900143	7,020	684	-	10%
1	2	SHORELINE	BRS-124	6632900144	6,900	-	752	11%
1	2	SHORELINE	BRS-126	6632900141	6,420	-	1,053	16%
1	2	SHORELINE	BRS-128	6632900140	6,445	-	696	11%
1	2	SHORELINE	BRS-130	6632900012	12,386	-	1,669	13%
1	2	SHORELINE	BRS-132	6632900015	5,657	-	967	17%
1	2	SHORELINE	BRS-133	6632900010	121,465	-	2,044	2%
1	2	SHORELINE	BRS-135	6632900011	10,938	-	2,702	25%

Property Acquisitions

Segment	Element	Jurisdiction	BRS No.	Parcel No.	Parcel Sq. Ft.	Sq. Ft. to be Acquired (Residential)	Sq. Ft. to be Acquired (Commercial)	Acquisition %
1	2	SHORELINE	BRS-136	3670500335	123,644	-	8,936	7%
1	2	SHORELINE	BRS-142	3670500385	14,982	-	649	4%
1	2	SHORELINE	BRS-143	3670500529	8,798	146	-	2%
1	3	SEATTLE	BRS-201	7663700410	35,932	-	3,057	9%
1	3	SHORELINE	BRS-202	6649300250	41,700	-	522	1%
1	4	LAKE FOREST PARK	BRS-222	1626049070	12,525	-	148	1%
1	4	SHORELINE	BRS-220	1568100460	48,132	-	1,481	3%
2	5	LAKE FOREST PARK	BRS-227	1626049030	56,043	-	2,888	5%
2	5	LAKE FOREST PARK	BRS-231	1568100645	11,047	-	1,722	16%
2	5	LAKE FOREST PARK	BRS-233	1568100655	5,096	-	650	13%
2	5	LAKE FOREST PARK	BRS-235	1568100660	4,853	-	668	14%
2	5	LAKE FOREST PARK	BRS-236	1568100665	3,811	-	874	23%
2	5	LAKE FOREST PARK	BRS-238	6744700020	251,944	-	7,804	3%
2	5	LAKE FOREST PARK	BRS-240	6744700034	3,342	-	141	4%
2	5	LAKE FOREST PARK	BRS-242	4109550000	24,193	-	2,024	8%
2	5	LAKE FOREST PARK	BRS-243	6744700060	16,324	-	2,713	17%
2	5	LAKE FOREST PARK	BRS-245	6744700080	19,992	-	38	0%
2	5	LAKE FOREST PARK	BRS-246	6744700062	18,276	-	2,964	16%
2	5	LAKE FOREST PARK	BRS-247	6744700106	23,442	-	38	0%
2	5	LAKE FOREST PARK	BRS-248	6744700105	25,035	-	554	2%
2	5	LAKE FOREST PARK	BRS-250	6744700103	47,089	-	3,202	7%
2	5	LAKE FOREST PARK	BRS-252	8026700170	14,523	257	-	2%
2	5	LAKE FOREST PARK	BRS-253	6744700123	5,578	-	1,806	32%
2	5	LAKE FOREST PARK	BRS-254	8026700175	13,936	397	-	3%
2	5	LAKE FOREST PARK	BRS-255	4238500000	7,349	-	1,082	15%
2	5	LAKE FOREST PARK	BRS-256	7715650000	40,154	-	1,325	3%
2	5	LAKE FOREST PARK	BRS-257	8026700180	12,870	644	-	5%
2	5	LAKE FOREST PARK	BRS-258	6744700360	48,300	-	1,129	2%
2	5	LAKE FOREST PARK	BRS-259	6744700343	15,435	-	3,287	21%

Property Acquisitions

Segment	Element	Jurisdiction	BRS No.	Parcel No.	Parcel Sq. Ft.	Sq. Ft. to be Acquired (Residential)	Sq. Ft. to be Acquired (Commercial)	Acquisition %
2	5	LAKE FOREST PARK	BRS-260	6744700341	10,325	159	-	2%
2	5	LAKE FOREST PARK	BRS-261	6744700303	22,950	2,907	-	13%
2	5	LAKE FOREST PARK	BRS-264	6744700301	25,350	2,331	-	9%
2	5	LAKE FOREST PARK	BRS-267	6744700285	15,160	2,290	-	15%
2	5	LAKE FOREST PARK	BRS-269	6744700262	16,693	1,061	-	6%
2	5	LAKE FOREST PARK	BRS-271	6744700260	17,360	1,057	-	6%
2	5	LAKE FOREST PARK	BRS-273	6744700240	13,300	2,054	-	15%
2	5	LAKE FOREST PARK	BRS-276	7740100305	18,575	347	-	2%
2	5	LAKE FOREST PARK	BRS-279	7740100005	14,950	1,170	-	8%
2	5	LAKE FOREST PARK	BRS-281	7740100015	16,851	705	-	4%
2	5	LAKE FOREST PARK	BRS-284	7740100025	8,650	377	-	4%
2	5	LAKE FOREST PARK	BRS-286	7740100030	8,650	413	-	5%
2	5	LAKE FOREST PARK	BRS-288	7740100035	9,895	521	-	5%
2	5	LAKE FOREST PARK	BRS-290	7740100040	9,265	540	-	6%
2	5	LAKE FOREST PARK	BRS-292	7740100045	9,265	595	-	6%
2	5	LAKE FOREST PARK	BRS-294	7740100050	9,000	638	-	7%
2	5	LAKE FOREST PARK	BRS-296	7740100055	9,600	720	-	8%
2	5	LAKE FOREST PARK	BRS-298	7740100060	9,600	720	-	8%
2	5	LAKE FOREST PARK	BRS-301	7740100065	9,600	767	-	8%
2	5	LAKE FOREST PARK	BRS-303	7740100070	9,600	1,360	-	14%
2	5	LAKE FOREST PARK	BRS-305	7740100075	9,600	1,467	-	15%
2	5	LAKE FOREST PARK	BRS-306	7738500495	7,317	1,040	-	14%
2	5	LAKE FOREST PARK	BRS-307	7740500040	9,615	1,070	-	11%
2	5	LAKE FOREST PARK	BRS-308	7738500165	10,200	212	-	2%
2	5	LAKE FOREST PARK	BRS-309	7740500045	9,719	720	-	7%
2	5	LAKE FOREST PARK	BRS-311	7740500050	10,010	706	-	7%
2	5	LAKE FOREST PARK	BRS-313	7740500055	10,257	677	-	7%
2	5	LAKE FOREST PARK	BRS-315	7740500060	10,181	634	-	6%
2	5	LAKE FOREST PARK	BRS-318	7740500065	9,882	988	-	10%

Property Acquisitions

Segment	Element	Jurisdiction	BRS No.	Parcel No.	Parcel Sq. Ft.	Sq. Ft. to be Acquired (Residential)	Sq. Ft. to be Acquired (Commercial)	Acquisition %
2	5	LAKE FOREST PARK	BRS-319	7740500070	9,659	508	-	5%
2	5	LAKE FOREST PARK	BRS-321	7740500075	9,620	423	-	4%
2	5	LAKE FOREST PARK	BRS-324	7740500080	9,764	332	-	3%
2	5	LAKE FOREST PARK	BRS-326	7740500085	10,092	209	-	2%
2	5	LAKE FOREST PARK	BRS-328	7740500090	10,605	606	-	6%
2	5	LAKE FOREST PARK	BRS-330	7740500095	11,304	226	-	2%
2	5	LAKE FOREST PARK	BRS-333	7740500100	11,860	237	-	2%
2	6	LAKE FOREST PARK	BRS-343	4019301655	717,012	-	71,701	10%
2	6	LAKE FOREST PARK	BRS-348	4019301656	15,943	-	319	2%
2	6	LAKE FOREST PARK	BRS-351	4030100350	4,500	-	3,072	68%
3	7	KENMORE	BRS-393	8832900005	52,286	-	1,046	2%
3	7	KENMORE	BRS-396	1126049010	10,896	-	22	0%
3	8	KENMORE	BRS-437	7946300115	8,659	-	376	4%
3	8	KENMORE	BRS-438	7946300110	8,922	-	378	4%
3	8	KENMORE	BRS-439	7946300101	8,515	-	399	5%
3	8	KENMORE	BRS-440	1226049014	249,020	-	3,112	1%
3	9	KENMORE	BRS-451.1	0114100940	84,720	-	1,694	2%
3	9	KENMORE	BRS-451.2	0114100950	203,425	-	4,069	2%
3	9	KENMORE	BRS-453	0114100920	216,204	-	2,838	1%
4	10	BOTHELL	BRS-515	0726059202	21,073	-	558	3%
4	10	BOTHELL	BRS-517	0726059447	9,883	-	268	3%
4	10	BOTHELL	BRS-518	0726059436	14,511	-	370	3%
4	10	BOTHELL	BRS-521	0726059032	16,600	-	352	2%
4	10	BOTHELL	BRS-522	726059246	76,679	-	609	1%
4	10	BOTHELL	BRS-525	0726059091	161,420	-	46	0%
4	10	BOTHELL	BRS-527	0726059054	287,139	-	1,286	0%
4	11	BOTHELL	BRS-537	0726059265	86,353	-	268	0%
4	12	BOTHELL	BRS-545	726059498	72,675	-	72,675	100%
4	14	BOTHELL	BRS-561	0967000325	9,844	-	489	5%

Property Acquisitions

Segment	Element	Jurisdiction	BRS No.	Parcel No.	Parcel Sq. Ft.	Sq. Ft. to be Acquired (Residential)	Sq. Ft. to be Acquired (Commercial)	Acquisition %
4	14	BOTHELL	BRS-564	0967000330	4,563	-	467	10%
4	14	BOTHELL	BRS-565	0967000335	7,200	-	843	12%
4	15	BOTHELL	BRS-574	0967000431	3,000	-	116	4%
4	15	BOTHELL	BRS-576	0967000435	5,629	-	1,475	26%
4	15	BOTHELL	BRS-577	9567800005	6,694	-	134	2%
4	15	BOTHELL	BRS-578	3798000185	8,360	929	-	11%
4	15	BOTHELL	BRS-580	3798000180	8,208	633	-	8%
4	15	BOTHELL	BRS-581	3798000175	8,284	623	-	8%
4	15	BOTHELL	BRS-582	3798000170	8,051	116	-	1%
4	15	BOTHELL	BRS-585	0526059074	17,500	-	21	0%
4	16	BOTHELL	BRS-590	0526059286	20,756	-	16	0%
4	16	BOTHELL	BRS-591	3067600050	47,860	-	1,628	3%
4	16	BOTHELL	BRS-593	826059166	12,263	-	498	4%
4	16	BOTHELL	BRS-594	3067600060	45,700	-	1,123	2%
4	16	BOTHELL	BRS-595	0826059281	9,112	-	146	2%
4	16	BOTHELL	BRS-596	0526059240	25,215	-	1,261	5%
4	16	BOTHELL	BRS-597	0526059175	191,495	-	9,575	5%
4	16	BOTHELL	BRS-601	0526059108	42,138	843	-	2%
4	17	BOTHELL	BRS-609	0526059052	93,590	-	936	1%
4	17	BOTHELL	BRS-610	0526059085	87,160	-	1,499	2%
4	17	BOTHELL	BRS-611	0526059315	8,461	-	423	5%
TOTAL					**4,938,827**	**49,676**	**289,565**	**7%**
PARCEL COUNT					**137**	**55**	**82**	

ATTACHMENT C

Properties with High or Moderate Hazardous Materials Risk

Sites with Potentially Adverse Environmental Conditions, High or Moderate Risk

No.	Segment	Element No.	City	BRS No.	Parcel No.	Property Name and Address	Acquisition	Potential Risk to Project Area	Potential Acquisition and/or Construction Impacts	Proposed Mitigation Measure
1	1	2	Shoreline	133	6632900010	PRC / 1250 NE 145th Street	Partial	Moderate	Liabilities associated with acquisition of an environmental impacted property. Impacted soil and/or groundwater during excavation.	Perform Phase I and/or II ESAs prior to property acquisition
2	1	2	Seattle	131	6632300641	Qwest / 1249 NE 145th Street	Partial	Moderate	Liabilities associated with acquisition of an environmental impacted property. Impacted soil during excavation.	Perform Phase I and/or II ESAs prior to property acquisition
3	1	2	Shoreline	135	6632900011	Spark's / 14501 15th Avenue NE	Partial	Moderate	Liabilities associated with acquisition of an environmental impacted property. Impacted soil and ground water during excavation.	Perform Phase I and/or II ESAs prior to property acquisition
4	1	2	Seattle	134	6632300643	Arco #0986 / 14359 15th Avenue NE	Partial	High	Liabilities associated with acquisition of an environmental impacted property. Impacted soil and ground water during excavation.	Perform Phase I and/or II ESAs prior to property acquisition
5	1	N/A	N/A	ROW	N/A	NE 145th & 15th ROW / NE 145th & 15th Avenue NE	No	High	Impacted ground water during excavation	Soil and ground water sampling ahead of construction
6	1	2	Seattle	137	6632300280	Own / 14360 15th Avenue NE	Full	High	Liabilities associated with acquisition of an environmental impacted property. Impacted soil during excavation.	Perform Phase I and/or II ESAs prior to property acquisition
7	1	2	Seattle	140	6632300290	Northpark Cleaners / NE 145th & 15th Avenue NE, 1549 & 1553 NE 145th Street, & 1633 NE 145th Street	Partial	Moderate	Impacted ground water during excavation	Visual and olfactory field screening of soils and ground water
8	1	2	Seattle	140	6632300290	QFC 858 / 1531 NE 145th Street	Partial	Moderate	Liabilities associated with acquisition of an environmental impacted property. Impacted soil and ground water during excavation.	Perform Phase I and/or II ESAs prior to property acquisition
9	1	2	Seattle	139	6632300281	145th Chevron / 1554 NE 145th Street	Partial	High	Liabilities associated with acquisition of an environmental impacted property. Impacted soil and ground water during excavation.	Perform Phase I and/or II ESAs prior to property acquisition
10	1	N/A	Seattle	219	7663700280	Windsor / 3217, 3225 & 3227 NE 145th Street & 14357 NE Lake City Way	No	Moderate	Liabilities associated with acquisition of an environmental impacted property. Impacted soil and ground water during excavation.	Perform Phase I and/or II ESAs prior to property acquisition
11	2	N/A	Lake Forest Park	239	1626049013	Acacia / 14951 Bothell Way NE	No	Moderate	Impacted soil and ground water during excavation	Visual and olfactory field screening of soils and ground water
12	2	5	Lake Forest Park	243	6744700060	Hudson Oil / 15030 Bothell Way NE	Partial	Moderate	Liabilities associated with acquisition of an environmental impacted property. Impacted soil and ground water during excavation.	Perform Phase I and/or II ESAs prior to property acquisition
13	2	5	Lake Forest Park	248 & 248.1	6744700105 & 6744701581	FAI / 15300 Bothell Way NE	Partial on 248, No on 248.1	Moderate	Liabilities associated with acquisition of an environmental impacted property. Impacted soil during excavation.	Perform Phase I and/or II ESAs prior to property acquisition
14	2	N/A	Lake Forest Park	339	1026049083	Chevron #93987 / 17017 Bothell Way	No	Moderate	Impacted soil and ground water during excavation	Visual and olfactory field screening of soils and ground water
15	2	N/A	Lake Forest Park	339	1026049083	FP Car Wash / 16827 Bothell Way	No	Moderate	Impacted soil and ground water during excavation	Visual and olfactory field screening of soils and ground water

No.	Segment	Element No.	City	BRS No.	Parcel No.	Property Name and Address	Acquisition	Potential Risk to Project Area	Potential Acquisition and/or Construction Impacts	Proposed Mitigation Measure
16	2	N/A	Lake Forest Park	342	7611300020	Arco 5242 / 17001 Bothell Way NE	No	Moderate	Impacted soil and ground water during excavation	Visual and olfactory field screening of soils and ground water
17	2	6	Lake Forest Park	343	4019301655	Albertsons 3416 / 17171 Bothell Way NE	Partial	High	Impacted ground water during excavation	Perform Phase I and/or II ESAs prior to property purchase
18	3	7	Kenmore	396	1126049010	ConocoPhillips 2705926 / 6115 Bothell Way NE	Partial	Moderate	Liabilities associated with acquisition of an environmental impacted property. Impacted soil during excavation.	Perform Phase I and/or II ESAs prior to property purchase
19	3	N/A	Kenmore	431	7946300225	Chevron 99555 / 6504 Bothell Way NE	No	Moderate	Impacted soil and ground water during excavation	Visual and olfactory field screening of soils and ground water
20	3	N/A	Kenmore	434	7946300196	Shell 19038 / 6532 Bothell Way NE & 6532 NE Bothell Way	No	High	Impacted soil and ground water during excavation	Soil and ground water sampling ahead of construction
21	3	N/A	Kenmore	436	7946300120	U-Haul / 6720 Bothell Way NE	No	Moderate	Liabilities associated with acquisition of an environmental impacted property. Impacted soil and ground water during excavation.	Perform Phase I and/or II ESAs prior to property purchase
22	3	8	Kenmore	439	7946300101	Unocal SS 4442 / 6744 Bothell Way NE	Partial	High	Liabilities associated with acquisition of an environmental impacted property. Impacted soil and ground water during excavation.	Perform Phase I and/or II ESAs prior to property purchase
23	3	N/A	Kenmore	442	114100690	Kenmore Cleaners / 6830 Bothell Way NE	No	Moderate	Impacted soil and ground water during excavation	Visual and olfactory field screening of soils and ground water
24	3	N/A	Kenmore	NA	4164100060	Skips / 6834 NE 175th Street	No	Moderate	Impacted soil and ground water during excavation	Visual and olfactory field screening of soils and ground water
25	4	N/A	Bothell	506	726059037	BWG / 17210 Bothell Way NE	No	Moderate	Impacted soil and ground water during excavation	Visual and olfactory field screening of soils and ground water
26	4	N/A	Bothell	ROW	N/A	Bothell Paint / 18004 & 18005 Bothell Way NE	No	High	Impacted soil and ground water during excavation	Soil and ground water sampling ahead of construction
27	4	N/A	Bothell	NA	N/A	Simon and Sons / 18107 Bothell Way NE	No	High	Impacted soil and ground water during excavation	Soil and ground water sampling ahead of construction
28	4	12	Bothell	545	726059498	NSD 417/Lot P South / 18421 98th Avenue NE	Full	High	Impacted soil during excavation	Soil and ground water sampling ahead of construction
29	4	N/A	Bothell	NA	967000385	Bothell 185 LLC / 10201 NE 185th Street	No	Moderate	Impacted soil and ground water during excavation	Visual and olfactory field screening of soils and ground water

ATTACHMENT D

Acronyms and Abbreviations

AADT	average annual daily traffic
ACBM	asbestos-containing building materials
ADA	Americans with Disabilities Act
AI	Area of Impact
ASTM	American Society of Testing and Materials
BAT	business access and transit
BEB	Battery Electric Bus
bgs	below ground surface
BMPs	best management practices
BRT	bus rapid transit
CFR	Code of Federal Regulations
COBRHL	City of Bothell Register of Historic Landmarks
DAHP	Washington State Department of Archaeology and Historic Preservation
dB	decibels
Ecology	Department of Ecology
EDR	Environmental Data Resources, Inc.
EFH	Essential Fish Habitat
EPA	US Environmental Protection Agency
ESA	Environmental Site Assessment
ETL	Express Toll Lane
GHG	greenhouse gas
HMA	hot mix asphalt
HMP	Habitat Management Plan
KMC	Kenmore Municipal Code
KCRHP	King County Register of Historic Places
LBP	lead-based paint
LOS	level of service
Metro	King County Metro
MSATS	mobile source air toxics
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
PGIS	pollution-generating impervious surfaces
PHS	Priority Habitats and Species
PLIA	Washington State Pollution Liability Insurance Agency
PSCAA	Puget Sound Clean Air Agency
RCRA	Resource Recovery and Conservation Act
RCW	Revised Code of Washington
ROW	right-of-way
SCL	Seattle City Landmark
SEPA	State Environmental Policy Act
SHMP	Shoreline Municipal Code
SMC	Seattle Municipal Code
SMP	Shoreline Master Program
SR	State Route

ST3	Sound Transit 3 Plan
SWPPP	Storm Water Pollution Prevention Plan
TDA	Threshold Discharge Area
TESCP	Temporary Erosion and Sediment Control Plan
TOD	transit-oriented development
TSP	transit signal priority
UST	underground storage tank
UW	University of Washington
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife
WHR	Washington Heritage Register
WISAARD	Washington Information System for Architectural and Archaeological Records Data
WSDOT	Washington State Department of Transportation

ATTACHMENT E

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