



Bus Base North

SEPA Environmental Checklist

July 2020

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Table of Contents

A	BACKGROUND	1
B	ENVIRONMENTAL ELEMENTS	5
1.	Earth	5
2.	Air	7
3.	Water	9
4.	Plants	18
5.	Animals.....	19
6.	Energy and Natural Resources	20
7.	Environmental Health	21
8.	Land and Shoreline Use	28
9.	Housing	31
10.	Aesthetics	32
11.	Light and Glare	33
12.	Recreation	35
13.	Historic and Cultural Preservation	35
14.	Transportation	37
15.	Public Services	47
16.	Utilities	49
C	SIGNATURE	50
	REFERENCES	51

Tables

Table 1 Wetland rating and applicable buffer distances..... 10

Table 2 Wetland mitigation ratios 17

Table 3 Bus Base North estimated peak traffic generation by time of day (2024) 40

Table 4 Bus Base North estimated peak traffic generation by time of day (2042) 41

Table 5 Bus Base North estimated daily traffic generation (2024) 42

Table 6 Bus Base North estimated daily traffic generation (2042) 43

Table 7 Intersection level-of-service, 2024 AM/PM peak hour – Build vs. No Build..... 44

Table 8 Corridor level-of-service, 2024 AM/PM peak hour – Build vs. No Build 45

Table 9 Intersection level-of-service, 2042 AM/PM peak hour – Build vs. No Build..... 46

Attachments

Attachment A Figures

Attachment B Bus Base North Ecosystem and Wetland Delineation Technical Memorandum

Attachment C Bus Base North Hazardous Materials Technical Memorandum

Attachment D Bus Base North Noise and Vibration Technical Memorandum

Attachment E Bus Base North Visual and Aesthetics Resources Technical Memorandum

Attachment F Bus Base North Historic and Archaeological Resources Report

Attachment G Bus Base North Transportation Technical Report

A BACKGROUND

1. Name of proposed project, if applicable:

Bus Base North Project (the project)

2. Name of applicant:

Sound Transit (Central Puget Sound Regional Transit Authority) is the project proponent and State Environmental Policy Act (SEPA) lead agency.

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

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4. Date checklist prepared:

June 2020

5. Agency requesting checklist:

Sound Transit

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

The Sound Transit Board of Directors will make a decision about whether to advance the project into final design after completion of the environmental review process. Sound Transit would select a design/build contractor for the project in 2021. Following selection, the design/build contractor would develop the detailed construction documents for the project and permit applications would be submitted to the City of Bothell and other permitting agencies. Construction is anticipated to start in 2021 and to be completed in 2023 prior to the start of Bus Rapid Transit (BRT) services in 2024.

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

Sound Transit has no plans for future additions or expansion of this proposed project other than the future potential conversion of more of the fleet to battery-electric buses.

The project is related to Sound Transit's proposed SR 522/NE 145th BRT Project and the I-405 BRT Project in that the buses that would serve those routes would be maintained at this facility. The facility would also serve other Sound Transit bus fleet.

The Washington State Department of Transportation (WSDOT) is undertaking a number of projects throughout the I-405 corridor implementing improvements identified in the *I-405 Master Plan*, which were previously evaluated programmatically through an environmental impact statement (WSDOT, 2002). One of the projects that WSDOT is currently implementing is the I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project. As a part of that project, WSDOT proposes to build a partial direct access ramp at SR 527 (to the east, north, and south) to provide connections to the Canyon Park Park-and-Ride. This project is related to the Bus Base North (BBN) project because, once constructed, buses could use this direct access ramp to access the bus base. Construction of this project is anticipated to begin in 2021 with an estimated three to four-year construction period.

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

These previously prepared documents relate to the proposal:

- *Final Supplemental Environmental Impact Statement for the Regional Transit Long-Range Plan Update* (Sound Transit 2014b)
- *Bus Base North Draft Geotechnical Data Report* (August 2019)
- *Bus Base North Phase I Environmental Site Assessment* (January 9, 2018)
- *Bus Base North Draft Phase II Environmental Site Assessment* (July 26, 2019)
- *Technical Memorandum: BRT Bus Base Site Evaluation and Screening* (July, 2019)

Documentation that has been prepared in support of this checklist is attached and listed in the table of contents.

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.

No applications for other proposals directly affecting the Bus Base North project and property are known or pending government approval.

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

The following government approvals or permits are anticipated for this project:

- U.S. Army Corps of Engineers/Section 404 Nationwide Dredge and Fill Permit
- Washington State Department of Ecology (Ecology) 401 Certification
- Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit, including approval of a request for chemical treatment if needed

- Puget Sound Clean Air Agency Notice of Construction Permit, Spray Coating Operations Supplemental Form
- City of Bothell
 - Conditional Use Permit
 - Critical Areas Alteration Permit
 - Landscape Plan Approval
 - Grading Permit
 - Right-of-Way Permit
 - Storm Drainage Side Sewer Permit
 - Commercial Building Permit
 - Fire Code Construction Permit
 - Fire Code Operational Permit
 - Sign Permit

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

The proposed project is a bus operations and maintenance facility on a 12.5-acre site, programmed and sized to maintain, service (including fuel and wash), and store up to 120 buses. These buses include the fleet that would operate on the proposed I-405 and SR 522/NE 145th BRT lines, as well as ST Express buses from existing lines of bus service. See Attachment A, Figure A-3 and Figure A-4, for site plans.

Most of the bus fleet to be served at the facility is expected to be articulated buses, along with some double-decker coaches. The fleet would be primarily diesel/electric hybrid buses, but approximately 10 of the buses would operate with battery-electric propulsion when the project opens. The facility would be configured to allow for the future potential conversion of the bus fleet to battery-electric buses if Sound Transit determines that to be an appropriate vehicle technology. Sound Transit currently anticipates that approximately 250 employees would work at or out of this new facility over the course of three shifts during a 24-hour period. The programming for the facility includes the following types of structures and component areas:

- The maintenance and operations building would be the primary structure on-site with a total building footprint of approximately 58,000 square feet. This building would include two floors. The first floor is anticipated to include approximately 57,000 square feet of floor area, and the second floor would include approximately 19,000 square feet of floor area, for a total building floor area of approximately 76,000

square feet. The ground floor is expected to house shop and maintenance bay functions and maintenance offices, while operations offices, dispatch areas, driver areas, and administrative functions would likely be located on the second floor. The building would also include an enclosed paint booth, designed in accordance with regulatory requirements. The paint booth would be used for touch ups and damage repairs, as well as for full coach repainting as the bus fleet ages or changes. The booth would likely be used between 4 to 8 times per month for about 10 to 12 hours each time.

- Storage/parking for the 120 buses would occur at the ground level in the eastern portion of the site, set back from 20th Avenue SE. Access to the bus parking area would be from a bus-only entrance/exit driveway from 20th Avenue SE along the southern property boundary. As shown in Attachment A, Figure A-3, the bus parking area includes space for the electrical charging infrastructure that would be needed for the potential future conversion to a battery-electric bus fleet.
- Above the ground-level bus parking area, a second-story parking deck, approximately 105,000 square feet in area, would be provided for employee and visitor parking. Approximately 250 parking spaces would be provided on this deck for employees, visitors, and non-revenue vehicles (vehicles used by staff for service and other non-customer transportation uses). This parking deck would cover the bus parking area providing weather protection for the parked buses, an overhead structure to attach lighting, and a structure to attach potential future overhead electric charging equipment. Automobile access to the parking deck would be from a second driveway from 20th Avenue SE, just north of the bus entrance/exit driveway, to a dedicated drive and ramp. The parking deck would likely include an elevated pedestrian walkway directly into the second floor of the maintenance and operations building and would also include an elevator and egress stairs, as required by code, to provide pedestrian access to the ground-level bus parking area below.
- An approximately 100-square-foot security building would be located at the bus entrance/exit driveway to monitor access and help control the ingress and egress of buses at the site. Entrance and exit gates would be located on either side (to the north and south) of the security building. Two security guard parking spaces would be provided just northeast of the security building.
- A bus wash building, approximately 4,500 square feet in size, would accommodate a fully enclosed, two-bay, drive-through bus wash operation.
- A fueling facility would be provided, including an approximately 1,000-square-foot support systems building and an approximately 3,000-square-foot canopy over two fueling lanes. The support systems building would include lube tanks for fluids used at the fuel island, an air compressor to run the pumps and equipment at the fuel island, vacuum equipment used to clean the buses during servicing, computerized equipment for the fuel/fluid management systems, a custodial room, and staff restrooms. An area for aboveground fuel tanks would be sited to the north of the fueling facility building.

- Other site improvements would include a new sidewalk along the site’s frontage on 20th Avenue SE, perimeter landscaping, stormwater management infrastructure, a refuse collection area, an electrical area for an emergency generator, 24 uncovered bus parking spaces for “down line” buses (those needing service), and 6 parking spaces for additional non-revenue vehicles.

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

The project site is located in the Canyon Park Subarea of Bothell, Snohomish County, Washington, east of 20th Avenue SE and just south of 214th Street SE (see Attachment A, Figure A-1). The site is within the Canyon Park Business Center. The Canyon Park Business Center is a 17 building, master-planned business community located at the intersection of Interstate 405 and the Bothell-Everett Highway that accommodates a broad range of uses, including office, medical-office, biotechnology, warehousing, manufacturing, retail, dining, and hospitality. The Snohomish County tax assessor parcel number of the project site is 27052900200800. The parcel is located in Section 29, Township 27 North, Range 5 East, Willamette Meridian.

B ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site: (underline one): flat, rolling, hilly, steep slopes, mountainous, other

The topography of the site is relatively flat with a gradual slope east to west. A topographic map of the site is provided in Attachment A, Figure A-2.

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

The steepest on-site slope is approximately 2 percent downgrade from east to west.

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.

Per the Natural Resources Conservation Service (NRCS) Web Soil Survey, the site consists of Mukilteo muck (80 percent of the area) and Everett very gravelly sandy loam (20 percent of the area) (NRCS 2019). According to the Geotechnical Data Report for Bus Base North, soils found on the site include topsoil or crushed rock (up to a depth of 0.5 foot); fill consisting of medium-dense poorly graded gravel with silt (up to a depth of 4.5 feet); fill consisting of loose gray silty gravel with sand (up to a depth of 7 feet);

dense to very dense gray-brown poorly graded sand with silt and gravel (up to a depth of 11 feet); hard gray silt (up to a depth of 14.5 feet); hard gray silt and lean clay (up to a depth of 17 feet); and very dense green-gray silty sand with gravel (up to a depth of 21 feet). Peat layers (up to approximately 6.5 feet thick) were encountered typically within the upper approximately 13 feet. There are no known agricultural soils at the site or in the project area.

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

According to Snohomish County and City of Bothell geologic data, there is no indication or history of unstable soils in the immediate vicinity and the site is not located in the Bothell liquefaction prone deposits map. No geologically hazardous areas, as defined in the Bothell Municipal Code (BMC), are mapped on-site or in the project area. Geologically hazardous areas are defined as areas that may not be suited to development because of their susceptibility to erosion, sliding, earthquake, or other geologic events, which would include unstable soils. The Geotechnical Data Report for Bus Base North confirmed this finding by stating that the seismic hazard for this site can be considered low and per the BMC's definition is not considered a seismic hazard area.

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.

The estimated quantity of earthwork for the building foundations, site grading, retaining walls, and stormwater vault is approximately 140,000 cubic yards of excavation, with an estimated fill amount of approximately 125,000 cubic yards. The specific sources of backfill materials remain to be determined. Fill placed on the site may include concrete, imported fill (soil/rock) materials, and possibly excavated site materials, if they are found suitable for backfilling purposes.

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

Minor and temporary soil erosion could occur as a result of clearing and grading during project construction, primarily during precipitation events. However, the potential for erosion would be minimized with adherence to best management practices (BMPs) approved by Ecology and the City of Bothell, and Sound Transit's standard BMPs described in response to Question B.1.h below.

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

The site is currently undeveloped and is a graded fill pad that has been regularly mowed and maintained. After project construction, approximately 80 percent of the project site—approximately 422,000 square feet—would be covered with impervious surfaces, including pavement, retaining walls along the ramps to the employee parking deck, and building structures.

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

During construction of the project, Sound Transit would implement BMPs (e.g., silt fencing, straw bale barriers, fiber rolls, hydraulic mulch), as required by regulatory agencies to eliminate or reduce erosion from the site, and would prepare and implement an Environmental Compliance Plan and a Stormwater Pollution Prevention Plan to document and help manage BMPs and procedures. All debris and spoil material (materials not used for backfill) generated during construction would be transported off-site to an appropriate disposal facility. The erosion control measures would be adjusted to fit construction and seasonal conditions. With implementation of the erosion control measures to eliminate or reduce erosion during construction, no adverse impacts are expected.

Site erosion is not expected to occur during operations since the entire active site would be paved or enclosed within buildings and the rest of the site would be vegetated/landscaped.

2. Air

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.

Emissions from construction would be temporary, lasting approximately 18 months. Particulate emissions during project construction would be associated with equipment used for land clearing, ground excavation, cut-and-fill operations on-site, and construction of site structures, along with hauling of materials to and from the site. Paving activities would generate temporary emissions of volatile organic compounds. During construction, there would also be exhaust emissions from small-scale construction equipment such as portable diesel generators and worker vehicles. Exhaust emissions include carbon monoxide, volatile organic compounds, particulate matter, and greenhouse gases.

When construction of the facility is complete, emissions from operation and maintenance activities would occur from a number of sources:

- Exhaust would be generated by diesel/electric hybrid buses moving around the site and emissions from employee vehicles and buses traveling to and from the site. Based on a conservative estimate, as noted in Question B.14.f, the number of daily personal and bus vehicle trips to the site in the year 2024 are estimated to be 345 trips entering and 345 trips exiting for a total of 690 daily trips. Operational emissions from vehicle exhaust include carbon monoxide, volatile organic compounds (VOCs), particulate matter, and greenhouse gases.
- VOCs and particulate matter emissions would occur with use of the proposed paint booth in the maintenance building; however, measures to minimize, reduce, or control air emissions would be built into the paint facility, such as exhaust ventilation to remove particulates (appropriately sized for the final design), operational controls in place regarding access to the paint booth while painting is in process, and use of Personal Protective Equipment by staff using the booth. Stationary sources of air

pollutant emissions (such as from the paint booth) are regulated by the Puget Sound Clean Air Agency, which would be consulted for the appropriate permit action prior to the construction of the facility.

- Per Sound Transit’s *Design Criteria Manual* (Sound Transit 2020), an emergency generator would be located on-site to support emergency power loads for the buildings. The *Design Criteria Manual* lists propane as the preferred fuel for emergency generators. Emissions would include oxides of nitrogen, VOCs, carbon monoxide, particulate matter, and greenhouse gases. Emergency combustion engines rated less than 500 horsepower are exempt from air permitting requirements and are assumed to have a negligible contribution to pollutant emissions. If a generator rated 500 horsepower or greater were required, the Puget Sound Clean Air Agency would be consulted for the appropriate permit action.

The proposed project supports expanded bus service, which has the effect of shifting trips from single-occupancy vehicles to transit. This reduction in passenger vehicle trips could result in lower emissions of carbon monoxide, VOCs, mobile source air toxics, particulate matter, and greenhouse gases from vehicle exhaust.

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

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

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

The project is located in an area that is in attainment for all criteria air pollutants. The Puget Sound Clean Air Agency is responsible for enforcing air quality regulations in the Puget Sound region. The agency has developed fugitive dust regulations contained in Section 9.15 of Regulation 1 of the Puget Sound Clean Air Agency that would be followed during construction. In addition, the project would comply with the Puget Sound Clean Air Agency’s Notice of Construction/Order of Approval Program (or the Notification Program), which is required of any new or modified air pollution source prior to construction that affects the level of air contaminants emitted. The permit issued through this program ensures compliance with air pollution control requirements and protects the public from exposure to pollutant concentrations.

An Environmental Compliance Plan, required by Sound Transit’s *Design Criteria Manual* (also referenced in the response to Question B.1.h above), would be prepared to address construction air quality. To reduce air emissions during construction, the project is anticipated to use a suite of best available control measures, likely including some of the following:

- Suppress dust on the construction site with water sprays or other methods
- Prevent dust emissions during transport of fill material or topsoil by covering the load, by wetting down, or by ensuring adequate freeboard on trucks
- Load all trucks, coming to the jobsite or leaving the jobsite, in a manner that prevents dropping of materials or debris on streets

- Promptly clean up spills from transported material on public roads through frequent use of a street sweeper machine
- Schedule work tasks to minimize disruption of the existing vehicle traffic on streets in the vicinity of the project site, minimizing potential idling of vehicles in traffic (vehicle idling typically produces greater emissions than a running vehicle because the engine is not running as efficiently)
- Maintain all construction machinery engines in good mechanical condition to minimize exhaust emissions
- Minimize the idling of diesel engines and ensure that the heavy equipment and trucks used in the project are in good repair, which would be required as part of the contract specifications

During operations and bus maintenance work at the site, the facility would comply with Washington State’s anti-idling regulations. While the potential for buses to idle on the site would depend on specific operations, the functional site layout has been designed to provide a site flow allowing buses to avoid waiting for other vehicles to clear the way, thereby minimizing idling. Buses are also expected to be turned off when parked and then turned on again when being moved for maintenance, fueling, or washing.

Since the project is located in an area that is in attainment for all criteria air pollutants, it does not require a hot-spot analysis or conformity determination.

During project operations, with negligible air emission anticipated as described above, there would be no adverse impacts; therefore, mitigation is not proposed. During operations, the immediate area would experience an increase in air pollutant emissions from vehicle trips generated by maintenance base staff and buses. However, the buses are anticipated to be diesel/hybrid vehicles, which would have fewer emissions than diesel buses, and the increase in activity would not likely cause or contribute to a potential exceedance of the National Ambient Air Quality Standards.

3. Water

a. Surface water:

- 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.**

Wetlands

Two wetlands occur on-site (i.e., entirely within the project site boundaries), in the southwest portion of the parcel (**Table 1**). See Attachment A, Figure A-5. These on-site features were formally delineated in the field during site visits conducted in April 2019. **Table 1** also includes off-site wetlands in the project vicinity.

Table 1 Wetland rating and applicable buffer distances

Wetland name	Wetland location	Wetland category ¹	Habitat score ¹	BMC required standard buffer width (feet)
WBO-1	On-site	III	Less than 20	75
WBO-2	On-site	III	Less than 20	75
WBO-3	Off-site	III	Less than 20	75
WBO-4	Off-site	II	Less than 20	100
WBO-5	Off-site	III	Less than 20	75
WBO-6	Off-site	III	Less than 20	75
WBO-7	Off-site	II	More than 20	105

SOURCE: BMC 14.04.530.F.1.a

NOTES: ¹2014 Wetland Rating System translated to the 2004 Wetland Rating System (Ecology 2014, revised July 2018); bold text indicates on-site wetlands. BMC = Bothell Municipal Code

Wetland WBO-1 is a 0.04-acre depressional, palustrine emergent (PEM) and scrub-shrub (PSS) wetland, adjacent to 20th Avenue SE. The wetland is located in a depression that appears to have been excavated out of the surrounding fill pad. A culvert, not contiguous with the wetland, is present at the southern extent of the depression, but would only be hydrologically connected to this wetland during extreme rain events (unexpected, unusual, severe, or unseasonal weather). In the event that hydraulic connection occurs, water would flow south and southeast through a piped system and into a stormwater detention pond approximately 0.5 mile to the southeast.

Wetland WBO-2 is a 0.04-acre depressional PEM wetland, approximately 25 feet east of Wetland WBO-1. Similar to Wetland WBO-1, Wetland WBO-2 is located in a depression that appears to have been excavated out of the surrounding fill pad. The wetland collects stormwater that is piped in through an 8-inch plastic culvert in the southeast extent of the wetland. A stormwater overflow pipe is also located in this area of the wetland that, when activated, likely flows south through the same system as WBO-1.

Five additional wetlands shown in **Table 1** were mapped off-site, in the vicinity of the project parcel, also shown in Attachment B. Visual observations only, rather than delineations, were used to estimate the boundaries of these wetlands, since access to these off-site areas was not available.

Wetland WBO-3 is a depressional PSS and palustrine forested (PFO) wetland located off-site but immediately adjacent to the southeast border of the project site within a Native Growth Protection Area designated by the city. No hydrologic connection was observed between the project parcel and Wetland WBO-3 during the site visits. However, Stream SBO-1, described below, is connected to WBO-3 through an off-site culvert that runs along the edge of the parcel to the east.

Wetland WBO-4 is a large depressional, palustrine aquatic bed (PAB), PEM, PSS, and PFO wetland complex located approximately 50 feet off-site, northeast of the project site's northeast corner. Wetland WBO-4 does not extend into the project site due to a dirt utility line access road approximately 4 to 6 feet higher in elevation than the project parcel; however, the wetland is hydrologically connected to the project parcel by Stream SBO-1 through a culvert that runs under the utility corridor.

Wetland WBO-5 is a depressional PEM and PSS wetland located off-site, approximately 75 feet northwest of the project site's northwest corner. Based on aerial imagery, the wetland appears to have been excavated between 2009 and 2010 for use as a stormwater facility, as inundated depressions now appear where a grass field existed in photos taken in May 2009 (Google Earth Pro 2019). However, due to its proximity to North Creek, it may have historically been a wetland associated with the creek's floodplain. Wetland WBO-5 is isolated from the project area by 20th Avenue SE. No hydrologic connection was observed between the project parcel and Wetland WBO-5 during the site visits.

Wetland WBO-6 is a depressional PEM and PSS wetland located off-site, approximately 125 feet west of the project site's southwest corner. Wetland WBO-6 is isolated from the project area by 20th Avenue SE. No hydrologic connection was observed between the project parcel and Wetland WBO-6 during the site visits. Similar to WBO-5, this wetland appears to have been excavated as a stormwater pond and, due to its proximity to North Creek, may have historically been associated with the creek's floodplain. The wetland boundary was estimated based on the city's wetland mapping.

Wetland WBO-7 is a large depressional PEM, PSS, and PFO wetland complex located off-site, approximately 200 feet west of the project site's northwest corner. The wetland is associated with North Creek. Wetland WBO-7 is isolated from the project area by 20th Avenue SE. No hydrologic connection was observed between the project parcel and Wetland WBO-7 during the site visits. The wetland boundary was estimated based on the city's wetland mapping.

Streams

One stream (SBO-1) occurs on-site. This feature is found in the northeast corner of the project area (Attachment A, Figure A-5). SBO-1 originates off-site to the north and drains to the south. Stream SBO-1 enters the project area through a perched culvert (i.e., an outlet elevated above the downstream water surface) under a utility corridor to the north, then flows through the project area in an open channel for approximately 55 feet before exiting the site and then traveling through a culvert off-site, immediately adjacent to the eastern boundary of the project area. The stream then flows into Wetland WBO-3 south of the project area, then through a series of pipes and ditches along 23rd Drive SE before joining a wetland complex north of North Creek and approximately 0.6-mile south of the project parcel. Several fish blockages are mapped as occurring downstream of the project parcel. This, combined with a blocked and perched culvert on the site, makes it unlikely that the portion of this stream within the project area supports fish. However, within the project area, the slope of the stream is gradual and less than 1 percent and would meet criteria for a fish-bearing stream (Type F) per the Washington Administrative

Code (WAC) definitions (WAC 222-16-030). Therefore, Stream SBO-1 would be classified by the City of Bothell as a Type F water.

Approximately 100 feet off-site to the west (across 20th Avenue SE from the site), Stream SBO-2 is an unnamed tributary to North Creek that flows southwest (Attachment A, Figure A-5). The stream originates in Wetland WBO-5 and flows southwest under 214th Street SE. The stream continues west and southwest before joining North Creek approximately 0.2 mile from the road crossing at 214th Street SE. Stream SBO-2 is classified as a fish-bearing (Type F) stream with intermittent flow, with no documented use by salmonids.

Per BMC 14.04.930.D.2, Type F streams, such as SBO-1 and SBO-2, have a regulatory buffer of 100 feet.

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.

Yes, the two wetlands on-site (WBO-1 and WBO-2) would be filled and disturbed for the two driveways into the proposed bus base facility and for the proposed bioretention stormwater infrastructure. 18,042 square feet of permanent impacts to the buffers of Wetlands WBO-1 and WBO-2 are anticipated. Paving would also occur within 200 feet of off-site Wetland (WBO-3), and permanently impact 17,765 square feet of wetland buffer. Work would be required within 200 feet of Stream SBO-1 for paving and landscaping, but no project work is proposed within the stream itself or within the stream's regulatory buffer (100 feet). However, the buffer area of Stream SBO-1 could conceivably be a suitable location for some portion of wetland or wetland buffer mitigation on-site, and temporary disturbance to the area (grading, plantings, irrigation, access for monitoring, etc.) could occur as appropriate.

During construction, dewatering is anticipated for the installation of underground stormwater detention vaults. Depending on the vault location, dewatering may occur within 200 feet of off-site wetland WBO-3, near the southeast corner of the site, and/or off-site wetland WBO-6 near the southwest corner of the site. Based on information in the project's Environmental Database Report (Attachment C, Appendix A), the groundwater in this area flows to the east and southeast. A local drawdown of groundwater during installation of the detention vaults is not anticipated to lower groundwater levels much below the lowest site elevation nor impact these wetlands.

WBO-3 is not likely affected by dewatering as it is not a marginal wetland; it receives hydrology from a variety of sources, including Stream SBO-1, groundwater, precipitation, and overland flow. WBO-3 soils are mapped as Mukilteo muck, which indicates a well-established high groundwater table. This soil type extends in all directions from the wetland, not just the project site. In addition, the dominant wetland vegetation (red-osier dogwood and Sitka willow) is strongly hydrophytic.

WBO-6 appears to have been excavated as a stormwater pond and is close to North Creek and other associated wetlands; it likely receives hydrology from a variety of sources, including: precipitation, overland flow, and localized groundwater. WBO-6 is several feet lower than the low point of the project site and would likely maintain a groundwater connection. As with WBO-3, its soils are mapped as Mukilteo muck, which indicates a well-established high groundwater table.

- 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.**

The on-site wetlands, WBO-1 and WBO-2, would need to be filled to accommodate the two driveways into the proposed bus base facility and for the proposed stormwater infrastructure. Therefore, this analysis assumes that the entire area of Wetland WBO-1 (0.04 acre) and the entire area of Wetland WBO-2 (0.04 acre) would be filled, for a project total of 0.08 acre of wetland fill. Fill material would come from an approved off-site source.

No fill or dredge material would be placed in or removed from streams or stream buffers, on- or off-site as part of this project with the possible exception of soils that might be used for potential wetland mitigation and plantings within the buffer area of SBO-1, as described above.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

The project would not require surface-water withdrawals or diversions.

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

The proposed project does not occur within a 100-year floodplain.

- 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.**

Operation of the project would not involve any discharges of waste materials to surface waters. The facility would include two bus wash lanes and a chassis wash bay within a fully enclosed structure on-site. For these operations, the water would be captured via a large-capacity trench drainage system and would travel through a reclaim system and a sand/oil/grit separator before discharging into the sanitary sewer system. The bus wash system would also be connected to a water reclaim system to reduce the water supply required for that function. The site would also include a covered fueling island that would be equipped with trench drains that would drain to an oil/water separator before tying into the sanitary sewer. Water and sanitary services would be tied to the Alderwood Water & Wastewater District services located along 20th Avenue SE. The rest of the site's impervious surfaces would drain to stormwater treatment facilities prior to discharge.

During construction, appropriate BMPs would be in place to control and treat stormwater flows. The site's stormwater facilities would be designed to treat on-site stormwater and to ensure that there would be no direct discharge of untreated stormwater from pollutant-generating pavements to surface-water resources. See also the response to Question B.3.b.1 below regarding management of dewatering water during construction to ensure no waste materials enter surface (or ground) waters, and response to Question B.7.a.2 regarding site cleanup activities.

b. Ground water:

- 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.**

The project would not with draw water from a well for drinking water or other purposes.

According to the Geotechnical Data Report dated August 2019, depth to groundwater at the time of drilling was between 5 to 12 feet, and in some locations no groundwater was observed during drilling.

Other than treated stormwater or possibly construction dewatering if it meets regulatory requirements, no water would be discharged to groundwater. As noted in the response to Question B.3.a.6 above, water from active use areas on the site during facility operation would be discharged to the sanitary sewer system and not to groundwater.

As groundwater levels are variable on-site, stormwater facilities would likely be constructed below the groundwater level in some areas. Construction of stormwater facilities that would likely be below groundwater levels could require dewatering; volumes for dewatering are not currently known and would depend on the final construction method chosen. Dewatering water would need to be treated and meet applicable permit requirements prior to discharge to either ground (or surface) water, especially if it is found to be contaminated (see also response to Question B.7.a.2 below).

- 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.**

No waste material would be discharged into the ground from septic tanks or other sources, as described above. See also response to Question B.7.a.2.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) 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.**

Sources of stormwater runoff would primarily be from impervious surfaces of the project, including the maintenance and operations building, elevated parking deck, security guard house, and fuel support systems building.

There are two existing drainage basins on-site. The basin on the eastern edge of the site, approximately 1.0 acre, drains east and south to an off-site wetland located near the southeast corner of the project site (Wetland WBO-3). The western portion of the site, approximately 11.48 acres, drains to the southwest corner of the site, where stormwater then leaves the site and drains to a private drainage system along the east side of 20th Avenue SE within the Canyon Park Business Park development.

The final stormwater design would match the existing drainage areas to the east and west basins for the developed condition. The final project design would determine the appropriate size and design of stormwater management facilities. Two stormwater detention vaults are currently conceived as the system to manage flows from the west basin, and two detention ponds are currently conceived to manage flows from the east basin. The detention facilities in the east basin would detain stormwater discharging to off-site Wetland WBO-3 to limit changes to the wetland functions and values. Sizing for the detention ponds would be based on meeting the City of Bothell's requirement to protect wetlands from changes in water flows, in terms of pre-project volumes. It is currently anticipated that flows directed to the wetlands in the east basin would be limited to stormwater from landscape areas to match the pre-developed contributing area. For the west basin, it is currently anticipated that flows would include all of the impervious areas for the site and that stormwater treatment would be required in addition to detention. In accordance with the Bothell Stormwater Code requirements, detention for the entire site would be sized to match "forested" pre-developed conditions plus Level 3 flow control prior to off-site discharge.

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

No, it is unlikely that any waste materials associated with the project would enter ground or surface waters as described in other responses above.

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

The project would re-grade the site and create new impervious surfaces. The proposed stormwater collection and disposal methods would control the volume and quality of runoff from those impervious surfaces in accordance with the City of Bothell's requirements for stormwater discharges. The stormwater management concept described above would ensure that drainage patterns in the vicinity of the project site would not be altered and, more specifically, that the proposed condition drainage areas, in terms of square feet to the east and west basins, would match existing conditions.

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

Stormwater runoff, drainage patterns, and groundwater

The measures discussed above (including detention, stormwater treatment, and source controls) are anticipated to be sufficient to control impacts to stormwater runoff, drainage basins, and groundwater. Facilities and operations would be conducted in accordance with state and local regulatory requirements, including BMC 18.04. No negative impacts are anticipated.

Project construction would be completed subject to Water Quality Criteria and in compliance with Washington State Water Quality Standards (WAC 173-201A), including the following:

- Petroleum products, fresh cement, lime, concrete, chemicals, or other toxic or deleterious materials would not be allowed to enter surface waters or onto land where there is a potential for reentry into surface waters. Activity specific pollution prevention measures would be taken. Fuel, solvents, detergents, paint, pesticides, and concrete admixtures would have secondary containment. Fueling would be conducted with a drip pad. Wastewater from exposed aggregate processes, concrete grinding and saw cutting, and new concrete washing and curing water would be collected and treated.
- Construction equipment would be refueled more than 100 feet from surface waters and would be provided with a drip pad. Any fuel tanks stored on-site during construction would require secondary containment.
- Equipment and material staging would occur in areas to prevent the contamination of any wetland or water body, consistent with project permits. Delineation of construction buffers would be placed to prevent construction near wetland boundaries.
- Fuel hoses, oil drums, oil or fuel transfer valves, fittings, etc., would be checked regularly for leaks, and materials would be maintained and stored properly to prevent spills.
- Compliance with applicable permits would occur, including a Stormwater NPDES General Permit, a Stormwater Pollution Prevention Plan, and a Spill Prevention Control and Countermeasures Plan.

Surface water

No temporary impacts to surface waters are anticipated, as noted above. However, unavoidable permanent impacts to wetlands and associated buffers, would occur with the filling of Wetlands WBO-1 and WBO-2 and disruption of the existing buffers, as well as the work within the buffer of Wetland WBO-3 described above. These impacts would be subject to the mitigation requirements described in BMC 14.04.540, and fill of the wetlands would also be subject to mitigation to satisfy U.S. Army Corps of Engineers standards.

While mitigation banking generally is the mitigation approach preferred by the Corps (followed by in-lieu fee programs, then permittee-responsible mitigation), the City of Bothell’s mitigation standards require one or more of the following actions, in order of preference:

1. Permittee-responsible mitigation, including:
 - a. Restoration (reestablishment or rehabilitation)
 - b. Establishment (creation)
 - c. Enhancement of degraded wetlands (along with Restoration or Establishment)
2. Purchasing credits from an approved Mitigation Bank in Water Resource Inventory Area 8, such as the Keller Farm Mitigation Bank, if available and feasible
3. Purchasing credits from an approved in-lieu fee program if available and feasible

Table 2 includes the City of Bothell’s wetland and wetland buffer mitigation ratios for Category III wetlands, as found in the project area and off-site. The BMC does not specifically require a mitigation ratio specific to wetland and stream buffers.

Table 2 Wetland mitigation ratios

Wetland category and type of impacted wetland and associated buffer	Restoration or creation	Enhancement only
Category III	2:1	3:1 to 6:1

SOURCE: BMC 14.04.540.F, BMC 14.04.540.G

A mitigation strategy would be chosen that would be acceptable to both the Corps and the City of Bothell. Given the poor quality of wetlands that would be impacted, mitigation for their loss, whether on-site or off, would contribute to an improvement in overall ecological functions in the watershed. With regard to in-basin restoration, Sound Transit has preliminarily assessed possible mitigation sites within the same subbasin in the City of Bothell limits. Specifically, Sound Transit reviewed the 2017 Water Resource Inventory Area 8 Chinook Salmon Conservation Plan Update, U.S. Fish and Wildlife Service National Wetland Inventory, and aerial mapping for potential wetland enhancement sites, and has not, as of yet, identified a suitable location. Sound Transit also consulted with City of Bothell staff who were not aware of candidate sites. At this time, Sound Transit proposes mitigation by purchasing credits at an approved mitigation bank; however, Sound Transit will continue to coordinate with the city on a final mitigation strategy during the permit process.

4. Plants

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

- deciduous tree: black cottonwood
- evergreen tree: N/A
- shrubs: N/A
- grass: reed canarygrass
- pasture: N/A
- crop or grain: N/A
- Orchards, vineyards or other permanent crops: N/A
- wet soil plants: fringed willowherb
- water plants: N/A
- other types of vegetation: knotweed, tansy ragwort, Himalayan blackberry, stinging nettle

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

Vegetation on the project site is primarily mowed grass with a few mature black cottonwood trees along the southern border. Wetland vegetation within WBO-1 and WBO-2 consists primarily of grasses with some invasive species such as tansy ragwort, reed canarygrass, and Himalayan blackberry. WBO-1 also includes some native black cottonwood saplings. Prior to construction, the majority of the site would be cleared, including vegetation within Wetland WBO-1 and WBO-2. Removal of mature black cottonwood trees would be limited where possible. No vegetation would be removed from the buffer of Stream SBO-1.

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

No listed threatened or endangered plant species are mapped as occurring near the site.

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

Landscaping would be provided on the perimeter of the site in designated areas and in accordance with local ordinances. Existing trees may be preserved along the boundary of the site where possible, and vegetation/landscaping would be provided in accordance with Sound Transit’s design standards and would be low maintenance and provided with irrigation where needed. Enhancement of the stream buffer with native plants may occur and would be determined through compliance with the City of Bothell’s Critical Area Alteration Permit process.

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

Invasive species and noxious weeds observed on-site include reed canarygrass, Himalayan blackberry, tansy ragwort, and knotweed. The Washington State Noxious Weed Control Board designates reed canarygrass and Himalayan blackberry as Class C noxious weeds, and tansy ragwort and knotweed as Class B noxious weeds.

5. Animals

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.

birds: song sparrow, American robin, American crow

mammals: small mammals and rodents

fish: none anticipated to occur in on-site stream

Wildlife species in the study area likely include birds (e.g. song sparrows, American robin, American crow) and small mammals (e.g., Virginia opossum, eastern cottontail, eastern gray squirrel) that are well adapted to living in a highly altered landscape and can tolerate or benefit from human disturbance. Few habitat features are present on the site, and these areas are limited to the northeast and southeast portions of the site where there is some forested cover.

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

No listed threatened or endangered animal species are known to occur on the site. No mammal or bird species are mapped as occurring near the site. The closest known fish species occurrence is in North Creek, approximately 0.2 mile to the west, where federally listed Chinook salmon and steelhead trout are known to occur (WDFW 2019).

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

The Puget Sound area is located within the Pacific Flyway, which is a flight corridor for migrating waterfowl and other avian fauna. The Pacific Flyway extends south from Alaska to South America.

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

Wildlife use is limited by the lack of habitat features and, therefore, impacts to wildlife as a result of the project are not anticipated. The project would not interfere with or alter the Pacific Flyway. Additionally, with the implementation of stormwater mitigation measures as discussed in response to Question B.3.d, no impacts to off-site fish species are anticipated.

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

Rodents (Old World rats and mice, eastern gray squirrel) are likely present on or near the site.

6. Energy and Natural Resources

- 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.**

Electricity is anticipated to be the primary source of energy to meet the bus base operations and maintenance requirements. This would include lighting, ventilation, elevator operation, roll-up doors, security systems, and general power needed in office and maintenance shop settings. Electricity would also be needed for electric vehicle charging (Sound Transit cars and other service vehicles and employee personal vehicles), as well as for equipment charging stations throughout the site.

Some electric power would be needed in the near term for recharging of the 10 battery-electric buses described above. Electricity would also be needed for a future battery-electric bus fleet if, or when, the bus fleet is converted more fully to battery-electric vehicles. The Bus Base North facility has been designed to be forward compatible to easily allow for a conversion to an all-electric fleet. Space for charging equipment for the buses stored on-site has been accommodated and future off-site improvements would not be required. The bus base site is close to one of the Snohomish Public Utility District's new substations (Fitzgerald). Currently, the Fitzgerald substation has 3 megawatts of capacity available, which would serve the proposed bus base facility and a portion of the potential future battery-electric bus charging stations. In the future, the Fitzgerald substation may have an additional 3.5 megawatts that become available. At the future time of the potential conversion to a battery-electric bus fleet, the electric needs would be coordinated with the Snohomish Public Utility District.

Rooftop solar photo-voltaic (PV) arrays would be installed in keeping with Sound Transit's sustainability goals. The energy generated from the PV system would be used to supplement the power needs of on-site facility operations.

A diesel fueling station for buses would be located on-site. A propane-powered emergency backup generator would be located adjacent to the fueling station.

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

Solar usage by adjacent properties is not anticipated to be affected by structures proposed by the project. The proposed buildings on the site are sufficiently set back from the perimeter property lines that shadows cast as the sun moves across the sky would not affect neighboring properties' use of solar energy.

- 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 is committed to environmental stewardship, including energy conservation. The final facility design will incorporate energy conservation features, including the PV solar arrays and LED light fixtures. Final design will also take advantage of natural lighting and ventilation, as well as selection of equipment, appliances, and systems that feature energy efficiency, safety, and durability to help

control energy impacts over the life of the facility. The facility would be designed to meet Leadership in Energy and Environmental Design (LEED) silver certification.

7. Environmental Health

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.

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

The *Bus Base North Hazardous Materials Technical Memorandum* (Attachment C) identifies potentially contaminated sites of concern on or near the project site, including the findings of the Phase I and Phase II Environmental Site Assessments (ESA) completed by Shannon & Wilson for the Bus Base North property in the fall of 2017 and summer of 2019, respectively. The technical memorandum also identifies likely hazardous materials to be used and wastes to be generated by the facility operations.

As part of the technical memorandum, a review of government environmental records was conducted that identified 12 sites within 0.125 mile (660 feet) of the project site with a prior regulatory action reported, such as a record of underground storage tanks for fuel, a hazardous materials storage inspection, or an application for a construction general stormwater permit. Nothing from the records review was identified on the project site. None of the database listings reflect a release of hazardous materials from the off-site locations to the environment or indicate that an environmental violation has occurred. During a July 2019 site visit of the hazardous materials study area (described in Attachment C), no additional sites of concern for hazardous materials were identified near the project site.

The work conducted for the Phase I ESA identified that the site included earthwork fill of unknown origins, which was found to include concrete, glass, and metal debris. The fill material represents a potential source of contamination and suggests that other waste materials may be present that could contain hazardous substances or petroleum products. Aerial photographs from approximately 2007 show unidentifiable objects stored outdoors on an unpaved surface in the eastern portion of the property; however, no information was available to determine the nature of these items. As noted in the communication records included with the Phase I ESA, this project site was previously owned by Immunex and is therefore associated with the former Amgen/Immunex facility, which is now the AGC Biologics facility adjacent to the east of the site. The former Amgen/Immunex facility used hazardous substances and generated hazardous waste (see Attachment C). Therefore, a potential exists that hazardous substances or petroleum products were stored in this eastern portion of the site and could be a potential source of contamination.

The soil borings conducted with the Phase II ESA found limited petroleum product within shallow soils (2 to 3 feet below ground surface) and within groundwater at the eastern end of the site; evidence of petroleum contamination was not encountered outside of the eastern end of the site. Based on the analytical data and field observations, the Phase II ESA noted that petroleum contamination would likely be

encountered during construction activities on the eastern end of the site within shallow soils and groundwater. Contamination may be encountered in other areas of the site, particularly if debris is present within the fill.

None of the petroleum hydrocarbon concentrations from the soil/groundwater samples collected during the Phase II ESA work exceeded Model Toxics Control Act Method A cleanup levels. Arsenic was detected above Method A cleanup levels within one soil sample in the north-central portion of the site and within groundwater samples taken from two direct-push borings in the eastern portion of the site. The groundwater sample taken from the western end of the site did not contain detectable arsenic. The slightly elevated arsenic concentrations within groundwater are likely associated with soil chemistry that mobilize naturally occurring arsenic, which can be attributed to either peat within the subsurface of the site or the petroleum contamination on the eastern end.

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.

There is potential to encounter prior contamination (hazardous materials) during construction as described above. There are no other known materials or hazardous infrastructure (such as gas transmission lines) on the site. According to the National Pipeline Mapping System (NPMS) public viewer, the nearest natural gas distribution line is located more than 9,200 feet away, along 186th Street SE running east-west (NPMS 2020). The nearest hazardous liquid pipeline is more than 7,500 feet away, to the east of 45th Avenue SE running north-south. While the NPMS does not specify the hazardous liquid being carried in this pipeline, the Revised Code of Washington (RCW) 81.88.010 defines a hazardous liquid to be petroleum, petroleum products, or anhydrous ammonia.

To address potential contamination that may be encountered on-site, as described above, prior to and/or during construction Sound Transit would ensure that any hazardous materials found on-site are cleaned up or appropriately contained as legally required. As design progresses, site plans would be developed detailing the area of contamination to the extent known, the type of contamination, and remediation actions. Soils excavated for off-site transport that are potentially affected by contaminants would be characterized for waste profiling and disposed at a Subtitle D landfill.

Dewatering may be required for installation of the stormwater vaults, depending on the actual depths of groundwater and time of year for construction. In addition, the native soils include some silty fines that tend to require more extensive dewatering treatment; such measures may include ponds, filter systems, and/or chemical treatment. If dewatering occurs, discharge to ground or surface waters would meet the requirements of the NPDES construction permit. The use of a chemical treatment would require written approval from Ecology. Alternatively, if approved by the Alderwood Water & Sewer District, dewatering water could be discharged to the sanitary sewer system as long as the discharges meet the district's pretreatment requirements.

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, relatively small quantities of fuel for various pieces of small equipment would likely be stored on-site. This could include diesel, gasoline, and propane. Heavy equipment fueling would likely occur using an on-site fuel delivery provider. Other construction-related materials likely would include solvents and adhesives used in relatively small quantities.

After construction, buses and automobiles that use gasoline, oil, and diesel would be parked on-site, and some leaks from these vehicles could occur. During facility operations accidental spills of fuels, lubricants, and hydraulic fluids from on-site equipment could occur. The project would likely store, use, or produce the following toxic or hazardous chemicals during the operating life of the project:

- **Maintenance and operations building:** The maintenance and operations building is expected to house and generate the bulk of the hazardous materials associated with the maintenance of buses. Hazardous materials would likely include petroleum lubricants, machinery cleaning solvents, on-board fire suppression system recharge units, engine coolant and refrigerants, lead-acid batteries, compressed gas cylinders, hydraulic hoist fluid, paints (paint booth), fire extinguishers, rechargeable batteries, and general cleaning supplies. In the future, if a battery-electric bus fleet is stored on-site, lithium-ion batteries would be expected to be used and would be maintained and stored on-site. Both new and waste versions of these hazardous materials would be stored within the maintenance and operations building. In addition, the maintenance and operations building would have a dedicated fire suppression system that, depending on the fire code requirements, could be a potential source of contaminants. Because of the types of flammable materials used or stored in the maintenance building, the fire suppression system could be required to use materials other than just water, such as foam, which uses organic solvents, or a high-pressure carbon dioxide extinguishing system.
- **Bus storage and elevated parking deck:** No hazardous materials are anticipated to be routinely used or stored either under or on the elevated parking deck. Accidental spills, or drips, from buses parked under the parking deck and from vehicles parked on the elevated parking deck could occur. For these instances, emergency spill cleanup kits would be staged at these locations. Wastes generated from cleanup activities, such as paper or cloth materials used to clean up a spill, would likely be removed and disposed of with other wastes from the maintenance and operations building.
- **Security guard house:** The only hazardous materials anticipated to be stored at the security house would be fire extinguishers and rechargeable batteries for communications equipment.
- **Fuel and wash buildings:** Hazardous materials stored and used at the fuel building would include petroleum diesel for revenue service vehicles, unleaded gasoline for non-revenue service vehicles, spill cleanup kits, and cleaning

supplies for interior bus cleaning and disinfection of the operator area. Aboveground storage tanks for diesel bus fuel and unleaded gasoline are also proposed. These aboveground storage tanks would be managed as required by Ecology's Contingency Planning and Facility Oil Handling Standards regulations (WAC 173-180). Double-walled fuel storage tanks would be specified for this project.

4) Describe special emergency services that might be required.

No special emergency services are expected to be required as a result of operations of Bus Base North, or during construction of the project. During construction, a Health and Safety Plan would be implemented by the contractor to protect the health and provide for the safety of both workers and the public as any prior site contamination is removed and handled.

In accordance with National Fire Protection Association 13 2013, 2018 International Fire Code 903, and current BMC Section 20.10.030, the maintenance facilities would install sprinklers and standpipes for fire suppression purposes; a minimum of one standpipe is required for use during project construction. A Hazardous Materials Identification System (HMIS) would be required for all buildings on the site. The HMIS would contain an inventory of products and would be used by the Bothell Fire Department to ensure compliance with the required space and quantities of chemicals used in the hazardous materials zone/area.

Sound Transit has an established program for responding to emergencies, including a spill response and hazardous materials handling plan. Therefore, the potential of long-term recurring releases of hazardous materials from bus operation and maintenance activities would be low. Accidental spills or drips from buses parked under the parking deck and from vehicles parked on the elevated parking deck could occur. For these instances, emergency spill cleanup kits would be staged at these locations. Wastes generated from cleanup activities, such as paper or cloth materials used to clean up a spill, would likely be removed and disposed of with other wastes from the maintenance and operations building.

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 and would be managed by Sound Transit through design, construction, testing, and commissioning of the facilities. The operational risks related to the use, storage, and disposal of hazardous materials would be integrated into Sound Transit's Safety and Security Program through the preparation and implementation of a Safety and Security Management Plan specific to Bus Base North. Sound Transit has a policy to meet or exceed federal safety and security process requirements on all projects.

Facility operations that would involve the use of hazardous materials, as described above, would be managed as required by Ecology's Solid Waste Handling Standards (WAC 173-350) and Ecology's Dangerous Waste Regulations (WAC 173-303). Section 19 (Operations and Maintenance Facility) of Sound Transit's *Design Criteria Manual* puts forth additional requirements for the design of the facility to ensure compliance with appropriate regulations for the storage and handling of hazardous materials. Compliance and implementation of these specifications and measures

would reduce or control environmental health hazards. A maintenance facility could result in an environmental health hazard if there were an uncontrolled accidental release of hazardous materials such as from a fuel spill. However, hazardous waste generated at the facility would be managed according to applicable regulatory requirements (Washington State Solid Waste Handling Standards, WAC 173-350) that would minimize exposure risk. In addition, the facilities would be designed and constructed with engineering controls to limit and contain releases and spills.

All potentially hazardous materials used during construction would be handled and stored in accordance with state and federal hazardous materials handling requirements. If unanticipated residual soil or groundwater contamination is encountered in portions of the project site during construction activities, the contaminated soil and groundwater would be remediated as needed. Consistent with state and federal regulations, a formal plan would be developed for the removal and treatment or disposal of contaminated soil and groundwater, which would include measures to minimize human exposure. Removal of any contamination may contribute to an improvement in overall environmental health.

No environmental health hazards are expected to occur as a result of either construction or on-going activities at the site. No additional measures to reduce or control environmental health hazards are needed.

b. Noise

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

No noise sources exist in the area that would affect the project. A bus and vehicle maintenance facility for the Northshore School District and the City of Bothell is adjacent to the north, and multi-story office buildings and a large warehouse/manufacturing facility are located to the south.

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.

The potential for operational noise impacts from the project was determined based on application of the Federal Transit Administration (FTA) General Noise assessment and the Washington State assessment methods. These methodologies were used to predict noise levels from bus transit operations and to evaluate the impact on nearby noise-sensitive receivers. BMC Chapter 8.26 also regulates noise within the City of Bothell. BMC Chapter 8.26 regulates both the hours of allowable construction and the maximum allowable operation noise levels based on the Washington State Environmental Designation for Noise Abatement (EDNA). BMC 8.26.040 sets maximum permissible noise levels consistent with the EDNA in WAC 173-06-040. An analysis of the potential noise levels generated during project construction and operation was conducted to confirm the ability of the project to comply with Bothell's noise ordinance requirements. Detailed findings of the project noise (and vibration) analysis is provided in Attachment D, *Bus Base North Noise and Vibration Technical Memorandum*.

This analysis demonstrates that the project is not anticipated to exceed any maximum permissible noise levels.

Operation of the facility would generate noise associated with the following activities:

- Bus operations: Typical noise from buses entering and leaving Bus Base North would include noise from tires, propulsion motors, air conditioning, and other auxiliary equipment on the vehicles. Buses operating within the Bus Base North site would also include backup alarms when operating in reverse.
- Maintenance and operations building/wash building, fuel island: Bus Base North would accommodate daily servicing and cleaning, inspection and repairs, and storage of buses. Associated noise sources would include: repairs involving the use of hand tools and mechanical equipment; bus engine testing; blowers associated with the enclosed bus wash; the vacuum system and an air compressor associated with the vehicle blow down facility; horn testing; employee vehicle trips; and bus movements within the site.
- Employee and visitor parking: Typical parking lot sources of noise are vehicle engine noise, opening and closing of car doors, and people talking.

Operations at the Bus Base North facility would occur 24 hours a day, with noises from the type of activities listed above occurring sporadically during that period. The loudest activity period is anticipated to be during the AM peak period when buses would enter into service at 4:30 a.m. at approximately 10-minute intervals with the majority of the buses off the site by 7:00 a.m. (see **Table 3** and **Table 4** in Question B.14.f).

Over the 24-hours of operation, Bus Base North is predicted to produce a day-night average noise level (Ldn) of 47 A-weighted decibels (dBA) at the closest nearby noise-sensitive receiver, the 220 Towns at Canyon Park residences (a new townhome development currently under construction, located just southeast of the project site along 23rd Drive SE), and an Ldn of 43 dBA at the existing residences on 214th Street SE. This level of noise from the project would be substantially lower than the existing daytime ambient level of an Ldn of 59 dBA at the 220 Towns at Canyon Park site and an Ldn of 68 dBA at the 214th Street SE residences and would not be noticeable. Further, the BBN noise level is predicted to be below the WAC EDNA for commercial noise sources adjoining a residential use of a L_{eq} of 57 dBA for daytime and a L_{eq} of 47 dBA for nighttime. Therefore, long-term noise levels associated with the project would not increase overall existing ambient noise levels and would not exceed either the FTA noise impact thresholds or the City of Bothell noise ordinance requirements at the closest receivers currently existing or under construction, even if residential or mixed-use development were to occur across 20th Avenue SE in the future.

During construction, the project would create noise from heavy equipment that generates relatively high noise levels. The most constant noise source at construction sites is usually engine noise. Mobile equipment generally operates intermittently or in cycles of operation, while stationary equipment, such as generators and compressors, generally operates at constant sound levels. Trucks would be present during most phases of construction and would not be confined to

the project site, so noise from trucks may affect more receivers than other construction noise.

Project construction would increase existing noise levels temporarily and intermittently, and would cease once construction is complete. Typical noise levels during construction are expected to be in the range of 69 dBA at the 220 Towns at Canyon Park homes currently under construction, 325 feet to the southeast of the BBN site. Impact pile driving would be prohibited unless Sound Transit's contractor determines there is no feasible technical alternative, but it has been evaluated in case it is required. If impact pile driving were used for construction, a noise level of 85 dBA at a distance of 325 feet from the site would occur at the 220 Towns at Canyon Park homes currently under construction. If these homes are completed and occupied during construction of this project, these levels of noise during construction would be noticeable.

Construction noise is allowed by the BMC during the weekday daytime hours of 7 a.m. to 8 p.m. and Saturday from 9 a.m. to 6 p.m. Construction noise is prohibited on Sundays and major holidays. For some portions of the work, construction at night and on Sundays would likely occur to accommodate construction scheduling for specific work activities and to reduce potential street closures or disruption of traffic during the day. Construction activities after 10:00 p.m. and before 7:00 a.m. on weekdays, on Sundays, or legal holidays would require a noise variance from the City of Bothell.

The noise analysis also considered potential vibration impacts from construction. Existing residential receivers on 214th Street SE, as well as the 220 Towns at Canyon Park homes currently under construction, are farther than 50 feet from the project site and, based on the FTA Vibration Screening Assessment, would not be impacted by vibrations from the long-term activity associated with the project.

Although construction vibration varies greatly depending on the construction process, type of equipment used, and distance to the closest receivers, building damage or annoyance from construction vibration are not anticipated due to the distance between the site and nearby receivers, including commercial operations in the vicinity. Again, impact pile driving would be prohibited unless Sound Transit's contractor determines there is no feasible technical alternative, but it has been evaluated in case it is required. If used, the closest pile driving would likely occur at a distance of 50 feet or greater from the BBN property boundary resulting in a predicted groundborne vibration level of 0.228 in/sec (PPV), which would not exceed the FTA building damage risk criteria of 0.50 in/sec (PPV).

3) Proposed measures to reduce or control noise impacts, if any:

Noise levels during both construction and operation of the project are not expected to exceed federal, state, or local thresholds. Therefore, no mitigation is proposed. As described above, the contractor would need to apply for a noise variance from the City of Bothell for construction activities proposed after 10:00 p.m. and before 7:00 a.m. on weekdays, on Sundays, or legal holidays.

Prior to construction, Sound Transit would revise the noise and vibration analysis with updated design and construction information. The revised analysis would be presented as part of an updated Noise and Vibration Analysis and Control Plan.

If the updated analysis indicates a potential impact, mitigation measures and best practices would be identified in the updated Noise and Vibration Analysis and Control Plan which would specify methods that the contractor would implement to minimize construction equipment noise and/or vibration levels at sensitive receivers as necessary. These measures could include, but would not be limited to, the following:

- Using low-noise emission equipment
- Using broadband backup warning devices on all vehicles
- Implementing noise-deadening measures for truck loading and operations
- Monitoring and maintaining equipment to meet noise limits
- Installing high-grade engine exhaust silencers and engine-casing sound insulation
- Minimizing use of generators
- Using movable noise barriers at the source of the construction activity where needed
- Using noise-reducing shrouds on pile drivers
- Using alternative pile-driving methods, such as vibratory hammers, hydraulic press-in driving, auger, or pre-drilled pile holes

8. Land and Shoreline Use

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.

The project site is currently undeveloped and vacant. Current land uses adjacent to the site are as follows:

- North: Northshore School District Fleet Maintenance Facility
- East: Laboratory, Scientific, Research and Engineering, Office
- South: Laboratory, Scientific, Research, Engineering, Manufacturing, Office
- West: 20th Avenue SE right-of-way, vacant property owned by others off of the northwest corner of the project site, (east of 20th Avenue SE), and vacant property across 20th Avenue SE

The City of Bothell Zoning and Comprehensive Plan land uses for the site and vicinity are shown in Attachment A, Figure A-6.

The proposed project is a conditionally permitted use for the Canyon Park area and is not expected to affect current land uses on adjacent properties, as described under the response to Question B.8.I below.

- 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 nonforest use?**

The site is located within the Canyon Park Subarea in the City of Bothell. The Canyon Park and North Creek Valley areas have a history of logging and agriculture prior to the 1980s, as described in the *Bus Base North Historic and Archaeological Resources Report* (Attachment F).

No agricultural or forest land of commercial significance would be converted as a result of this project.

- 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:**

No, there are no nearby working farms or forest land businesses that the project would affect or be affected by.

- c. Describe any structures on the site.**

The site is currently vacant and undeveloped.

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

No structures would be demolished.

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

The Canyon Park Subarea features a variety of zoning designations intended to attract a range of land uses and development flexibility (see Attachment A, Figure A-6). Several zoning designations apply to the subject property. When multiple zoning designations are used in combination, the most permissive land use and development standards are to be applied (BMC 12.04.020). The site is zoned Residential – Activity Center (R-AC)/Office – Professional (OP)/Light Industrial (LI).

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

The *Imagine Bothell...Comprehensive Plan, City of Bothell 2015 Periodic Plan and Code Update*, adopted in July 2015 (City of Bothell 2015) designates the project site land uses the same as the zoning: Office – Professional (OP), Light Industrial (LI), and Residential – Activity Center (R-AC) land uses.

The OP designation includes personal and professional service businesses common in office buildings such as banks, medical and dental clinics, accounting, law, real estate, insurance, travel agencies, and similar businesses.

The LI designation is for non-polluting manufacturing and processing, wholesaling, warehousing, distribution, and other similar activities.

The R-AC designation allows for multi-family residential development and is intended to promote a variety of housing types in sufficient numbers to support shopping, dining, and entertainment opportunities within the activity center.

The project site is located within the 989-acre Canyon Park Subarea designated by the City of Bothell. Canyon Park was also designated a Regional Growth Center (RGC) by the Puget Sound Regional Council through adoption of the 1995 update of VISION 2020 (later updated to VISION 2040) (see Attachment A, Figure A-6). RGCs are envisioned to be neighborhoods with higher-density population and employment served by efficient multimodal transportation infrastructure and services. The Canyon Park RGC is approximately 735 acres in size and is made up of a mix of office, light industrial, research and development, retail, and other commercial and residential uses.

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

Not applicable. The project site is located outside of a City of Bothell designated shoreline jurisdiction and, therefore, is not subject to the city’s shoreline master program regulations.

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

Yes. As described in response to Question B.3.a, fieldwork investigations identified two Category III wetlands in the southwest corner of the site and a perennial, fish-bearing stream (Type F) in the northeastern corner of the site.

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

The facility has been planned to accommodate approximately 250 administrative, maintenance and shop, and transit operator staff over the course of 24-hour periods. The project would not include residences.

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

None. The property is currently undeveloped and vacant.

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

The project would not result in any displacements.

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

Sound Transit strives to locate its major transit facilities where they would also be compatible with projected land uses and plans. As a regional transit authority facility, the project would be recognized as an essential public facility per the Washington State Growth Management Act (RCW 36.70A.200) for consideration by local governments and compliance with their development plans and policies. Sound Transit is aware that in

2016, the city initiated an update to the *Canyon Park Regional Center Subarea Plan*. The city is in the final phases of the update process with a *Planned Action SEPA Draft Environmental Impact Statement of the Canyon Park Subarea Plan Update*, which was issued for public comment on December 6, 2019.

Review of the city’s current comprehensive plan indicates that the project would be a consistent land use. As a conditionally permitted use for the Canyon Park area, the project is not expected to negatively affect or be incompatible with current land uses on adjacent properties.

The project would comply with current City of Bothell zoning, critical area, and development codes and standards. Setbacks, height, and other dimensional standards required by Bothell’s code would be met. Perimeter landscape treatments and fencing would provide a visual and vegetated buffer from the adjacent properties, and critical area impacts would be mitigated as required. Site lighting would be shielded and located in a way to prevent unnecessary light pollution onto neighbors. As the project moves into final design with the design-build contractor, Sound Transit would employ a team of professional architects/urban designers to ensure a consistent look and feel of the site structures while maintaining the fundamental maintenance and operations functions of the facility.

As part of the conditional use permit approval anticipated to be needed for the project, Sound Transit would implement agreed-upon measures to ensure land use compatibility of the site. Properties immediately north of the project site and west across 20th Avenue SE feature similar zoning and comprehensive plan designations with the added uses allowed by the Community Business (CB) classification, and therefore could be developed with retail, dining, and entertainment-type businesses. These adjacent properties are also covered by the Motor Vehicle Sales Overlay (MVSO) that allows for the sale and outside display of vehicles, motorcycles, and boats within the CB zoning district only. Both the CB and MVSO are very automobile dependent and could develop with a variety of uses permitted by the OP, LI, R-AC, CB, and MVSO zoning. Such uses would not be inconsistent with or negatively affect use of the project site for the Bus Base North project.

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

No measures are required. The project would not affect agricultural or forest lands of long-term commercial significance.

9. Housing

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

No housing units would be provided with this project.

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

No housing would be eliminated as a result of this project.

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

No measures to control housing impacts are warranted. Development of this project would support expanded bus service within the City of Bothell, serving future growth and housing development.

10. Aesthetics

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

The parking structure is anticipated to be approximately 30 feet tall to the top of the stair tower. The maintenance and operations building would be approximately 35 feet tall. The *Bus Base North Visual and Aesthetics Resources Technical Memorandum* (Attachment E) provides conceptual simulations of the proposed structure heights and elevations.

The architectural materials for the structures would be determined during final project design. The City of Bothell’s design review process would confirm that the project would use exterior building materials that are visually compatible with existing buildings that are a part of the adjacent commercial and light-industrial development, as well as the city’s design standards.

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

The project would be consistent with the type, scale, size, shape, and form of other nearby office and light-industrial buildings (see Attachment E, *Bus Base North Visual and Aesthetic Resources Technical Memorandum*). The design would minimize the visibility of potentially distracting and “disorderly” components, such as by primarily conducting bus maintenance activities inside buildings on-site and by covering the bus storage area with a parking deck. The parking deck and on-site buildings, including the small security guard building visible in the middle of the entry driveway, would be treated aesthetically to fit cohesively with the architectural style of the proposed maintenance and operations building. The aboveground fuel storage tanks would be placed on the northeast corner of the site with minimal visibility from the North Creek Trail and 20th Avenue SE.

There are no existing residential neighbors with direct views of the BBN site; existing residences are located a distance of over 1,000 feet to the west and north of the site and views are screened by mature vegetation. Currently, the 220 Towns at Canyon Park residences are under construction approximately 400 feet southeast of the BBN site along 23rd Drive SE. Between the BBN site and this townhome development there is existing mature vegetation along the eastern property line of the BBN site and adjacent to the southeast portion of the site, within a Native Growth Protection Area, that would screen views from these residences. Therefore, the project is not expected to alter or obstruct views from these residences.

In the future, there is the potential for additional residential or mixed-use development in the Canyon Park area, including potentially across the street along the west side of 20th Avenue SE. Similar to this project, these potential future developments would be required to comply with the City of Bothell’s land use and zoning requirements and obtain design review approval to ensure visual compatibility with the surrounding area.

Some mature trees would be removed for construction activities and some existing trees along the boundary of the site may be retained, where possible, and on-site landscaping would be proposed in accordance with the BMC and in compliance with Sound Transit’s design standards. The project would not degrade sensitive natural visual resources in the area such as North Creek and its associated riparian area, would not substantially change the existing landform, and would not obstruct desired views.

The project is not anticipated to change the existing aesthetics or visual quality of the project area. While new structures would be placed at the project site, these structures and landscaping would be visually similar to existing adjacent development. The project would not create adverse impacts on aesthetics or visual quality because viewers would retain a sense of visual order.

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

As noted in the responses above, features would be incorporated into the design and construction of the project to avoid potential aesthetic impacts. The facility will be designed to meet LEED silver certification. In addition to measures discussed above, the final design will incorporate Crime Prevention Through Environmental Design (CPTED) strategies to confirm that security and visual quality are complementary to one another.

Aesthetic impacts during the construction phase would be short term in nature and would likely not require any control measures.

11. Light and Glare

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

There would be an increase in visible artificial lighting at the site during the hours of low natural light and throughout the night (from 11 p.m. to 6 a.m.) due to operations, security lighting around the site and outside of buildings, light from the employee parking and bus parking areas, and lights that may be visible through windows in the maintenance and operations building. The project would seek LEED silver certification and lighting requirements would follow Sound Transit’s Design Construction Manual to reduce light spillage. For maintenance and parking areas, 3 (and up to 5) foot-candles¹ are suitable for the site. The area where the buses are circulating during the nighttime hours are away from 20th Avenue SE. The closest neighboring sites are the school bus yard to the north and office buildings to the east and south, which are unlikely to be occupied during these hours.

¹ A foot-candle is a measurement of light intensity and is defined as the illuminance on a one-square-foot surface from a uniform point source of light.

Light or glare would not be visible to existing residential viewers as the nearest existing residences are approximately 1,000 feet to the west of the site. For the townhome development currently under construction (approximately 400 feet southeast of the BBN site), existing mature vegetation between the townhomes and the BBN site would be expected to screen and diminish visible light or glare from the BBN site. Potential future residential or mixed-use development in the area would have to comply with the City of Bothell’s requirements for exterior lighting. The project would not degrade the overall visual quality for travelers or trail users as lighting would be directed down and, over the long term, perimeter landscaping would grow, mature, and provide visual screening.

During the construction period, lights may be used to safely illuminate work areas, which could cause some spillover light onto immediately adjacent parcels. Since, currently, no permit application has been submitted to the City of Bothell for a residential or mixed-use development on the parcel across the street along the west side of 20th Avenue SE, none of the immediately adjacent parcels are expected to be in residential use during the project’s anticipated construction phase, so there are no anticipated short-term light impacts to residents. Construction lighting within the project site would be directed away from adjacent streets to the extent practicable to avoid creating a glare impact to nighttime drivers and recreational trail users. Construction activities on 20th Avenue SE would be minor and short term, and any nighttime work would be short term.

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

No. Exterior lighting on the new structures as well as all site lighting would be shielded to focus light downward to ensure that light sources do not shine directly toward off-site areas. The most active areas during the nighttime hours for maintenance and servicing occurs on the ground level. Maintenance areas would have limited glazing, particularly in areas that would face the adjacent street. The new structures would be composed of materials that would not create glare that could result in a safety hazard or interfere with views, and proposed landscaping would help screen on-site lighting.

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

There are no existing off-site sources of light or glare that may affect the project.

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

The project would comply with City of Bothell regulations regarding exterior lighting and lighting of parking and loading areas (BMC 12.16.100). In compliance with BMC 12.14.240, an exterior lighting plan would be submitted to the City of Bothell as part of the project’s design review approval. The following design features and actions would be incorporated into the design and construction of the project to reduce or control light and glare impacts:

- Shielding exterior lighting and perimeter vegetation would minimize light spillover to adjacent uses, including roadways, sidewalks, the North Creek Trail (west of the project site across 20th Avenue SE), and potential future residential or commercial uses across 20th Avenue SE.
- Temporary construction light and glare impacts would be reduced by shielding and aiming light sources downward and toward work areas to avoid light spillover.

12. Recreation

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

The designated and informal recreational opportunities in the immediate vicinity are shown in Attachment A, Figure A-7, and are as follows:

- Centennial Park at 1130 208th Street SE
- North Creek Trail across 20th Avenue SE west of the project site
- An unnamed open space south of 23rd Avenue SE

Centennial Park is a 54-acre recreational park with picnic tables and a trail; it is owned by the City of Bothell. The North Creek Trail is a 4.2-mile regional-multipurpose recreational trail owned by the City of Bothell and Snohomish and King Counties. The unnamed open space is an 11.4-acre undeveloped parcel owned by the City of Bothell.

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

No recreational uses or opportunities would be displaced by the project.

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

The project would not affect recreational facilities or opportunities; therefore, no measures to reduce or control impacts are required.

13. Historic and Cultural Preservation

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.

There are no aboveground buildings or structures in or near the project site listed in or eligible for listing in the national, state, or local preservation register (Department of Archaeology and Historic Preservation ((DAHP) 2019). The oldest building adjacent to the project site was built in 1988 and is therefore not eligible for listing in a preservation register based on its age. No archaeological sites, cemeteries, or traditional cultural places are recorded in or adjacent to the project site (DAHP 2019).

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.

No archaeological sites, cemeteries, or traditional cultural places are recorded in or adjacent to the project site (DAHP 2019). The Statewide Predictive Model for encountering precontact-era sites classifies the project area as High to Very High Risk –

Survey Highly Advised (DAHP 2010). The Statewide Predictive Model is a multivariate model that uses several landscape factors (e.g., proximity to water, elevation, slope) to predict landscape-level archaeological sensitivity. The High to Very High Risk classification is likely largely attributable to the proximity of the project site to North Creek, as well as its low elevation and generally flat landform. Additionally, the Statewide Predictive Model typically does not factor in landscape impacts from development and urbanization. Past development of the project site is likely to have disturbed any cultural resources that might once have been present.

There is one previously recorded Native American place name near the project site, Ctc&l, for North Creek (Hilbert et al. 2001). The project site was first surveyed in 1874 when two tributaries of North Creek were recorded in the project site. However, there is no evidence of homesteads, trails, or other past use of the project site during this time (U.S. Geological Survey 1895; U.S. Surveyor General 1874). North Creek lies approximately 0.25 mile to the southwest of the project site. A land patent for the project site parcel was issued to Michael M. Fitzgerald on February 7, 1889. By 1910, August Shultz was listed as the owner and, in 1927, Charles E. Peabody was listed as the owner (League of Snohomish County Heritage Organizations, 2019; Metsker Map Company 1927; Kroll Map Company 1934). A 1960s map shows Eugene R. Wockner as owner of the project site parcel (Metsker Map Company 1960).

Historic aerial photos show the project site as forested, undeveloped, and rural until 1980. Logging in the North Creek Valley eventually gave way to agricultural efforts. By the 1970s and 1980s, farming was waning as demand increased for commercial and residential development. By 1990, the parcel had been cleared of vegetation, and roads were in place to the west (20th Avenue SE) and north. During the early 21st century, a private drive had been constructed through the northern portion of the parcel and three structures in the northeast portion of the parcel were built. These three structures were removed by 2006 (Historic Aerials 2019; U.S. Geological Survey 1895, 1953, 1968, 1973, 1981).

Six previous cultural resources assessments have been conducted within the project vicinity. Of those, one archaeological survey (Lockwood et al. 2019) and one historic resources inventory (Knapp 1995) included the project site. The archaeological survey conducted in 2019 included pedestrian reconnaissance and excavation of eight shovel probes; no archaeological sites or isolates were identified.

- 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.**

As cited in response to Questions B.13.a and B.13.b above, the following types of documents were reviewed in order to identify any potential cultural resources in the project vicinity: DAHP's Statewide Predictive Model and Washington Information System for Architectural and Archaeological Records Data, historic maps, aerial photographs, and published ethnographies and local histories. As noted in B.13.b above, the project site has previously been subject to archaeological survey (Lockwood et al. 2019).

- 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.**

Construction would proceed under the terms of an Archaeological Resources Inadvertent Discovery Plan, which would set forth the procedures and protocols to be followed in the event that archaeological resources are discovered during construction.

If cultural resources were to be discovered during construction, Sound Transit would comply with all laws requiring the protection of cultural resources and human remains. Sound Transit would temporarily halt work in the immediate vicinity of the identified resources and notify DAHP and Affected Tribes to determine mitigation and/or avoidance measures.

14. Transportation

- 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.**

Attachment A, Figure A-1 shows the project site location and the affected geographic area. The project site is located within the Canyon Park Business Center, within which all roads are privately owned and maintained by the business center. The privately owned roads (identified as private right-of-way) are shown in Attachment A, Figure A-11. The private roads anticipated to be used by buses, employees, and visitors to the site include 214th Street SE, 20th Avenue SE, 220th Street SE, 17th Avenue SE, and 26th Avenue SE.

Public streets and highways outside of the business center, along which buses would be expected to travel, include I-405, SR 527/Bothell-Everett Highway, and SR 524/Maltby Road.

All vehicles, including BRT buses, ST Express buses, employee vehicles, and vendor vehicles as needed over time, would enter and exit the facility via two driveways on 20th Avenue SE at the southwest corner of the site, as shown in Attachment A, Figure A-3. Two driveways are proposed to safely accommodate the different types of traffic on the site, with bus and other agency vehicles as well as personal vehicles separated on the site as much as possible.

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

The site is directly served by public (bus) transit operated by Community Transit, via 20th Avenue SE. The closest Community Transit bus stop is directly across 20th Avenue SE, approximately 70 feet from the site.

The project would facilitate new Sound Transit BRT service, expected to be available in Bothell in 2024/2025.

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

The proposed facility would not eliminate any parking. The project would provide space to park 120 standard, articulated, and/or double-decker transit coaches. In addition, the project would include an elevated parking deck for employee and visitor parking with approximately 250 parking stalls. Adequate parking for buses and employees would be provided on the project site, and the facility is not expected to physically, or otherwise, affect parking elsewhere in the project vicinity.

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

The project proposes to introduce a break to the center median along privately owned 20th Avenue SE, near the planned employee/visitor entrance, to allow left turns into and out of the facility. The median would also be shortened by approximately 40 feet on the south end of the roadway to allow for the bus entrance/exit at the southwestern corner of the site. The project includes a new sidewalk along the frontage of the site on 20th Avenue SE as well as two Americans with Disabilities Act ramp and sidewalk improvements at the northeast and southeast corners at the intersection of 214th Street SE (private roadway) and 20th Avenue SE. No other new or improved transportation facilities are proposed.

Sound Transit, as an owner and member of the Canyon Park Business Center Owners' Association, would contribute to maintenance of common area roadway infrastructure as identified in the covenants, conditions, and restrictions.

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

The project is not sited in the immediate vicinity of water, rail, or air transportation and would not use these modes of transportation.

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

For additional detail on the transportation analysis, see Attachment G, *Bus Base North Transportation Technical Report*. Transportation impacts were evaluated for both the project's year of opening (2024) and 2042. Year 2042 represents the year when Sound Transit's ST3 program elements for Link light rail and Sounder commuter rail are anticipated to be complete. The analysis used forecasted traffic volumes for 2042 based on WSDOT future traffic volume projections developed by the WSDOT I-405 Program team to ensure consistency of approach between both of the agency's projects in the area.

Project Trip Generation

It is anticipated that on-site operations would occur 24 hours a day, 7 days a week.

Table 3 and **Table 4** show estimated hourly trips generated for the morning and afternoon peak periods (7:30 to 8:30 a.m. peak and 4:30 to 5:30 p.m. peak) by trip type for years 2024 and 2042, respectively. As shown in the tables, very few trips associated with Bus Base North would likely occur during the normal commuter peak hour for the Canyon Park Subarea. The peak hour is the period during which local roads experience the highest traffic volumes and most congestion, Monday through Friday.

Approximately 60 transit operators and essential operations staff would be expected to arrive at the facility by private vehicle between 3:30 and 4:30 a.m. for their shift check-in and to perform a vehicle condition report prior to the start of morning service. Bus trips in and out of the project site during peak hours would be very limited due to the nature of bus operations schedules. Peak-hour trips starting at 7:30 a.m. and 4:30 p.m. were used for detailed traffic analysis since that period would represent the worst-case overall traffic conditions. **Table 3** and **Table 4** show that for both 2024 and 2042, most buses would leave the site from approximately 4:30 a.m. to 6:30 a.m. and would return from 2:30 p.m. to 3:30 p.m. with additional buses leaving from 1:30 p.m. to 3:30 p.m. and returning from 11:30 p.m. to 12:30 a.m.

Table 3 Bus Base North estimated peak traffic generation by time of day (2024)

	Hour starting	Entering							Exiting						
		Buses			Private vehicles				Buses			Private vehicles			
		BRT	ST Express	Total	Coach operators	Base employees	Misc. (deliveries/vendors/visitors)	Total	BRT	ST Express	Total	Coach operators	Base employees	Misc. (deliveries/vendors/visitors)	Total
Morning	3:30			0	36			36			0				0
	4:30			0	26			26	18	18	36		15		15
	5:30			0	3	36		39	12	14	26				0
	6:30			0		30		30	3		3				0
	7:30			0		10	5	15			0			5	5
	8:30			0	5			5			0				0
	9:30			0				0	5		5				0
	10:30			0				0			0				0
	11:30	17	16	33				0			0			5	5
Afternoon/Evening	12:30	16	16	32			5	5			0			5	5
	1:30			0	32		5	37			0	36			36
	2:30	5		5				0	16	16	32	29	36		65
	3:30			0			5	5			0	5	30	5	40
	4:30			0		15	5	20			0		10	5	15
	5:30			0				0			0				0
	6:30			0				0			0				0
	7:30			0			5	5			0			5	5
	8:30			0			5	5			0			5	5
	9:30			0				0			0				0
	10:30			0				0			0				0
	11:30	16	16	32		15		15			0				0
12:30			0				0			0	32	15		47	

Subarea commuter AM peak hour

Subarea commuter PM peak hour

SOURCE: Sound Transit 2020

Table 4 Bus Base North estimated peak traffic generation by time of day (2042)

	Hour starting	Entering							Exiting						
		Buses			Private vehicles				Buses			Private vehicles			
		BRT	ST Express	Total	Coach operators	Base employees	Misc. (deliveries/vendors/visitors)	Total	BRT	ST Express	Total	Coach operators	Base employees	Misc. (deliveries/vendors/visitors)	Total
Morning	3:30			0	54			54			0				0
	4:30			0	38			38	36	18	54		15		15
	5:30			0	4	36		40	24	14	38				0
	6:30			0		30		30	4		4				0
	7:30			0		10	5	15			0			5	5
	8:30			0	5			5			0				0
	9:30			0				0	5		5				0
	10:30			0				0			0				0
	11:30	32	16	48				0			0			5	5
Afternoon/Evening	12:30	32	16	48			5	5			0			5	5
	1:30			0	48		5	53			0	54			54
	2:30	5		5				0	32	16	48	42	36		78
	3:30			0			5	5			0	5	30	5	40
	4:30			0		15	5	20			0		10	5	15
	5:30			0				0			0				0
	6:30			0				0			0				0
	7:30			0			5	5			0			5	5
	8:30			0			5	5			0			5	5
	9:30			0				0			0				0
	10:30			0				0			0				0
	11:30	32	16	48		15		15			0				0
	12:30			0				0			0	48	15		63

Subarea commuter AM peak hour

Subarea commuter PM peak hour

SOURCE: Sound Transit 2020

Table 5 and **Table 6** show the total traffic volumes for the 2024 and 2042 “With Project” condition. Similarly, for the PM peak period, many trips related to Bus Base North would likely occur outside of the typical PM peak hour of 4:30 to 5:30 p.m. Of the estimated 690 trips entering/exiting the site daily in 2024 and 876 trips in 2042, approximately 30 percent of those trips would be buses, with the remaining trips being generated by passenger vehicles (maintenance or driver employees).

Table 5 Bus Base North estimated daily traffic generation (2024)

Vehicle type	One-way trips entering	One-way trips exiting
AM peak hour*		
Maintenance base employees	10	
Coach operators		
BRT/ST Express coaches		
Miscellaneous trip activity	5	5
Totals	15	5
PM peak hour*		
Maintenance base employees	15	10
Coach operators		
BRT/ST Express coaches		
Miscellaneous trip activity	5	5
Totals	20	15
Daily		
Maintenance base employees	106	106
Coach operators	102	102
BRT/ST Express coaches	102	102
Miscellaneous trip activity	35	35
Totals	345	345

SOURCE: Sound Transit 2020

NOTE: BRT = bus rapid transit

* Represents the highest volume peak hour for each particular category of trip, which for most trip types occurs outside of the commuter peak hour for the Canyon Park Subarea. See Table 3 for estimates of actual time of day occurrence.

Table 6 Bus Base North estimated daily traffic generation (2042)

Vehicle type	One-way trips entering	One-way trips exiting
AM peak hour*		
Maintenance base employees	10	
Coach operators		
BRT coaches		
Miscellaneous trip activity	5	5
Totals	15	5
PM peak hour*		
Maintenance base employees	15	10
Coach operators		
BRT coaches		
Miscellaneous trip activity	5	5
Totals	20	15
Daily		
Maintenance base employees	106	106
Coach operators	149	149
BRT coaches	149	149
Miscellaneous trip activity	35	35
Totals	439	439

SOURCE: Sound Transit 2020

NOTE: BRT = bus rapid transit

* Represents the highest volume peak hour for each particular category of trip, which for most trip types occurs outside of the commuter peak hour for the Canyon Park Subarea. See Table 4 for estimates of actual time of day occurrence.

Intersection and Corridor Level-of-Service Analysis

Intersection level-of service (LOS) analysis is required for all intersections (owned by the City of Bothell or WSDOT) within the study area. The study area for this traffic analysis was developed to include intersections where traffic generated by Bus Base North would be most concentrated. The eight study intersections, five of which are WSDOT intersections located along SR 527, are shown in Attachment A, Figure A-9, and are all located in Bothell. They are as follows:

- SR 527 and 208th Street SE/Maltby Road (intersection ID #1)
- SR 527 and 214th Street SE (ID #2)
- 214th Street SE and 20th Avenue SE (ID #3)
- SR 527 and 220th Street SE (ID #4)
- SR 527 and I-405 northbound ramps (ID #5)

- SR 527 and I-405 southbound ramps (ID #6)
- 17th Avenue SE and 220th Street SE (ID #17)
- 20th Avenue SE and 220th Street SE (ID #20)

The No Build conditions described below capture anticipated traffic levels and travel conditions without the Bus Base North project, while Build conditions capture these conditions with conservatively estimated traffic generated by the facility added to them. Average delay and intersection LOS were determined at each of the study area intersections for the AM and PM peak hour. Average delay and levels-of-service results by study area intersection for the 2024 Build and No Build conditions are compared in **Table 7**.

Table 7 Intersection level-of-service, 2024 AM/PM peak hour – Build vs. No Build

ID	Intersection	AM Peak				PM Peak			
		2024 No Build		2024 Build		2024 No Build		2024 Build	
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS
1	SR 527 and 208th Street SE/Maltby Road (WSDOT)	80	F	80	F	86	F	86	F
2	SR 527 and 214th Street SE (WSDOT)	25	C	25	C	34	C	34	C
3	214th Street SE and 20th Avenue SE	2	A	2	A	2	A	2	A
4	SR 527 and 220th Street SE (WSDOT)	37	D	37	D	54	D	54	D
5	SR 527 and I-405 northbound ramps (WSDOT)	8	A	8	A	33	C	33	C
6	SR 527 and I-405 southbound ramps (WSDOT)	11	B	11	B	9	A	9	A
17	17th Avenue SE and 220th Street SE	12	B	12	B	22	C	22	C
20	20th Avenue SE and 220th Street SE	52	F	52	F	145	F	145	F

SOURCE: Synchro results, 2020

NOTE: LOS = level-of-service; WSDOT = Washington State Department of Transportation

Additionally, 2024 PM peak period traffic analysis was performed for the City of Bothell designated corridor on SR 527/Bothell-Everett Highway/Bothell Way NE between SR 524 and SR 522, as show in Attachment A, Figure A-10. A comparison of 2024 PM No Build and Build corridor LOS results is shown in **Table 8** for the SR 527 corridor. Corridor LOS is determined by calculating a volume-weighted average of intersection delay along the corridor.

Table 8 Corridor level-of-service, 2024 AM/PM peak hour – Build vs. No Build

Corridor Intersection	Traffic control	2024 without project			2024 with project		
		TEV	LOS	Delay	TEV	LOS	Delay
SR 527/Bothell-Everett Highway/Bothell Way NE between SR 524 and SR 522							
1. SR 527/208th Street SE	Signal	6,500	F	86	6,510	F	86
2. SR 527/214th Street SE	Signal	4,480	C	34	4,515	C	34
3. SR 527/220th Street SE	Signal	5,670	D	54	5,700	D	54
4. SR 527/I-405 Northbound Ramp	Signal	5,350	C	33	5,365	C	33
5. SR 527/I-405 Southbound Ramp	Signal	5,170	A	9	5,180	A	9
6. Bothell-Everett Hwy/228th Street SE	Signal	6,125	E	67	6,130	E	67
7. Bothell-Everett Hwy/240th Street SE	Signal	2,635	D	37	2,635	D	37
8. Bothell Way NE/NE 190th Street	Signal	2,750	D	53	2,750	D	53
9. Bothell Way NE/NE 185th Street	Signal	2,490	C	23	2,490	C	23
10. Bothell Way NE/NE 183rd Street	Signal	1,955	B	10	1,955	B	10
11. Bothell Way NE/Main Street	Signal	2,005	B	13	2,005	B	13
12. Bothell Way NE/SR 522 (Woodinville Drive)	Signal	5,090	E	77	5,090	E	77
Weighted Average Delay Along Corridor			D	47		D	47

SOURCE: Sound Transit 2020

NOTE: LOS = level-of-service; TEV = total entering vehicles; WSDOT = Washington State Department of Transportation

In 2024, the intersection analyses for the AM and PM peak-hour conditions show that at two locations, studied intersections would be expected to exceed the City of Bothell and WSDOT established LOS without the project.

- One of the five study area intersections along SR 527 would exceed the WSDOT LOS E standard—SR 527 and 208th Street SE/ Maltby Road (ID#1). This intersection is projected to operate at LOS F in the AM and PM peak hours for both the No Build and Build conditions. The project is not expected to cause an impact at this intersection, as delay is not expected to change in either peak hour due to projected traffic from Bus Base North.
- One intersection within the Canyon Park Business Center is expected to exceed LOS E—the unsignalized intersection of 20th Avenue SE and 220th Street SE (ID#20). This intersection is expected to operate at LOS F in both the No Build and Build conditions, and it would have no change in seconds of delay between the No Build and Build conditions.

The corridor LOS analysis for SR 527 shows that the corridor is expected to meet the city’s LOS standard, operating at LOS D in the PM peak hour in both the No Build and Build conditions. All of the analyses show no change in overall delay and no change in peak-hour LOS between No Build to Build conditions. The Bus Base North project is not expected to cause adverse impacts related to traffic operations in 2024.

A comparison of 2042 No Build and Build intersection LOS results is shown in **Table 9**.

Table 9 Intersection level-of-service, 2042 AM/PM peak hour – Build vs. No Build

ID	Intersection	AM Peak				PM Peak			
		2042 No Build		2042 Build		2042 No Build		2042 Build	
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS
1	SR 527 and 208th Street SE/Maltby Rd (WSDOT)	101	F	101	F	107	F	107	F
2	SR 527 and 214th Street SE (WSDOT)	27	C	28	C	60	E	60	E
3	214th Street SE and 20th Avenue SE	2	A	2	A	2	A	2	A
4	SR 527 and 220th Street SE (WSDOT)	49	D	49	D	60	E	60	E
5	SR 527 and I-405 northbound ramps (WSDOT)	12	B	12	B	44	D	44	D
6	SR 527 and I-405 southbound ramps (WSDOT)	11	B	11	B	8	A	8	A
17	17th Avenue SE and 220th Street SE	16	B	16	B	24	C	24	C
20	20th Avenue SE and 220th Street SE	82	F	82	F	228	F	228	F

SOURCE: HCM 2010 methodology, 2019

NOTE: LOS = level-of-service; WSDOT = Washington State Department of Transportation

The analyses of the 2042 AM and PM peak-hour conditions show the same two intersections exceeding LOS standards in 2042 as in 2024.

- The first, SR 527 and 208th Street SE/ Maltby Road (ID#1), would potentially exceed the WSDOT LOS E standard. As in 2024, the intersection is projected to operate at LOS F in the AM and PM peak hours for both the No Build and Build conditions. There would be no change in delay at this intersection from the Bus Base North project.
- The unsignalized intersection of 20th Avenue SE and 220th Street SE (ID#20) would continue to exceed LOS E. The intersection would be expected to operate at LOS F in both the No Build and Build conditions, with no change in delay between the No Build and Build conditions.

It is possible that some buses in 2024 (which includes those serving SR 522/NE145th BRT), may use 214th Street SE and SR 527 to travel to and from I-405 in lieu of 17th Avenue SE and the proposed direct access ramps (Attachment 1, Figure A-8). A greater proportion of buses may also use 214th Street SE and SR 527 to travel to and from I-405, if warranted, based on unexpected traffic conditions or if the I-405 facilities are not

completed prior to the start of BRT service. However, given that no buses would be entering or exiting the facility during peak traffic hours, no additional analysis is necessary to evaluate this effect on the peak commute hour of operations.

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

No. The project and operations at the facility are not expected to affect the movement of agricultural and forest products on roads or streets in the area. The project site is not in the vicinity of a Critical Urban Freight corridor, as designated by WSDOT, or any other major route or freight terminal that would transport such materials.

- h. Proposed measures to reduce or control transportation impacts, if any:**

As a result of the analysis conducted, no mitigation is required to address impacts related to traffic operations, safety, parking, or overall mobility. However, Sound Transit will continue to coordinate with WSDOT and the Canyon Park Business Center throughout the development of the Bus Base North project regarding bus movements to and from the site.

15. Public Services

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

During some construction activities, temporary disruption to the transportation network would likely occur as a result of lane closures and a need to reroute traffic. These lane closures and reroutes, in addition to construction traffic, may affect the ability of emergency service vehicles to move through the area and could increase emergency response times and the travel times for public service vehicles.

As a new industrial facility, the project is expected to increase the need for fire protection in the Canyon Park area. In addition, the project would add trips to local roads, both from buses arriving and departing from the site and from employee and visitors to the site. See Question 15.b below for how these direct impacts to public services would be reduced or controlled.

The project is not expected to increase the need for police, health care, or schools; particularly, the project would not increase the need for these public services beyond what has been anticipated as land uses and growth as part of Bothell’s comprehensive plan. The project is for a facility that is needed to provide increased and improved public transit service to Bothell and the Puget Sound region.

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

During construction, fire protection would be provided through the installation of a minimum of one standpipe for firefighting purposes. The location of this standpipe would be extended on the site as construction progresses.

To minimize traffic disruption during construction, as part of construction planning and permitting, Sound Transit would work with the contractors, service providers, and the City of Bothell to ensure that appropriate access through or around the area is retained at all times. Sound Transit and the City of Bothell would work to minimize the duration and extent of lane closures and reroutes by:

- Maintaining through-traffic, except for temporary lane closures that would typically be limited to nighttime, weekend, and off-peak travel hours
- Establishing detour routes on nearby arterials for temporary lane closures
- Maintaining traffic management systems

These measures would be included in a Maintenance of Traffic Plan, addressing all travel modes, and would be approved by the City of Bothell.

The project facilities would be fully sprinklered and standpipes installed in accordance with the National Fire Protection Association's 2013 regulations, the 2018 International Fire Code and BMC 20.10.030. In addition to a sprinkler system in the facilities, the fire code requirements include:

- Providing fire extinguishers every 75 feet within light-industrial buildings and more frequently in higher hazard occupancies
- Providing appropriate fire truck access into and around the site, including providing a "Knox Box" that would allow the fire department to remotely open the facility gates
- Providing fire hydrants in compliance with code requirements
- Conducting an analysis for emergency responder radio coverage

In addition, a Hazardous Materials Identification System (HMIS) would be required for all buildings on the site. The HMIS would contain an inventory of chemical products on the site and would comply with the required space and quantities of chemicals used in the hazardous materials zone/area. Compliance with these fire prevention regulations would be evaluated through plans that would be provided as part of the building permit application, prior to issuance of the building permit.

During the building permit review process, Sound Transit would work with the City of Bothell to ensure adequate fire protection measures are provided and that the project would not have an undue need for fire services. Sound Transit's design criteria require fire alarm systems to include automatic fire detection, alarm, and control systems to allow emergency response personnel to formulate proper responses and alleviate pressure on emergency services in case of an emergency.

The project is considered a Transit Vehicle Base Essential Public Facility per BMC 12.06.080. In lieu of paying impact fees, Sound Transit has worked with the City of Bothell to identify potential traffic impacts from the project, as discussed in Question B.14. That analysis concludes that no traffic mitigation measures are required to address impacts related to traffic operations, safety, parking, or overall mobility.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

There are currently no utilities on the site itself, which is undeveloped. However, electrical, gas, water, sanitary sewer, storm sewer, and telecommunication services are all available for connection in the near vicinity as described below.

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.

The utilities that would connect to the site are located underground along 20th Avenue SE, which is a private road owned by the Canyon Park Business Center. The utilities here are public utilities, even though the road itself is private. The following describes the existing utilities and how the project would be served and connected:


- **Electricity:** New service connections would be established for the project facilities. Electrical service to the project would be provided by the Snohomish Public Utility District (PUD), with primary electrical service coming from the east property line. The Snohomish PUD has power lines that are adjacent to the northeast corner of the project site, which would be used or extended as needed to the preferred service entry point on-site. The site is near one of Snohomish PUD's new substations – Fitzgerald. The substation currently has 3 megawatts of capacity available, with an additional 3.5 megawatts that may become available in the future. The Snohomish PUD currently has the capacity to serve the site and a portion of the battery-electric bus charging stations (see Question B.6). The Snohomish PUD would require Sound Transit to cover the cost of system upgrades once the total load at the site exceeds 2.5 megawatts, which may be exceeded with a full deployment of battery-electric buses for both BRT routes.
- **Water:** New fire and domestic water services would be routed on-site to serve the project facilities. The project would be served by water from the Alderwood Water & Wastewater District and would tie into the existing district main water distribution line in 20th Avenue SE. Two separate water connections would be made at approximately the same location—one for fire water service (fire hydrants and sprinklers) and one for domestic water service. Several stub outs along 20th Avenue SE could be used to connect the facility, and trenching within the street would likely be required to connect the service.
- **Sanitary Sewer:** New sanitary sewer service would be routed on-site to serve the project facilities. The project would tie into the existing sanitary sewer main in 20th Avenue SE operated by the Alderwood Water & Wastewater District. Several stub outs along 20th Avenue SE could be used to connect the facility, and trenching within the street would likely be required to connect the service.
- **Storm Sewer:** New connections to the storm sewer system would be established for the project facilities. The project is expected to connect to the culvert conveyance system owned and operated by the business park. Stormwater management on the property would require installation of a piped conveyance network. Low-impact

development facilities (e.g., biofiltration) would also be implemented as appropriate to comply with Sound Transit and city stormwater requirements.

- Communications: Private communication/cable lines to serve the site would connect to the existing communications line in 20th Avenue SE. On-site service would be routed from the tie-in point to the necessary locations on the site, and trenching within the street would likely be required to connect the service.

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: Kathleen G. Fendt

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

Date Submitted: July 23, 2020

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Glossary of terms

Archaeological resource: Pre-contact archaeological resources are places on the landscape that contain the physical remnants of activities carried out by Native Americans during the pre-contact period (as late as AD 1769). Historical archaeological resources are post-European contact resources that may include remnants of early settlements. See *also* **Cultural resource**.

Best management practice (BMP): Methods designed to minimize adverse effects on the environment. Examples of BMPs include practices for erosion and sedimentation controls, watering for dust control, silt fences, rice straw bales, and sediment basins.

Borings: A technique used to explore the underground surface, typically used to determine if it is capable of holding up a building by making or enlarging a hole to survey fragments.

Contaminants: Hazardous materials (e.g., solid, liquid, or gaseous vapor) that physically remains on a person, animal, or object.

Cultural resource: A resource related to the tangible and intangible aspects of cultural systems, living and dead, that is valued by a given culture or contains information about the culture. Cultural resources include historical and archaeological resources such as sites, structures, buildings, districts, and objects associated with or representative of people, cultures, and human activities and events.

dBA: A-weighted decibels which account for human perception of sound and unwanted noise.

Dewatering: The process of draining or removing water (typically ground water) from sediment.

Ecosystem: An interconnected network of living organisms, including people, and their local physical environment; often considered as an ecological unit.

Emergency services: Emergency response by fire, law enforcement, and emergency services to fire, seismic events, or other emergency situations.

Endangered species: Any species listed under the federal Endangered Species Act as being in danger of or threatened with extinction throughout all or most of its range.

Extreme rain event: An unexpected, unusual, severe, or unseasonal weather, such as a 100-year flood.

Fill material: Any material that replaces portions of surface water with dry land or which changes the bottom elevation of a surface water for any purpose. Soil, rocks, sand, or other material that displaces soil or water or reduces water retention potential can be fill material.

Greenhouse gases (GHG): A class of air pollutants believed to contribute to the global warming effect, including CO₂, hydrocarbons, and NO_x.

Groundwater: Water contained and transmitted through open spaces within rock and sediment below the ground surface.

Habitat: An environment where plants or animals occur; an ecological setting used by animals for a particular purpose, (e.g., roosting habitat, breeding habitat).

Hazardous material: Any material that, because of quantity, concentration, or physical or chemical characteristics, poses a present or potential hazard to human health and safety, or to the environment if released.

Hazardous Materials Identification System (HMIS): A system that utilizes colored bars, numbers, and symbols to convey the hazards of chemicals used in the workplace. This helps employers comply with the Occupational Safety and Health Administration Hazard Communication Standard.

Hazardous occupancies: A hazardous occupancy is a measurement of the space where products, substances, and chemicals are present or stored.

Hazardous substance: Any substance or mixture of substances that are (1) toxic, (2) corrosive, (3) an irritant, (4) a strong sensitizer, (5) flammable or combustible, or (6) generate pressure through decomposition, heat, or other means. Hazardous substances may cause personal injury or substantial illness, and include petroleum products; certain radioactive substances; asbestos-containing materials; lead-based substances; and certain substances that present an electrical, mechanical, or thermal hazard.

Hazardous waste: A hazardous material that is no longer of use and will be disposed of. Hazardous waste is regulated by the U.S. Environmental Protection Agency under the Resource Conservation and Recovery Act (RCRA). Washington hazardous waste law is in some cases more stringent than federal law, and waste can often be defined as Washington hazardous waste (or non-RCRA hazardous waste).

Impact: A change in the condition or function of an environmental resource or environmental value as a result of human activity.

Impervious surface: Surface covered by impenetrable materials, such as pavement and buildings, that increases the potential for water runoff and reduces the potential for groundwater recharge.

Ldn: Average day-night noise level, cumulative 24-hour day-night noise level

Level-of-service (LOS): A rating that uses qualitative measures to characterize operational conditions within a traffic stream and the perception by motorists and passengers.

Mitigation: Action or measure to minimize, reduce, eliminate, or rectify the adverse impacts of a project, practice, action, or activity.

Mitigation bank: A large block of land that is preserved, restored, and enhanced for the purpose of mitigating the adverse impacts of projects on special-status species, wetlands, or otherwise vegetated biological communities.

National Pollutant Discharge Elimination System (NPDES): Under Section 402 of the Clean Water Act, the National Pollutant Discharge Elimination System Program regulates all point source discharges, including, but not limited to, construction-related runoff discharges to surface waters and some post-development discharges.

Noise-sensitive receivers: Refers to premises that are used for purposes sensitive to noise and require protection. Examples include domestic premises, hotels, educational institutions, and hospitals and clinics.

Riparian: Relating to, living, or located on the bank of a natural water course, lake, or tidewater.

Runoff: The flow of water over land from rain, snowmelt, or other sources.

Sediment: Fragments of ground material originating from the physical or chemical weathering of rocks and minerals, decomposition of organic matter, and atmospheric fallout. Clay, mud, and sand are all types of sediment.

Shallow soils: Soils that typically extend less than 10 inches deep before hitting an impervious layer.

Standpipe: A vertical pipe extending from a water supply, especially one connecting a temporary tap to the main. Usually this is a connection of the fire hydrant system.

Stub outs: Represent a network of water utility pipes that extend beyond the confines of a residential or commercial building.

Stormwater pollution prevention plan: A type of construction plan that specifies site management activities to be implemented during site development. These management activities include construction period stormwater best management practices, erosion and sedimentation controls, dewatering (nuisance water removal), runoff controls, and construction equipment maintenance.

Visual quality: An assessment of what viewers like and dislike about visual resources that compose the visual character. Elements of visual quality include natural harmony, cultural order, and project coherence.

Visual resources: The natural and artificial features of a landscape that characterize its form, line, texture, and color.

Wetlands: An area of land with soil that is saturated with moisture, either permanently or seasonally. According to the *U.S. Army Corps of Engineers Wetlands Delineation Manual*, three criteria must be satisfied to classify an area as a jurisdictional wetland: (1) a predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation), (2) soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils), and (3) permanent or periodic inundation or soils saturation, at least seasonally (wetland hydrology). Types of wetlands include the following:

- **Palustrine emergent (PEM)** – Palustrine emergent systems include all nontidal wetlands dominated by persistent emergent species and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 parts per thousand (ppt). The Emergent Wetland Class is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present during most of the growing season in most years. These wetlands are usually dominated by perennial plants.
- **Palustrine scrub-shrub (PSS)** – Palustrine scrub-shrub systems include all nontidal wetlands dominated by shrub species and all such wetlands that occur in tidal areas where

salinity due to ocean-derived salts is below 0.5 parts per thousand (ppt). The Scrub-Shrub Wetland Class includes areas dominated by woody vegetation less than 6 meters (20 feet) tall. Species include true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions.

- **Palustrine forested (PFO)** – Palustrine forested systems include all nontidal wetlands dominated by trees and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 parts per thousand (ppt). The Forested Wetland Class is characterized by woody vegetation that is greater than 6 meters (20 feet) tall.
- **Palustrine aquatic bed (PAB)** – Palustrine aquatic bed systems include all nontidal wetlands dominated by aquatic vegetation and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 parts per thousand (ppt). The Aquatic Bed Wetland Class includes wetlands dominated by plants that grow principally on or below the surface of the water for most of the growing season in most years.

Attachment A

Figures



Figure A-1 Bus Base North Vicinity Map

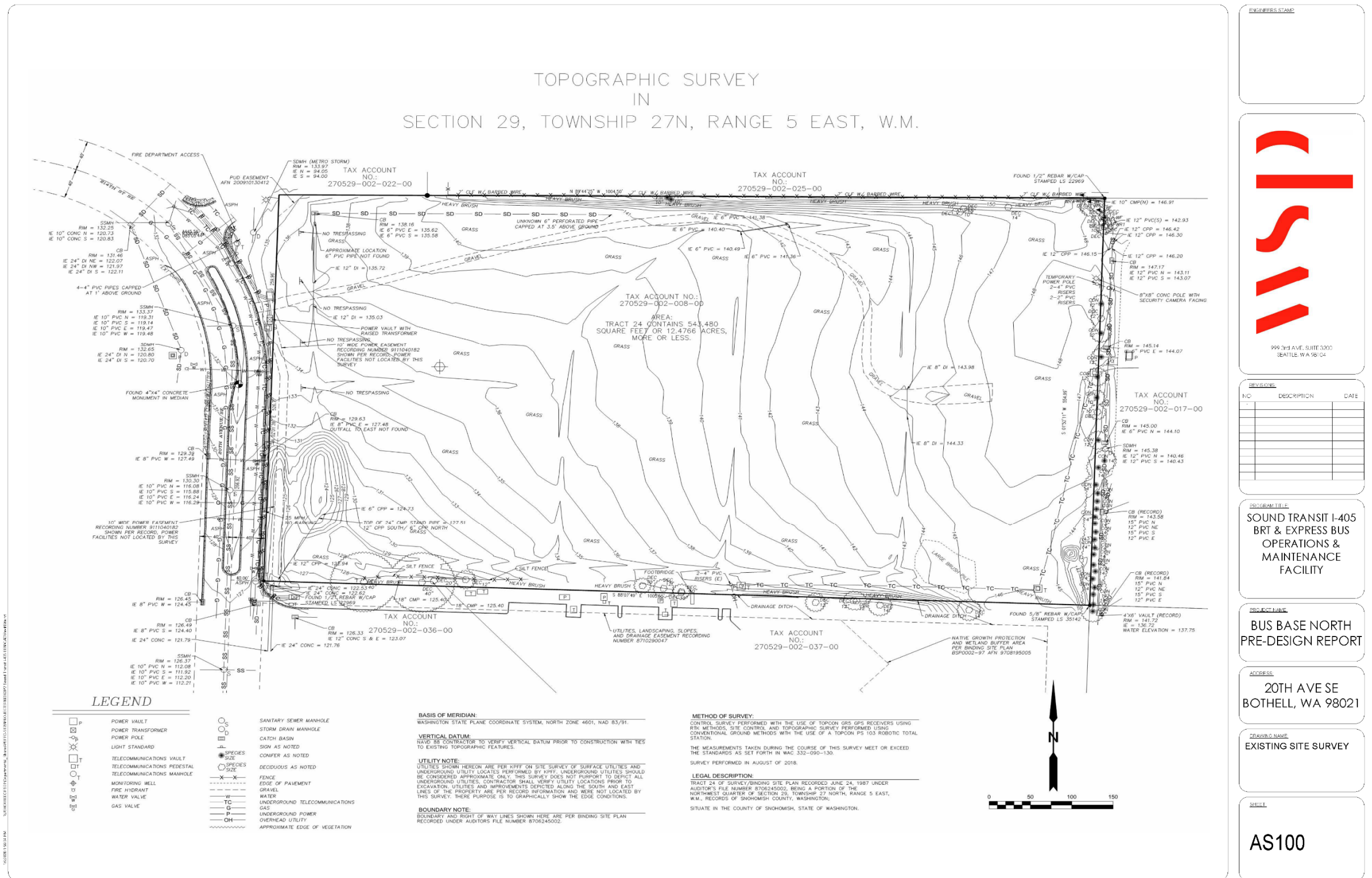
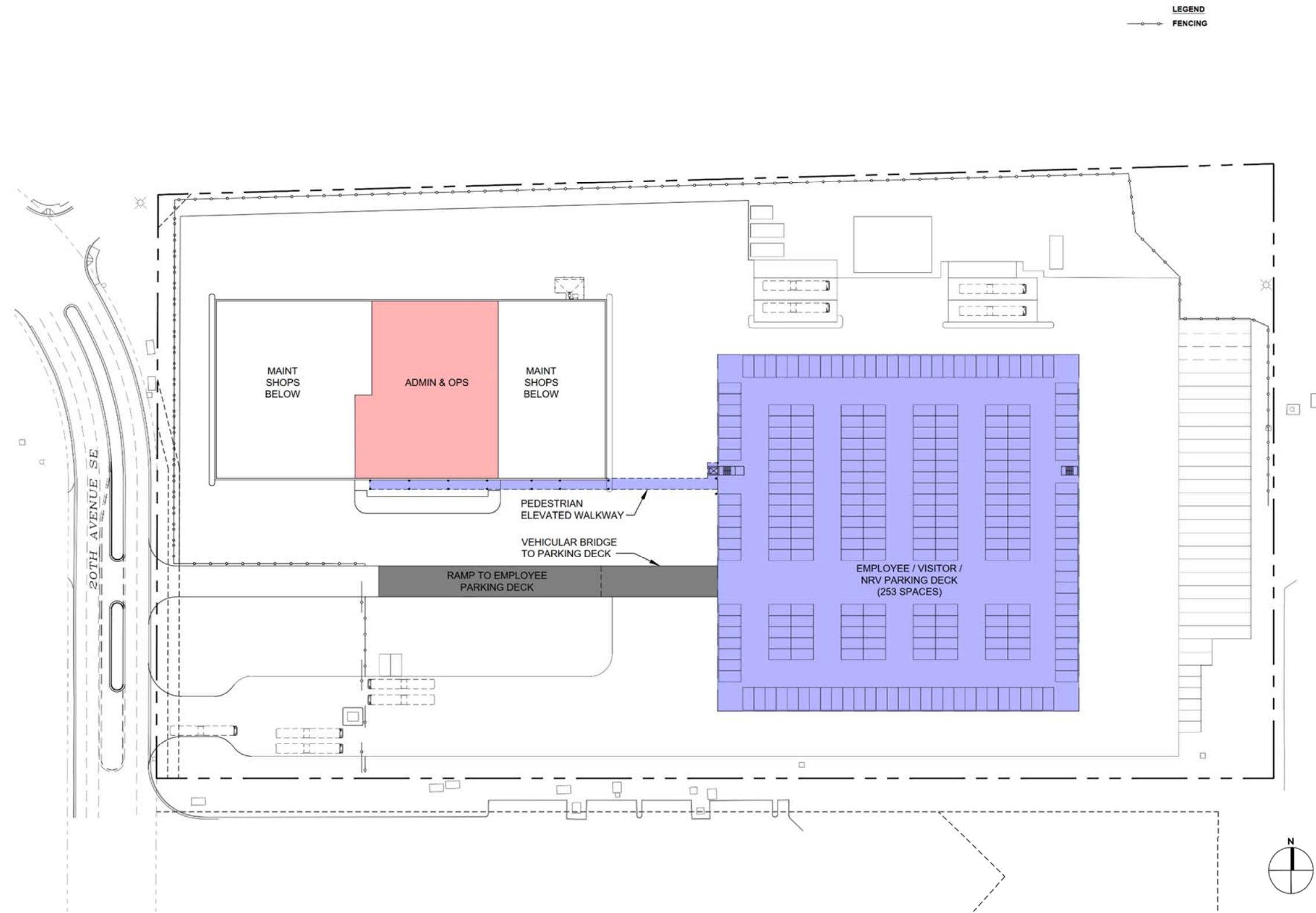


Figure A-2 Bus Base North Topography



DRAWING NUMBER	SK-2	DRAWING TITLE	BUS BASE NORTH 2ND LEVEL SITE PLAN	 WSP USA, Inc. 16200 PARK ROW SUITE 200 HOUSTON, TEXAS 77064 TEL: (281) 799-5100 FAX: (281) 799-5104		PROJECT TITLE	SOUND TRANSIT I-405 BRT & EXPRESS BUS OPERATIONS & MAINTENANCE FACILITY	PROJECT NO.	160363P	DRAWN BY	PMB	DATE	04/09/20	SCALE	22x34 1" = 40'-0" 11 X 17 1" = 80'-0"

Figure A-4 Preliminary Site Plan (Second Level)

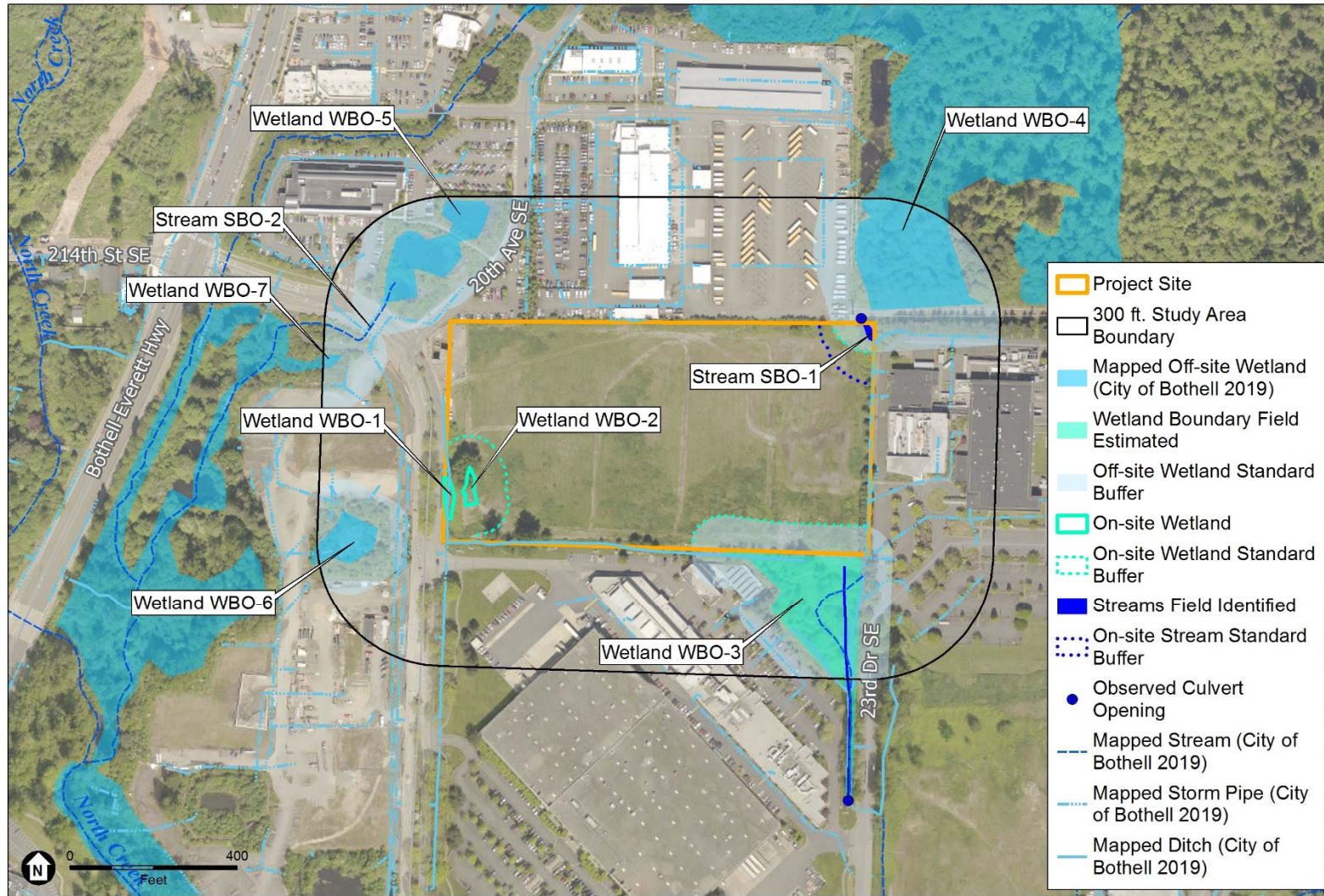


Figure A-5 Wetlands and Streams

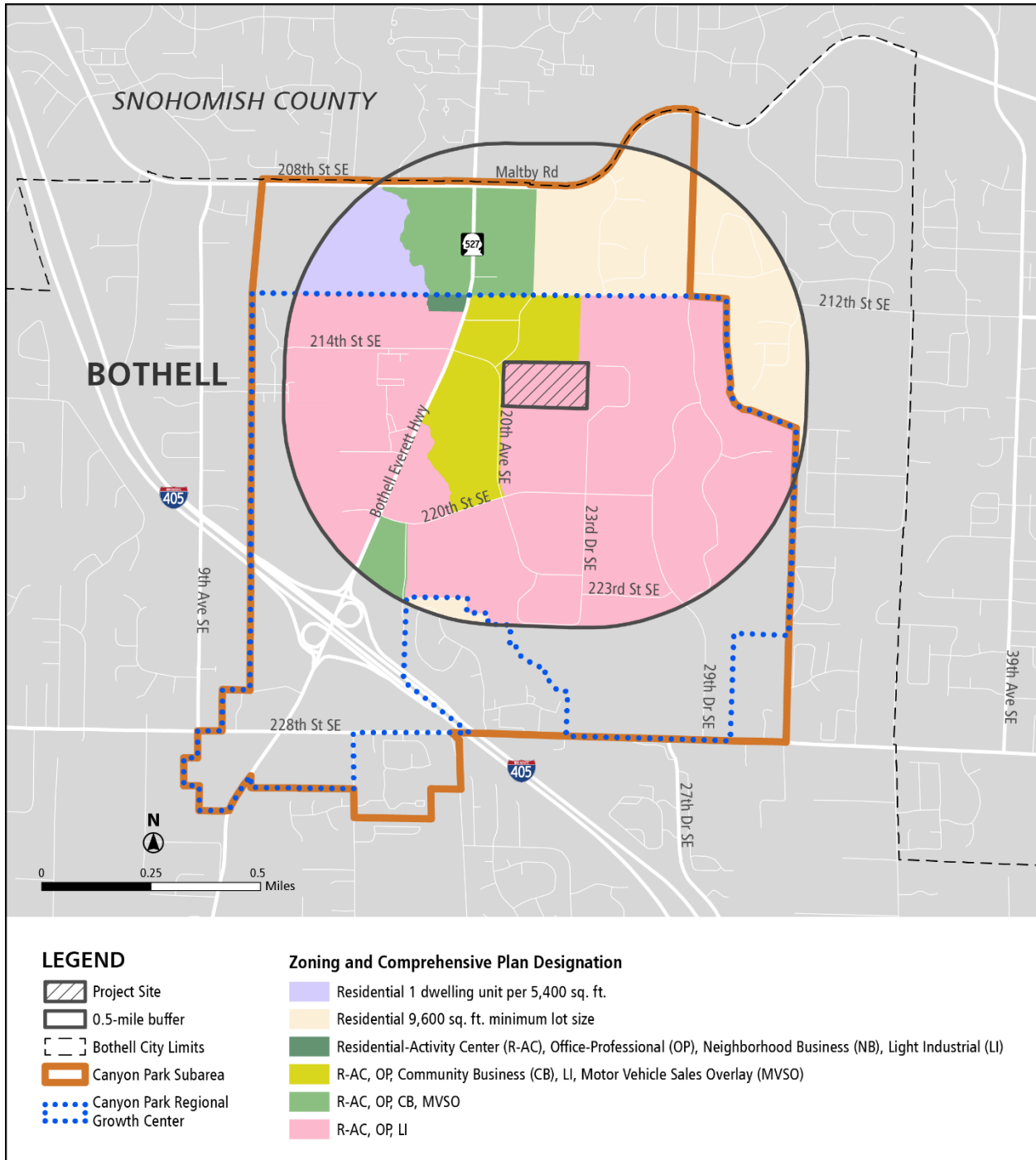


Figure A-6 Bothell Zoning and Comprehensive Plan Land Use

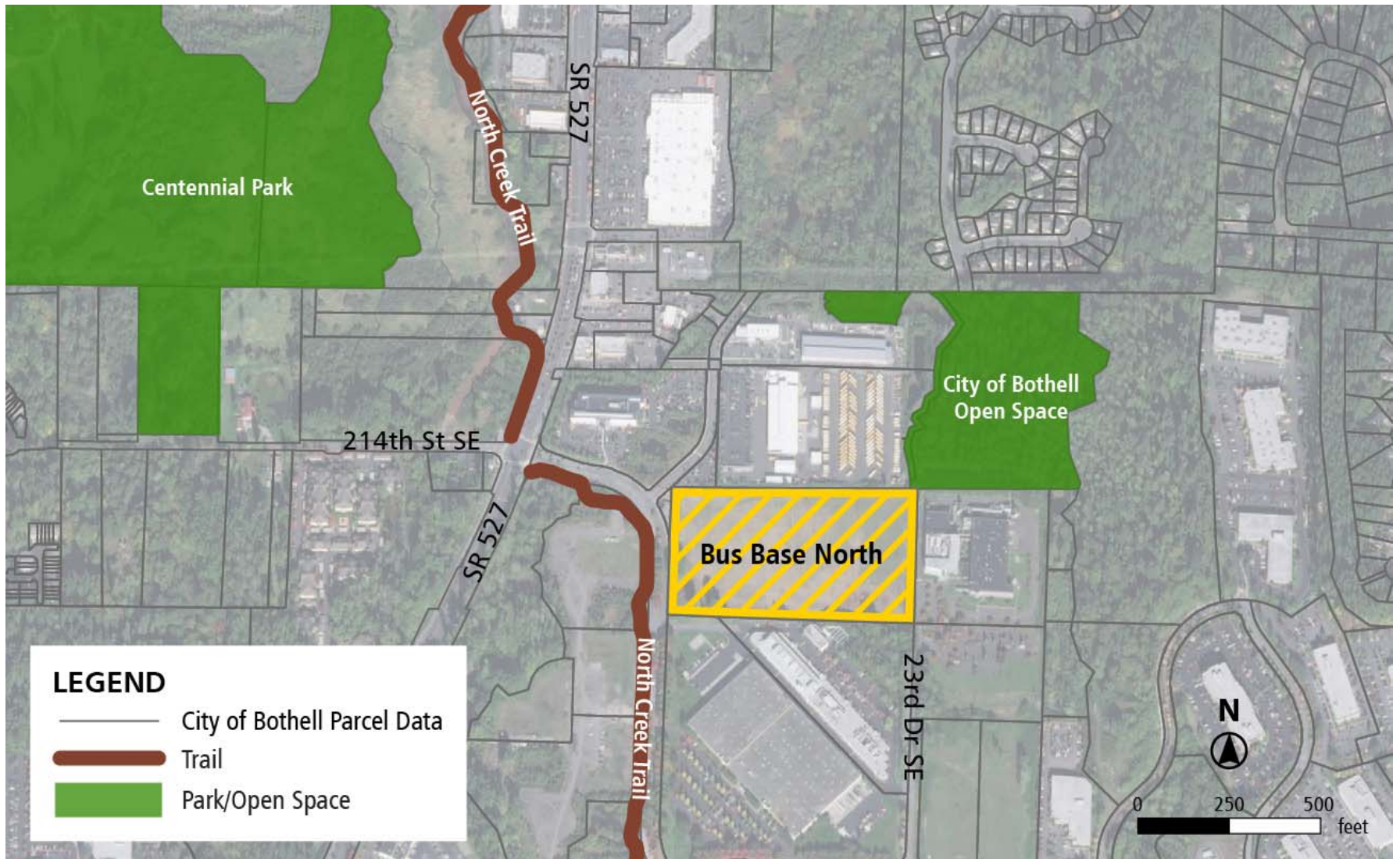


Figure A-7 Recreational Facilities

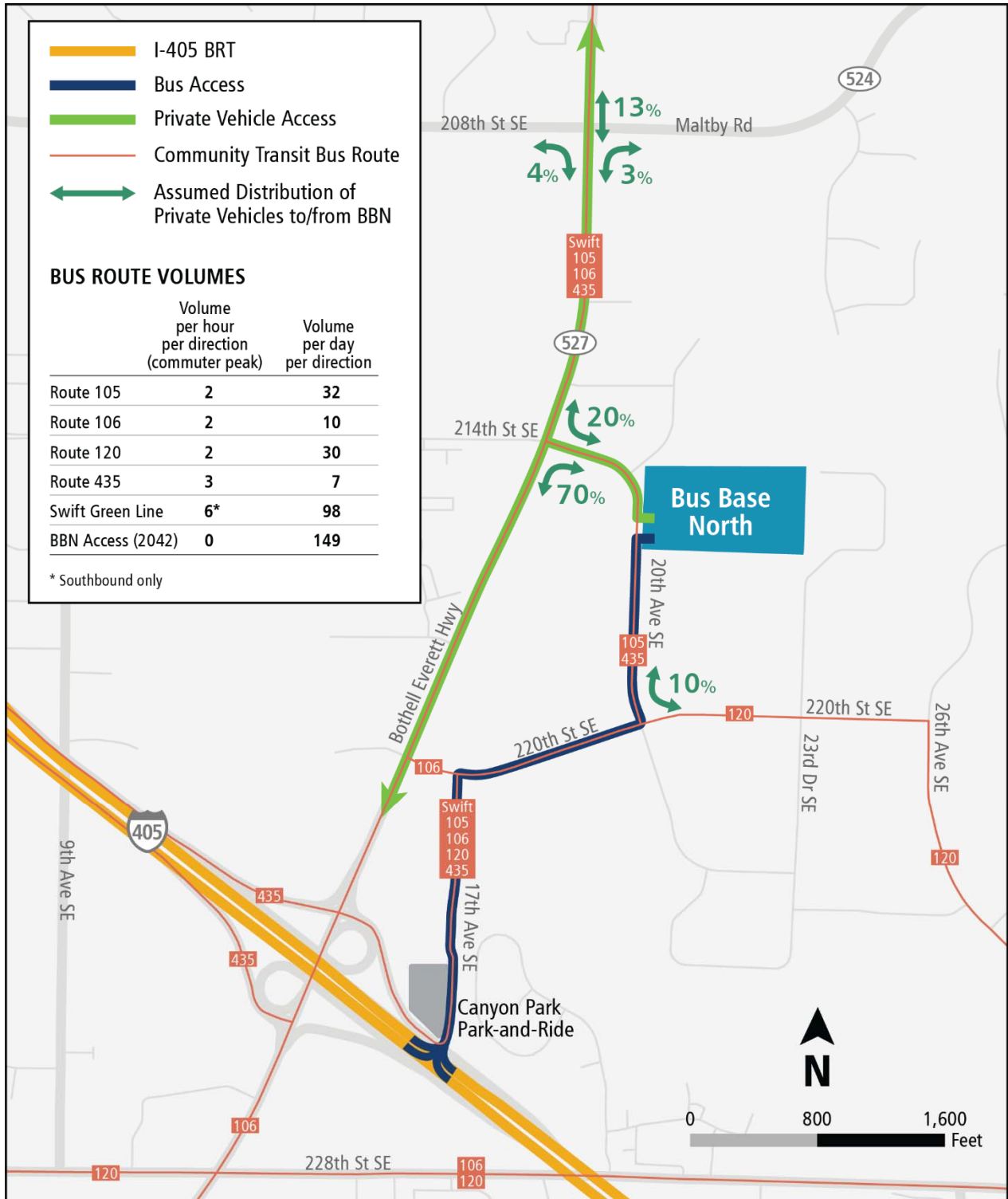


Figure A-8 Proposed 2024 Vehicle Access between Bus Base North and I-405



Figure A-9 Study Intersections

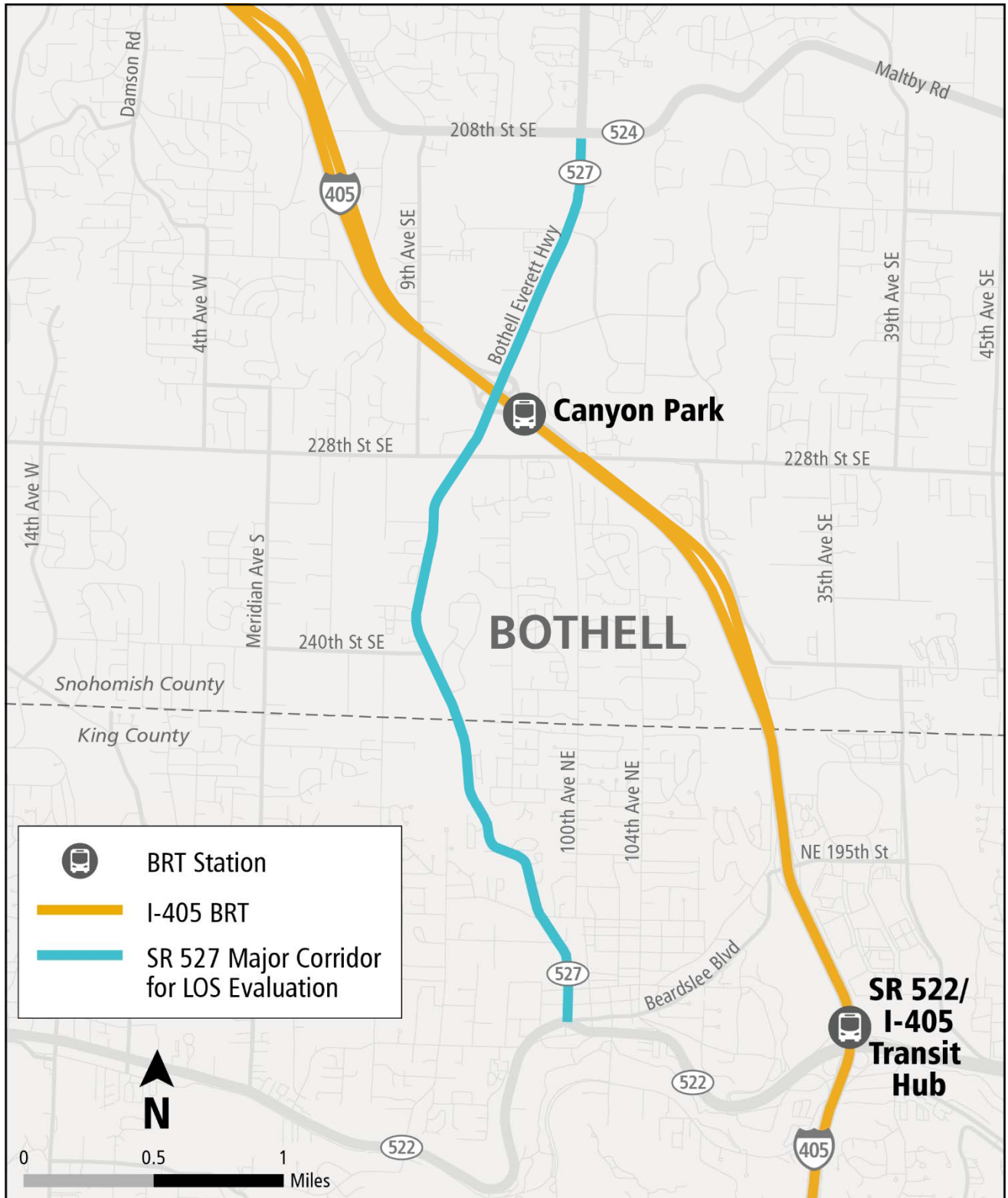
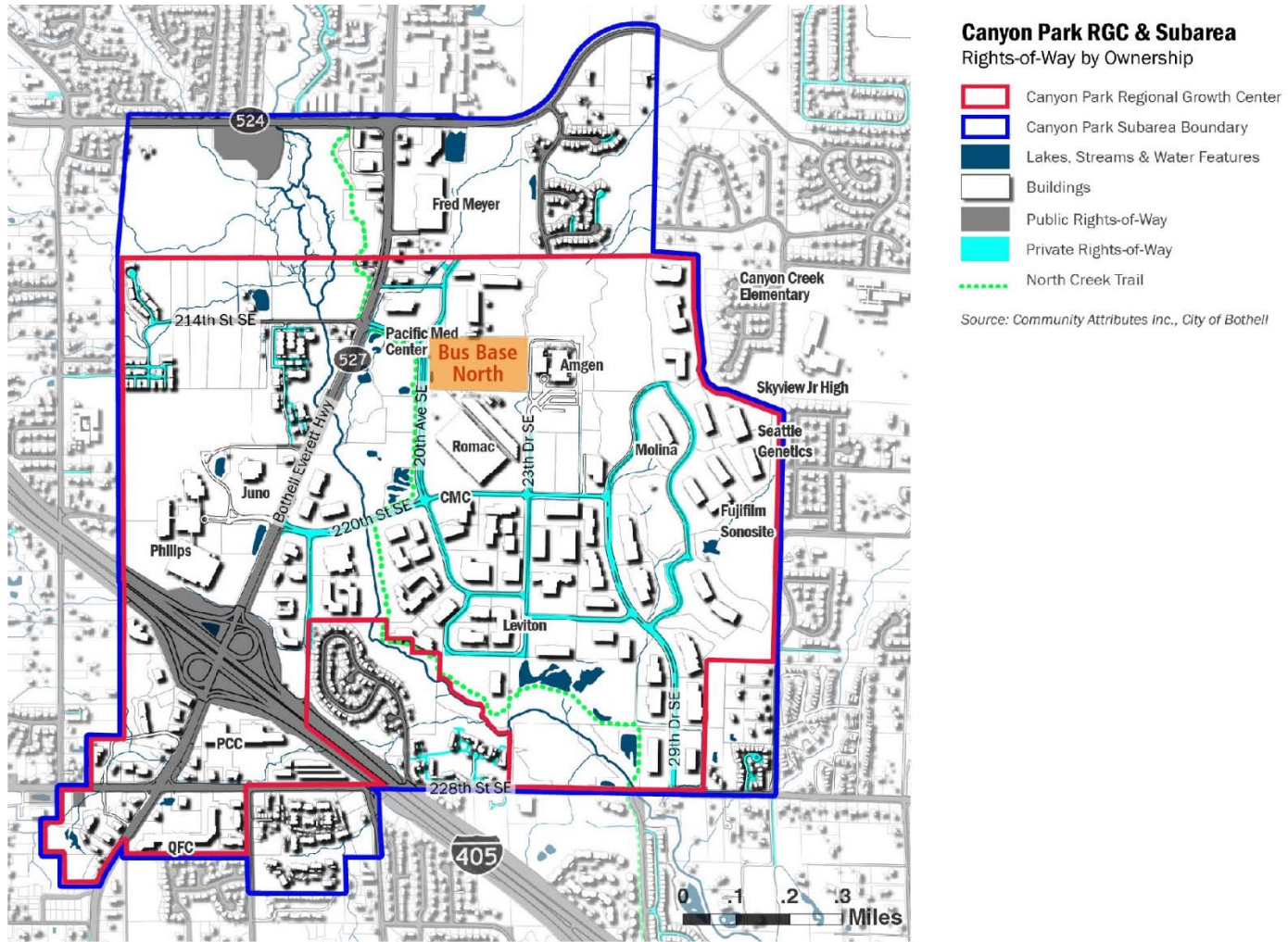


Figure A-10 SR 527 Corridor



SOURCE: City of Bothell, Canyon Park Vision (2018) - <http://www.bothellwa.gov/DocumentCenter/View/7644/Final-Canyon-Park-Vision-Report>

Figure A-11 Private Rights-of-Way in the Bus Base North Project Area

Attachment B

Bus Base North Ecosystem and Wetland Delineation Technical Memorandum

Attachment C

Bus Base North Hazardous Materials Technical Memorandum

Attachment D

Bus Base North Noise and Vibration Technical Memorandum

Attachment E

Bus Base North Visual and Aesthetics Resources Technical Memorandum

Attachment F

Bus Base North Historic and Archaeological Resources Report

Attachment G

Bus Base North Transportation Technical Report

