

# SEPA Environmental Checklist

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## Lakewood Station Access Improvements Project AE 0145-17 LSAI 02.01

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## Acronyms and Abbreviations

ADA	Americans with Disabilities Act
AI	Area of Impacts
BMPs	Best Management Practices
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
DAHP	Washington Department of Archaeology and Historic Preservation
dBA	Decibels
DNR	Washington State Department of Natural Resources
Ecology	Washington State Department of Ecology
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GHG	Greenhouse Gas
I-5	Interstate 5
ID	Identification Number
JBLM	Joint Base Lewis McChord
Ldn	Day-night equivalent sound level
Leq	Equivalent sound level
LMC	Lakewood Municipal Code
MSATs	Mobile Source Air Toxics
MTCA	Model Toxics Control Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NPMS	National Pipeline Mapping System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
P&R	Park and Ride
PM	Particulate Matter
ppm	Parts per million
ROW	Right-of-Way
SEPA	State Environmental Policy Act
STIP	Statewide Transportation Improvement Plan
SWPPP	Storm Water Pollution Prevention Plan
TESC	Temporary Erosion and Sediment Control
USGS	United States Geological Survey
VMT	Vehicle miles travelled
VOC	Volatile Organic Compound
WAC	Washington Administrative Code
WDFW	Washington State Department of Fish and Wildlife
WSDOT	Washington State Department of Transportation

## PROJECT OVERVIEW

Sound Transit (Central Puget Sound Regional Transit Authority) proposes to provide access improvements to the Lakewood Station along the Sounder South Commuter Rail line. Access to the Lakewood Station and the surrounding area would include improved walking, bicycling, parking, and bus facilities. Other proposed improvements include new and updated sidewalks, Americans with Disabilities Act (ADA) compliant ramps, and bike lanes. Sound Transit is reviewing this project under the State Environmental Policy Act (SEPA). The environmental review evaluates project impacts along with potential measures to avoid, reduce, or mitigate those impacts.

The proposed Lakewood Station access improvements were identified through an alternatives analysis conducted in 2021 for the project (Sound Transit 2021). The alternatives analysis identified two tiers of projects: those identified as Potential Improvements (herein titled Priority 1 projects) and those identified as Possible Alternates (herein titled Priority 2 projects). Three key criteria were used to identify Priority 1 and Priority 2 projects. These criteria were:

- Improves connections for underserved communities
- Addresses a substantial travel barrier
- Located within proximity of the station

For the purposes of this environmental analysis, all Priority 1 and Priority 2 projects are included in this SEPA checklist and environmental review.

## SUMMARY OF ENVIRONMENTAL ELEMENTS

### Earth

The project area is essentially flat with very little elevation gain. Similarly, soils in the area are uniformly composed of Spanaway gravelly sandy loam. The soils are very resistant to erosion and are stable. The project area does not include seismic, landslide, steep slope, or erosion hazard zones and is conducive to urban development. Project-designated Best Management Practices (BMPs) for erosion control would result in minimal or no issues related to erosion during construction. The only improvement that would disturb more than 1 acre is the Northeast Surface Parking Lot C, and a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit and Stormwater Pollution Prevention Plan would be required from Ecology. The project would result in approximately 148,100 square feet of new impervious surface (related to the Northeast Surface Parking Lot C and the new trail along the Sound Transit rail line).

### Air

Construction activities would result in short-term emissions such as dust from soil disturbance and vehicle exhaust from construction vehicles and equipment (e.g., carbon monoxide, sulfur dioxide, nitrogen oxide, and particulates). The improvements would be constructed over a longer timeline (five years), and individual improvements would be constructed over a very short timeline (months). Thus, localized effects are unlikely to notably impact air quality. There may be some temporary (approximately one to two hours) odor impacts at adjacent properties

related to paving the new surface parking lot. Some greenhouse gases and mobile source air toxics would result from use of vehicles during the construction and operation phases; however, these would not cause a deterioration in the air quality standards. The project could support long-term air quality improvements by providing non-motorized access opportunities.

## **Water**

While there are wetlands, a stream (Clover Creek), and floodplain in the project area, these would not be affected by construction or operation of the project. The project would improve the control of stormwater runoff because many of the areas around the project improvements currently have no facilities for stormwater control and the project would add collection and treatment (infiltration) facilities to the project area. The soils in the project area are conducive to infiltration, and use of this treatment option is a recognized sustainable solution. No hazardous waste would be discharged to surface waters or groundwater and the project would not affect drainage patterns. The project does not result in placing fill within the 100-year floodplain thus does not affect the storage capacity of the floodplain.

## **Plants**

The project would be in a heavily urbanized environment, and there are few native plants in the area. A mix of landscaping, noxious weed species, invasive species, shrubs, and trees are located along the project areas. The proposed location of the Northeast Surface Parking Lot C contains several Oregon white oak trees, which are considered significant trees by the City of Lakewood. Although the city designates Oregon white oaks a priority wildlife habitat, these trees are isolated from other oak stands or critical areas and are unlikely to provide significant wildlife habitat or function as a wildlife corridor. The project would comply with requirements for replacement of the Oregon white oak trees if tree removal is needed. There are no listed threatened or endangered plant species on or near the project. The project would replace any removed landscaping and proposes adding landscaping for a number of areas, including the new trail along the Sound Transit rail line and at the Northeast Surface Parking Lot.

## **Animals**

There is generally little habitat for animal species because the project area is highly urbanized and any existing habitat is fragmented. Thus, the existing habitat generally supports only small mammals, reptiles, and amphibians. The exception is Clover Creek, which supports two listed salmonid species, as well as other aquatic organisms. The project would have no impacts to Clover Creek or listed salmonids. There are no listed threatened or endangered wildlife species known to be on or near the project site.

## **Energy and Natural Resources**

The project would require the use of electricity for electric vehicle charging, illumination, signals, rail crossing arms, and station upgrades (i.e., public address and security systems). The project's demand for electricity is not anticipated to adversely affect the supply of electricity and would not affect the potential use of solar energy at adjacent properties.

## **Environmental Health – Hazardous Materials**

While there are a number of listed contaminated sites in the area (30 sites), the project would not affect any of these sites. The project is also located in the area of past contamination from the Asarco Copper Smelter that released arsenic, lead, and other heavy metals; however,

Lakewood and the project sites are located in the lowest predicted arsenic concentration area, which is below the threshold for required cleanup.

There is also the possibility that during soil disturbance unknown contamination could be encountered. However, the project requires a very limited amount of soil disturbance, there are no listed contaminated sites near the various improvements, and there are no underground hazardous liquid or gas pipelines in the area. In the event of discovery of unknown contamination, work in the area would stop pending further investigation and if necessary remediation.

During construction there is potential for inadvertent spills of fuel or other materials to occur especially during equipment maintenance or fueling. The contractor would be required to prepare and implement a spill prevention and control plan and, if fueling is proposed, to conduct any staging in areas that have containment measures in place. 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, and ongoing operations. Sound Transit has a policy to meet or exceed federal safety and security process requirements on all projects, including measures for controlling hazardous material usage during construction, as well as during operation and maintenance of the project.

### **Environmental Health – Noise and Vibration**

Construction activities would produce noise and vibration lasting for the duration of construction. Due to the existing high level of ambient noise in the area and the five-year construction timeline for the improvements, it is not anticipated that construction would produce any adverse noise impacts. Similarly, construction vibration is not expected to produce any adverse effects because the proposed improvements generally would not be located close to existing structures (usually farther than 50 feet away). Because the project's proposed access improvements would not result in any increase in Sounder trips, operational sound and vibration levels would not change.

### **Land and Shoreline Use**

Because most of the project improvements would occur within road and rail line right-of-way (ROW) and consist of non-motorized improvements, they generally would result in no change in land use. One vacant property would potentially be developed for the proposed Northeast Surface Parking Lot C, and a segment of undeveloped Sound Transit rail ROW would potentially be converted to a trail. The proposed project improvements are consistent with policies in the City of Lakewood's Comprehensive Plan and Station District Subarea Plan, as well as the zoning code.

### **Housing**

The project does not provide or eliminate any housing units.

### **Aesthetics**

The project would have temporary effects on views during construction, which would include construction equipment and vehicles, disturbed areas, and staged materials. The completed project would have no impact on views, and there are no identified sensitive views in the project area. The roadway project improvements (sidewalks, curbs, gutters, sharrow, etc.) generally have no effect on views themselves because they blend into the existing roadway environment. Improvements that would slightly change local views include improved transit stops, the new

Northeast Surface Parking Lot C, and the trail in the Sound Transit ROW. Landscaping is proposed in several areas including at the Northeast Surface Parking Lot C, the Sound Transit ROW trail, and in selected areas along other access improvements.

### **Light and Glare**

There may be some temporary light produced during construction if night work is necessary. The project would add some luminaires along several of the project areas and at the proposed Northeast Surface Parking Lot C, thereby slightly increasing nighttime light. These luminaires would direct light downward to minimize any glare to drivers on the roads.

### **Recreation**

The project adds a trail, sidewalks, and bicycle facilities, which are a benefit to recreation. The project does not adversely affect any existing recreational opportunities.

### **Historic and Cultural Preservation**

The historic and cultural survey identified 18 historic properties (residences, commercial, and utility properties); however, none of the properties were recommended for listing on federal, state, and local registers. There is one recorded archaeological site within the project area, but the Washington State Department of Archaeology and Historic Preservation (DAHP) determined that it was not eligible for listing. Review of previous archaeological surveys conducted near the access improvements (i.e., within 0.25 mile) and the project's archaeological survey (pedestrian survey and shovel probes) revealed no cultural or archaeological resources present. Therefore, it is anticipated that the project would not affect any historic or cultural resources. If archaeological resources are encountered during construction activities, all work in that vicinity would stop, and the project's inadvertent discovery plan would be implemented.

### **Transportation**

The purpose of the project is to improve access to the Lakewood Station. Although the project would increase vehicle trips (by approximately 50 daily trips) on the area roads to the station for use of the proposed Northeast Surface Parking Lot C and improved drop-off/pickup areas, these trips would not change the level of service on the local roads or at the modeled project area intersections. Thus, the project would have no adverse effects on transportation, but rather would have a beneficial effect on non-motorized travel to and from the station.

### **Public Services**

If project construction requires any lane closures or detours, it has the potential to temporarily impact access for emergency service vehicles. The contractor would be required to maintain access for emergency vehicles and provide notification of potential lane closures or detours. Following construction, the project would not impact public services.

### **Utilities**

During construction the project would require electricity and water service. The only utility required for the completed project is electricity. This additional demand for electricity would not have an adverse effect on the electrical supply in the project area.



## A. BACKGROUND

### A 1. Name of proposed project, if applicable:

Lakewood Station Access Improvements Project

### A 2. Name of applicant:

Central Puget Sound Regional Transit Authority (Sound Transit)

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

Lesley M. Maurer, Senior Environmental Planner, Sound Transit  
Office of Environmental Affairs and Sustainability  
Union Station, 401 South Jackson St., Seattle, WA 98104-2826  
206-553-3892

### A 4. Date checklist prepared:

January 10, 2024

### A 5. Agency requesting checklist:

Sound Transit

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

The Sound Transit Board of Directors would select the projects to be built after completion of the design and environmental review process. The project is currently scheduled for construction to occur between 2025 and 2030.

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

Yes. The Sound Transit 3 (ST3) Plan (Sound Transit 2016) includes projects to expand the capacity and enhance future Sounder South commuter rail service to meet the projected increased demand for Sounder S Line service due to increasing population and employment over the next 25-year period.

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

Sound Transit previously prepared plan-level and project-level environmental reviews that address planned regional high-capacity transit improvements, including improvements to Sounder Commuter Rail.

- Sound Transit's Final Environmental Impact Statement (EIS) on the Regional Transit Long-Range Plan (Sound Transit 2014).
- The portion of the S Line from Tacoma Dome to Lakewood, including the South Tacoma Station, was included in the Lakewood to Tacoma Commuter Rail EIS (Sound Transit 2002).

**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.**

There are no known applications pending for governmental approvals directly affecting the property covered by the proposal.

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

- Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit
- Washington State Department of Transportation (WSDOT) ROW General Permit
- Washington Utilities and Transportation Commission Approval
- City of Lakewood permits and approvals related to:
  - Grading
  - Parking Lot
  - Public Right-of-Way
  - Electric
  - Low Voltage

**A 11. Give a 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 project's purpose is to provide better walking, bicycling, driving, and transit facilities to improve access to Lakewood Station. The access improvements are needed to add bicycle lanes, missing sidewalk segments, ADA-accessible ramps, bus facility improvements, parking and station upgrades. The proposal consists of several individual improvement projects designed to improve access and connections to and from Lakewood Station.

Sound Transit has no plans for future additions to or expansion of this project. The access improvements project is related to the Sound Transit 2 Plan (ST2 Plan). The ST2 Plan was approved in 2008 and builds on the Link light rail lines and the region's investment in Sounder commuter rail and Sound Transit Express bus service.

Figure 1 shows the locations of the proposed access improvement projects. Each access improvement project has been given a letter and number identification (ID). Figure 2 shows the location of each improvement by ID alphanumeric. Table 1 summarizes all of the access improvement projects by ID, and more descriptions of the access improvements follow.

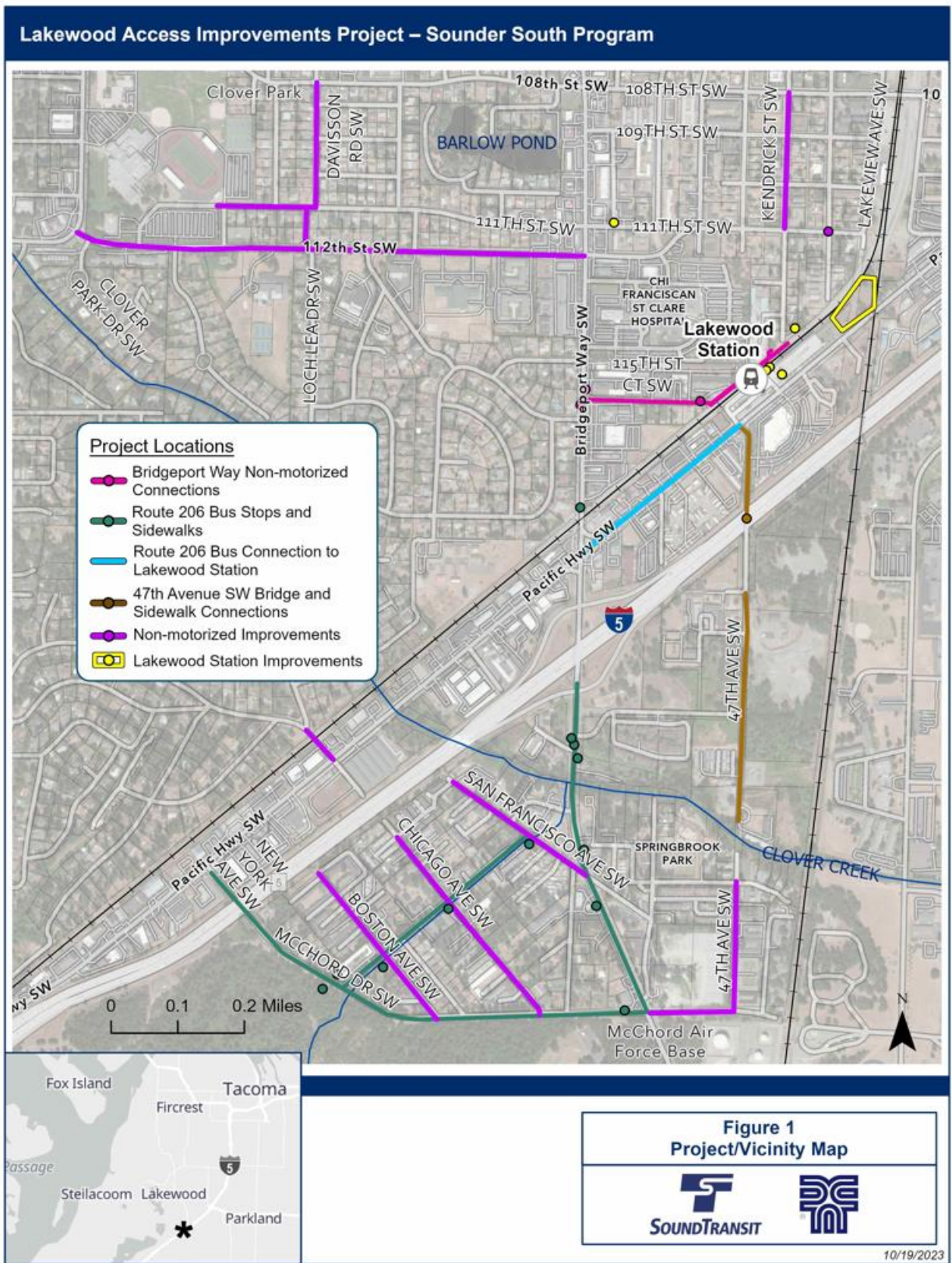


Figure 1 Project/vicinity map

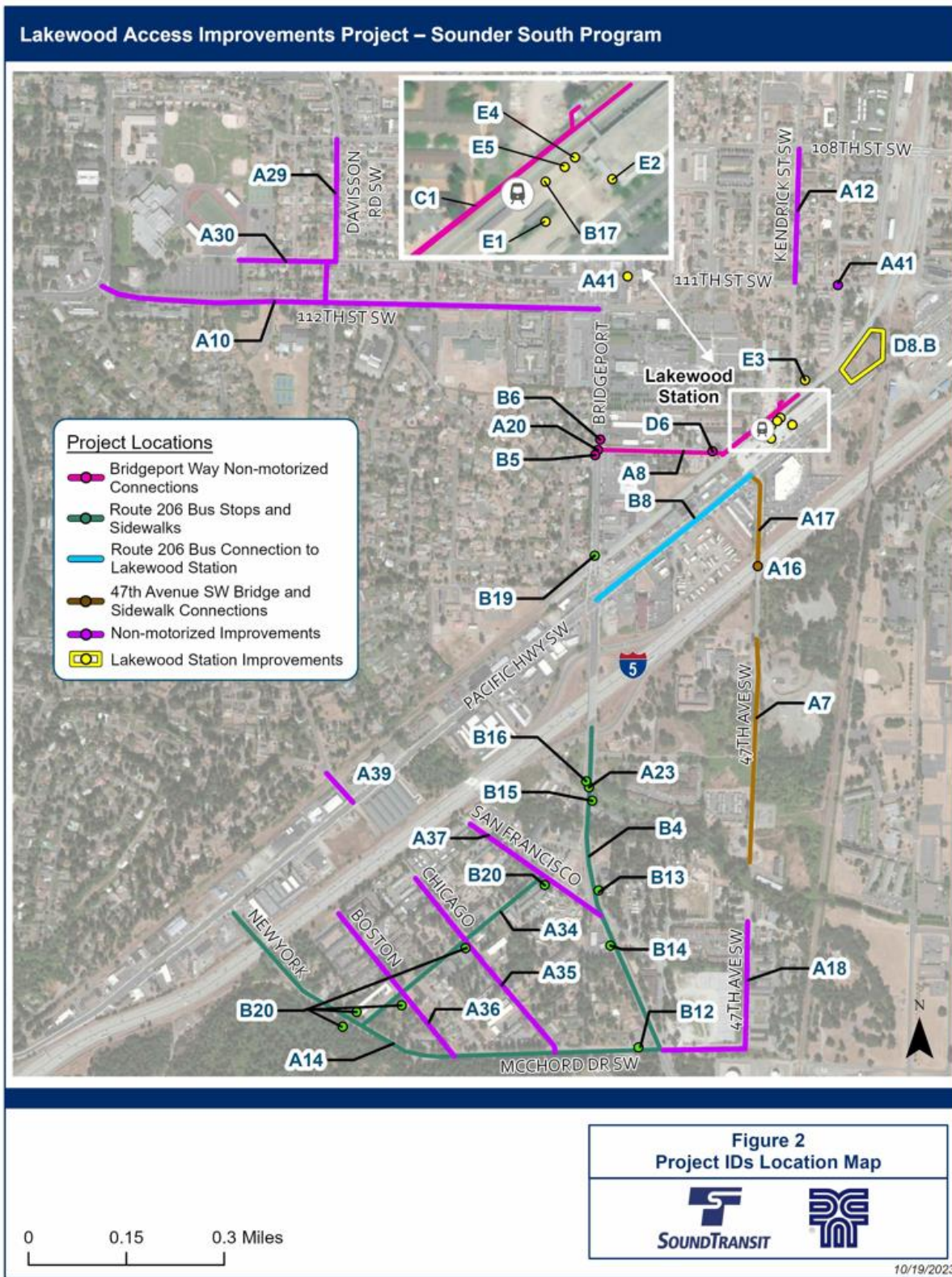


Figure 2 Project IDs location map

**Table 1 Summary of improvements**

Project IDs	Description Location	Project Length (feet)	Bike	Ped	Bus	Lighting	ADA	Traffic Signal	Souder Station
Bridgeport Way Non-motorized Connections via 115th Street Ct SW									
A8	115th Street Court SW Non-motorized Connection	1,620	✓	✓			✓		
A20	Bridgeport Way SW Non-motorized Crossing Improvements	NA		✓		✓		✓	
B5/6	Bridgeport Way SW/115th Street SW Southbound Bus Stop Improvements	NA			✓				
C1	Improve Station Fencing	780							✓
D6	115th Street Court SW Pickup/Drop-off	NA		✓					
Route 206 Bus Stops and Sidewalks									
A14	New York Avenue SW/McChord Drive SW Sidewalk Improvements	3,880		✓	✓				
A23	Bridgeport Way SW/Seattle Avenue SW Pedestrian Crossing	NA		✓				✓	
A34	Lincoln Avenue SW Non-motorized Improvements	1,900		✓		✓			
A37	San Francisco Avenue SW			✓		✓			
B4	Bridgeport Way SW/McChord Drive SW Transit Improvements	2,700		✓	✓				
B12	Bridgeport Way SW/McChord Drive SW Southbound Bus Stop Improvements	NA		✓	✓	✓			
B13-16	Bridgeport Way SW/San Francisco Avenue SW and Seattle Avenue SW Bus Stop Improvements	NA		✓		✓			

Project IDs	Description Location	Project Length (feet)	Bike	Ped	Bus	Lighting	ADA	Traffic Signal	Sounder Station
B19	Bridgeport Way SW/Pacific Highway SW Southbound Bus Stop Improvements	NA		✓		✓			
B20	Lincoln Avenue SW Transit Improvements	NA		✓					
Route 206 Bus Connection to Lakewood Station									
B8	Pacific Highway SW Transit Improvements (add right-turn lane)	1,610			✓				
47th Avenue SW Bridge and Sidewalk Connections									
A7	47th Avenue SW Nonmotorized Improvements – South of I-5	1,810	✓	✓					
A16	47th Avenue SW Bridge Add Bicycle Lanes/Sidewalks West Side Only	NA	✓	✓					
A17	47th Avenue SW Non-motorized Improvements North of I-5	700	✓	✓					
Lakewood Station Improvements									
A41	Station Area Curb Ramp Retrofits	NA					✓		✓
B17	Shelter Retrofits at Station	NA			✓				✓
D8.B	Northeast Surface Parking Lot C	NA				✓			✓
E1	Public Address System	NA							✓
E2	Station Stair Design Improvements	NA							✓
E3	Wayfinding to Pickup/Drop-off Location	NA							✓
E4	Bird Deterrent Retrofit	NA							✓
E5	Station Accessibility for Sight Impaired	NA							✓

Project IDs	Description Location	Project Length (feet)	Bike	Ped	Bus	Lighting	ADA	Traffic Signal	Sounder Station
Non-motorized Improvements									
A10	112th Street SW Non-motorized Improvements	4,030	✓	✓					
A12	Kendrick Street SW Non-motorized Improvements	1,080	✓	✓					
A18	47th Avenue SW/McChord Drive SW Non-motorized Improvements	1,890	✓	✓					
A29	Davisson Road SW Bike Lanes (possible power pole location outside ROW)	1,470	✓	✓					
A30	Clover Park High School Connection	730	✓	✓					
A35/36	Chicago Avenue SW and Boston Avenue SW Non-motorized Improvements	1,970		✓		✓			
A39	Clover Creek Drive SW Pedestrian Improvements	320		✓				✓	

**Bridgeport Way Non-motorized Connections (A8, A20, B5, B6, C1, D6)**

The improvements proposed at 115th Street Court SW would facilitate non-motorized movement from the Bridgeport Way SW bus stop and the 115th Street Court SW cul-de-sac to Lakewood Station. The improvements would allow for drop-off and pickup of passengers at the street end and access to the station via a trail along the north side of the tracks to the north station entrance.

Sharrows would be added to 115th Street Court SW from Bridgeport Way SW to the end of the cul-de-sac. Sharrows are lanes designated for sharing between vehicles and bicycles – these are not separate bicycle lanes. Curb, gutters, and sidewalks would be constructed at the cul-de-sac and a portion of the north side of 115th Street Court SW. An approximately 800-foot-long by 10-foot-wide shared use path would be constructed from the end of the cul-de-sac along the north side of the rail ROW to just past the pedestrian overpass, allowing passengers to access the overpass bridge to the station. The path would be bordered on both sides with a fence for security and would be extended beyond the overcrossing to connect to the existing sidewalk and stairs up to the overcrossing.

The bus stop on the south side of Bridgeport Way SW at 115th Street SW would be relocated, and a pedestrian-only signal would be added, as well as improved lighting and crosswalks to improve access to the bus shelters. ADA-compliant curb ramps would be added in several areas (included A41 under Lakewood Station Area Improvements).

### **Route 206 Bus Stops and Sidewalks (A14, A23, A34, A37, B4, B12, B13, B14, B15, B16, B19, B20)**

Pierce Transit Route 206 operates on Bridgeport Way SW from the Lakewood Towne Center and extends south through the project area serving the access improvements project area. The project proposes improvements to a number of transit stops, sidewalks, roadways, and intersections in this area. These improvements are described in more detail below. Curb, gutter, and a 6-foot-wide sidewalk would be constructed on the north side of New York Avenue SW and McChord Drive SW between Bridgeport Way SW and Pacific Highway SW over a distance of approximately 3,800 feet. Several new utility poles for lighting would be added to this road segment at various points along the route. Near the intersection of McChord Drive SW and Lincoln Avenue SW a concrete bus stop pad with a bench would be installed on both sides of the street. New crosswalk striping would be added at Lincoln Avenue SW to access the southbound bus stop on McChord Drive SW. Another concrete bus stop pad and bench would be added to the north side of McChord Drive SW near Bridgeport Way SW.

At the New York Avenue SW crossing of Interstate 5 (I-5), the narrow sidewalks on the north and south sides would be removed. On the north side, a new sidewalk (slightly over 6 feet wide) would be constructed. Also on the north side, a concrete barrier and pedestrian railing would be installed between the street and the sidewalk as well as a new railing at the bridge edge.

New curb, gutter, and sidewalks would be constructed on Lincoln Avenue SW between McChord Drive SW and San Francisco Avenue SW for a distance of approximately 1,900 feet. Sidewalks would be added to both sides of Lincoln Avenue SW between McChord Drive SW and Chicago Avenue SW. From Chicago Avenue SW to San Francisco Avenue SW, sidewalks would only be added to the north side of Lincoln Avenue SW because there is existing sidewalk on the south side. A bus stop pad, bench, and shelter would be installed at the existing bus stop at Lincoln Avenue SW and Chicago Avenue SW.

New transit shelters, pedestrian-level lighting, benches, and trash receptacles would be added to Bridgeport Way SW at the transit stop at San Francisco Avenue SW. A concrete bus stop pad and bench would be installed at Seattle Avenue SW. A new pedestrian crossing signal and median pedestrian refuge would be added at the Bridgeport Way SW/Seattle Avenue SW intersection.

### **Route 206 Bus Connection to Lakewood Station (B8)**

The project would reconstruct the existing right-turn lane from southbound Pacific Highway SW to northbound Bridgeport Way SW to allow for a larger turning radius to accommodate buses, allowing Pierce Transit's Route 206 to access the station. To accommodate the larger turn radius, a sliver of the existing island would be removed and the receiving lanes on Bridgeport Way SW would be shifted west, thus reducing the width of the median. Project B8 would construct new curbs on Bridgeport Way SW and within the modified turn lane.

### **47th Avenue SW Bridge and Sidewalk Connections (A7, A17, A16)**

South of I-5, sidewalks would be constructed on the west side of 47th Avenue SW from Clover Creek to 120th Street SW. Sharrows would be constructed on both sides of 47th Avenue SW in the same location. However, there would be a sidewalk and bicycle facility gap between 123rd Street SW and 121st Street SW. The City of Lakewood may address this gap in the future.



North of I-5, sidewalk, curbs, and gutters would be added to the west side of 47th Avenue SW extending from I-5 to Pacific Highway SW. Sharrows would be constructed on the east side of 47th Avenue SW, and a bicycle lane would be provided on the west side.

Across I-5 on the bridge, there are two options to improve the pedestrian and bicycle access. The first would remove the narrow sidewalk on the east side of the bridge and widen the sidewalk on the west side to 5 feet, with a pedestrian barrier between the road and sidewalk and a pedestrian railing at the edge of the bridge. Enough room would be available to add sharrows across the bridge. The second option would be to construct a shared use path on the west side of the bridge. To accommodate this added width, the bridge structure would be strengthened to allow for the full deck width to be utilized, which would allow for the barriers to be placed at the edge of the bridge. The bridge strengthening for the 47th Avenue bridge may consist of adding a fiber wrap on bridge deck or other methods including adding other reinforcement; overlaying the existing deck, or modifying and reconstructing barriers and railings.

### **Lakewood Station Improvements (A41, B17, E1, E2, E4, E5, E3)**

Lakewood Station projects are proposed to improve access conditions for sight impaired, non-English speaking, and disabled persons, as well as support non-motorized access, and improve maintenance issues affecting user comfort. The following upgrades are proposed for the Lakewood Station:

- Add bird deterrent system.
- Provide ADA mini-high shelter (mini-high provides a level train boarding surface).
- Retrofit stairs and other station components that are currently collecting trash.
- Install a public address system.
- Provide accessible wayfinding for sight-impaired persons including:
  - Braille for ticketing.
  - Tactile strips between platform and drop-off areas.
- Provide signage for non-English-speaking persons.
- In addition, retrofit ADA-compliant curb ramps at select locations within 0.5 mile of the station.
- Add wayfinding signage at several locations including near the intersections of Bridgeport Way SW and Pacific Highway SW, Bridgeport Way SW and 112th Street SW, and Kendrick Street SW and 111th Street SW. Add station access signage to Pacific Highway SW near the station. The sign locations are being coordinated with the City of Lakewood; therefore, these locations are preliminary and may change.

### **Northeast Surface Parking Lot C (D8.B)**

A new surface parking lot would be constructed (Northeast Surface Parking Lot C) north of the station (see Figure 3). The parking area would be bordered by an 8-foot landscaped buffer that is bounded by a retaining wall. The entire parking area would be fenced. At the southern end of the parking area, a 6-foot sidewalk would be constructed that connects to Lakewood Station. There would be approximately 12 compact parking spaces and 54 standard-size parking spaces (for a total of approximately 66 parking spaces), and the parking area would include lighting and electric vehicle charging stations. Existing parking stalls in the parking garage would be retrofitted to construct three accessible stalls, and three electric vehicle charging stations each serving two parking stalls would be added.

### **Non-motorized Improvements (A10, A12, A18, A29, A30, A35, A36, A39)**

Various other station access improvements are proposed to enhance non-motorized travel in the project area, as follows:

- 112th Street SW Connection – Improve sidewalks on 112th Street SW for a length of approximately 4,000 feet by adding curbs and gutters. Also add bicycle lanes. Improvements on the north side of 112th Street SW from Gravelly Lake Drive SW to Highland Avenue SW would be done by others.
- Kendrick Street SW Connection – Do a full rebuild of approximately 1,000 feet of curbs, gutters, sidewalks, bicycle lanes, and lighting.
- Clover Creek Drive SW Connection – Provide sidewalks on Clover Creek Drive SW between Hillcrest Drive SW and Pacific Highway SW. Improve accessibility and safety at the at-grade rail crossing by providing sidewalks, signage, and crossing arms.
- Clover Park High School Connection – Install bicycle lanes and construct curb, gutter, and sidewalks on 111th Street SW between 60th Avenue SW and Davisson Road SW.
- Davisson Road SW Connection – Construct bicycle lanes, curb, gutter, and sidewalk on Davisson Road SW between 108th Street SW and 111th Street SW, and on Highland Street SW between 111th Street SW and 112th Street SW.
- Springbrook Area Connections – Provide sidewalks, curb, gutter, pavement, and shared bicycle markings on 47th Avenue SW and McChord Drive SW for a distance of approximately 1,800 feet. Construct curb, gutter, and sidewalks on Chicago Avenue SW between McChord Drive SW and Springbrook Lane SW and on Boston Avenue SW between McChord Drive SW and 57th Avenue Court SW for a distance of approximately 1,900 feet. Construct curb, gutter, and sidewalks on San Francisco Avenue SW between Springbrook Lane SW and Bridgeport Way SW for a distance of approximately 1,300 feet.

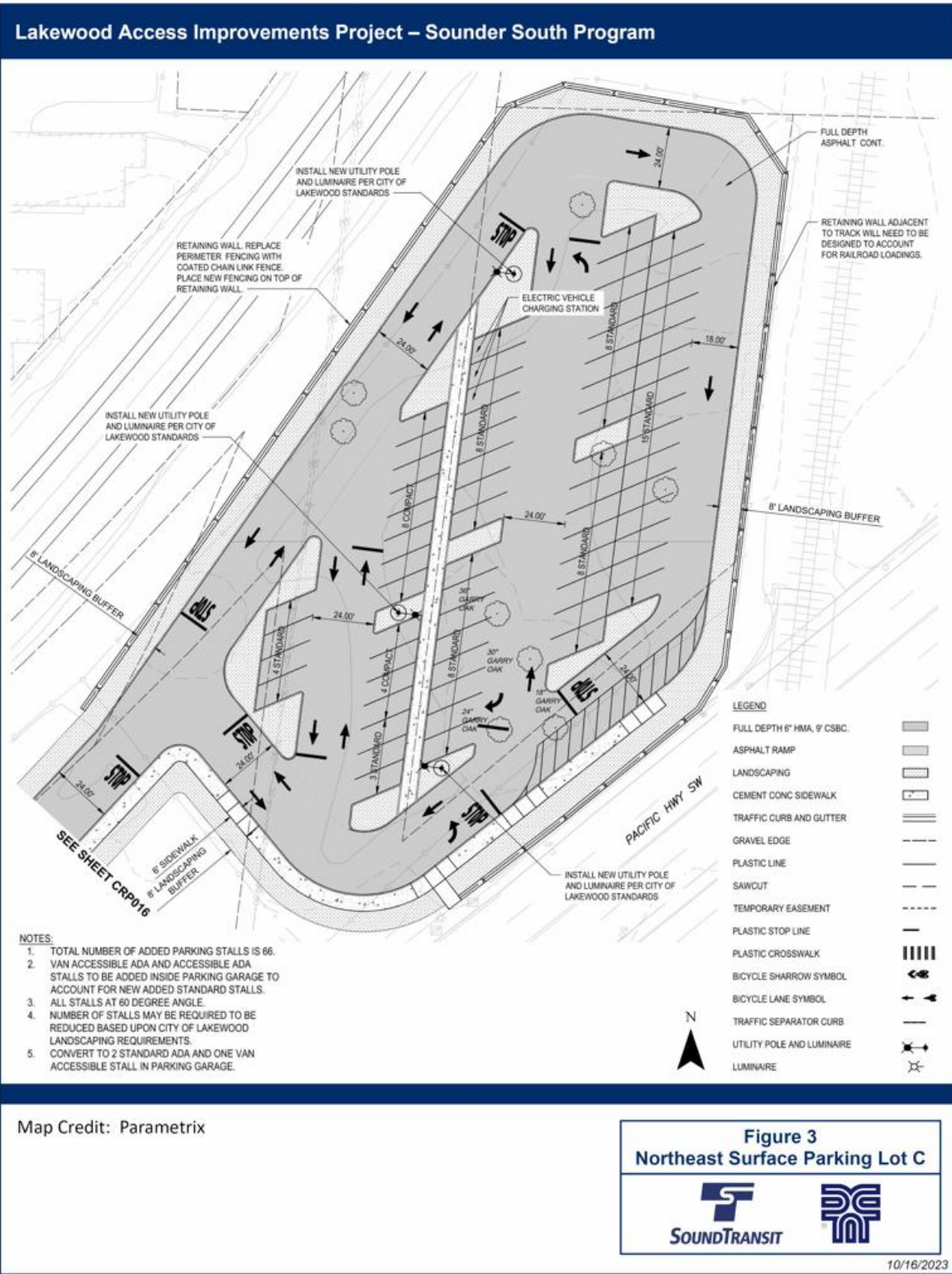


Figure 3 Northeast Surface Parking Lot C

**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 address of the Lakewood Station is 11424 Pacific Highway SW, Lakewood, Washington 98499. Improvements are located throughout the Lakewood area (see Figure 1).

**B. ENVIRONMENTAL ELEMENTS**

**B 1. Earth**

**B 1 a. General description of the site:**

**Flat**, rolling, hilly, steep slopes, mountainous, other \_\_\_\_\_

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

The project area is generally flat, with elevations ranging from 270 feet to 290 feet above sea level across the entire project area. Slopes generally range from 0% to 3%.

**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 project area is almost uniformly composed of Spanaway gravelly sandy loam (NRCS 2023). The exceptions are the soils along Clover Creek, which are Spana loam that occur in a strip on both sides of the creek, and along 47th Street SW between Clover Creek and I-5. There are also a few isolated spots that contain Dupont muck.

The soil types in the project area are not considered prime agricultural soils because the area is urbanized and there is no agricultural land of long-term commercial significance.

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

Due to the project area’s flat topography, there are no landslide or steep slope hazard areas. According to the Washington Geospatial Open Data Portal map, the project area has a very low potential for seismic instability (DNR 2023a).

**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.**

Clearing, grading, excavation, and fill are necessary to achieve the proposed grades for development of facilities such as the trail along the Sound Transit rail line, the new Northeast Surface Parking Lot C, and other improvements to install sidewalks, landscaping, and lighting and signals requiring underground utilities. It is anticipated that there would be balanced cut and fill. Approximately 18,200 cubic yards of excavation and 18,300 cubic yards of fill would be

required if all the improvement projects are implemented. Structural fill material is anticipated to be obtained from a local aggregate supplier.

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

Spanaway and Spana soils have a “slight” erosion hazard when exposed (NRCS 2023). However, soil erosion is possible during construction from soil disturbance and wind and stormwater runoff. Eroded materials have the potential to adversely affect off-site areas, particularly any drainageways. It is anticipated that there is potential for only minor erosion to occur during construction due to the flat topography and generally limited areas of disturbance. In addition, the project would implement construction BMPs to control erosion (see B.1.h below).

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

The access improvements generally would occur over existing impervious surfaces except for the trail from 115th Street Court SW to the station and the new Northeast Surface Parking Lot C. A number of projects would generate new impervious surface. The total new impervious area for all improvements combined is estimated to be approximately 148,100 square feet. Overall, the project would be 95% covered with impervious surface (the trail and surface parking area would include some pervious surfaces such as landscaped areas).

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

The project would develop and implement a temporary erosion and sediment control (TESC) plan to reduce or control erosion or other impacts to earth. The TESC would include the use of BMPs in compliance with the Washington State Department of Ecology (Ecology) Stormwater Management Manual for Western Washington and the City of Lakewood’s 2022 Stormwater Management Program as applicable, which could include all or a combination of the following:

Stabilization BMPs may include:

- Hydroseed disturbed ground.
- Mulch the ground with straw or wood chips.
- Cover stockpiled soil with plastic.
- Cover disturbed soils during wet weather (if uncovered for more than two days if not being worked).
- Keep staging and travel areas clear of dirt.
- Preserve and minimize removal of natural vegetation.

Structural BMPs may include:

- Install silt fencing around disturbed areas.
- Channel runoff through temporary drainage swales to minimize runoff concentration.
- Install rock check dams, straw bale barriers, or sediment traps to reduce runoff velocity.
- Install rock pad construction entrances.
- Install truck wheel wash as necessary.
- Inspect facilities at regular intervals.

The only improvement that would disturb more than 1 acre is the Northeast Surface Parking Lot C. A NPDES Construction Stormwater General Permit would be required from Ecology. In addition to an approved TESC plan, the contractor is required to prepare, implement, and keep a copy of a Storm Water Pollution Prevention Plan (SWPPP) on-site for reference. The SWPPP includes objectives to implement construction BMPs to minimize erosion and sediments from rainfall runoff at the various construction sites and to identify, reduce, eliminate, or prevent the pollution of stormwater, prevent violations of surface water quality, groundwater quality, or sediment management standards, and prevent adverse water quality impacts during construction by controlling peak rates and volumes of stormwater runoff at the permittee's outfall and discharge locations.

## **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.**

Construction activities and associated vehicles and equipment produce a variety of air emissions lasting the duration of construction. One of the main air emissions is the generation of fugitive dust from earth disturbance. Land clearing, grading, and excavation would disturb the ground particularly for the trail and the Northeast Surface Parking Lot C. Once soil is disturbed, wind can pick up and carry particles offsite, causing impacts to the environment and human health. Dust can also be caused by the movement of soil to and from the construction site, particularly if truck loads are not covered. Dust increases the levels of particulate matter in the form of PM<sub>2.5</sub> and PM<sub>10</sub> in the atmosphere. Other air emissions resulting from construction vehicle and equipment exhaust include carbon monoxide (CO), sulfur dioxide, nitrogen oxide, and particulate matter. These emissions constitute greenhouse gases (GHGs).

The project would produce temporary odor emissions from the asphalt paving that would be detectable at surrounding land uses. Asphalt paving produces a strong odor caused by the presence of aromatic hydrocarbons (i.e., volatile organic compounds or VOCs) in the asphalt. The VOCs evaporate easily, especially when the asphalt is heated, resulting in strong odors. Once asphalt cools, it stops releasing fumes and the odor dissipates, typically approximately an hour after paving is completed. Temporary exposure to these VOCs is not anticipated to cause a health hazard, but it may cause a short-term odor nuisance.

Similar to construction equipment and vehicles, passenger vehicles would also produce GHGs. The project would generate a total of 14 p.m. peak hour trips per day and approximately 50 daily round trips to and from the new parking lot, as well as miscellaneous drop-off trips. An approximate estimate of the GHGs produced during operations was approximately 533 metric tons of carbon dioxide (CO<sub>2</sub>). This estimate was based on 60,000 gallons of gasoline used for 50 round trips of 50 miles each over 365 days with an average of 15 gallons of gas used per mile (EPA 2023). Thus, the total GHGs produced as a result of the access improvements is anticipated to be well below the 10,000 metric tons of CO<sub>2</sub> per year requirement for a qualitative GHG analysis (Ecology 2023a). Therefore, no further review or evaluation of GHGs was conducted for this project, and no GHG impacts are predicted to result from the access improvements.

Vehicles also emit a number of mobile source air toxics (MSATs), which are hazardous air pollutants emitted from the incomplete combustion of fuel. These include compounds such as benzene, formaldehyde, acetaldehyde, and 1,3-butadiene, which are known or suspected of causing cancer. Because the project would not result in any meaningful change in the vehicle mix or volumes, and most of the individual projects are focused on non-motorized travel, the

project is considered exempt from analysis for MSATs. The project would also help to reduce vehicle miles travelled (VMT) in the project area because the proposed improvements would encourage more people to use transit and non-motorized travel options.

The project area is designated by the Environmental Protection Agency (EPA) as a maintenance air quality area for CO, PM<sub>2.5</sub>, and ozone. Certain projects (i.e., regionally significant projects), if not included in the Statewide Transportation Improvement Plan (STIP), must undergo a transportation conformity analysis if certain criteria are met. Pedestrian and bicycle facilities are exempt from this analysis. As defined by the state conformity rule:

[A] regionally significant project (other than an exempt project) is one that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc. or transportation terminals as well as the terminal themselves), and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel (40 CFR Part 93.101).

The improvement projects were not included in the STIP; however, as described above, the pedestrian and bicycle improvements are exempt. The remaining improvements (other than pedestrian and bicycle facilities) do not meet the definition of a regionally significant project (as they would not normally be included in the modeling of the transportation network) and therefore do not require a transportation conformity analysis.

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

There are no off-site sources of air emissions or odor that would affect the project.

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

The contractor would implement BMPs to reduce emissions during construction. These BMPs may include:

- Spray exposed soil with water or other suppressants to reduce fugitive dust emissions and deposition of particulate matter, when necessary.
- Use phased development, when feasible, to keep disturbed areas to a minimum.
- Minimize dust emissions during transport of fill material or soil by covering, wetting down, or by ensuring adequate freeboard (space from the top of the material to the top of the truck bed) on trucks.
- Promptly clean up spills of transported material on public roads.
- Schedule work tasks to minimize disruption of the existing vehicle traffic on roadways as much as practical.
- Use stabilized construction entrances to minimize tracking of dirt onto paved surfaces.
- Where feasible, locate construction equipment and truck staging areas away from sensitive receptors and in consideration of potential effects on other resources.

- Where feasible, provide wheel washers to remove particulate matter that would otherwise be carried off-site by vehicles to decrease deposition of particulate matter on area roadways.
- Reduce idling time of equipment and vehicles and use newer construction equipment or ensure equipment has add-on emission control.
- Cover dirt, gravel, and debris piles as needed to reduce dust and wind-blown debris.
- Minimize odors on-site by covering loads of hot asphalt, when practical.

Project operations are not anticipated to cause any new air quality impacts or worsen the ambient air quality in the area and would not cause any exceedances of the National Ambient Air Quality Standards. The project would result in improved transit service and operations for non-motorized travel. These improvements are anticipated to reduce single-occupancy vehicle use, which would reduce air emissions; therefore, no mitigating measures are proposed.

### **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 only stream in the project area is Clover Creek. Clover Creek begins approximately 15 miles east of the Lakewood Station and cuts across the project area flowing from east to west, crossing Bridgeport Way SW south of Seattle Avenue SW and continuing to the northwest, where it empties into Steilacoom Lake (see Figure 4). Washington State Department of Natural Resources (DNR) classifies the creek as a shoreline of the state and a Type “F” stream (i.e., known to be used by fish or meeting the physical criteria to be potentially used by fish) (DNR 2023b). The Ecology Water Quality Atlas identifies Clover Creek in the vicinity of the project as having two water quality issues – temperature and fecal coliform bacteria (Ecology 2023b). The City of Lakewood Shoreline Master Program (Lakewood 2019) requires a 65-foot buffer area around Clover Creek (but the buffer may be reduced to 50 feet with buffer enhancement). The improvements on 47th Avenue SW come the closest to the creek but are outside the 65-foot buffer area.

There are four wetlands in the project area (see Figure 4). The northernmost wetland (also known as Barlow Pond) is located near two project streets – 112th Street SW and Davisson Road SW. This wetland is north of 112th Street SW (approximately 475 feet away) and east of Davisson Road SW (approximately 897 feet away). The 8.07-acre wetland is classified as a palustrine open water and aquatic bed wetland. The second wetland is located adjacent to the east of Bridgeport Way SW (approximately 50 feet away) directly across from Seattle Avenue SW and is 1.39 acres in size. It is associated with Clover Creek and is classified as a palustrine emergent and forested wetland. The third wetland is located approximately 300 feet away and south of McChord Drive SW on Joint Base Lewis McChord (JBLM) property. This 4.03-acre wetland is classified as a forested/shrub wetland. The fourth wetland is a small freshwater pond located east of WoodSpring Suites across the railroad tracks on the WSDOT maintenance facility property and approximately 500 feet southeast of the proposed Northeast Surface Parking Lot C improvement. This 0.25-acre wetland is classified as a palustrine open water wetland. It may have been excavated as a stormwater pond at some point in the past.



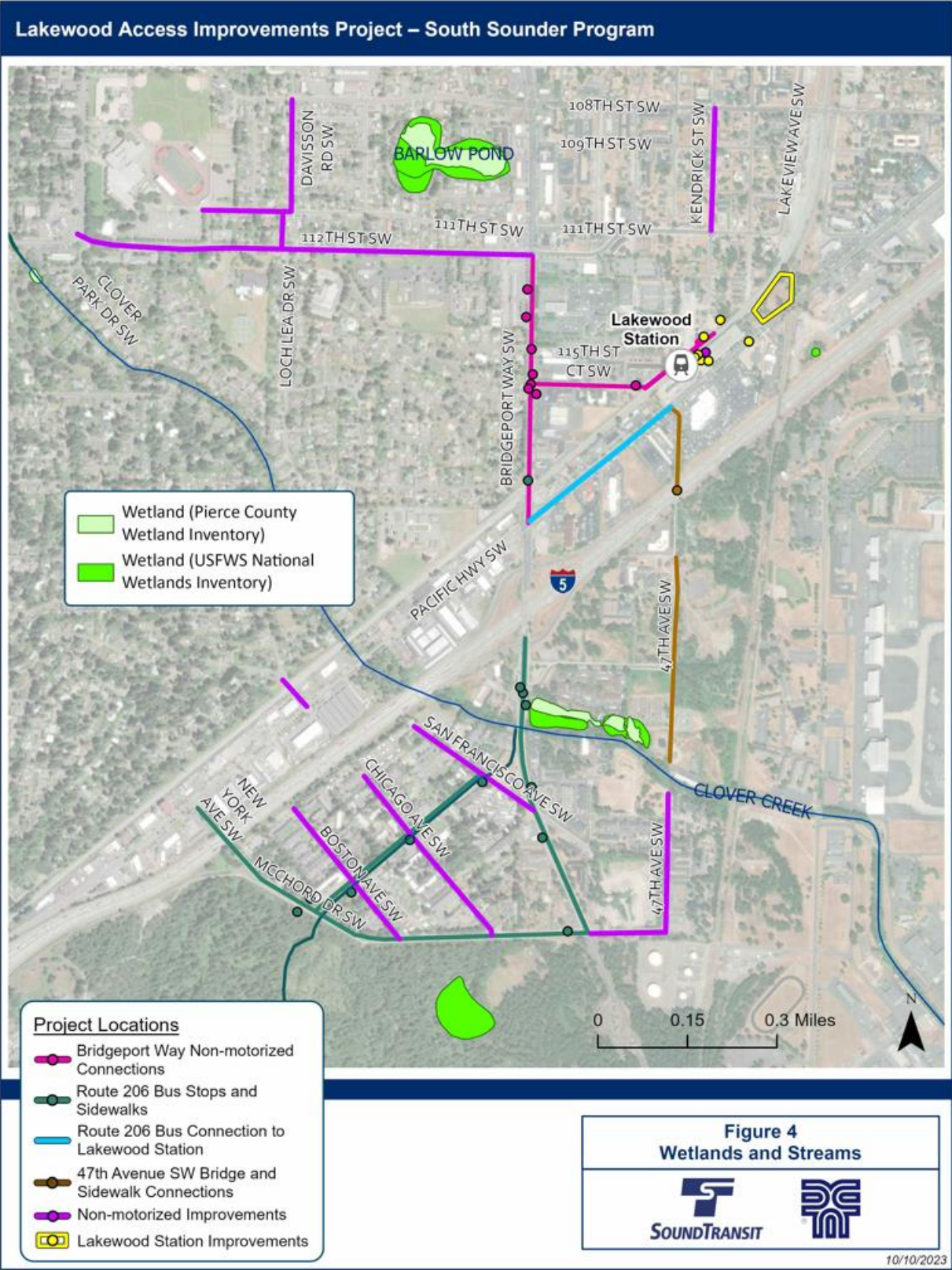


Figure 4 Wetlands and streams

**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 or adjacent to the project area surface waters described above.

**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, and 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 the location on the site plan.**

Portions of the project lie within a 100-year floodplain. Figure 5 shows the Federal Emergency Management Agency (FEMA 2023) flood zones for the project area. Zones AE and AH have a one percent chance of flooding and are considered to be the base flood or 100-year floodplain. Zone X is considered to be within the 500-year floodplain. As shown in Figure 5, portions of the project area along Bridgeport Way SW, 112th Street SW, and 47th Avenue SW cross the 100-year floodplain.

**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.**

The project would not involve any discharge of waste materials to surface waters.

**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.

**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.

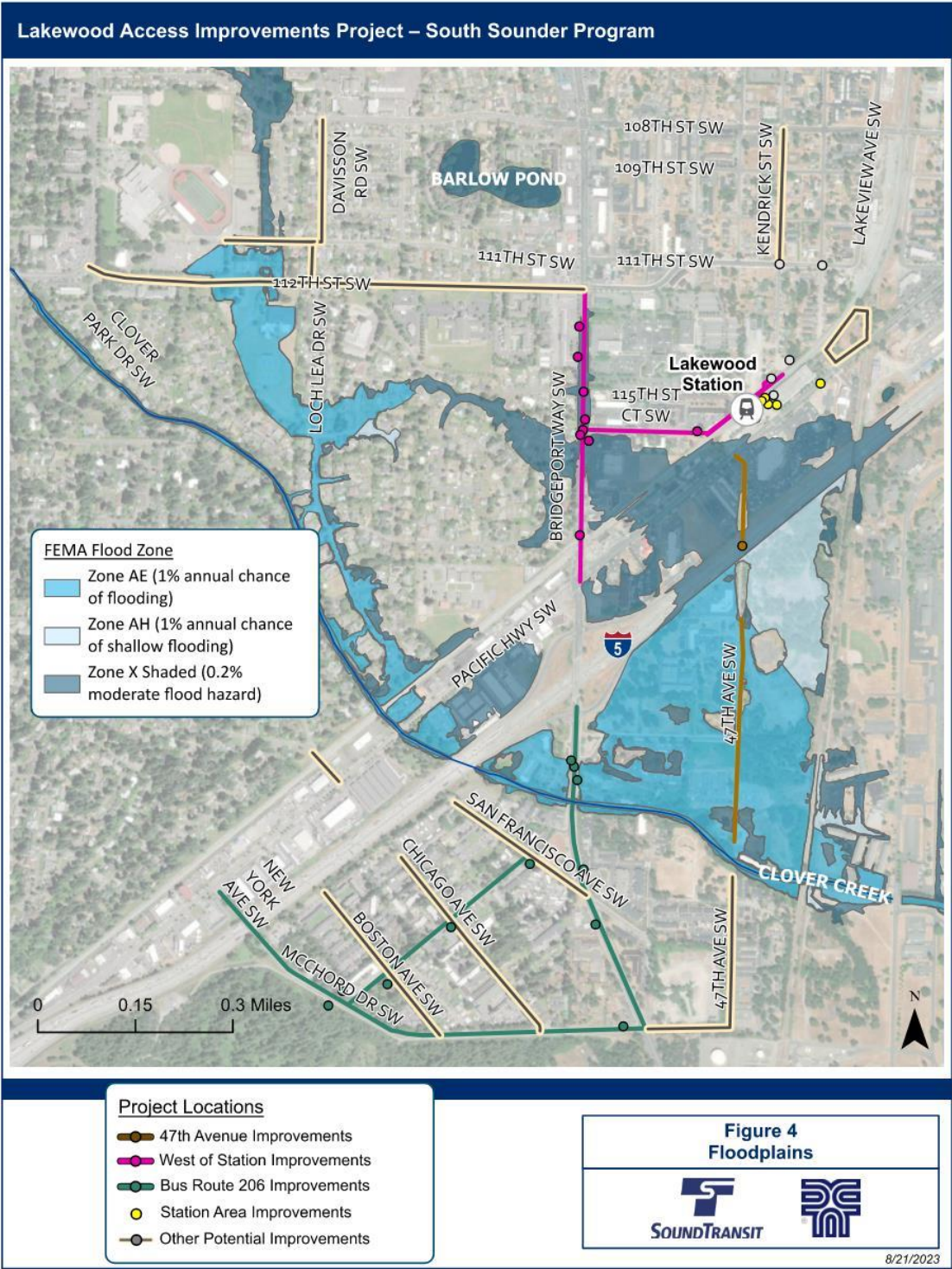


Figure 5 Floodplains

**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.**

Rainfall and resulting stormwater are the source of water runoff. During construction, BMPs would be employed to control stormwater (see B1.h above). Currently, there is an incomplete system of stormwater collection in the project area. Some of the existing ROW has curb, gutters, and catchbasins to collect stormwater, and there are some infiltration trenches. Other roadways have a gravel shoulder with ditches, but many of the areas do not have any existing stormwater treatment or collection that meet City of Lakewood standards. The project would construct additional stormwater collection for sites that trigger the city's requirements for runoff treatment and flow control. Collected stormwater would be directed to newly installed infiltration trenches, which would serve to treat and infiltrate the stormwater. It is not anticipated that there would be any critical or major storm drainage issues, because Lakewood has well-draining soils and use of infiltration for runoff is assumed to apply throughout the project area.

**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 available and reasonable source control BMPs, as described in response to Question B1.h, to prevent spills from reaching storm drains or water bodies.

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

The proposed project does not anticipate altering or affecting drainage patterns in the vicinity of the project area. The improvements will be designed to meet the requirements of Ecology's Stormwater Management Manual for Western Washington and the City of Lakewood's 2022 Stormwater Management Program.

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

There is a potential that project construction activities could impact water from accidental spills (e.g., fueling operations during construction) and erosion and sedimentation. Measures to reduce these potential construction impacts are described above in Section B.1.h. Because the project would add infiltration where necessary, operation of the project is not anticipated to require any additional mitigation.

**B 4. Plants**

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

- deciduous tree: alder, maple, aspen, other: Oregon white oak
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- orchards, vineyards or other permanent crops.
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation: Invasive woody vines and ornamental landscaping vegetation

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

Various vegetation types are found along the project area including emergent, shrub, and forested species. The project areas are located in a heavily developed urban setting with patches of vegetation mostly located in road edges. Some landscaping and weed species would be removed during construction. There are several trees that would be removed that are located in the proposed Northeast Surface Parking Lot C area including one Douglas fir (*Pseudotsuga menziesii*), four deciduous trees, and four Oregon white oak trees. The oak trees range from 18 inches to 36 inches in diameter, and some have multiple stems. All of the oak trees on the site qualify as “significant trees” according to City of Lakewood Municipal Code (LMC 18A.70.320) because they are at least four inches in diameter. The two improvements with the most impacts to vegetation are the trail along the Sound Transit right-of-way extending from the end of 115th Street Court SW to the station and the new parking lot. The trail would have approximately 7,500 square feet of impact to grass and disturbed shrub habitat dominated by invasive species including Himalayan blackberry (*Rubus armeniacus*) and Scotch broom (*Cytisus scoparius*). The parking lot would occupy approximately 59,300 square feet of disturbed habitat dominated by a combination of landscaping near the entrance to the existing parking garage, invasive shrubs such as Scotch broom, and the trees described above.

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

There is an existing stand of four Oregon white oak (*Quercus garryana*) trees that sit on parcel number 0219122165, just northeast of the Lakewood Station (parcel number 0219122166). Proposed access and parking improvements are anticipated to occur on both parcels. Oregon white oak trees provide habitat for species that are state listed as Sensitive, Threatened, or Endangered, or are candidates for these listings. The primary listed or candidate species associated with Oregon white oak habitat is western gray squirrel, which is State Threatened (see Section B.5 for more information). The population of this tree species is limited and declining (WDFW 1998). According to LMC 14.154.080, “where priority Oregon white oak trees

and woodlands does [sic] not exceed 1 acre in size contiguous...the City may allow for removal or trimming of priority Oregon white oak trees and woodlands to accommodate a legal use of the property with the least possible impact to the critical area.” At 0.1 acre, the area to be disturbed for the Northeast Surface Parking Lot C is less than 1 acre and therefore does not qualify as a priority Oregon white oak woodland. Although the City of Lakewood designates Oregon white oaks a priority wildlife habitat, these trees are isolated from other oak stands or critical areas and are unlikely to provide significant wildlife habitat or function as a corridor for movement from one habitat area to another.

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

Native vegetated plantings would be used as much as practical, and landscaping would meet the City of Lakewood’s landscaping standards (LMC 18A.70.140) and Sound Transit’s Standard Plant List (Sound Transit Design Criteria Section 10-10). Landscaping is proposed for the transit station access trail and Northeast Surface Parking Lot C, and near bus shelters or other locations where the existing landscaping would be removed and would need to be replaced as applicable.

Care would be taken to avoid impacts to existing significant trees (e.g., Oregon white oak trees) to the greatest extent practicable. Avoidance according to city code requires that there be no disturbance within the critical root zone (1 foot for every 1 inch of tree diameter) of the tree and installation of tree protection fencing. Providing an arborist on-site during construction to monitor tree health would afford additional protection. Any significant trees that cannot be avoided would be mitigated in accordance with the City of Lakewood’s significant tree preservation code (LMC 18A.70.320), which requires smaller replacement trees located to optimize visual screening.

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

A wide variety of noxious weeds and invasive species may be present on the project site due to the project area’s urbanized setting. Common noxious plant species known to be on or near the site include Himalayan blackberry, English ivy (*Hedera helix*), Scotch broom, and reed canarygrass (*Phalaris arundinacea*) (Washington Noxious Weed Control Board 2021).

**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.**

Urban dwelling animals that have adapted to humans may be present in the upland project area such as common racoon (*Procyon lotor*), Douglas and eastern gray squirrel (*Tamiasciurus douglasii* and *Sciurus carolinensis*), eastern cottontail rabbit (*Sylvilagus floridanus*), opossum (*Didelphis marsupialis*), coyote (*Canis latrans*), and other small mammals (e.g., rats, mice, and voles), as well as domesticated dogs and cats. Herpetofauna species that may occur in the area particularly near Clover Creek, wetlands, and in fragmented areas of suitable habitat include common, northwestern, and western garter snake (*Thamnophis sirtalis*, *T. ordinoides*, and *T. elegans*), long-toed and northwestern salamander (*Ambystoma macrodactylum* and *A. gracile*), pacific tree frog (*Pseudacris regilla*), red-legged frog (*Rana draytonii*), western fence lizard (*Sceloporus occidentalis*), painted turtle (*Chrysemys picta*), red-eared slider (*Trachemys scripta elegans*), and northern alligator lizard (*Elgaria coerulea*).

Both coastal and inland birds are located in the area due to the project’s proximity to the Puget Sound. Western Washington encompasses part of the Pacific Flyway (USGS 2023), which is

used by a large number of migratory bird species. Songbird species observed or likely to occur in the area include sparrows (house, song, and white-crowned sparrow) (*Passer domesticus*, *Melospiza melodia*, and *Zonotrichia leucophrys*), dark-eyed junco (*Junco hyemalis*), American crow (*Corvus brachyrhynchos*), northern flicker (*Colaptes auratus*), American robin (*Turdus migratorius*), and black-capped chickadee (*Poecile atricapillus*). Raptor bird species may include bald eagle (*Haliaeetus leucocephalus*), red-tailed hawk (*Buteo jamaicensis*), and osprey (*Pandion haliaetus*). Waterfowl bird species may include Canada geese (*Branta canadensis*), common gull (*Larus canus*), mallard (*Anas platyrhynchos*), bufflehead duck (*Bucephala albeola*), and common goldeneye (*Bucephala clangula*).

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

Clover Creek has documented spawning of coho salmon (*Oncorhynchus kisutch*) and documented history of winter steelhead (*Oncorhynchus mykiss*). Steelhead is currently listed as Threatened under the Endangered Species Act (WDFW 2023). Clover Creek intersects the project area at Bridgeport Way SW south of Seattle Avenue SW. Clover Creek is designated as critical habitat for steelhead (NMFS 2023).

No threatened and endangered terrestrial wildlife species are known to be on or near the site. The State Threatened western gray squirrel (*Sciurus griseus*) have been known to seek habitat in Oregon white oak trees, which are present in the proposed Northeast Surface Parking Lot C (WDFW 1998). However, this species requires large stands that provide substantial cover and mast for forage, which are not present in the project area. It is unlikely that there are any threatened or endangered bird or animal species in the project vicinity, because there is not suitable habitat present to support these species within the proposed project vicinity.

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

The project location exists within the Pacific Flyway, a migratory corridor consisting of the western coastal areas of South, Central, and North America (USGS 2021). Clover Creek is also a migratory route for salmonid species.

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

Vegetation removal would be minimized where possible considering the project design, which is mostly within existing roadway ROW. Landscaping including trees would be planted in several areas of the project, which could provide habitat for some birds and small mammals. Mitigation for removal of priority Oregon white oak trees would be provided in accordance with City of Lakewood code requirements, which could include on-site or off-site planting of replacement trees.

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

There are no invasive animal species that were observed to be on or near the project site, although presence of eastern gray squirrel and house sparrow, which are considered invasive animal species, is possible.

## 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 the use of electricity for lighting; electric vehicle charging; and operation of signals, rail crossing arms, the public address system at the station, and possibly signage.

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

The project would not affect the potential use of solar energy by adjacent properties.

**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:**

Sound Transit evaluates opportunities for sustainable design measures for the access improvements on property owned by Sound Transit. This would apply to the following access improvements:

- Surface parking
- Station improvements
- Improvements to station fencing
- 115th Street Court SW shared use path on the north side of the Sound Transit ROW

Some of the sustainability measures that would be considered during the design process could include incorporating recycled materials into construction (including concrete and aggregate), implementing erosion and sediment control measures during construction, maintaining native vegetation to the maximum extent feasible and using plants that are drought resistant and low maintenance, reducing import and export of excavated soils from the project sites, and providing dedicated areas for storage and collection of recyclables. Project improvements located outside of Sound Transit-owned property would be informed by sustainability guidance in the City of Lakewood Sustainability Plan (Lakewood 2015).

The project would result in improved transit service and operations for non-motorized travel. These improvements provide the opportunity to reduce single-occupancy vehicle use, which may 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.**

There is potential to encounter unknown contaminated soil or groundwater when earth is disturbed during grading or excavation associated with construction. Grading and excavation would be necessary in several places including at the new trail along the Sound Transit tracks and the Northeast Surface Parking Lot C, as well as in places where utilities need to be installed, foundations need to be laid (such as at the bus shelters), and where sidewalks would



be replaced. The project lies within the regional contamination area from the Asarco Copper Smelter – see Section B.7.a (1) below.

During construction there are activities that have the potential to result in accidental spills during refueling or servicing of vehicles and equipment at the construction site. Thus, there is the potential for leaks and spills of materials such as fuel, oil, lubricants, and other contaminants onto the ground, which may then be carried off-site into receiving waters or infiltrated into the groundwater by rain and stormwater runoff or carried off-site by construction vehicles.

Typically, leaks from construction equipment and vehicles are relatively small and have minimal potential for adverse impact, especially if the equipment and vehicles are well maintained. A spill of fuel, hydraulic fluid, or other material during construction operations, refueling or handling of hazardous materials has the potential for larger adverse impacts on soil, and surface water and groundwater. Spills to soil can adversely change the growing characteristics of soil, resulting in a zone where plants are unable to grow. Contaminants entering surface water may reduce water quality by increasing oxygen demand, changing pH levels, or increasing the level of organic pollutants, which could adversely affect fish and other aquatic organisms. Spills also have the potential to adversely affect construction workers if they are exposed to hazardous materials. It is not anticipated that there would be any risk of fire or explosions.

It is not expected that there would be any environmental health hazards related to the operation of the project.

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

A hazardous materials assessment was conducted for the project in 2023 and is summarized below (Hazardous Materials Technical Memorandum, Shannon & Wilson 2023). Hazardous sites in proximity to the project were identified using the Washington Department of Ecology website What’s in My Neighborhood. This assessment found 30 known contaminated sites in the project vicinity with soil, groundwater, or air that has confirmed or suspected contaminants. Contaminants of concern include petroleum, metals, halogenated organics, halogenated solvents, polycyclic aromatic hydrocarbons, and polychlorinated biphenyls. These 30 known contaminated sites are shown in Table 2 and Figure 6 (the IDs in Table 2 correspond to the IDs in Figure 6). Of the 30 sites, Ecology has granted 13 sites a No Further Action designation. Four sites are awaiting cleanup. Cleanup activities have been initiated at 10 of the sites, including two within the footprint of the Lakewood Station. The three remaining sites are undergoing monitoring.

**Table 2      Listed contaminated sites**

Figure 6 ID	Site Name	Status	Figure 6 ID	Site Name	Status
1	Qwest Juniper	No Further Action	16	Unocal #3588	Cleanup Started
2	Cellular One	No Further Action	17	JBLM 1168 Fuel Station	Awaiting Cleanup
3	Rental Mart	No Further Action	18	Lakeview Gravel Pit	Cleanup Started
4	BP Service Station	No Further Action	19	WSDOT Bridgeport Way SW Interchange	Cleanup Started
5	Lucky Leos Carwash	No Further Action	20	7 Eleven #14469	No Further Action

Figure 6 ID	Site Name	Status	Figure 6 ID	Site Name	Status
6	Top Auto, Inc.	No Further Action	21	Exxon Station #7142	No Further Action
7	7 Eleven	No Further Action	22	Hickey	No Further Action
8	WSDOT Maintenance Facility	Cleanup Started	23	Auto Hobby Building	Cleanup Started
9	Lakeview Auto Wrecking	Cleanup Started	24	Lakewood Ponders Corner	Cleanup Complete – Active Monitoring
10	Tyee Cleaners & Laundromat	Cleanup Started	25	JBLM Fuel Vault 1 and 2 Building	Awaiting Cleanup
11	Kwang Property	Cleanup Started	26	Ponders Auto Parts, Inc.	Awaiting Cleanup
12	Lakewood Ford	Cleanup Started	27	AAA Loans & Gun Shop	No Further Action
13	WSDOT I5 ROW MP 126.5	Cleanup Started	28	McChord Custom Cleaners	No Further Action
14	Flying B 18	Awaiting Cleanup	29	USAF MAFB MTCA WP 34	Performance Monitoring
15	Texaco	No Further Action	30	JBLM SS-34N	Cleanup Complete – Active Monitoring

Source: Shannon & Wilson 2023.

The project also lies within the area of past contamination from the Asarco Copper Smelter that was located in Ruston, Washington (approximately 10 miles north of the Lakewood Station). The smelter released arsenic, lead, and other heavy metals in a plume for almost a century, affecting 1,000 square miles of land and contaminating an area extending from Olympia, Washington, to Shoreline, Washington. According to Ecology's Tacoma Smelter Plume (Dirt Alert) map, Lakewood and the project area are in the lowest predicted arsenic concentration area – under 20 parts per million (ppm). The Model Toxics Control Act Method A concentration threshold requiring cleanup for arsenic in soils is 20 ppm (Ecology 2023c).

**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.**

Contaminated sites have been identified in proximity to the project (see Table 2). However, the risk of encountering hazardous chemicals/conditions appears to be low. The project requires a very limited amount of ground-disturbing activities, thereby reducing the potential to encounter and generate contaminated materials. Where ground-disturbing activities are proposed, there are no known listed sites adjacent to the work area. No underground hazardous liquid and gas transmission pipelines are located within the project area or in the vicinity (NPMS 2023). It does not appear that hazardous chemicals/conditions will affect project development and design.

Underground utilities would be identified during the utility locate process, which would take place before any excavation. Areas with underground utilities would be avoided as necessary.

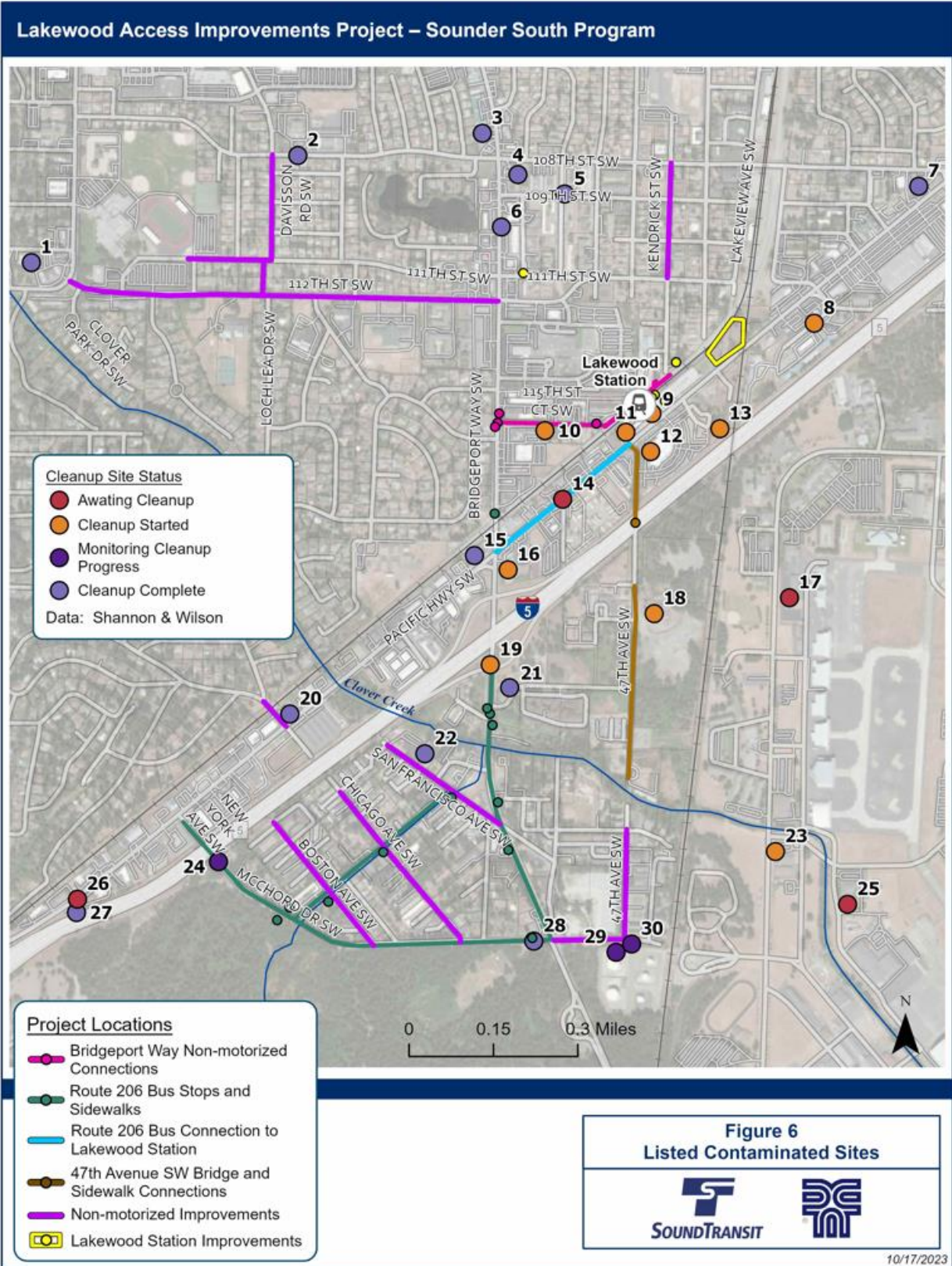


Figure 6 Listed contaminated sites

**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 it may be necessary to fuel or maintain vehicles or construction equipment on-site. Thus oil, gasoline, diesel, lubricants, solvents, or cleaning substances may be used or stored on-site. These activities would generally occur in a staging area with the appropriate spill control measures in place (the contractor would determine the locations of staging areas as necessary in the vicinity of the project utilizing existing ROW or working with adjacent property owners for use).

There would be no need for storing or producing toxic or hazardous materials during the operating life of the project. Cleaning materials may be used periodically at the bus stops and Sounder Station, but these are generally not considered hazardous. Therefore, it is not anticipated that project operations would result in any environmental health hazards.

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

Special emergency services are not anticipated to be required during construction or operation. During construction it may be necessary to store hazardous materials, and these would be secured by fencing and/or in locked facilities. The contractor would implement a Health and Safety Plan during construction to protect the health and provide for the safety of both workers and the public in the event that any site contamination is identified.

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

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, and ongoing operations. Sound Transit has a policy to meet or exceed federal safety and security process requirements on all projects, including measures for controlling hazardous material usage during construction, as well as during operation and maintenance of the project.

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. This compliance includes preparation of a Health and Safety Plan to protect construction workers and the public.

The following measures would be implemented during construction to reduce or control environmental health hazards:

- Any contaminated soil or groundwater encountered during construction would be collected and disposed of in accordance with state and federal regulations.
- A Spill Prevention, Control Countermeasures and Containment Plan would be prepared and implemented for the storage, handling, use or disposal of hazardous materials and would comply with the Model Toxics Control Act Cleanup Regulation (WAC 173-340).
- Specific areas would be designated for equipment repair, fuel storage, and refueling, which would include measures for containing spills.

- If a hazardous material spill occurred, the contractor would immediately notify Sound Transit and the City of Lakewood and if necessary call the appropriate emergency response agency. The contractor would be required to have materials on-site, such as absorbent pads, to ensure the spill is contained immediately.
- All hazardous materials used in construction would have a required Material Safety Data Sheet filed on-site.

## **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)?**

Sound Transit examined the project area to identify noise-sensitive and vibration-sensitive locations and select locations where noise monitoring would be performed. The potential area of effect for the noise study was determined by modeling the worst-case operational noise levels and including all noise-sensitive properties within that area that have a potential for experiencing a noise impact. For noise, this process was applicable only to new project components that have the potential to produce noise. Because most of the project improvements are for non-motorized transportation, it is predicted that most of the project components would not change the noise environment by a measurable amount. In addition, any new hard surfaces installed as part of the project, including new pavement for bicycle lanes and sidewalks, are predicted to not cause a measurable increase in noise levels at any noise-sensitive properties. The only potential exception is the proposed new surface parking lot (Northeast Surface Parking Lot C), where the added traffic and new hard surfaces could affect the noise environment.

For the vibration analysis, impacts normally occur only within 50 feet to 150 feet of the rail trackway, depending on speed, type of track, and geological factors. However, as previously stated, the proposed project improvements would not change the existing Sounder operations, and therefore no detailed vibration analysis related to rail operations was required.

There are a variety of existing noise types produced in the potential area of effect for noise including BNSF Railway freight traffic and Sounder commuter rail service, vehicle traffic on the main corridors of I-5 and Pacific Highway SW, and commercial and residential land uses. Noise level measurements were conducted over a two-day period at four sites near the Lakewood Station (refer to Appendix A – Noise and Vibration Technical Report, Michael Minor and Associates, 2023). Average sound levels ranged from 58 decibels (dBA) Leq to 67 dBA Leq. Leq is the equivalent sound level, and represents the total sound exposure for the period of interest. These measurements included a minimum of three time periods (morning, daytime, and evening) each at four of the monitoring sites. The 24-hour sound measurements ranged from 59 dBA to 65 dBA.

Major vibration-related sources include the Sounder, Amtrak, and Tacoma Rail trains, and rail service to and from JBLM. Other vibration sources include heavy trucks, industrial activities, and military training activities. Because the proposed project would have no track modifications or changes in Sounder or Amtrak operations, there would be no change predicted in the overall vibration levels in the area. Therefore, no vibration impacts are predicted.

**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.**

Construction would produce short-term increases in the ambient noise levels. Construction is expected to occur mainly during the daytime, but some limited night work may also be necessary. Major noise-producing equipment could include saw cutters, jackhammers, concrete pumps, cranes, excavators, haul trucks, loaders, tractor-trailers, cement mixers, pavers, and vibratory equipment. Maximum noise levels could reach 83 dBA to 88 dBA at the nearest residences, which in some cases are within 50 feet to 100 feet, for normal construction activities. Other less-notable noise-producing equipment would include backhoes, air compressors, forklifts, pumps, power plants, service trucks, and utility trucks, which have noise levels usually below 80 dBA at 50 feet, except in rare instances when the maximum noise level could reach 86 dBA at 50 feet.

Vibration associated with general construction activities can result in increased vibration levels. Project-related vibration sources include soil compactors, excavators, haul trucks, flat-bed tractor-trailers, backhoes, cranes, and jackhammers. The vibration sources associated with the project, even though they may be noticeable to residents when construction is nearby, are not expected to cause any structural damage, because the estimated level of vibration would be below the threshold to cause damage and there would be sufficient distance between work zones and structures.

Most of the proposed improvements for Lakewood Station are related to non-motorized transportation. Other project improvements, including new sidewalks, curbs, gutters, bicycle lanes, and other safety improvements are not predicted to result in any long-term changes in the noise levels. All vehicle travel lanes along roadways that are associated with the project would remain in the same general lane configurations.

The one improvement that could result in an operational noise impact is the Northeast Surface Parking Lot C to the north of the station. The future use of the parking lot was modeled to determine the potential effects on noise levels. The noise model assumed full use of approximately 70 parking spaces during a single hour several times a day, thereby providing a worst-case hourly noise level. Noise levels were modeled for the nearby receiver locations shown in Figure 7, which included eight residences and one hotel.

As is shown in Table 3, noise levels from parking operations at the nine nearby receivers would range from 37 dBA Leq to 46 dBA Leq (average sound level) during the peak hour of operations, with a day-night equivalent sound level (Ldn) (24-hour day-night sound level) ranging from 32 dBA Ldn to 41 dBA Ldn. The existing noise levels are at least 10 dB higher than the modeled noise from the parking lot operations. If the existing noise levels are 10 dB higher than the new noise source levels, the new source would not contribute to a measurable change in the overall noise levels. The analysis showed that adding the parking lot would not change the noise levels at any of the nearby receiver locations due to the high background noise levels. Thus, the Northeast Surface Parking Lot C would not adversely affect noise levels (refer to Appendix A – Noise and Vibration Technical Report, Michael Minor and Associates, 2023).

**Table 3 Northeast Surface Parking Lot C noise analysis**

Location	Type	Distance (feet)	Background Noise (dBA)		Parking Lot Noise (dBA)		Future Noise Levels with Parking Lot (dBA)	
			Leq	Ldn	Leq	Ldn	Leq	Ldn
R-1	Residence	140	61	59	42	37	61	59
R-2	Residence	165	61	59	40	35	61	59
R-3	Residence	200	61	59	39	34	61	59
R-4	Residence	230	61	59	38	32	61	59
R-5	Residence	85	61	59	46	41	61	59
R-6	Residence	95	61	59	45	40	61	59
R-7	Residence	150	61	59	41	36	61	59
R-8	Residence	150	61	59	41	36	61	59
R-9	Hotel	250	66	65	37	32	66	65

Source: Michael Minor and Associates 2023.

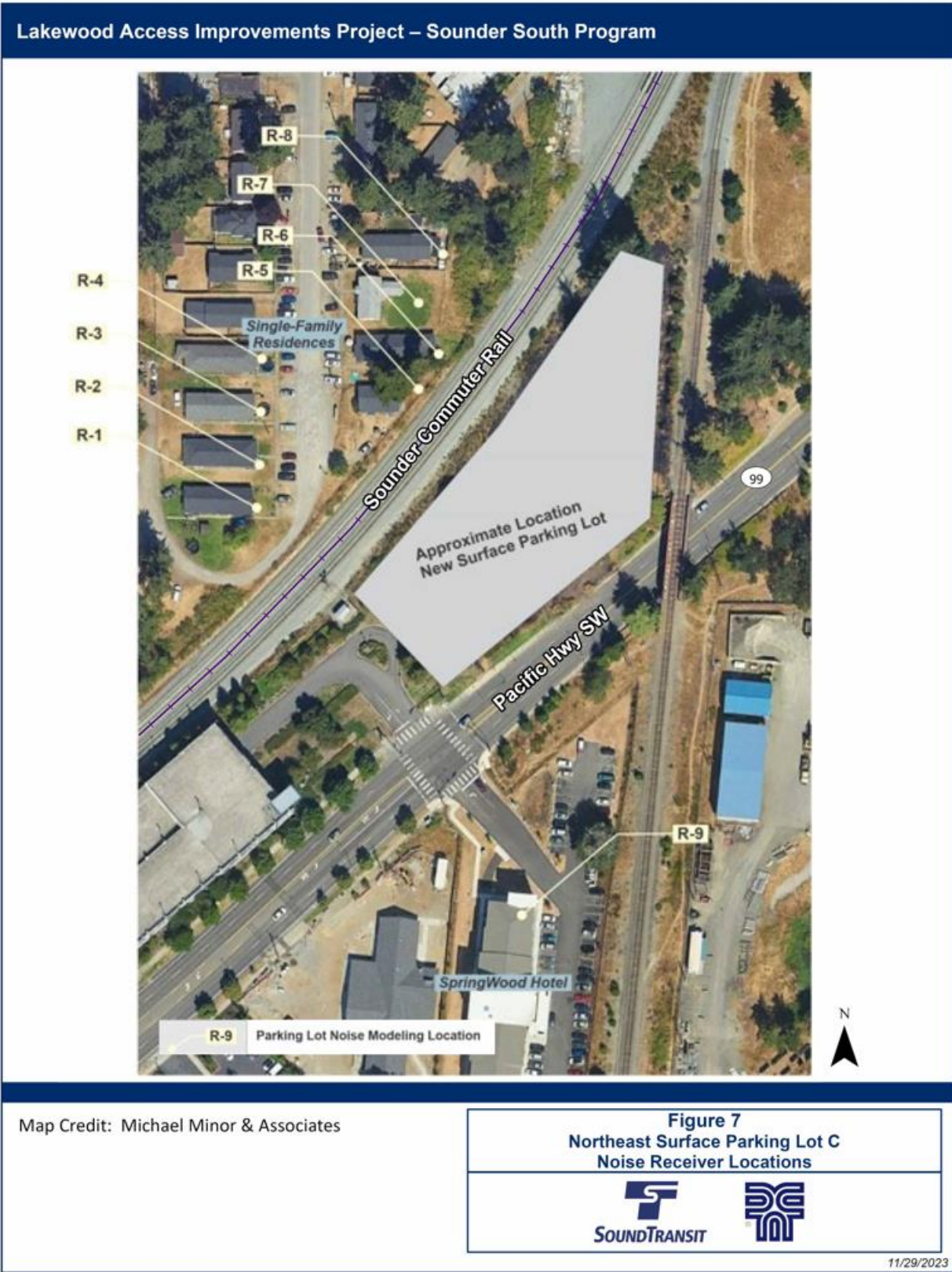


Figure 7 Northeast Surface Parking Lot C noise receiver locations



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

Because no operational noise impacts are predicted to result from the project, no measures to reduce or control operational impacts are proposed. With the proper equipment choice and acoustical treatments, potential noise from construction of the project can be reduced. Sound Transit would require the contractor to develop a Noise Control Plan that would include best practices to reduce construction-related noise at nearby properties and would require adherence to the local noise control ordinances and regulations. Any potential nighttime or weekend construction could require a noise variance from the City of Lakewood. The contractor would have the flexibility of prohibiting certain noise-generating construction activities during nighttime hours, providing additional noise control measures to meet noise limits, or seeking a variance. The following measures included in the Sound Transit Requirements Manual (June 2023) could be used to avoid or abate construction noise:

- Use smart back-up alarms during nighttime.
- Use low-noise emission equipment.
- Implement noise-deadening measures for truck loading and operations.
- Monitor and maintain equipment to meet noise limits.
- Use lined or covered storage bins, conveyors, and chutes with sound-deadening material.
- Use acoustic enclosures, shields, or shrouds for equipment and facilities.
- Install high-grade engine exhaust silencers and engine-casing sound insulation.
- Prohibit jack hammering during nighttime hours.
- Minimize the use of generators or use whisper-quiet generators to power equipment.
- Limit use of public address systems.
- Use movable noise barriers at the source of the construction activity.
- Limit or avoid certain noisy activities during nighttime hours near residential areas.

The primary concern related to construction vibration in the project area is annoyance inside sensitive spaces. No construction vibration impacts are predicted; however, the following precautionary vibration mitigation strategies could be implemented if construction occurs within 25 feet of a sensitive or historic structure:

- Pre-construction verification: As previously stated, given the types of construction activities required for completion of the project, no vibration impacts are projected and no pre-construction survey or verification should be required. If, however, during construction, highly sensitive or historic buildings are identified within 25 feet of a site with heavy construction activities, an inspection of those buildings may be warranted.
- Vibration limits: The construction contract specifications should limit construction vibration to a maximum of 0.5 inches per second for all buildings within 25 feet of construction activities.
- Vibration monitoring: Given the types of construction activities required for completion of the project, vibration monitoring should not be necessary. If heavy construction would occur closer than 25 feet to sensitive structures or historic buildings, limited vibration monitoring may be warranted.

## 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.**

Various existing land uses are located along the project areas and near access improvement sites. Land uses include single-family and multi-family residences (Garden Park Apartments, Pine Ridge Apartments, Springtree Apartments, James Apartments, Ladobe Apartments, AUZA Apartments, Ridgewood Apartments, and Carlyle Apartments), hotels (Holiday Inn Express, Comfort Inn & Suites, WoodSpring Suites, and Towne Place Suites by Marriot), recreation uses (Lakewood Racquet and Sports Club, Clover Park Baseball Fields, and Springbrook Park), fast food restaurants (Jack in the Box, Church's Texas Chicken, KFC Chicken, and K&C Burkie Hamburgers), retail and services (Titus Will Ford, Pet Doctor, Tyee Laundromat, Inspire Insurance, Texaco Gas Station, Aquarium Paradise, and McChord Mart), St. Clare Hospital, churches (Apostolic Faith Fellowship Church, First Baptist Church, and Grace Slavic Baptist Church), a daycare center, Clover Park High School, storage facilities, parking, and several vacant areas.

Generally, the project would not affect current land uses. There would be some improvements at driveways where new sidewalks and curb ramps would be added. In addition, some fencing and existing landscaping may need to be moved and replaced. Some existing informal parking in city ROW may be changed or eliminated.

### **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 forest lands. There are no agricultural or forest lands of long-term commercial significance due to the area having been converted to urban land uses.

### **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:**

Because there are no working farmlands or forest lands near the project area, the proposal would not affect or be affected by these land uses.

### **B 8 c. Describe any structures on the site.**

Lakewood Station comprises four one-story drop-off and pickup shelter structures, and a one-story sheltered waiting area for the Sounder trains. There is also a four-story, 620-stall parking garage with a pedestrian bridge and stairs that cross the rail line to the north side of the tracks to the drop-off/pickup area on Kendrick Street SW. Connected to the parking garage is covered area for the kiosk and ticket machine. Next to the kiosk is an approximately 20-foot-high public art structure. The station also includes luminaires.

Elsewhere in the project area, there are a number of types of structures. These include light poles, utility poles, mailboxes, fences, fire hydrants, retaining walls, covered transit shelters, and signage.

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

None of the existing Lakewood Station structures would be demolished. Some of the transit stops in the project area would be renovated, which would require temporary removal of signs, benches, and shelters. Some fencing may require removal or relocation to make room for construction or due to minor property acquisition of permanent ROW. The two projects requiring minor permanent ROW acquisition are:

- Bridgeport Way non-motorized connections via 115th Street Court SW to provide the connection from the 115th Street Court SW cul-de-sac to the trail and potential ROW along the edge of the trail.
- 47th Avenue SW non-motorized improvements north of I-5 on the west side of the street, between the bridge and Pacific Highway SW, to provide improved sidewalks.

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

The access improvements would be mostly located within roadway ROW or Sound Transit rail ROW, which have no zoning. The City of Lakewood zoning classifications for property adjacent to the road corridor improvements are Industrial/Industrial Business, Residential, Multi-family Residential, Public Institutional, Commercial, Open Space/Recreation, Transit-oriented Commercial, and Central Business District. The proposed Northeast Surface Parking Lot C would be located partially in the Public Institutional and partially in the Industrial/Industrial Business zoning categories. The Lakewood Station is located in the Public Institutional zone. Figure 8 shows the zoning in the project area.

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

The comprehensive plan designations for the project area are shown in Figure 9. The comprehensive plan designation for the Bridgeport Way SW corridor north of I-5 is Single-Family Residential to the west and Corridor Commercial along the road. The St. Clare Hospital to the east of Bridgeport Way SW is designated Public & Semi-Public Institutional.

Along 112th Street SW west of Bridgeport Way SW, the land is mostly designated Mixed Residential and Single-Family until it crosses Highland Avenue SW, where the plan designates the Clover Park High School as Public & Semi-Public Institutional to the north and the Lakewood Raquet & Sport Club as Open Space & Recreation. The land along Davisson Road SW is designated Single-Family and around Kendrick Street SW the designation is High-Density Multi-Family. The Sounder Station is designated Public & Semi-Public Institutional.

The southern part of the project area, south of I-5 and west of Bridgeport Way SW, is a mix of Multi-Family, High-Density Multi-Family, and Neighborhood Business District. Most of the 4th Avenue SW corridor is designated as Industrial with some High-Density Multi-Family and Open Space & Recreation designations.

The City of Lakewood has also developed a subarea plan for the Sounder station environs called the Station District Subarea Plan, which is an overlay for the area surrounding the Sounder station (Lakewood 2021). The district encompasses an area within 0.5 mile of the station but does not include the area to the southeast due to the I-5 freeway, which forms a barrier.

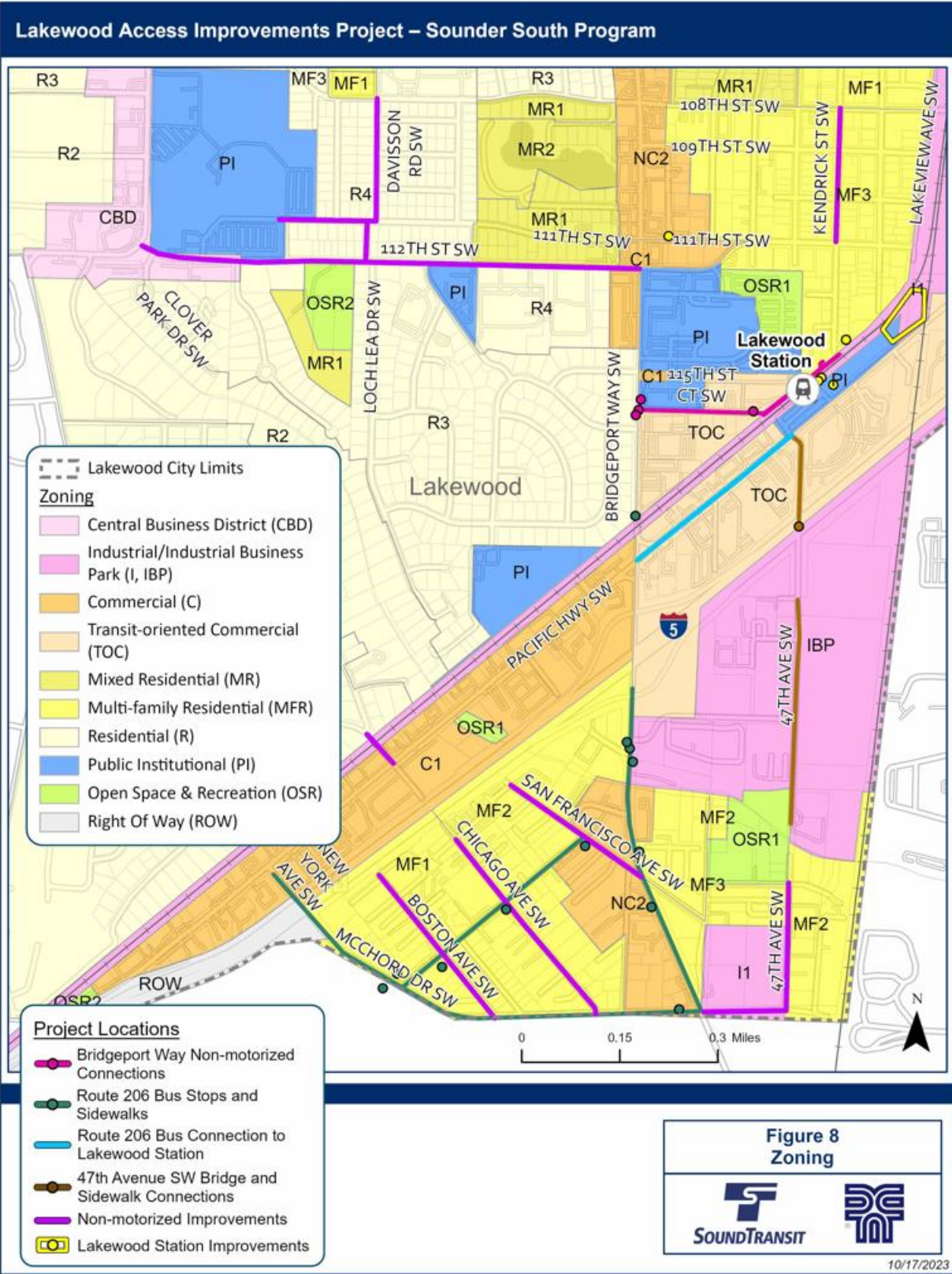


Figure 8 Zoning

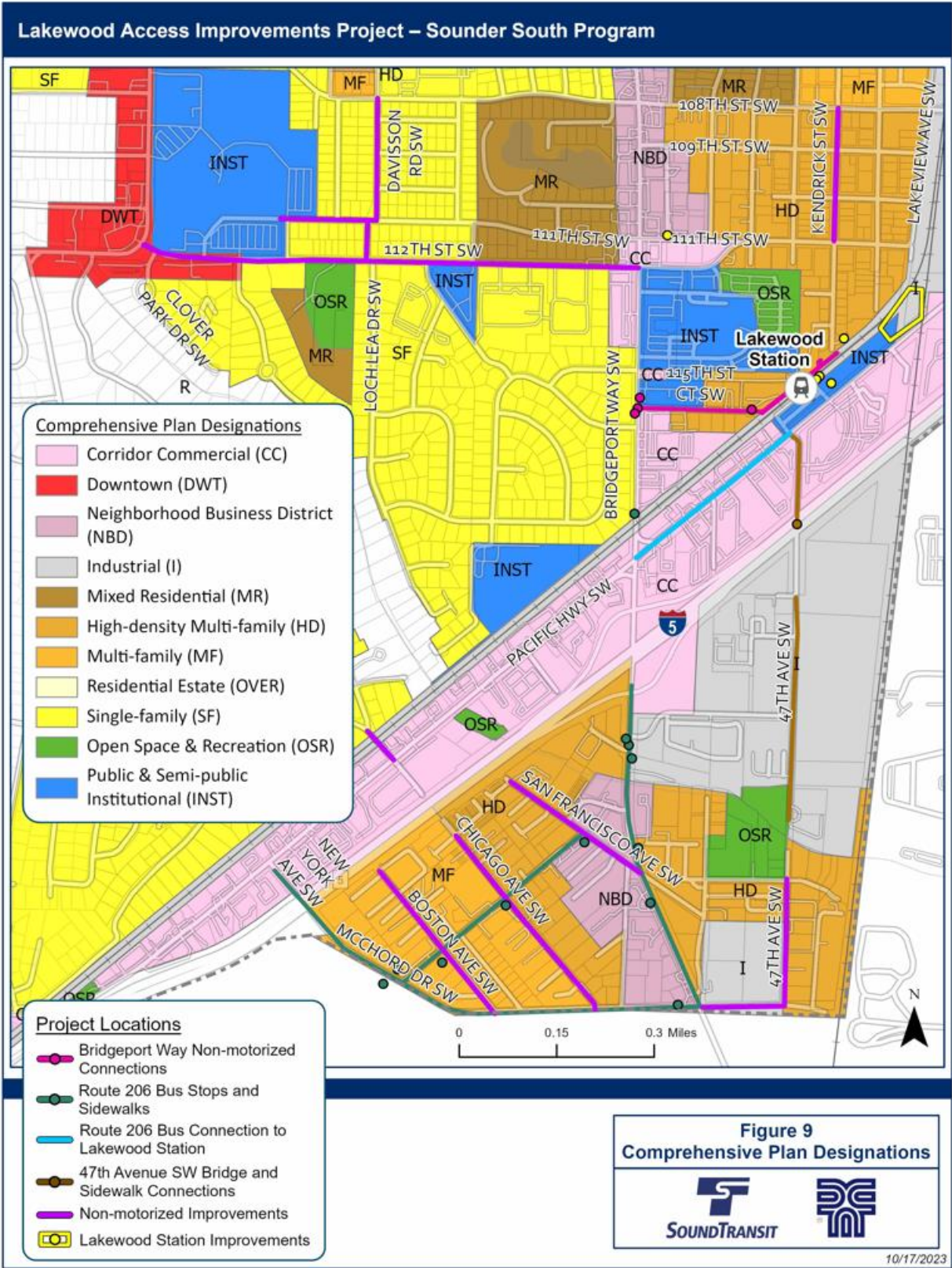


Figure 9 Comprehensive plan designations

The purpose of the district is to encourage transit-oriented development, which would be a dense mix of commercial, retail, services, and high-density residential uses supported by the Lakewood Station and transit connections.

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

Clover Creek flows through the project area and is designated as Aquatic Environment and Urban Stream Protection Environment per the City of Lakewood's Shoreline Master Program.

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

The City of Lakewood Critical Areas and Natural Resource Lands Code (LMC Chapter 14.142) designates the following areas as critical areas within the city: wetlands, critical aquifer recharge areas, fish and wildlife habitat areas, geologically hazardous areas, flood hazard areas, and mineral resource lands. Critical areas that exist in the project area include three wetlands, Clover Creek (fish habitat area), and floodplains. The entire project area is located within the Central Pierce County sole source aquifer area.

Even though critical areas are located in the vicinity of the project, the project would have no adverse effects on wetlands, critical aquifer recharge areas, or flood hazard areas. The proposed Northeast Surface Parking Lot C would remove a small (0.1 acre) stand of Oregon white oak trees, which are designated a potential priority wildlife habitat in the City of Lakewood; however, this small stand is unlikely to provide significant wildlife habitat or function as a corridor as described in Question B 4 c. None of the improvements would encroach upon wetlands or Clover Creek or their buffers. The project would not result in any loss of flood storage, and no water would be withdrawn from the underlying aquifer (the proposed infiltration of stormwater would benefit the aquifer).

In addition, the following activities are exempt from the provisions in LMC Lakewood's Critical Areas and Resource Lands Ordinance, as stated in the ordinance:

Maintenance or reconstruction of existing roads, paths, bicycle ways, trails, bridges, and associated storm drainage facilities, provided that reconstruction does not involve significant expansion of facilities. Construction of curbs, gutters, sidewalks, or other incidental improvements to existing roadways shall generally be considered to fall within this exemption when undertaken pursuant to best management practices to avoid impacts to critical areas (LMC 14.142.070 (B)).

Installation or construction in improved City road rights-of-way, and replacement, operation, or alteration of all electric facilities, lines, equipment, or appurtenances, not including substations, with an associated voltage of 55,000 volts or less (LMC 14.142.070 (E)(4)).

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

No people would reside or work at the completed project.

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

The project would not result in displacement of any people. Most of the access improvement projects would not require permanent acquisitions. Temporary construction easements or rights-of-entry would be necessary for minor grading activities to construct some projects or portions of some projects. Temporary construction easements would be identified during final design of the

project. Sound Transit would own the proposed Northeast Surface Parking Lot C. Two of the access improvement projects would potentially require partial permanent acquisition of property:

- Bridgeport Way non-motorized connections via 115th Street Court SW to provide the connection from the 115th Street Court SW cul-de-sac to the trail and potential ROW along the edge of the trail.
- 47th Avenue SW non-motorized improvements north of I-5 on the west side of the street, between the bridge and Pacific Highway SW, to provide a sidewalk.

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

No measures are necessary because the project requires no 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 the City of Lakewood's land use and development code and would support the City of Lakewood's land use goals and policies. The Lakewood Comprehensive Plan calls for "aggressive pursuit of non-motorized transportation facilities and public transit options" (Lakewood 2000, revised 2021). This theme runs through the entire comprehensive plan document and is a substantial policy element; therefore, the project is compatible with the plan. Sound Transit would follow the City of Lakewood's land use approval processes for project design elements as needed, which would ensure project consistency with city land use plans, goals, and policies.

**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 proposed because the project would have no impacts to agricultural or forest lands.

**B 9. Housing**

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

No housing units would be created 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 the elimination of any housing units.

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

The proposed non-motorized access improvements are not anticipated to result in housing impacts, given that these access improvements would occur within existing city ROW or within the Lakewood Station property. The exception would be the parcels owned by Sound Transit that are proposed for the Northeast Surface Parking Lot C. If these parcels are developed for parking, it would potentially affect the use of these parcels for future housing or transit-oriented development.

## **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?**

Most of the access improvements would be less than a single story in height (such as a bus shelter) or at ground level, with the exception of several utility poles for lighting, which would be up to 36 feet high. These utility poles would be used in conjunction with sidewalk improvements on the north side of New York Avenue SW and McChord Drive SW between Bridgeport Way SW and Pacific Highway SW as well as lighting for the new Northeast Surface Parking Lot C. Exterior building materials for the bus shelters would conform to Pierce Transit's architectural standards.

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

During construction, views in the vicinity of access improvements would be temporarily altered by construction equipment, vehicles, and disturbed areas.

There are no identified sensitive views in the project area. No existing views are anticipated to be obstructed by the project. Most of the views both from and toward these facilities would be slightly altered by the addition of pedestrian-level access improvements within areas of existing urban or semi-urban visual character. Therefore, it is anticipated that these new features would blend in with existing views, causing little if any visual change with the exception of locations where existing vegetation would be removed. For example, adding bicycle lanes, sidewalks, bus shelters, etc. to the roadway ROW would blend in with the existing roadway environment.

The proposed Northeast Surface Parking Lot C would require the removal of several mature trees including Oregon white oak and Douglas fir in an open space adjacent to the station. This removal of trees would alter the views of this area from the station and from Pacific Highway SW. One mature Douglas fir tree may be removed for the 10-foot-wide asphalt path proposed to be built between the cul-de-sac on 115th Street Court SW and the existing pedestrian overpass, altering views from the street by removing visual screening of the track. Also, proposed concrete curb and sidewalks along McChord Drive SW may remove several mature Douglas fir trees close to the roadway. According to LMC 18A.70.320, all of the trees in these areas are likely considered "significant" trees due to their type and size.

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

Perimeter landscaping in conjunction with city code and the Sound Transit Design Criteria Manual would help reduce the visual effect of the new Northeast Surface Parking Lot C, 10-foot asphalt trail, and security fence by screening and/or softening views toward the facilities. Similarly, sidewalk improvements along McChord Drive SW would provide street trees per City of Lakewood code to replace lost screening function from removal of existing trees.

Care would be taken to avoid impacts to existing significant trees (e.g., Oregon white oak trees) to the greatest extent practicable. Any significant trees that cannot be avoided would be mitigated in accordance with the City of Lakewood's significant tree preservation code (LMC 18A.70.320), which requires smaller replacement trees located to optimize visual screening (see Section B.4.d).



## **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?**

During construction there may be a need for night work, which would require night lighting to safely illuminate the work area. That light could spill over into commercial or residential areas adjacent to the access improvement or create glare in the ROW, thereby adversely affecting drivers. If such construction lighting were necessary, it would be of a short-term nature.

Proposed sources of light would come from new streetlights along New York Avenue SW and McChord Drive SW. These lights would be seen at night from adjacent roadways and residential areas. The intersection on the south side of Bridgeport Way SW at 115th Street SW would receive a pedestrian half signal, as well as improved lighting. New pedestrian-level lighting would be added to Bridgeport Way SW at the transit stops at San Francisco Avenue SW, Seattle Avenue SW, and Pacific Highway SW, and this lighting would be seen at night. A new pedestrian crossing signal and median pedestrian refuge would be added at the Bridgeport Way SW/Seattle Avenue SW intersection and would be seen flashing only during use. Lighting would also be installed at the new Northeast Surface Parking Lot C.

Reflective glare is not expected as a result of the project improvements because bus and transit shelter materials would be nonreflective and/or matte-finished.

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

It is not anticipated that any light or glare from the project would pose a safety hazard or interfere with views because the new lighting would occur within the urban areas that have existing lighting and transit shelter materials would be nonreflective. No other project features are anticipated to produce glare.

### **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 project.

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

As much as practical, construction night lighting would be directed downward and away from any adjacent residences to reduce spillover light, as well as away from streets to avoid creating night glare for drivers.

For project operation, all proposed light fixtures would include cut-off 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, almost all the new lighting associated with the project would occur in a roadway corridor that has existing street lighting. No measures are proposed or necessary for glare because it is not anticipated that the finished project would produce glare.

## **B 12. Recreation**

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

There are a variety of recreational opportunities in the general project vicinity (see Figure 10). These include the following private and public facilities:

- Lakewood Racquet & Sport Club
- Springbrook Park
- Clover Park Baseball Fields, Tennis Courts, and High School Football Field
- Gravelly Lake, American Lake, and Lake Steilacoom
- Tacoma Country & Golf Club
- Lakewold Gardens

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

The proposed project would not displace any existing recreational uses temporarily or permanently.

### **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:**

Because the project would not impact any recreation uses, no measures are proposed.

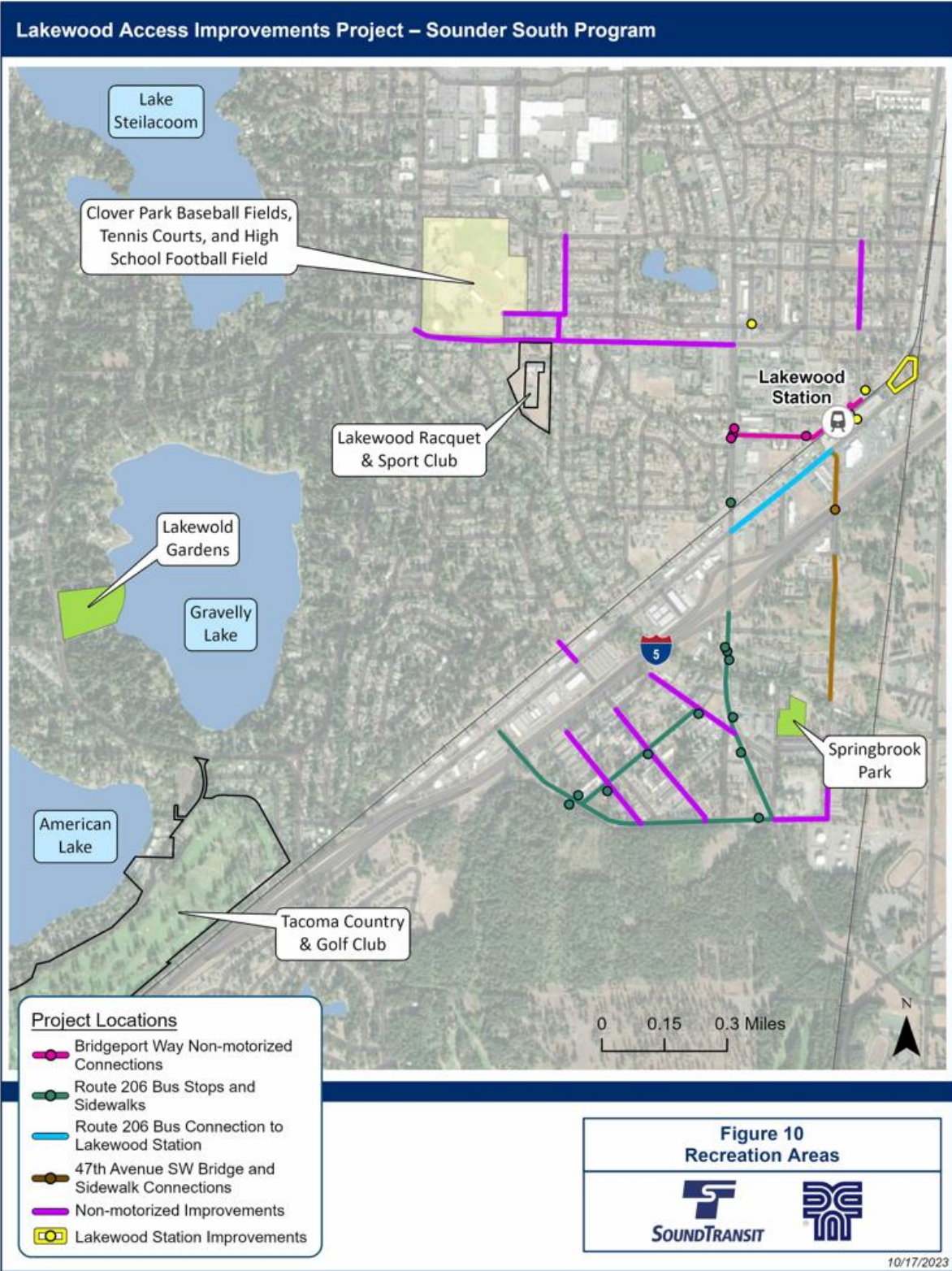


Figure 10 Recreation areas

## 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 defined Area of Impacts (AI) for historic and cultural resources includes the area encompassing all the proposed access improvements within the construction footprint (see Figure 11). In locations where the proposed improvement includes the construction of elements above 1 foot in height (i.e., new bus shelters and fencing), with the exception of lighting and signs, the AI includes the parcel adjacent to the proposed construction. Where the adjacent parcel is a ROW improvement, the AI extends to the next adjacent parcel (up to 200 feet) to account for any potential impacts on the viewsheds of neighboring resources. Where activities have no potential to impact viewsheds (i.e., at-grade improvements or improvements not exceeding 1 foot in height), the AI is limited to the area of anticipated ground disturbance. Because the project would be in an urbanized environment, and there are no expected impacts associated with the addition of light poles or signage, the AI is limited to the area of anticipated ground disturbance where these at-grade elements are proposed.

Table 4 lists the 18 potential historic resources identified within the AI. While there are a number of historic resources older than 45 years, they are not recommended for listing in city, state or national registers based on the historic resources analysis.

There is one previously recorded archaeological resource within the AI. Site 45PI767, Old Pacific Highway/Lakeview Avenue, consists of segments of a historic road alignment that was constructed from 1918 to 1928 (Cooper and Sparks 2007). The site has been determined not eligible for the National Register of Historic Places (NRHP) (Sterner 2015). Aerial imagery indicates that the portion of Site 45PI767 within the AI was removed during clearing and grading activities within the vacant lot northeast of the Lakewood Station parking garage that occurred between 2005 and 2008.

There are two additional previously recorded archaeological sites within 0.25 mile of the AI, neither of which has been formally evaluated for listing in the NRHP (DAHP 2023a). The first, Site 45PI419, is a surface historic-period debris scatter consisting of materials dating from circa 1917 to 1938, located approximately 0.1 mile south of the AI within JBLM (Walitschek 1994a). The second, Site 45PI420 (Steilacoom to Elk Plain – Moloch Station Road Segments), consists of two intact road segments predating 1870. One of the road segments is located less than 0.1 mile south of the AI within JBLM, while the other is located more than 0.25 mile south of the AI within JBLM (Walitschek 1994b).

### **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.**

During the cultural resources survey conducted for the project, there was no evidence of Native American historic use or occupation. Archival research revealed that there have been seven previous cultural resource surveys conducted within the AI, none of which located any archaeological resources. An additional seven cultural resource studies have been conducted within 0.25 mile of the AI. Refer to Table 5 in Section B.13.c below and to Appendix B (Cultural Resources Technical Report, Historical Research Associates, Inc., 2023) for information about these 14 previous studies.

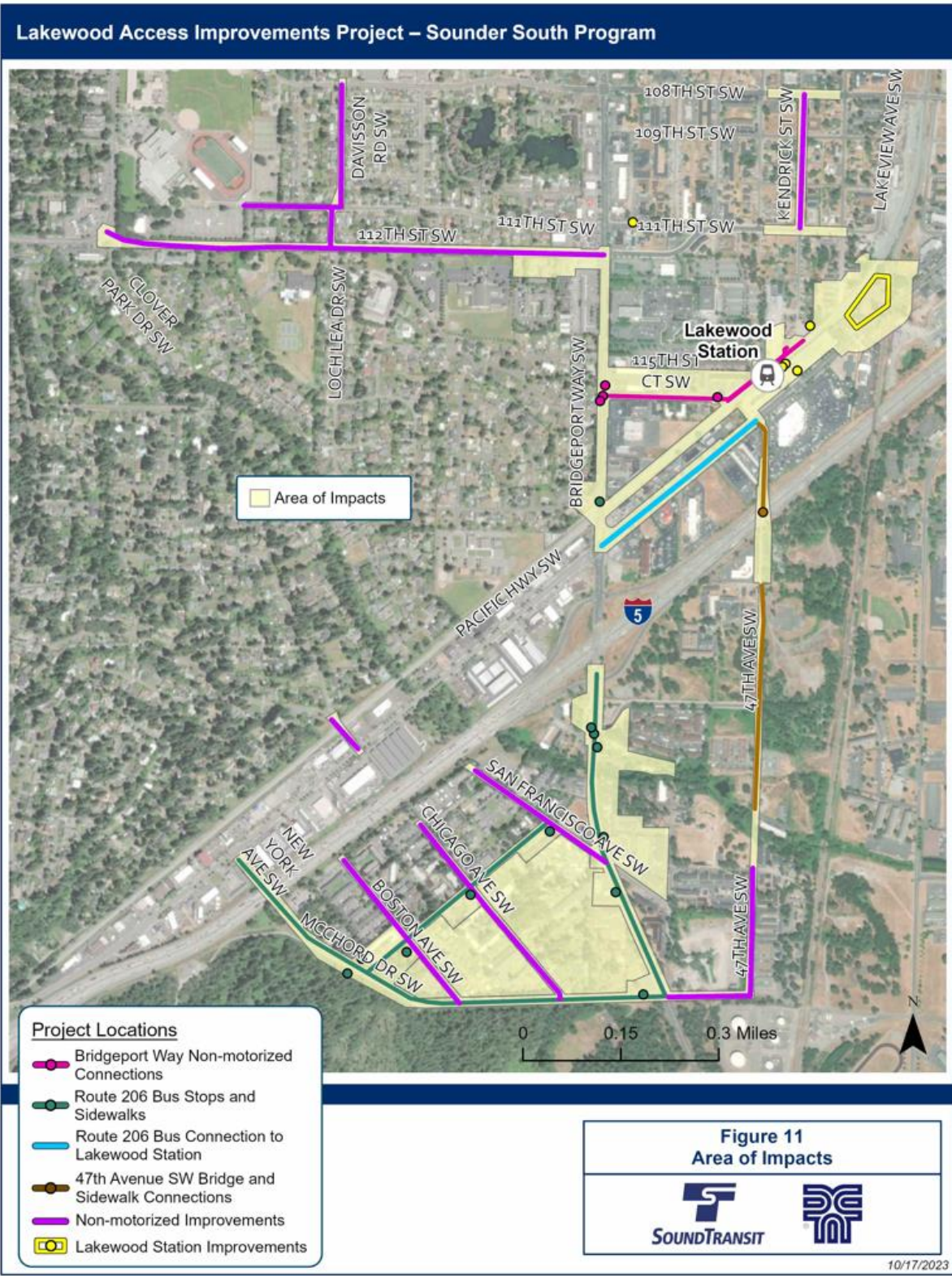


Figure 11 Area of impacts

**Table 4** Surveyed built environment resources within the Area of Impacts

No.	Parcel No.	WISAARD <sup>1</sup> Property ID	Address	Existing Use	Year Built	Sound Transit's Eligibility Recommendation
1	0219111042	730662	5202 112th Street SW	Multi-family Residence	1963	Recommended Not Eligible for City, State, or National Registers
2	0219111018	730665	11202-11208 Bridgeport Way SW	Commercial	1964	Recommended Not Eligible for City, State, or National Registers
3	0219122139	730664	4400 Lakeview Avenue SW	Multi-family Residence	1928	Recommended Not Eligible for City, State, or National Registers
4	0219122142	730666	11213-11221 Kline Street SW	Multi-family Residence	1945–1955	Recommended Not Eligible for City, State, or National Registers
5	0219122150	730666	11216-11230 Kline Street SW	Multi-family Residence	1945–1957	Recommended Not Eligible for City, State, or National Registers
6	0219122167	730667	4610 113th Street SW	Industrial	1955–2007	Recommended Not Eligible for City, State, or National Registers
7	2650000050	154009	4801 115th Street Court SW	Multi-family Residence	1962	Recommended Not Eligible for City, State, or National Registers
8	2650000030	153976	4815 115th Street Court SW	Multi-family Residence	1963	Recommended Not Eligible for City, State, or National Registers
9	2650000020	153974	4901 115th Street Court SW	Multi-family Residence	1962	Recommended Not Eligible for City, State, or National Registers
10	0219122065	730670	11509 Bridgeport Way SW	Utility	1968–2002	Recommended Not Eligible for City, State, or National Registers
11	5125200050	148065	11803 Tomahawk Road SW	Residence	1956	Recommended Not Eligible for City, State, or National Registers
12	5125200060	153468	11811 Tomahawk Road SW	Residence	1957	Recommended Not Eligible for City, State, or National Registers
13	0219123054	730671	12413 Bridgeport Way SW	Multi-family Residence	1955–1972	Recommended Not Eligible for City, State, or National Registers
14	0219132044	730672	12928 Bridgeport Way SW	Commercial	1959	Recommended Not Eligible for City, State, or National Registers
15	0219132043	730673	4911 McChord Drive SW	Residence	1944	Recommended Not Eligible for City, State, or National Registers
16	0219114146	730674	12809 Lincoln Avenue SW	Multi-family Residence	1977	Recommended Not Eligible for City, State, or National Registers
17	0219141045	730675	13020 Lincoln Avenue SW	Multi-family Residence	1964	Recommended Not Eligible for City, State, or National Registers
18	0219141019	730676	5508 Boston Avenue SW	Residence	1951	Recommended Not Eligible for City, State, or National Registers

Source: Historical Research Associates 2023.

Note: (1) WISAARD = Washington Information System for Architectural and Archeological Records Data.

**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.**

An archaeological survey of the AI was performed on March 6 and 16, 2023, which included archaeological reconnaissance, pedestrian survey, and shovel probing (Historical Research Consultants, Inc. 2023). One previously identified archaeological site (Site 45P1767 described above) located in the AI was assessed during the survey, even though it was previously determined not to be eligible for listing and no historic remnants were observed at the site. Seven shovel probes were excavated within the proposed footprint of the new Northeast Surface Parking Lot C, and no precontact or historic-period cultural materials were found.

Other methods used to assess impacts included conducting archival research, which included identifying and reviewing previous cultural resource studies using published and electronic sources and those provided by the DAHP and the City of Lakewood. Table 5 below provides a summary of those studies.

**Table 5 Previous cultural resource studies within 0.25 mile of the AI**

Reference	NADB <sup>1</sup>	Title	Distance and Direction from AI	Cultural Resources Identified Within the AI
Chattey and Foxall 1997	1350067	Historic Resources Inventory & Evaluation McChord Air Force Base, Pierce County, Washington Survey Report	Overlaps the AI	None
Chasteen and Cooper 2005	1346744	Cultural Resource Assessment of the Proposed City of Lakewood Pacific Highway Southwest (Bridgeport Way to 108th Street Southwest) Improvement Project, Pierce County, Washington	Overlaps the AI	None
Jongsma and Schultz 2006	1684718	SE5237A, Lakewood City WT-Offload, 11116 Gravelly Lake Drive, Lakewood, Washington	< 0.1 mile (mi) west	None
Kanaby et al. 2007	1350671	Cultural Resources Report, Pacific Highway Improvement Project 108th Street to SR 512, Pierce County, Lakewood, Washington	0.2 mi northeast	None
AMEC Earth and Environmental 2008	1351203	Section 106 Review, Tillicum/American Lake Gardens Sewer Expansion, Pierce County, Washington	0.2 mi southwest	None
Bowers 2008	1353346	Cultural and Historic Resources Survey, Pacific Highway Southwest Improvement Project (Gravelly Lake Drive to Bridgeport Way), Lakewood, Pierce County, Washington	Overlaps the AI	None
Chasteen et al. 2008	1351522	Final Cultural Resources Survey/Discipline Report: Point Defiance Rail Bypass Project, Pierce County, Washington	Overlaps the AI	None

Reference	NADB <sup>1</sup>	Title	Distance and Direction from AI	Cultural Resources Identified Within the AI
Stevenson 2011	1681088	Cultural Resources Survey Report–Lakewood Station Connection	Overlaps the AI	None
Van Galder et al. 2012	1683008	Section 106 Survey Report Historic, Cultural, and Archaeological Resources/Discipline Report: Federal Railroad Administration–WSDOT Point Defiance Bypass Project Environmental Assessment	Overlaps the AI	None
Kiers 2013	1683944	Cultural Resources Survey, I-5/SR 510 to SR 512 – Stage 3 Mobility Improvements, Thurston and Pierce Counties, Washington	Overlaps the AI	None
Stevenson and Sneddon 2013	1684576	Cultural Resources Assessment for the Sounder Yard Expansion Project, Lakewood, Washington	0.1 mi northeast	None
Rooke and Uldall 2016	1688295	Cultural Resources Assessment for the Springbrook Park Land Acquisition and Bridge Installation Project, Pierce County, WA	< 0.1 mi east	None
Patton and Schreck 2022	1696742	McChord Bridge Replacement Project Cultural Resources Survey Report	0.2 mi east	None
Schneider et al. 2022	1696941	Springbrook Park Phase 2 Additional Improvements Project, Lakewood, Pierce County, Washington	< 0.1 mi east	None

Source: Historical Research Associates, Inc. 2023.

Note: (1) = National Archeological Database.

The methods also included review of historic-period maps, historic registers, and cemeteries within the AI. DAHP's Predictive Model was also reviewed, which gives a general estimate of the likelihood of encountering archaeological resources based on historic Indian usage. Archaeological resources and historic-period built-environment resources were evaluated for their eligibility for listing in the NRHP. Additional built-environment resources were evaluated for their eligibility for listing in the Washington Heritage Register and the Lakewood Landmarks Register.

Appendix B (Cultural Resources Technical Report, Historical Research Associates, Inc., 2023) will be distributed to appropriate Tribes and DAHP for their review and comment. Sound Transit will allow 30 days for review of the documents. Sound Transit also will request formal NRHP and Washington Heritage Register eligibility determinations from DAHP for resources newly identified by this effort. These practices are not required under SEPA but are part of Sound Transit's best practices for cultural resource compliance.



**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.**

Since there were no cultural resources found during the project survey or previous studies, no measures are proposed. An inadvertent discovery plan would be in place during construction activities. If archaeological deposits are inadvertently discovered during construction, procedures outlined in the project’s inadvertent discovery plan would be followed (refer to Appendix B – Cultural Resources Technical Report, Historical Research Associates, Inc., 2023).

**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.**

The project occurs on a number of streets including Bridgeport Way SW, 112th Street SW, Highland Avenue SW, 111th Street SW, Davisson Road SW, Kendrick Street SW, Pacific Highway SW, 115th Street Court SW, 47th Avenue SW, McChord Drive SW, Lincoln Avenue SW, Chicago Avenue SW, Boston Avenue SW, San Francisco Avenue SW, and Clover Creek Drive SW (see Figure 1 and Figure 14). Table 6 identifies access to the Lakewood Station by passenger mode of transportation based on Sound Transit survey and station profile data. As shown, the station is primarily accessed by automobile. Access by other modes such as walking, bicycling, and local transit is difficult due to existing barriers or lack of direct travel routes.

**Table 6 Lakewood Station mode of access summary**

Mode of Transportation	2019 System Access Strategic Plan Passenger Access Survey Report	March 2020 Lakewood Station Profile (pre-Covid)
Walk/wheelchair	<2%	8%
Bicycle	<2%	<1%
Transit transfer	17%	4%
Auto	78%	87%
Drop-off	14%	8%
Parked (Drove alone/carpool/vanpool)	64%	79%
Other <sup>1</sup>	<2%	Not measured

Source(s): Sound Transit 2019 and 2020b.  
 Note: (1) Other is not defined in source documents.

### Vehicle Access

Vehicular access to the 601-stall Lakewood Station parking garage is provided via Pacific Highway SW, through both a signalized intersection on the northeast side of Lakewood Station and a right-in/right-out point of ingress/egress midway along the garage frontage. From the north, the cul-de-sac southern terminus of Kendrick Street SW provides a pickup/drop-off location, from which the station platform can be accessed via a pedestrian bridge over the Sounder tracks.

Pacific Highway SW, a primarily north-south minor arterial, connects Lakewood Station to Lakewood's broader roadway network, from Tacoma to the north to the southern portion of Lakewood to the south. Bridgeport Way SW, a north-south principal arterial, intersects Pacific Highway SW to the southwest of the station and provides connections to University Place in the north, as well as I-5 and JBLM to the south. An east-west minor arterial, 112th Street SW intersects Bridgeport Way SW at a signalized intersection northwest of the station. To the east, it connects to Kendrick Street SW and its pickup/drop-off area at the northern edge of the station. Figure 12 displays the Lakewood Station vehicle access points.

Between the Lakewood Station parking garage and the 493-stall SR 512 Park-and-Ride operated by Pierce Transit at the intersection of South Tacoma Way and Pacific Highway SW, approximately 1,000 parking spots are available within the 1-mile travel shed. The vehicle parking at Lakewood Station is not fully utilized (utilization ranged from 20% to 31% during a Tuesday through Thursday data collection period in May 2023). Additionally, there is currently no indication that Sounder riders are parking along City of Lakewood streets in neighborhoods adjacent to the Lakewood Station. Bicycle parking at the station is also underutilized. No other parking access gaps were identified.

Located 0.5 mile southwest of Lakewood Station, the I-5/Bridgeport Way SW interchange provides access to the state highway network, connecting the station area to the regional transportation system. I-5 is the primary north-south limited access corridor for local, regional, interstate, and international travel. I-5 has an interchange with SR 512 approximately 1.5 miles north of the Bridgeport Way SW interchange and enters the Olympia/Lacey area approximately 13.5 miles to the south. Figure 13 displays the roadway network within the 5-mile vehicle travel shed and Figure 14 shows the roadway network near the station.

Lakewood Access Improvements Project – Sounder South Program



Map Credit: Parametrix

Figure 12  
Lakewood Station Vehicle Access Point



11/10/2023

Figure 12 Lakewood Station vehicle access points

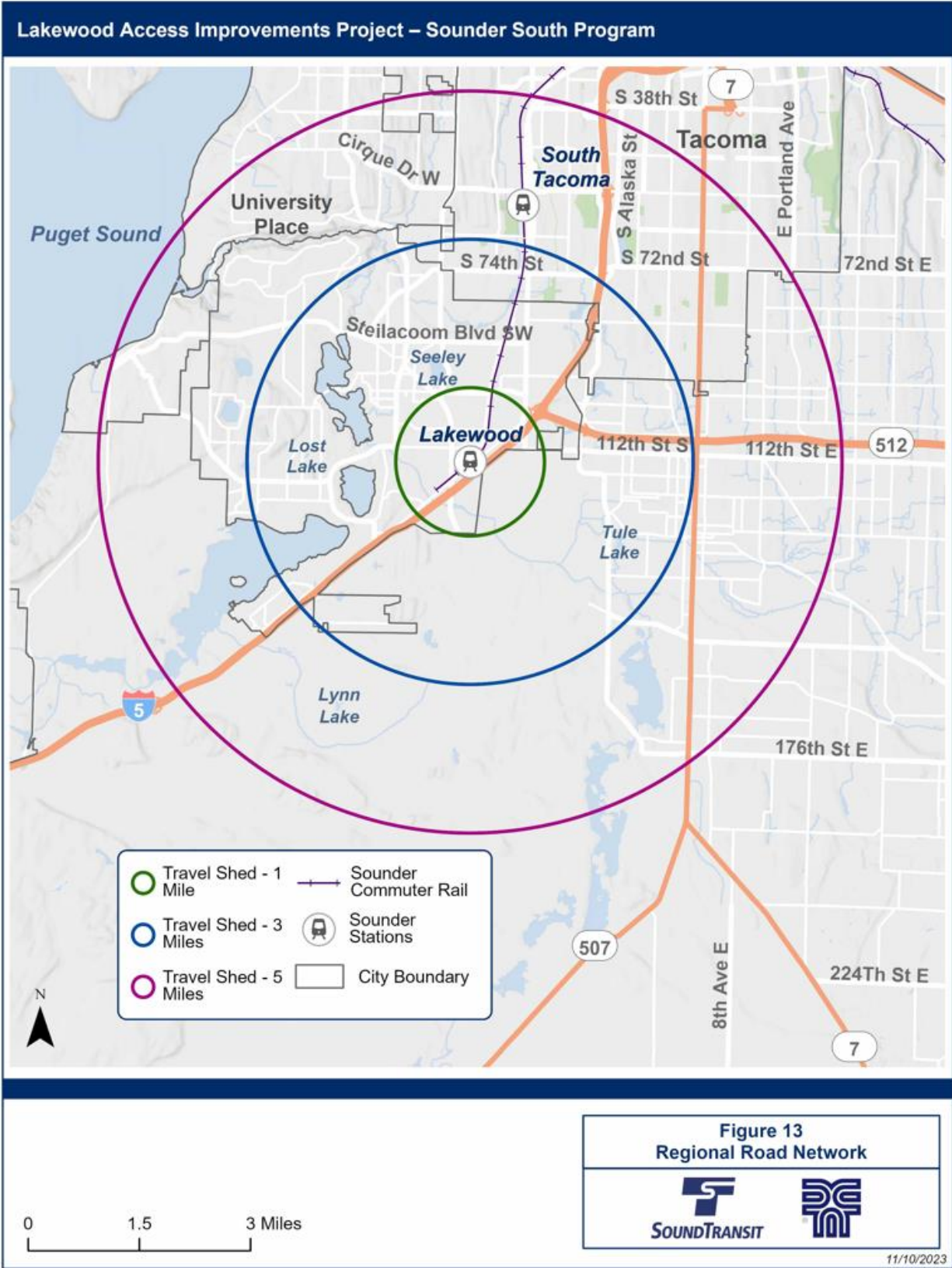


Figure 13 Regional road network

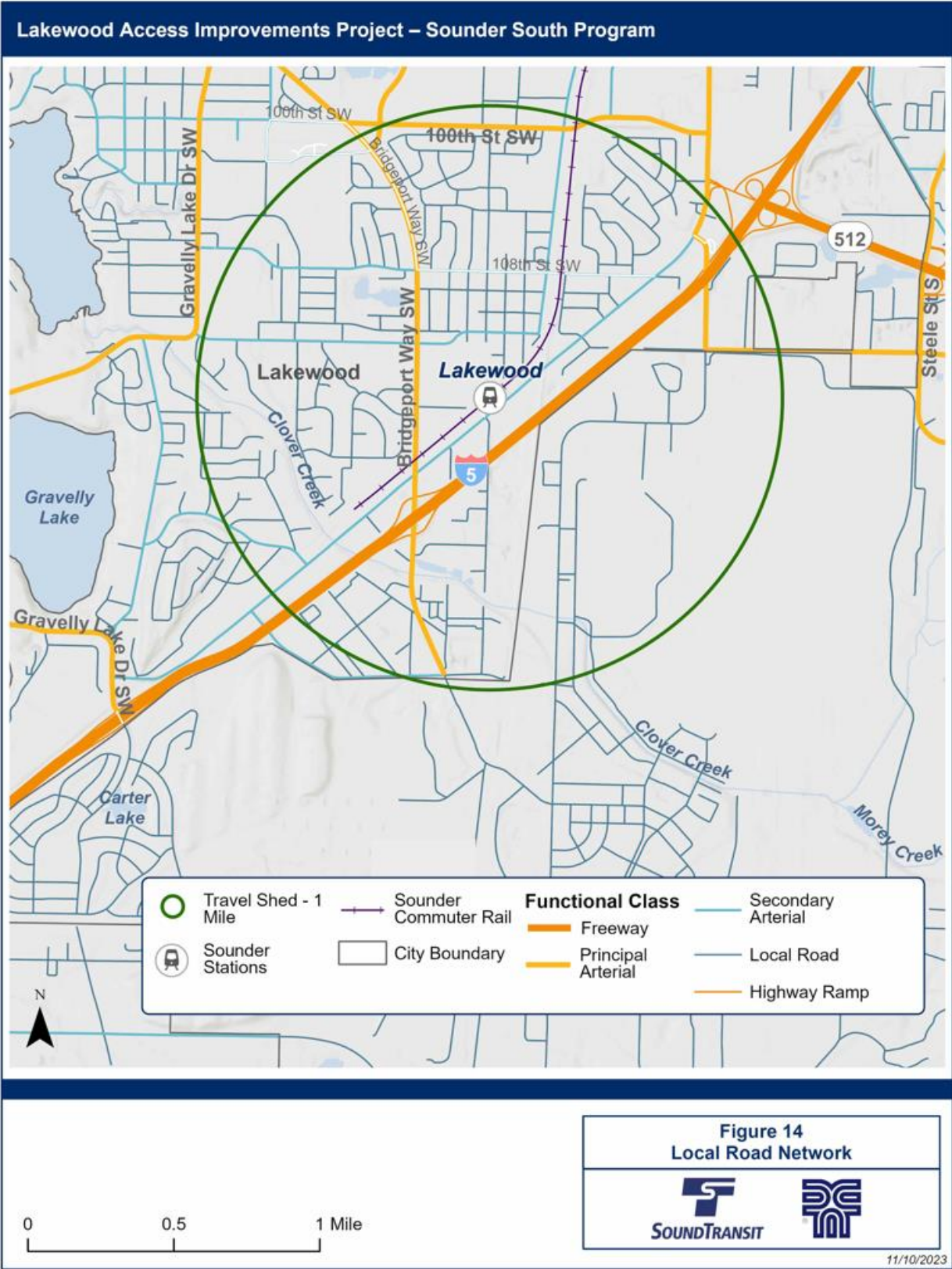


Figure 14 Local road network

## Pedestrian Access

Pedestrian access to Lakewood Station occurs on the station's southeastern frontage along Pacific Highway SW (see Figure 15), while three signalized intersections along the station frontage (parking garage driveway, north bus terminal driveway, and south bus terminal driveway/47th Avenue SW) provide opportunities for pedestrians to cross Pacific Highway SW.

A pedestrian plaza is also located on the northwest side of the Sound Transit tracks at Kendrick Street SW, linking to the station platform, bus terminal, and parking garage via a pedestrian bridge. At-grade sidewalk crossings of the Sounder tracks are present at Bridgeport Way SW to the southwest of the station and 108th Street SW to the northeast.

While the Lakewood Station pedestrian bridge provides direct access across the Sound Transit tracks to the north, there is little pedestrian access to locations that are immediately northwest of the station, such as St. Clare Hospital. Currently, accessing such locations would require pedestrians to either travel southwest along Pacific Highway SW and then north along Bridgeport Way SW, or cross the pedestrian bridge north to Kendrick Street SW and follow 111th Street SW and 112th Street SW to the west.

Key sidewalk gaps are present on Bridgeport Way SW and 47th Avenue SW as they cross I-5, while sidewalk gaps along 112th Street SW west of Bridgeport Way SW limit pedestrian access to neighborhoods west of the station. As shown in Figure 15, sidewalk gaps are present along the majority of non-arterial streets within the 1-mile pedestrian travel shed.

Within the 1-mile Lakewood Station pedestrian travel shed, sidewalks are present along most arterial and collector roadways, with the following exceptions:

- Bridgeport Way SW (both sides between I-5 southbound on/off ramps and I-5 overpass; west side between I-5 overpass and I-5 northbound on/off ramps).
- 47th Avenue SW (west side between Pacific Highway SW and I-5 overpass; both sides south of I-5 overpass).
- South Tacoma Way (west side between Pacific Highway SW and I-5 overpass; west side between I-5 overpass and 112th Street SW).
- 112th Street S (north side east of 34th Avenue S; south side east of South Tacoma Way).
- Wildaire Road SW (both sides west of Main Street SW/Davisson Road SW).
- 112th Street SW (both sides west of 55th Avenue SW; north side between Bridgeport Way SW and 55th Avenue SW; north side between Bridgeport Way SW and Addison Street SW; south side between Addison Street SW and Freiday Street SW).
- 111th Street SW (both sides between Freiday Street SW and Kendrick Street SW).
- Lakeview Avenue SW (east side north of 108th Street SW).
- 100th Street SW (south side – most of the portion within the 1-mile travel shed).

The condition of curb ramps within the 1-mile pedestrian travel shed varies. Some intersections have curb ramps that are noncompliant with current ADA standards while other intersections may have missing curb ramps.

### Bicycle Access

Bicycle lanes along Pacific Highway SW and South Tacoma Way provide direct access to Lakewood Station and locations to the northeast and southwest between 88th Street SW and Gravelly Lake Drive SW, except for a short gap to the northeast of the station as Pacific Highway SW passes below the BNSF Railway ROW (see Figure 16).

Bicycle lanes on Kendrick Street SW (south of 111th Street SW), 111th Street SW (Kendrick Street SW to Lakeview Avenue SW), and Lakeview Avenue SW (both sides from 111th Street SW to 108th Street SW and west side only between 108th Street SW and Steilacoom Boulevard SW) connect neighborhoods to the northern station entrance and pedestrian bridge. The bicycle lanes on Lakeview Avenue SW and Pacific Highway SW connect to bicycle lanes on 108th Street SW, which cross at-grade with the Sounder tracks to the northeast of the station. A project by the City of Lakewood and Sound Transit enhanced non-motorized facilities by adding sidewalks and bicycle lanes in both directions on 111th Street SW and 112th Street SW between Bridgeport Way SW and Kendrick Street SW and was completed in 2021.

Bicycle lanes are provided along Bridgeport Way SW to the west of Lakewood Station between McChord Drive SW and 123rd Street SW, and shared lanes are provided between Pacific Highway SW and 75th Street W. The northern end of the shared-lane markings connect to bicycle lanes on Bridgeport Way SW that continue north into University Place.

There are few east-west bicycle connections located outside of the immediate station vicinity and within 1 mile of Lakewood Station. I-5 presents a barrier to bicycle access to Lakewood Station from the east and south, because there are no crossings with dedicated bicycle facilities. Bicycle access to the station from the east and south is further limited by SR 512 and JBLM, particularly from the unincorporated Pierce County community of Parkland.

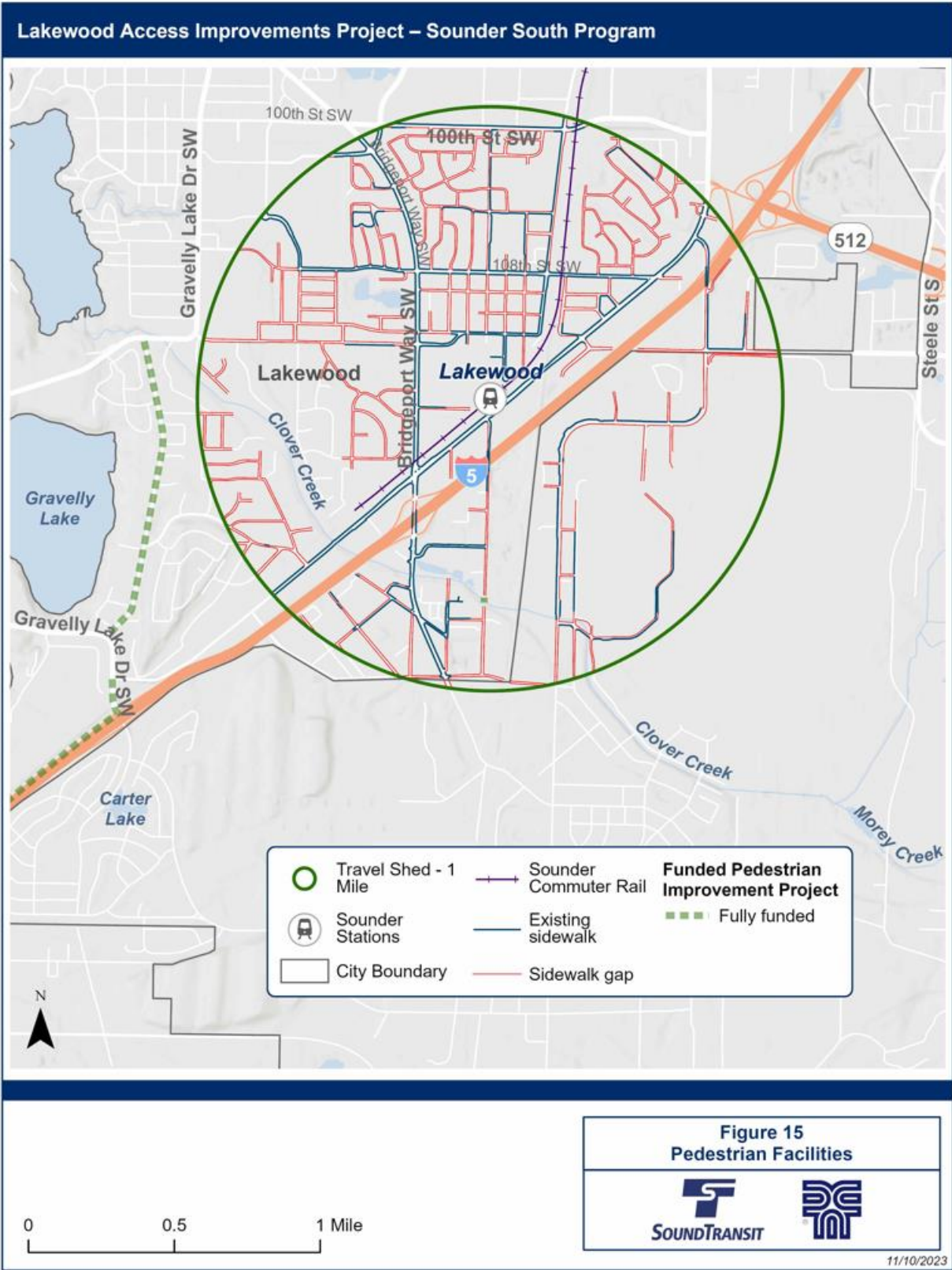


Figure 15 Pedestrian facilities



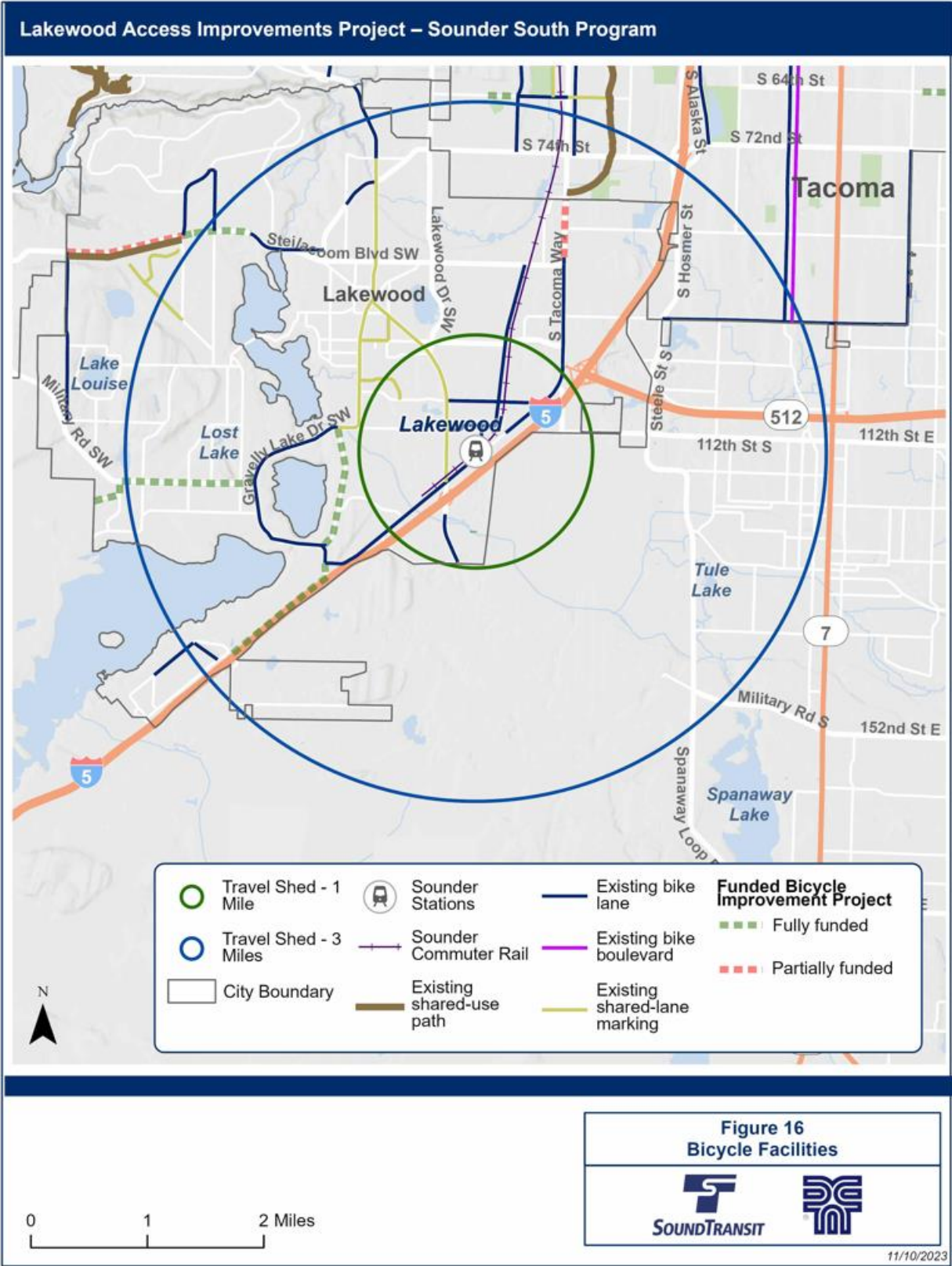


Figure 16 Bicycle facilities

**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?**

Sound Transit operates S Line commuter rail between Lakewood and Seattle, with the Lakewood Station serving as the current route’s southern terminus. During the weekday morning period, Seattle-bound (northbound) trains operate every 20 to 30 minutes between 4:30 a.m. and 7 a.m. One additional northbound trip departs Lakewood around 10 a.m., and one southbound trip from Seattle to Lakewood operates around 8 a.m. During the evening period, Lakewood-bound trains in the southbound direction operate every 20 to 45 minutes, arriving at Lakewood Station between 4:50 p.m. and 7:45 p.m. (Sound Transit 2023). Eight trains operate northbound and southbound each between Lakewood and Seattle each day, for a total of 26 daily trips.<sup>1</sup>

In addition to the Sound Transit S Line service between Lakewood and Seattle, bus transit service is provided to the station by Pierce Transit, Intercity Transit, and Sound Transit Express Bus. Table 7 summarizes the existing bus transit routes and weekday schedule frequency (average headways) serving stops within a 1-mile radius of the station.

**Table 7 Bus transit routes serving stops within 1 mile of the station (2023)**

Route # and Description, Major Destination Served	Service Span	Headways (weekday) in Minutes		Nearest Transfer Point to Lakewood Station
		Northbound / Eastbound	Southbound / Westbound	
		6 a.m. to 9 a.m. 3 p.m. to 6 p.m. All Day	6 a.m. to 9 a.m. 3 p.m. to 6 p.m. All Day	
<b>Pierce Transit Route 3</b> - Lakewood – Tacoma: <i>Lakewood Transit Center</i> <i>SR 512 park-and-ride (P&amp;R)</i> <i>Tacoma Mall Transit Center</i> <i>10th &amp; Commerce Transit Center</i>	16 hours	30 30 30-60	30 30 30-60	108th Street SW and Kendrick Street SW (0.4 mile)
<b>Pierce Transit Route 4</b> - Lakewood – South Hill: <i>Lakewood Transit Center</i> <i>SR 512 P&amp;R</i> <i>South Hill Mall Transit Center</i> <i>Pierce College - Puyallup</i>	14 hours	30 30 30	30 30 30	100th Street SW and 47th Avenue SW (0.9 mile)
<b>Pierce Transit Route 202</b> - 72nd Street: <i>Lakewood Transit Center</i> <i>72nd Street Transit Center</i>	15 hours	30-60 30 30-60	30 30 30-60	Lakewood Drive SW and Bridgeport Way SW (1.1 miles)
<b>Pierce Transit Route 206</b> - Pacific Highway / Tillicum / Madigan <i>Joint Base Lewis-McChord (JBLM) Madigan Hospital</i> <i>Lakewood Transit Center</i>	16 hours	30 30 30-60	30 30 30-70	Bridgeport Way SW and Pacific Highway SW (0.3 mile)
<b>Pierce Transit JBLM Runner</b> - Lakewood Transit Center – JBLM	6 hours	On Demand	On Demand	Lakewood Station

<sup>1</sup> Five additional S Line trains (10 total daily trips) operate between Seattle and Tacoma Dome Station in the northbound and southbound directions each weekday. For the Sounder trips that do not serve Lakewood Station, Sound Transit Express Bus route 594 connects Lakewood and Tacoma Dome Stations (Sound Transit 2023).

Route # and Description, Major Destination Served	Service Span	Headways (weekday) in Minutes		Nearest Transfer Point to Lakewood Station
		Northbound / Eastbound	Southbound / Westbound	
		6 a.m. to 9 a.m. 3 p.m. to 6 p.m. All Day	6 a.m. to 9 a.m. 3 p.m. to 6 p.m. All Day	
Lakewood Transit Center Lakewood Station JBLM				
<b>Intercity Transit Route 620 –</b> Olympia/512 P&R Express Olympia Transit Center Lacey Transit Center Martin Way Park & Ride Lakewood Station SR 512 Park & Ride	14 hours	50-65 60-90 65-85	60-65 65-85 50-70	Lakewood Station
<b>Sound Transit Route 574 -</b> Lakewood / Sea-Tac Airport via Federal Way: Lakewood Transit Center SR 512 P&R Tacoma Dome Station Federal Way Transit Center Star Lake Freeway Station Kent/Des Moines Freeway Station Sea-Tac Airport	20 hours	30 30 10-60	20-30 30 20-60	SR 512 P&R (0.9 mile)
<b>Sound Transit Route 592 -</b> DuPont – Seattle: DuPont Station Lakewood Station SR 512 P&R Downtown Seattle	4 hours	15-30 (4 p.m.- 7:45 AM) N/A N/A	N/A 15-30 ( 4:30 p.m.- 7:45 p.m.) N/A	Lakewood Station
<b>Sound Transit Route 594 -</b> Lakewood / Tacoma – Seattle: DuPont Station <sup>1</sup> Lakewood Station SR 512 P&R Tacoma Dome Station Downtown Seattle	14 hours	20 (after 8:30 a.m.) N/A 30	30-45 (after 7:00 a.m.) 20-30 (until 4:30 p.m.) 10 (8 p.m.-8:15 p.m. only)	Lakewood Station

Source: Pierce Transit 2021 and Sound Transit 2023.

Note:

(1) One northbound and two southbound trips serve DuPont Station.

The Lakewood Bus Transit Center is located just outside of the 1-mile travel shed to the northwest of Lakewood Station and is served by Pierce Transit Routes 2, 3, 4, 48, 202, 206, 212 and 214, and JBLM Runner and Sound Transit Express Bus Route 574. Figure 17 presents Sound Transit regional connections within the 5-mile transit rider/driver access travel shed while Figure 18 displays Pierce Transit, Intercity Transit and Sound Transit Express bus routes and facilities within the 1-mile travel shed.



Figure 17 Regional transit routes

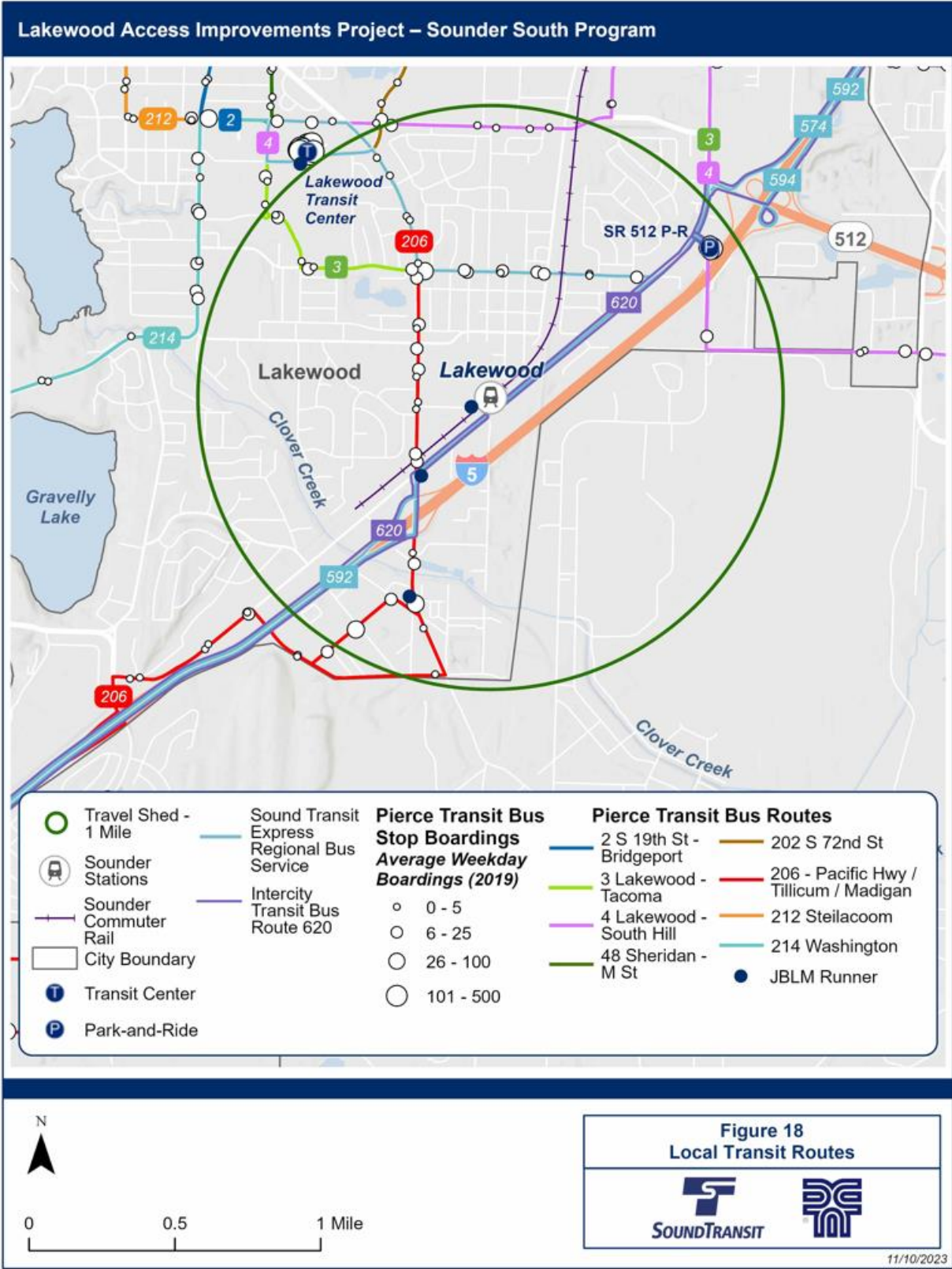


Figure 18 Local transit routes

The nearest transfer opportunity from Sounder to a local (non-regional) north-south bus transit route (Route 206) is approximately 0.3 mile from the station, while the nearest transfer opportunity to an east-west bus route (Route 4) is approximately 0.9 mile away. Pierce Transit Route 206 currently operates along Bridgeport Way SW, to the west of Lakewood Station, with the nearest stops at the intersection of Pacific Highway SW. Route 4 operates along 100th Street SW, to the north of the station, with the nearest stop at the intersection of 100th Street SW and 47th Avenue SW. Transfer opportunities to Pierce Transit Route 3 are located approximately 0.4 mile from Lakewood Station at the intersection of 108th Street SW and Kendrick Street SW. Other bus transit routes serve stops approximately 1 mile to the northeast and northwest of the station, requiring riders to walk longer distances for transfer opportunities to bus routes serving destinations other than those along Routes 3, 4, and 206.

**B 14 c. 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. The purpose of the project is to improve access to Lakewood Station by adding new improvements for pedestrians, bicycles, and bus transit to the surrounding transportation infrastructure, as well as improvements to the Lakewood Station itself. The access improvements are described in response to Question A11 above and in Table 1.

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

The project would not occur in the vicinity of water or air transportation. The Sound Transit rail line runs adjacent to the Lakewood Station, and Sound Transit operates its S Line service on the line. Amtrak also operates passenger trains over this rail line, and there are occasional freight train operations by Tacoma Rail and BNSF Railway.

**B 14 e. 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?**

Most of the project improvements will make non-motorized improvements and therefore are not expected to generate additional vehicular trips. One improvement project, the Northeast Surface Parking Lot C, would generate new vehicular trips.

Methodologies established in the Institute of Transportation Engineers Parking Generation Manual were used to generate the level and timing of daily use of the proposed Northeast Surface Parking Lot C. Traffic operations analysis utilized the Synchro tool (version 11) to determine the intersection level of service (LOS) based on the Highway Capacity Manual (HCM) 2000 report and delay (in seconds per vehicle). The Synchro model was developed consistent with the WSDOT Synchro modeling protocol with the exception of the reporting method. The WSDOT protocol recommends reporting HCM 6th edition. However, the analysis conducted for this study includes pedestrian signals which are not supported by the HCM 6th edition methodology, thus the analysis defaulted to HCM 2000 reports.

The proposed Northeast Surface Parking Lot C is estimated to generate 14 additional p.m. peak hour trips by automobiles. Based on the trip forecast, it is expected that intersections in the project area would operate similarly to existing conditions (refer to Appendix C, Transportation Technical Report, Parametrix, 2023).

**B 14 f. 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 project would be in an urban area and would not interfere, affect, or be affected by movement of agricultural or forest products.

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

Emergency vehicle access would be maintained through the construction zone at all times. Access to residential and commercial uses would be retained. Road lane closures or detours would be coordinated through approvals from the City of Lakewood. The contractor would prepare and implement a Traffic Management Plan in coordination with Sound Transit and the City of Lakewood.

The proposed access improvements would result in similar or improved conditions in the operation of the project area roads, thus no mitigation for transportation operations is proposed.

**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.**

Construction could temporarily impact emergency vehicle response times because of temporary lane closures, detours, or other access issues. The access improvements themselves would not increase the need for any public services. Instead, they would provide a benefit for public transit by improving access.

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

Construction mitigation would include ensuring that emergency vehicles can safely and quickly pass through the construction zone and that any lane/road closures or detours are communicated to the various emergency service providers prior to construction. Conditions of the ROW permit would include other required measures such as the development and implementation of a traffic control plan, which outlines in more detail the measures to ensure emergency providers can pass quickly and safely through the construction zone.

**B 16. Utilities**

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

The following utilities are available throughout the project area:

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

**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.**

Construction would require the use of gasoline and diesel fuel, water, and electricity. Local fuel providers would supply gas and diesel. Electrical service in the project area is provided by Lakeview Light & Power. The Lakewood Water District would provide water.

Electricity is the only utility that is proposed for the completed project. Electricity would be needed for the following project areas:

- Kendrick Street SW – New utility pole and luminaire installed between 110th Street SW and 111th Street SW.
- 111th Street SW:
  - New utility pole and luminaire installed.
  - New luminaire installed on existing utility pole.
- 112th Street SW – Two new luminaires installed on existing utility pole.
- Davisson Road SW – Potential replacement of power pole outside the ROW.
- Bridgeport Way SW at San Francisco Ave SW – New pedestrian-level lighting may be added at the bus stop.
- Bridgeport Way SW at Seattle Avenue SW – New pedestrian crossing signal would be added.
- Bridgeport Way SW at & 115th St Ct SW – New pedestrian crossing signal with illumination would be added.
- 115th St Ct SW Trail – 5 new utility pole and luminaires installed.
- New York Ave SW and McChord Dr SW:
  - Two new utility poles and luminaires installed on New York Avenue on both sides of I-5 bridge crossing.
  - New utility pole and luminaire installed between Detroit Avenue SW and Chicago Avenue SW.
- Northeast Surface Parking Lot C:
  - Three new utility poles and luminaires installed.
  - Three new electric vehicle charging stations installed.
- 47th Ave SW and 47th Bridge:
  - One new luminaire installed on existing utility pole.
  - Three new utility poles and luminaires installed.



**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: 

Name of Signee: Lesley M. Maurer

Position and Agency/Organization: Senior Environmental Planner, Sound Transit

Date Submitted: January 10, 2024

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# *Appendix A*

## Noise and Vibration Technical Analysis

# *Appendix B*

## Cultural Resources Technical Report

# *Appendix C*

## Transportation Technical Report

