



# **The Northgate Pedestrian and Bicycle Bridge Seattle, Washington**

## **SEPA Checklist**

**March 21, 2018**

## STATE ENVIRONMENTAL POLICY ACT (SEPA) ENVIRONMENTAL CHECKLIST

### A. BACKGROUND

1. **Name of proposed project, if applicable:** The Northgate Pedestrian and Bicycle Bridge

2. **Name of applicant:** Seattle Department of Transportation (SDOT)

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

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4. **Date checklist prepared:** March 21, 2018

5. **Agency requesting checklist:** SDOT

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

Project construction is scheduled for 2019-2020.

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

There are no future plans or further activity related to or connected with this proposal.

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

- Draft Northgate Pedestrian/Bicycle Bridge Project Wetland Discipline Report, March, 2018
- Draft Northgate Pedestrian/Bicycle Bridge Project Fish, Wildlife, and Vegetation Technical Memorandum, March, 2018

- Draft Northgate Pedestrian/Bicycle Bridge Project Section 4(f) Technical Memo, March 2018
- Draft Northgate Pedestrian/Bicycle Bridge Project Environmental Justice Technical Memorandum, March 2018
- Draft Northgate Pedestrian/Bicycle Bridge Project Hazardous Materials Technical Memorandum, March, 2018
- Northgate Pedestrian/Bicycle Bridge Project Type Size and Location Report, Integrity Engineering. November 11, 2017
- Draft Northgate Pedestrian/Bicycle Bridge Transportation Analysis Technical Memorandum, Fehr & Peers. July 28, 2017
- Preliminary Geotechnical Report, Northgate Bridge: Pedestrian and Bicycle Facility, HWA Geosciences, 2017
- Northgate Pedestrian/Bicycle Bridge Geotechnical Engineering Report, Hart Crowser, November 22, 2016
- Northgate Pedestrian/Bicycle Bridge Project Cultural Resources Assessment, ESA, December, 2015
- Station Access Data Analysis and Application to Northgate Station, Kittelson & Associates, May 2013
- Northgate Pedestrian Bridge Feasibility Study, King County Department of Transportation, December 2012
- Sound Transit North Link Final Supplemental Environmental Impact Statement, March, 2006
- Sound Transit, Central Link Project: North Link SEPA Addendum, 2012
- North Seattle College Housing Feasibility Study, 2017

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

The North Seattle College (NSC) is investigating development of student housing on campus. The College would like to build a 300-400 bed facility for students. A location has not been identified. The goal of the student housing is to provide on-campus housing for domestic and international students, including affordable housing for low income, homeless students.

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

- Federal Highway Administration (FHWA) National Environmental Policy Act (NEPA), Documented Categorical Exclusion
- US Army Corps of Engineers, Section 404 Clean Water Act Nationwide Permit 14, Linear Transportation Projects
- Washington State Department of Ecology, Section 401 Water Quality Certification
- Washington State Department of Ecology, National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit
- Washington Department of Fish and Wildlife, Hydraulic Project Approval
- King County, Waste Discharge Permit (for dewatering)
- Seattle Department of Construction and Inspections (SDCI)
  - Environmentally Critical Areas Approval
  - Stormwater/Drainage Approval
  - Building Permit
  - Electrical Permit
- NSC, Permanent Easement Agreement
- Washington State Department of Transportation (WSDOT) Trail Lease Agreement

**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.)**

SDOT is proposing to build a non-motorized transportation corridor between the east and west sides of the Northgate community, helping knit together a neighborhood historically divided by Interstate 5 (I-5), a 10-lane highway. The project will provide a link to the King County Metro Transit Center that currently serves over 6,000 passengers a day, and the planned Sound Transit Link Light Rail station that is expected to serve over 15,000 passengers per day. The project will connect transit, retail and office uses on the east side of I-5 with residential neighborhoods and the NSC on the west side.

The key elements of the Northgate Pedestrian and Bicycle Bridge Project include:

- A 16 foot-wide and 1900-foot long pedestrian/bicycle facility, including a 360-foot crossing of I-5

- On the east side of I-5, ramps will connect to grade level at 1st Avenue NE and NE 100th Street. A bridge connection over 1st Avenue NE will connect to the Northgate Link Light Rail station
- On the west side of I-5 the bridge will transition to an earthfill embankment with retaining walls and touch down on the NSC campus
- The western 400 feet of the pedestrian/bicycle corridor will connect to College Way N and vacated N 100th Street via a 16-foot wide multi-use path
- A 10-foot wide protected bike lane will be provided along the west side of 1st Avenue NE from NE 92nd Street to NE 103rd Street. A multi-use path will continue on the east side of the street to Northgate Way

**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 will be located in the Northgate area of Seattle (Figures 1 and 2). The project area is generally bounded by College Way N on the west, 1st Avenue NE on the east, Northgate Way on the north and N 92nd Street on the south. This project area is bisected by I-5. The eastern and middle portions of the project are on land owned by WSDOT and on SDOT and WSDOT right-of-way. The western portion of the project lies within WSDOT right-of-way and on land owned by the NSC. Staging will occur on the NSC campus and on the WSDOT park and ride (Figure 3).

**B. ENVIRONMENTAL ELEMENTS**

**1. Earth**

**a. General description of the site: [Check the applicable boxes]**

Flat       Rolling      X Hilly      X Steep Slopes       Mountainous  
X Other: (identify)

The project site lies within the headwaters of Thornton Creek. It consists of the core NSC campus buildings, walkways, parking lots, trails, wetlands and undisturbed areas. The western portion of the proposed bridge is at a ground elevation of about 250 feet. The NSC campus rises on the west to an elevation of about 280 to 290 feet. The I-5 freeway to the east is on an artificial embankment

12 to 20 feet high with southbound lanes at an elevation of about 270 feet and climbing to an elevation of about 300 feet at N 92nd Street. The east side of I-5 is at an elevation of about 250 feet at NE 100th Street and 1st Avenue NE.

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

Slopes on the NSC campus are generally shallow, at approximately 6%, with some smaller slopes adjacent to wetlands and watercourses at over 50%. The fill embankments for I-5 are at an approximately 50% slope.

**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.**

Eight soil units were found on the bridge corridor<sup>1</sup>:

- Fill
- Soft Clay/Silt
- Medium Dense Sand/Gravel
- Glacial Till
- Advance Outwash
- Glacio-lacustrine deposits
- Hard Organic Silt/Peat
- Very Dense Sand/Gravel

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

The western half of the proposed bridge structure is underlain by thin fill deposits and very dense glacial till soils. These soils will generally provide good support for the proposed improvements. A small pocket of potentially liquefiable fill was observed near Pier 4 at the contact between the fill and underlying glacial till.<sup>2</sup>

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<sup>1</sup>Source: HWA Geosciences, 2017.

<sup>2</sup> Ibid.

The main span of the bridge structure is underlain by dense to very dense fill soils and glacial soils at depth. These soils will provide good bearing for the bridge foundation in this area.

The eastern portion of the bridge is underlain by near surface soft clays and silts. These soils are compressible in nature and will undergo consolidation settlement upon the application of load. These soils are underlain by very dense glacial soils at depth<sup>3</sup>.

According to the City of Seattle's GIS data, the project is located in Peat Settlement Prone and Steep Slope Environmentally Critical Areas (ECA). Additionally, a peat layer was noted in the geotechnical investigations on the east side of the project.

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

Grading, fill and excavation will be required for:

- **Bridge footings and columns** - Ground disturbance for 17 bridge support piers and abutments would be about 7,000 square feet. The west embankment approach to the bridge will be fill supported by retaining structures up to a height of about 20 feet. Fill quantity is estimated at about 2,500 cubic yards.
- **Staging areas** - On the west side of I-5, ground disturbance for excavation and grading including staging areas would be about 60,000 square feet. On the east side of I-5 ground disturbance for excavation and grading including staging areas would be about 56,000 square feet.
- **Drainage** - A new stormwater detention vault will be installed on the west side of I-5, near the NSC north parking lot. Approximately 300 cubic yards of existing soil will be removed for the installation of the vault.

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<sup>3</sup> Ibid.

- **Retaining walls** -A portion of the east approach will be fill supported by retaining walls up to a height of about 11 feet. Fill quantity is estimated at about 460 cubic yards.
- **Wetlands** – Wetland 5 will be reconfigured to allow room for the west bridge approach. Approximately 500 feet of Wetland 5 will be filled. The North Watercourse will be filled to accommodate the east bridge landing and protected bike lane in 1st Avenue NE. One hundred and fifty (150) feet of the North Watercourse will be filled.

The fill source is expected to be a commercial quarry site to be identified by the project contractor.

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

Disturbed portions of the project area, including fill slopes and stockpiles, would be susceptible to erosion during staging and construction prior to re-establishment of permanent ground cover.

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

The project area consists of three distinct sections: the NSC campus, the area over I-5, and the area east of I-5 which includes the east approach and pedestrian/bicycle facilities along 1st Avenue NE. Currently, the 65-acre NCS campus is covered with approximately 35 acres of impervious surface or 55%. The project will add approximately 0.61 acres of new impervious surface to the NSC campus. The percent of impervious surface on the NSC campus after construction of the project will increase slightly to 56%.

The area over I-5 is currently covered with nearly 98% impervious surface. The bridge span across I-5 will add 0.215 acres of impervious surface. This will not change the percent of impervious surface in this area after the project is constructed.

The east side of I-5 where the east approach will land consists of the I-5 berm, the WSDOT park and ride lot, North Watercourse and 1st Avenue NE. This area consists of approximately 95% impervious surface. New facilities will add



approximately 2.4 acres of impervious surface. The approach ramp will add 0.659 acres and the 1st Avenue protected bike lane and multi-use path impervious area will add approximately 1.7 acres. This will slightly increase the percent of impervious surface after the project is constructed.

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

The contractor will develop a Stormwater Pollution Prevention Plan (SWPPP) as specified in the Ecology NPDES Construction Stormwater General Permit. The SWPPP will describe erosion control Best Management Practices (BMPs) to reduce and control erosion and impacts to water quality.

In addition, the project is being designed to account for liquefiable soils on the site. Pier 4 has been designed to withstand liquefaction and light weight fill soils will be added at the eastern bridge approach. The project will also be designed to meet development standards for Steep Slope Areas (SMC 25.09.09). Subsurface foundations will be designed to meet development standards for Peat Settlement Prone Areas (SMC 25.09.11).

**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.**

Construction air emissions would result from exhaust from internal-combustion engine powered construction equipment, which is expected to be the predominant power mode for the site. Dust will be generated during excavation, clearing and grading activities.

Operation of the bridge and bicycle facilities will not generate air emissions. Maintenance of the facility could result in short-term emissions from internal-combustion engine powered equipment.

Construction greenhouse gas emissions will result primarily from fuel used in construction equipment and embodied emissions in materials such as concrete and steel. Operation emissions may come from facilities such as lighting, however since Seattle has a carbon neutral electrical supply, no greenhouse

gas emissions will occur. Maintenance emissions would come from equipment used to maintain the facility, including periodic washing and trimming of trees adjacent to the facility, and occur over the project's lifespan.

Construction Greenhouse gas emissions will result primarily from fuel used to run construction equipment and embodied emissions in materials such as concrete and steel.

Operation emissions may come from facilities such as lighting. However, since Seattle has a carbon neutral electrical supply, no greenhouse gas emissions will occur. Maintenance emissions would come from equipment used to maintain the facility, including periodic washing and trimming of trees. Because the project will not change traffic operations, greenhouse gas emissions from traffic are not expected to change.

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

The I-5 freeway is the largest source of off-site emissions in the area. Other emissions in the area are from combustion powered space heating in commercial and residential buildings. These emissions will not affect the project.

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

Pedestrian and bicycle use of the project will not cause emissions so measures to reduce or control emissions are not proposed.

Emissions from construction equipment will result from use of internal combustion engines. Use of newer lower emission diesel engines during construction may be used to reduce emissions from that source.

Dust generated during construction will be controlled following dust suppression best management practices specified in Volume 2 of the City of Seattle's Stormwater Manual, Construction Stormwater Control.

### 3. Water

#### a. Surface:

- 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.**

There are numerous wetlands and several watercourses in the project area and in the vicinity of the project (Figure 4).

On the NSC campus there are seven wetlands (Wetlands 1-7) shown in Figure 4. All wetlands are connected hydraulically either by pipe, surface-flow or groundwater. Wetland 5 is associated with a surface drainage course parallel to and south of vacated N 100th Street. This wetland drains directly into Wetland 6, the "Surge Pond".

West of the project area, a wetland constructed as a stormwater detention facility is located at 10049 College Way N on the Seattle Police North Precinct site. This wetland drains across College Way N into Wetland 1.

On the east side of I-5, there are four wetlands (Wetlands A, D, E, F shown in Figure 5) two ditches (Ditch 1 and 2), and two watercourses (North and South watercourses). The South Watercourse receives water from NSC Wetland 6 via a 72" culvert that crosses I-5 along the vacated N 100th Street alignment. The North Watercourse receives water from the I-5 right-of-way.

The North and South Watercourses flow via pipes in NE 100th Street to a water quality treatment facility that conveys flows through Thornton Place, a condominium development. From here, water is discharged downstream to the South Branch of Thornton Creek at NE 103rd Street and 5th Avenue NE via a 0.18 mile of enclosed drainage and 0.15 mile of open channel.

- 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.**

Permanent impacts to wetlands on the west side of I-5 will occur at the west end of Wetland 5 which will be re-aligned to accommodate the west bridge approach. Approximately 80 cubic yards of fill will be placed

resulting in about 500 square feet of wetland impact. The western end of Wetland 5 will be realigned to the north resulting in an area of wetland creation approximately equivalent to the area being filled. The existing 36-inch Corrugated Metal Pipe (CMP) that discharges water into the wetland will be re-routed to discharge to the upstream end of re-aligned Wetland 5.

On the east side of I-5, portions of the North Watercourse riparian corridor will be filled to accommodate the east landing of the bridge. This will reduce the length of available stream habitat. Approximately, 130 feet of existing stream channel will be filled and the vegetation in this area will be removed to accommodate the landing.

Installation of the protected bike lane along the western edge of 1st Avenue NE will require filling a sliver of the northern portion of the North Watercourse. Proposed culverts will be used to convey stream flows downstream into the existing 72-inch pipe that conveys current flows downstream.

Construction impacts on the west side of I-5 include temporary impacts to Wetlands 4, 5 and 6. At Wetland 4, construction equipment will access this portion of the alignment from I-5 resulting in 0.021 acre (910 square feet) of temporary impact. At Wetland 6, the bridge truss will be staged across the north end of the wetland (construction equipment will not enter the wetland), resulting in 0.085 (3,700 square feet) of temporary impact.

Construction impacts on the east side of I-5, including hand clearing of trees and brush to allow construction of the bridge, will occur near the north and south ends of the North Watercourse with temporarily impacts to approximately 430 square feet of the watercourse.

The project will not impact Thornton Creek which is 1.5 miles downstream from the project. However, depending on permit requirements, it is possible that off-site mitigation will take place on downstream sections of Thornton Creek that would result in temporary construction impacts. Impacts from off-site mitigation will be evaluated in separate environmental documents.

**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.**

Permanent fill on the west side of I-5 includes approximately 80 cubic yards in Wetland 5 resulting in 500 square feet of permanent wetland impact. The fill is needed to facilitate the bridge transition to the pedestrian/bike trail on N 100th Street.

Bridge construction and installation of Piers 5 and 6 will permanently impact 90 square feet (0.002 acres) of the buffer of Wetland 6.

Staging of the bridge truss and construction access will temporarily impact 0.449 acre (19,550 square feet) of Wetland 6 buffer.

One hundred and thirty feet (200 cubic yards) of the North Watercourse on the east side of I-5, will be filled.

The fill source is expected to be a commercial quarry site to be identified by the project contractor.

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

No surface water withdrawals or diversions are proposed. All watercourses and wetlands will continue their existing patterns of recharge and discharge. Temporary diversion of water in watercourses containing fish may be required prior to and during fill operations.

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

No floodplains are designated on the site or in the vicinity by the SDCI GIS maps or Federal Emergency Management Agency (FEMA) floodplain map number 53033C0329F.

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

No waste material will be discharged to surface waters.

**b. Ground:**

- 1) Will ground water 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.**

No groundwater will be withdrawn for drinking purposes.

Dewatering of groundwater will be required for the construction of the piers and stormwater detention vault. All water encountered during excavation activities will be pumped either to holding tanks or temporarily into the next excavation location to aid in construction. This recycled water will help stabilize the banks of the excavation and be used for cement production for construction. Although there is no indication of contaminated groundwater at the project location, if any potentially contaminated water is encountered, it will be contained in tanks, or discharged to sanitary sewer as allowed through a King County Waste Discharge Permit obtained by the project.

- 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 will be discharged to the ground.

**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.**

The source of runoff from the project will be stormwater flow from new and replaced impervious surface, largely consisting of the bridge and approaches and the trail connection to College Way N. The majority of the impervious surface will be from non-pollution generating surfaces.

Stormwater flow control facilities are proposed in accordance with City of Seattle standards. This includes a detention vault on the west side of the project and on-site stormwater BMPs on the east side.

All stormwater will continue to discharge into surface waters within the project area at the same locations as current drainage patterns and will eventually discharge to Thornton Creek near NE 103rd Street and 5th Avenue NE. Thornton Creek flows into Lake Washington.

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

No waste material will be discharged to surface or ground waters. Permanent surface water discharges are limited to stormwater from the bridge, associated approaches and the 1st Avenue NE multi-use bike and pedestrian path. These facilities will be used by pedestrians and bicyclists and will have very low levels of pollutants. Detention facilities will be required to meet the Seattle Stormwater Code and Manual requirements. However, water quality treatment facilities are not triggered by the code. On-site stormwater detention and BMPs are required and will be implemented in compliance with the code.

During construction inadvertent spills may occur from sources such as fuel for construction equipment.

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

No. Stormwater drainage from proposed facilities will discharge to existing surface water and existing drainage patterns will be maintained within existing discharge areas.

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

Stormwater facilities for permanent surface water discharges will include collection and detention consistent with the City of Seattle Stormwater Code and Manual which will mitigate any impacts to acceptable levels as defined by the codes. Stormwater on the west side of the project will be collected and

directed to a stormwater detention facility. The outflow from the facility will meet both the Wetland Protection, Pre-Developed Pasture, and Peak Flow standards per SMC 22.805.080. Stormwater runoff on the east side will be managed using on-site stormwater BMPs to mitigate both the flows and water quality from the site per SMC 22.805.070.

Specific BMP's for groundwater containment, treatment, and disposal will be part of the National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit, Washington State Department of Ecology 401 Water Quality Certification process, and local agency permits and will follow City of Seattle standard specifications.

The SWPPP and a Spill Prevention Plan required by the City of Seattle will include provisions for any groundwater pumping that may be required for dewatering and will include contingency planning for any inadvertent spills that might result in discharge to surface or ground water.

#### 4. Plants

##### a. Types of vegetation found on the site: *[Check the applicable boxes]*

- |  |   |   |  |  |
|--|---|---|--|--|
| <input checked="" type="checkbox"/> Deciduous trees:                   | <input checked="" type="checkbox"/> Alder   | <input checked="" type="checkbox"/> Maple     | <input type="checkbox"/> Aspen           | <input type="checkbox"/> Other: (identify) |
| <input checked="" type="checkbox"/> Evergreen trees:                   | <input checked="" type="checkbox"/> Fir     | <input checked="" type="checkbox"/> Cedar     | <input checked="" type="checkbox"/> Pine | <input type="checkbox"/> Other: (identify) |
| <input checked="" type="checkbox"/> Shrubs                             |   |   |  |  |
| <input checked="" type="checkbox"/> Grass                              |   |   |  |  |
| <input type="checkbox"/> Pasture                                       |   |   |  |  |
| <input type="checkbox"/> Crop or grain                                 |   |   |  |  |
| <input type="checkbox"/> Orchards, vineyards, or other permanent crops |   |   |  |  |
| <input checked="" type="checkbox"/> Wet soil plants:                   | <input checked="" type="checkbox"/> Cattail | <input checked="" type="checkbox"/> Buttercup | <input type="checkbox"/> Bulrush         | <input type="checkbox"/> Skunk cabbage     |
| <input type="checkbox"/> Other: (identify)                             |   |   |  |  |
| <input type="checkbox"/> Water plants:                                 | <input type="checkbox"/> water lily         | <input type="checkbox"/> eelgrass             | <input type="checkbox"/> milfoil         | <input type="checkbox"/> Other: (identify) |
| <input checked="" type="checkbox"/> Other types of vegetation:         | (identify) landscaping                      |   |  |  |

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

Construction of the bridge and approach embankments, as well as the trail connection to College Way N will involve a variety of temporary and permanent displacements of both natural and introduced landscaping.



On the west side of I-5:

- Permanent clearing for the approach embankment and safe sightlines on the NSC campus will displace about 7,000 square feet of largely mowed grass and remove up to 52 trees.
- Permanent clearing for the overhead structure will remove 5 – 10 trees in WSDOT right-of-way.
- Permanent impacts to Wetland 5 will be about 500 square feet of vegetation removal.
- Permanent impacts to the Wetland 1 buffer will be about 370 square feet of removal of mixed native, ornamental, and invasive vegetation for addition of a new section of sidewalk.
- Temporary clearing for construction and staging of the approach embankment on the west side will displace about 17,700 square feet of largely mowed grass and six trees and may require pruning or removal of some additional trees.
- Temporary impacts to Wetland 4 vegetation from construction equipment access will be about 910 square feet.
- Temporary impact to Wetland 6 from the bridge truss staging across the north end of the wetland will be about 3,700 square feet of wetland vegetation although construction equipment will not enter the wetland.
- Temporary impacts to the buffer associated with Wetland 1 will be about 1,600 square feet of clearing of mixed native, ornamental, and invasive vegetation.
- Staging along vacated N 100th Street and Corliss Avenue N will impact about 28,000 square feet of grass and undergrowth. Some adjacent mixed shrubs and trees may be removed or pruned.

On the east side of I-5:

- Permanent removal of 15 trees for placement of ramp structure.
- Permanent impacts to the North Watercourse will be about 130 linear feet of habitat.
- Temporary impacts to the North Watercourse will include a total of 430 square feet of habitat at the south end and east edge.

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

There are no known endangered or listed vegetation species on or near the site.

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

All vegetation displaced in staging areas will be replaced in-kind by native species in wetland and wetland buffer areas and by appropriate native and ornamental vegetation in trail and access road areas. Native and ornamental landscaping may be installed, as specified with agreement with the NSC, to compensate for vegetation removed by permanent facilities consistent with the requirements of regulatory agencies.

Native vegetation on stream corridors downstream of the site may be enhanced as part of mitigation requirements of state and federal permits to replace vegetation removed within streams wetlands and their buffers.

The project will also comply with vegetation mitigation requirements in the City of Seattle ECA regulations (SMC 25.09) which addresses wetland and streams and their buffers and in the Seattle Tree Protection Code (SMC 25.11).

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

No state or local listed “noxious weeds” are known to be present on or near the site.

A range of invasive species including English ivy, Japanese knotweed, Himalayan and evergreen blackberry, and other species are endemic in the Seattle area and are regularly controlled by the City and other agencies such as NSC.

**5. Animals**

**a. Birds and animals which have been observed on or near the site or are known to be on or near the site: [Check the applicable boxes]**

**Birds:**         Hawk         Heron         Eagle         Songbirds  
 Other: (identify)

**Mammals:**     Deer         Bear         Elk         Beaver  
 Other:(identify): Coyote, rats, mice

**Fish:**         Bass         Salmon     Trout         Herring  
 Shellfish     Other: (identify)

Bald eagles, protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Act, have mapped breeding areas in several locations several miles from the project. The nearest nesting territory is mapped near the mouth of Pipers Creek and two nesting territories are mapped adjacent to Green Lake, which is located over two miles southwest of the study areas. Neither nesting territory will be adversely affected by the proposed bridge construction because of the distance from the project.

West of I-5 the large, open water wetland (Wetland 6) attracts a variety of water-associated bird species, such as gulls, ducks, geese, and cormorants. These species likely use the wetland primarily for foraging, rather than nesting, due to the proximity of I-5.

Bird species typically adapted to urban environments such as American robins and European starlings, are likely present.

Numerous small mammals likely use the project area. These include species that can tolerate or benefit from human disturbance, using landscape vegetation, structures, garbage cans, and other human features for foraging, movement, shelter, and potentially even breeding sites. Examples include mammals such as the Norway rat, eastern gray squirrel, raccoon, possum and other species tolerant of an urban environment.

Large native mammals such as deer are not present due to lack of habitat and migration routes. Beaver and other aquatic mammals use watercourses and wetlands in the vicinity and on the site.

Amphibians, such as the Pacific tree frog (*Pseudacris regilla*) are monitored by students through several Ecology classes taught by Professor John Figge as part of the NSC Ecology curriculum (Figge, 2017) and are primarily found in and adjacent to Wetland 2 on the NSC campus as shown in Figure 4. The corridor from Wetland 1 and Wetland 2 are heavily used by tree frogs for all life stages. These areas will not likely to be impacted by this project and all efforts to minimize disturbance during construction will be made including temporary fencing to minimize disturbance.

Amphibians are an important part of forest and aquatic ecosystems, and they are very sensitive to environmental changes. Their populations have been declining world-wide as a result of environmental stresses including increases in UV-B radiation (from ozone depletion), climatic change, habitat loss and destruction, acidification caused by acid rain and infection (e.g. fungal disease, chytridiomycosis). Light pollution may also impact amphibians, because many amphibians are nocturnally active or have biological rhythms regulated by light. The light impacts from the NSC parking areas and walkway light fixtures and lamp posts currently illuminate areas that are used by amphibians including pacific tree frogs. The proposed project will not significantly increase the amount of light that currently exists throughout the site. The new bridge will have lighting and new and replaced lighting in the lower elevation areas that will not spill over onto the Bartonwood Natural Area.

East of I-5, terrestrial habitat is limited because of residential and commercial development, including the Northgate Mall and the residential community of the Northgate neighborhood. Commercial properties are sparsely vegetated and residential properties are moderately vegetated with urban landscaping. Wildlife use of the upland is likely limited to the Norway rat, eastern gray squirrels, raccoons and opossums.

Juvenile cutthroat trout and spine stickleback, which are not threatened or endangered, were observed on the east side of I-5 within Wetland A, and in the North and South Watercourses as well as on the west side of I-5 in the Surge Pond (Wetland 6) and Wetland 5 during the wetland delineations and field visits.

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

No endangered species listed under the federal Endangered Species Act occur on the site. However, threatened species, winter steelhead and fall Chinook salmon, are located approximately 1.5 miles downstream from the site. Coho and sockeye salmon are also found (WDFW, 2015b), along with resident coastal cutthroat trout (PHS, 2015) downstream of the site.

No state-designated priority species or habitats, regulated by the Washington State Department of Wildlife, were identified within the study areas.

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

The NSC Campus provides about 30 acres of open space/greenbelt on the northerly, easterly and southerly margins of the campus. This area is characterized by a variety of native vegetation as well as introduced species. The site, however, is isolated on the east by a large interstate highway, on the north by a large office building and parking lot and a variety of urban uses, on the south by an arterial and single family residential use, and on the west by college parking and buildings, and single-family residential uses. This provides little opportunity for movement of terrestrial species to and from the site, except for the Norway rat, eastern gray squirrel, raccoon, possum and other species tolerant of an urban environment. Amphibians may occasionally move through the urban storm drainage system both as eggs and tadpoles carried by high flows and as ranging mature frogs.

The site is located within the Pacific Flyway, and as such a variety of migratory birds use the vegetated and wetland areas, likely for foraging rather than nesting due to the proximity of I-5.

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

Habitat value lost by vegetation displaced in staging areas will be replaced in-kind by native species in wetland and wetland buffer areas and by appropriate native and ornamental vegetation in trail and access road areas. Native and ornamental landscaping may be installed, as specified with agreement with NSC, to compensate for vegetation removed by permanent facilities which likely will replace and may enhance overall habitat value of the open space/greenbelt portion of the campus. Impacts on streams and wetlands will be mitigated in conformance with permit requirements.

The project will comply with vegetation mitigation requirements in the City of Seattle ECA (SMC 25.09) which addresses wetland and streams and their buffers and in the Seattle Tree Protection Code (SMC 25.11).

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

Norway rat, eastern gray squirrels, and opossums.

## 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 will be used for bridge and path lighting, information technology service (ITS) lines, call boxes and the art installation.

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

No. There will be no blockage of potential solar collectors by the bridge or trails.

- 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:**

LED lighting will likely be used, which has lower energy use than other fixture types.

## 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.**

A review of the state and federal databases in 2017 indicates there are no US EPA Superfund sites within one mile of the project site. There were six sites identified in the Washington State Department of Ecology (Ecology) databases within one-half mile of the project site as shown in Figure 6. However, the review of environmental records and site-specific history shows that none of the six sites are sites of concern.

West of I-5, past use of the site for agriculture prior to 1950 and as open space/greenbelt indicates a low probability of contamination on the route of the pedestrian/bicycle bridge.

East of I-5, past urban uses prior to establishment of the highway indicate little potential for hazardous materials according to Sound Transit North Link environmental documents.

**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 are no known hazardous chemicals or conditions that would affect project development and design.

**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.**

Toxic or hazardous materials that might be stored, used or produced during the project's development or construction could include construction equipment, fuel and maintenance products.

**4) Describe special emergency services that might be required.**

No special emergency services would be necessary. Occasional medical emergencies on the bridge or bike track may require emergency medical response by trained personnel available from the Seattle Fire Department and Police Department.

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

To minimize risk to construction workers if contaminated materials are encountered, the contractor will follow the City of Seattle 2017 Standard Specifications for Road, Bridges and Municipal Construction 1-07.29 Discoveries of Contaminated Material(s), Dangerous Waste(s) and TSCA Waste(s). In addition, the contractor will develop a Spill Plan that meets City Standard specifications 1-07.15(1) and 8-01.3(2)(C).

**b. Noise**

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

Traffic noise from I-5 is the predominant source of noise in the vicinity. Noise at the edge of the I-5 right-of-way is estimated to be between 70 and 75 dBa based on similar readings for sections of I-5 where the highway is elevated above the surrounding area. The western portion of the NSC campus is about 800 feet from the I-5 travel lanes and has an estimated noise level of 60 to 65 dBa (Based on measurements in Sound Transit's Lynnwood Link Noise and Vibration Technical Report. July 2013).

**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.**

During operation of the bridge, users of the bridge would create noise from conversation, bicycle bells, and avoidance voice signals. Proximity noise from the bridge has the potential to increase noise levels slightly in the Bartonwood Natural Area. Such disturbance could reduce the use of the wetlands and nearby upland areas for some sensitive wildlife species. However, the Bartonwood Natural Area is currently subjected to the human contact and noise associated with the trails that wind through the area and produce noise and disturbance much closer to habitat areas.

The Natural Area is also currently affected by noise from pedestrian use on the Khaki and Green Loop trails on the vacated N 100th Street, which are closer to the natural area than the bridge alignment. The incremental impact of additional noise from the bridge is likely minimal in comparison to current highway noise and noise from users of trails within the area. The 2007 NSC Long-Range Plan recognized that "longer term impacts to wildlife habitats would result from the incremental increase in human activity associated with the addition of new trails, lighting and signage. The disturbance would reduce the suitability of the wetlands and nearby upland areas for some wildlife species. Animal species that are intolerant of continual human contact may leave the wetlands."

Construction noise impacts would be temporary and would result from the use of heavy construction equipment (excavators, bulldozers, generators,



etc.). The increase in noise levels would depend on the type of equipment being used and the amount of time it is in use.

The NSC open space/greenbelt in the western portion of the corridor, which includes wildlife that could be affected by construction of the earth embankment supporting the western portion of the trail and the hauling of soils and construction materials. NSC buildings closest to the construction site, including the Childcare Center would also be affected.

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

Construction noise will be controlled by the City of Seattle Noise Ordinance (SMC 25.08.425), which regulates noise levels for various activities within the city. To satisfy the Noise Ordinance, the Contractor will develop a noise control plan. A Noise Variance from the SDCI will be required for night-time construction.

During operation, noise from users of the bridge could be reduced by planting native vegetation in the portions of the Bartonwood Natural Area that are currently characterized by mowed lawns and invasive Himalayan blackberry, which would reduce the transference of sound from the bridge structure.

**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 land use in the western portion of the bridge corridor is the NSC campus open space/greenbelt area and parking area.

The central part of the bridge corridor is I-5 right-of-way.

The eastern portion of the bridge corridor includes a WSDOT park and ride adjacent to 1st Avenue NE, a light-rail corridor and station under construction east of 1st Avenue NE, 1st Avenue NE, freeway on/off-ramp and shoulder, and a variety of parking, commercial, office and residential uses.

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

Yes, the site was used for agriculture from about 1920 to 1968 when the Kumasaka Farm and Green Lake Gardens Company was purchased by the state for the NSC campus.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversized equipment access, the application of pesticides, tilling, and harvesting? If so, how?**

No. There is no surrounding working farm or forest land.

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

On the east side of I-5 the Sound Transit light rail elevated guideway and station construction is the dominant feature in the immediate vicinity. Further northeast are large scale buildings housing the Northgate Shopping center and a variety of office, commercial and retail buildings ranging from one to six stories in height.

On the west side of I-5 the 65-acre NSC includes:

- The NSC Campus Core, (covering about 20 acres) on the western portion of the site. It includes all campus buildings and the planted areas around and between those buildings.
- Parking lots (covering about 15 acres) located east of the Campus Core and includes campus parking lots and landscaping.
- Open Space/Greenbelt (covering about 30 acres) includes a variety of vegetated areas, including uplands and wetlands and a large stormwater detention pond.

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

No structures will be demolished

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

West of I-5:

- NSC Campus: The NSC campus is divided into three zones as shown in Figure 7:
  - MIO-37-LR3 - Major Institutional Overlay with a 37-foot height limit.
  - MIO-50-LR3 - Major Institutional Overlay with a 50-foot height limit.
  - is MIO-105-LR3 - Major Institutional Overlay with a 105-foot height limit.

East of I-5:

- Between NE 100th Street and NE 105th Streets the zoning is NC3-125, Neighborhood Commercial Zoning District with a 125-foot height limit.
- Between NE 100th Street and the alignment of NE 97th Street the zoning is NC3-85, Neighborhood Commercial Zoning District with an 85-foot height limit.
- Between the alignment of NE 97th Street and the alignment of NE 96th Street the zoning is NC3-65, with a height limit of 65 feet.
- Between the alignment of NE 96th Street and NE 94th Street the zoning is LR-3 and LR-2, Low-rise Residential.
- South of NE 94th Street the zoning is SF-7200, Single Family.

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

The NSC lies within the Northgate Urban Center and a Major Institutional Overlay District as designated in the City of Seattle Comprehensive Plan.

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

Not applicable.

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

Yes. Several areas of the site have been designated as ECA by the City of Seattle. The City of Seattle maps show:

- Steeps slopes, primarily associated with the I-5 road embankment.
- Wetlands, wetland buffers, and watercourses, roughly consistent with the field delineation.
- Peat settlement prone areas, which includes the larger NSC and Northgate Mall area.

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

None.

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

None.

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

Not applicable.

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

The project is consistent with the City of Seattle Northgate Area Comprehensive Plan (1993)<sup>4</sup> and the NSC Major Institution Master Plan (1995) both approved by the City of Seattle.

**m. Proposed measures to ensure that the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:**

Not applicable. There are no agricultural or forest lands of commercial significance on the site.

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<sup>4</sup> Northgate Area Comprehensive Plan includes several directives to construct an overpass between a new light rail station and the NSC (pages 29, 32, 50).

## 9. Housing

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

None.

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

None.

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

Not applicable.

## 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 tallest structure will be bridge truss over I-5. It will be 20-feet tall.

The majority of the bridge structure will be precast prestressed concrete with a steel truss and steel girder spans over freeway lanes.

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

Views in the vicinity of the project would be altered by the bridge. A permanent change in visual context would occur for all potential viewers including occupants of vehicles on I-5 and viewers from both sides of the freeway.

The east bridge approach would include an elevated structure that wraps around the existing WSDOT parking facility, a ramp that extends to grade at 1st Avenue NE and NE 100th Street and a spur bridge that extends across 1st Avenue NE to the mezzanine level of the Sound Transit light rail station. The spur bridge will be about 30 feet lower than the light rail guideway and much narrower than the light rail elevated structure and station to the east. The Light Rail station will be about twice as high as the pedestrian/bicycle bridge and by far the most prominent feature in the vicinity. In the context of the much larger light rail station, it is not expected that the proposed bridge would be seen as obstructing views, or as a substantial change in the complex urban context.

The bridge would be visible from most of the NSC campus where views to the northeast are available from eastern facing portions of buildings, parking areas and open space.

Since the buildings on the campus are largely related to an inner courtyard facing the west, the bridge would not be a prominent feature for most users of the campus and would be most visible from the upper floor walkways providing access to classrooms on the northeast side of the instructional wing and from the northern and eastern sides of the Arts and Sciences wing. The bridge and fill approach (Figure 8) would be visible from the college parking lot and portions of the open space/greenbelt area.

The most visually prominent feature would be the pier supported bridge structure along the north end of the open space portion of the campus. The most prominent views would be from viewpoints adjacent to the Wetland 6 where the bridge would cross over the north end of the wetland. At this location, trees adjacent to the bridge would be higher than the structure and it would be seen in the context of the elevated I-5 travel lanes would be intermittently visible to the east.

The bridge elevation would be about 30 feet higher than the ground floor elevation of the NSC building complex and about 30 feet lower than the balconies on the highest level. Views to the east from higher floor of the buildings look over the landscape buffer and would feature the bridge in the context of I-5 and the office, commercial and retail buildings in the background. The buildings on the east side of I-5 would be higher and have greater mass and would be the most prominent elements of the view with the bridge as a middle level feature. The bridge would likely be perceived as an added element of the urban landscape, particularly with the complexity of features such as the elevated Sound Transit light rail line and station which will stretch along about three quarters of a mile to the east of I-5.

Persons approaching the bridge from the west on the trail connecting to College Way N would view the trail and bridge from the context of the parking lot and likely would perceive that it fit into the transition between the developed portions of the site and open space as shown in Figure 9. Persons approaching the college from the east would have views of college buildings, parking lots, vegetation from Wetland 5 and the west pedestrian/bike path as seen in Figure 10.

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

None.

**11. Light and glare**

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

The bridge will include lighting. Lighting for the bridge would be lower intensity roadway lighting on pedestrian-scale lighting than because the bridge with a width of 16 feet would require less light for illumination. LED lighting is proposed as it is the Seattle City Light general standard for street lighting. The 1st Avenue NE protected bike land will rely on existing street lighting for illumination.

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

The bridge lighting will be at a somewhat higher elevation than existing street lighting on I-5 or adjacent streets. It is unlikely to be perceived as a substantial addition to light sources since this section of I-5 is lighted with much higher intensity lighting.

The west approach from College Way N will add lighting, similar to street lighting. The bridge lighting through the NSC open space/greenbelt area and will be primarily visible from the parking area to the southeast. Lighting will not be readily visible from the Bartonwood Natural area to the north because it will be screened by heavy vegetation in the watercourse/Wetland 5 between the facility and the natural area.

When viewed from the NSC buildings to the west, the lighting of the bridge will likely not be a visual focus because the intervening lighting of the campus parking is nearer and of higher intensity.

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

Existing lighting on I-5, in the NSC parking area to the west, and on adjacent streets to the east of I-5 likely will have no effect on the proposal.

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

The configuration of the lighting is being designed to minimize spillover lighting to reduce impacts on wildlife within the open space area on the NSC Campus. Light impacts to the Bartonwood Natural Areas to the north will be screened to a large extent by existing mature vegetation in the watercourse/Wetland 5 to the north. In addition, the light impacts from the NSC parking areas and walkway light fixtures currently illuminate areas that are used by wildlife, including amphibians such as pacific tree frogs.

**12. Recreation**

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

Recreational opportunities in the immediate vicinity of the project consist largely of use of the College trail system and the open space on the NSC campus. Several areas of flat grassed areas usable for informal recreation throughout the College open space provide passive off-trail recreational use such as frisbee throwing and dog walking. Recreation opportunities on the NSC Campus are shown on Figure 11.

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

The western approach to the proposed bridge would require the placement of bridge piers, each of which is approximately 4 feet by 4 feet in size within the NSC open space/greenbelt with an elevated structure located within the eastern 145 feet of the open space/greenbelt.

The western approach would also displace the "North Berm Trail" which is not currently designated on campus plans.

The Khaki and Green Loop trails on the vacated N 100th Street as well as a portion of the Cranberry Trail will be used for staging and truss assembly for most of the 18-month construction period. The Cranberry Trail will be used for access during this time. Temporary access to and use of these trails by students and the public will be restricted during all or a portion of the construction period. After construction these trails will be restored.



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

Mitigation during temporary trail closure for staging areas and for bridge crossings will include signing for pedestrian detours to provide safe routes to access other portions of the trail system within the campus.

After construction is completed, trails closed for staging will be restored to existing conditions.

The North Berm Trail will be replaced south of the western bridge approach.

**13. Historic and cultural preservation**

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

The Kumasaka Farmhouse and Green Lake Gardens Company site on the NSC Campus is over 45 years old and may be eligible for listing on the National Register of Historic Places (NRHP) due to its association with Japanese immigration and assimilation on the West Coast in the early 20th century, Japanese community longevity before and after World War II, Japanese Internment during World War II, and the importance of the Kumasaka family as a center of the North Seattle Japanese community (ESA 2015).

**b. Are there any landmarks, features, or other evidence of Indian or historic use of 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.**

Native American use of the area included use of the Thornton Creek drainage basin by the XcuAbsh (A-chu-Absh) tribe, the "people of the large lake." They had a village at the mouth of Thornton Creek on Lake Washington, occupied by the Tuhu-beed-Absh clan. This would likely have been part of their hunting and gathering territory focused on the stream a large lake and wetland that occupied the valley bottom. These people visited the lake every fall, to collect

wild cranberries, fish, and hunt in the surrounding area. They built their camps on the slope where the Northgate Mall now stands, and near the present-day County Health Services Building. Nearby Licton Springs was an important spiritual site, where they collected iron-rich mud to use as a pigment. Its waters were considered sacred and purifying. Nearby, they built sweat-lodges in which to enhance the spiritual experience. No cultural artifacts were identified during archaeological surveys of the project alignment. (ESA, 2015).

Professional studies and review included the Northgate Pedestrian/Bicycle Bridge Cultural Resources Assessment, ESA, December 2015.

- 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 Archaeology and Historic Preservation, archaeological surveys, historic maps, GIS data, etc.**

The potential occurrence for prehistoric and historic-period archaeological sites on the project site was investigated by qualified archaeologists. Information about environmental features, known archaeological resources, and the patterns of prehistoric, ethnographic, and historic use of the area was assembled into a cultural resources report. The report was submitted by to Washington Department of Archaeology and Historic Preservation (DAHP) and affected Indian Tribes by the Federal Highway Administration (FHWA) as part of the Section 106 process. FHWA consulted with DAHP and the Tribes.

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

The project was designed and staging areas were selected to avoid the Kumasaka site. Measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources are included in the Cultural Resources Assessment presented to DAHP. In addition, an Archaeological Monitoring and Inadvertent Discovery Plan will be developed prior to construction for the contractor to follow.

## 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.**

Regional access to the area is via I-5 and Aurora Avenue N (SR 99) as shown on Figure 1.

Arterials on the east side of I-5 include 1st Avenue NE, NE Northgate Way, NE 103rd Street, NE 100th Street and NE 92nd Street. Fifth Avenue NE is located about a half mile to the east.

Arterials on the west side of I-5 include College Way N, Wallingford Avenue N, N Northgate Way, and N 92nd Street.

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

The project area is currently served by five bus routes run by King County Metro. Bus service routes are along College Way N, NE Northgate Way, NE 92nd Street, and 1st Avenue NE. Destinations to the south accessible to and from the study area include Downtown Seattle, Loyal Heights, Ballard, and Wallingford neighborhoods. Service is available to the north to the Shoreline College, Aurora Village Transit Center, and Richmond Beach. These transit routes also stop at the Northgate Transit Center, so there are many opportunities to transfer to another route to reach destinations on the eastside of I-5.

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

Four parking spaces will be removed from the WSDOT park and ride lot on the east side of I-5 and 32 parallel parking spaces will be removed from the western edge of vacated N 100<sup>th</sup> Street. It is anticipated that the project will increase demand for all-day parking on the NSC campus.

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

On the west side of I-5, the bridge would terminate near the intersection of N 100th Street and College Way N. A new public pedestrian trail would connect from the bridge to College Way N on the north side of the alignment of vacated N 100th Street.

- 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 will not use or affect water, rail, or air transportation. The east side of the project is in the immediate vicinity of the future Sound Transit Northgate Link Light rail station as shown in Figure 2.

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

No vehicle trips will be generated by the completed project. No truck trips would be generated, except infrequent maintenance activities.

- 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. There is no agricultural or forest products use on roads in the area.

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

SDOT will provide the NSC with a gate at the north entrance to the campus to limit public access to all-day, on-campus parking. The gate will restrict entry to students and faculty who have paid for parking. It will also allow public parking at an increased fee.

## 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.**

It is anticipated that no additional police services will be required.

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

Call boxes will be added along the bridge and trail for increased security.

**Utilities**

**a. Utilities currently available at the site, if any: [Check the applicable boxes]**

- None  
 Electricity       Natural gas       Water       Refuse service  
 Telephone       Sanitary sewer       Septic system  
 Other (identify) Drainage

**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.**


Electrical service will be provided for lighting, information technology service (ITS) and call boxes. Seattle City Light will provide the service which will be installed adjacent to the vacated N 100th Street alignment from the service point near the intersection of College Way N and N 100 Street to the service cabinet at the touch down point of the west approach of the bridge. From the service cabinet, the electrical conduit will run within the bridge structure to a series of hand holes located along the length of the bridge.

ITS is proposed and will be provided by SDOT. The ITS conduit will connect to the new electrical conduit at the touch down of the west bridge approach and will run within the bridge structure through a series of hand holes located along the length of the bridge.

Stormwater management will be provided in accordance with City of Seattle standards and will consist of a collection system routing drainage to both sides of I-5. Stormwater will be collected by bridge drains located at every bridge pier and conveyed by downspouts to the ground elevation below. A single stormwater detention facility will be provided on the west side in the vicinity of the vacated N 100th Street alignment.

**C. SIGNATURE**

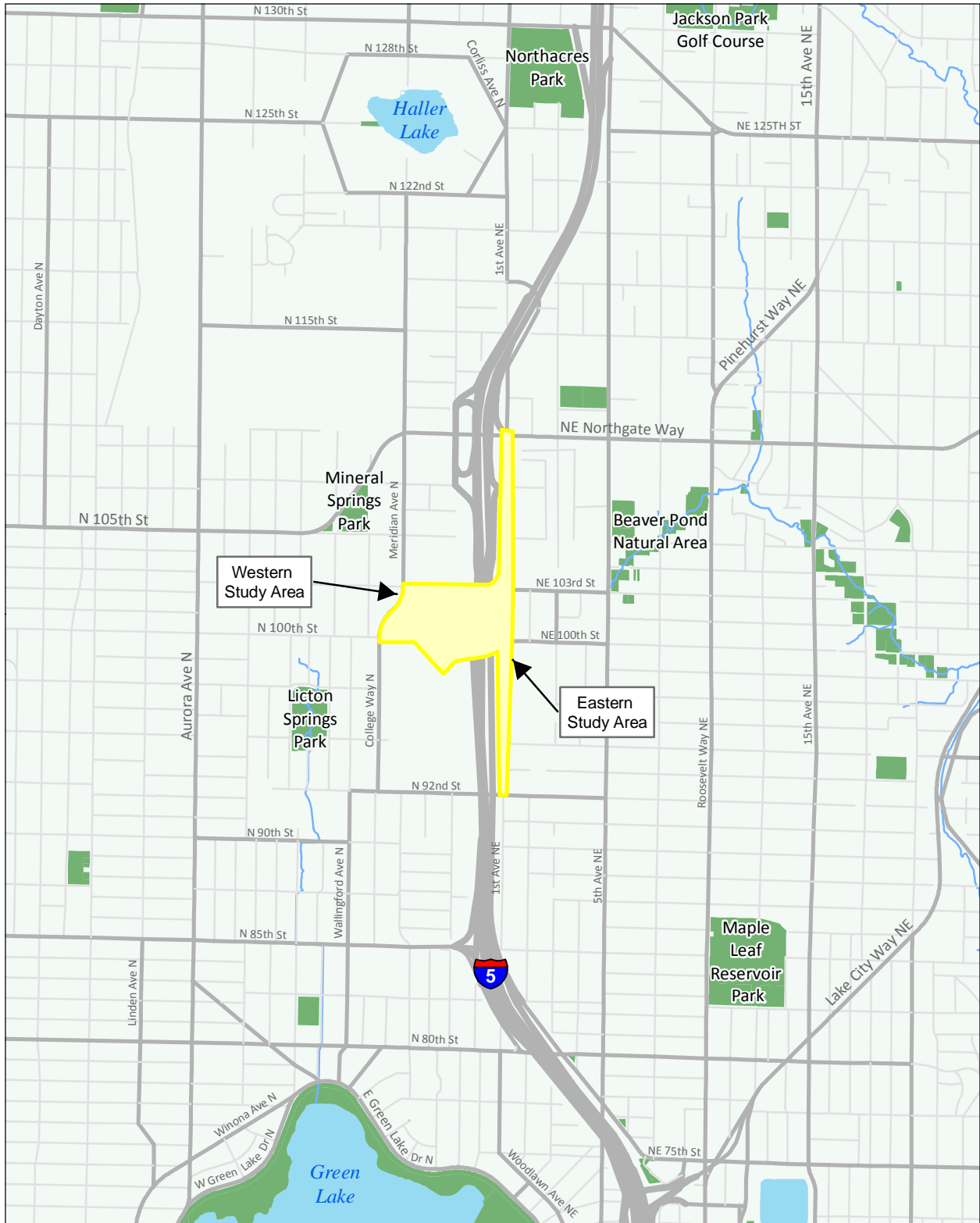
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: .....  .....

Date Submitted: ..... *3/21/18* .....

## FIGURES

- Figure 1. Project Vicinity
- Figure 2. Project Location
- Figure 3. Staging Areas
- Figure 4. Aquatic Resources
- Figure 5. East Side of I-5 Aquatic Resources
- Figure 6. Hazardous Materials Sites
- Figure 7. Current Zoning
- Figure 8. West Bridge Approach
- Figure 9. Visual Simulation View to the East from Trail on Vacated N 100<sup>th</sup> Street Alignment
- Figure 10. Visual Simulation View to the West from Bridge over North Seattle College Open Space
- Figure 11. Recreation Opportunities in the Project Vicinity

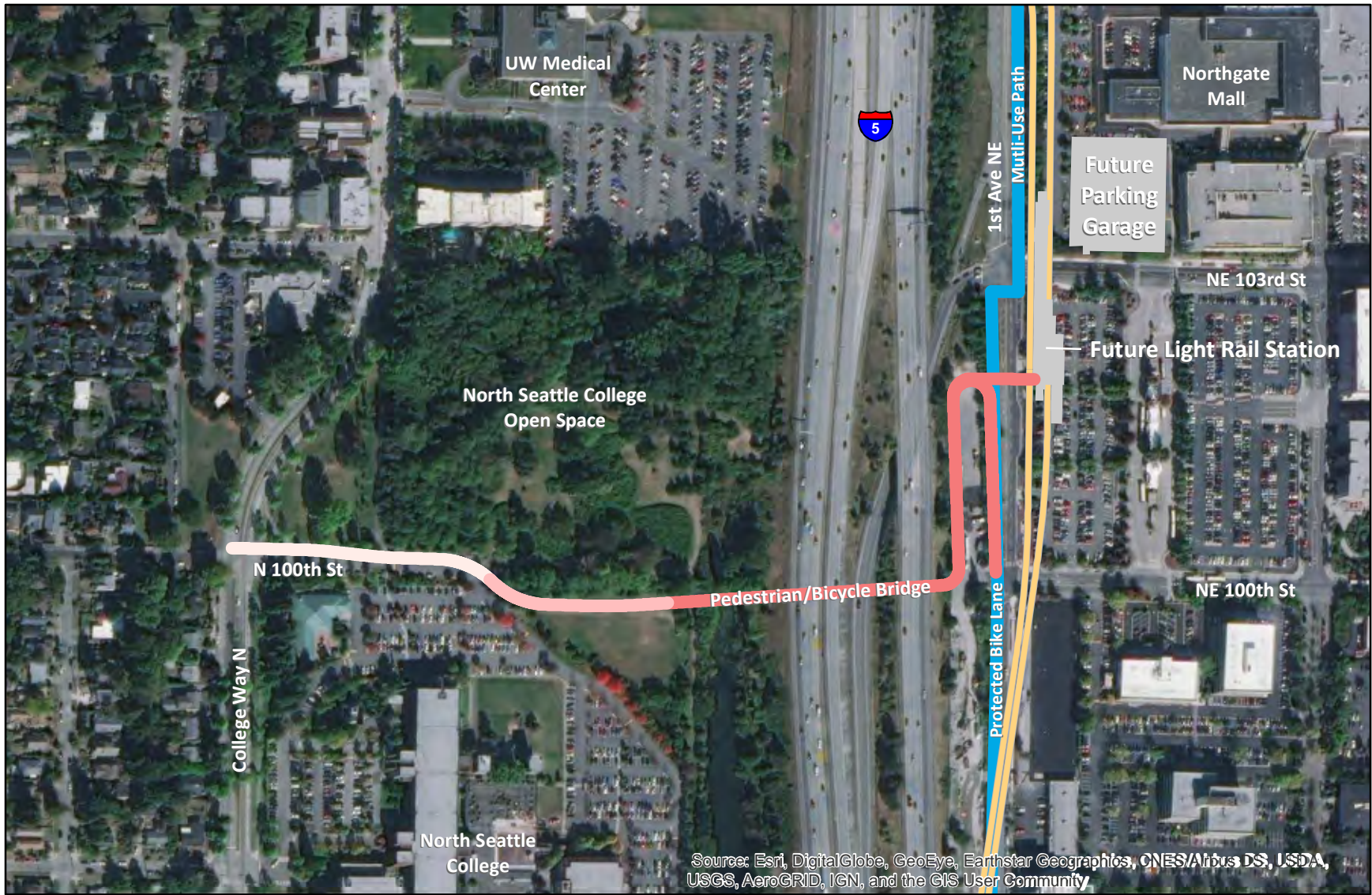


SOURCE: City of Seattle 2017

Northgate Pedestrian Bridge Project





**Figure 1**  
Project Vicinity



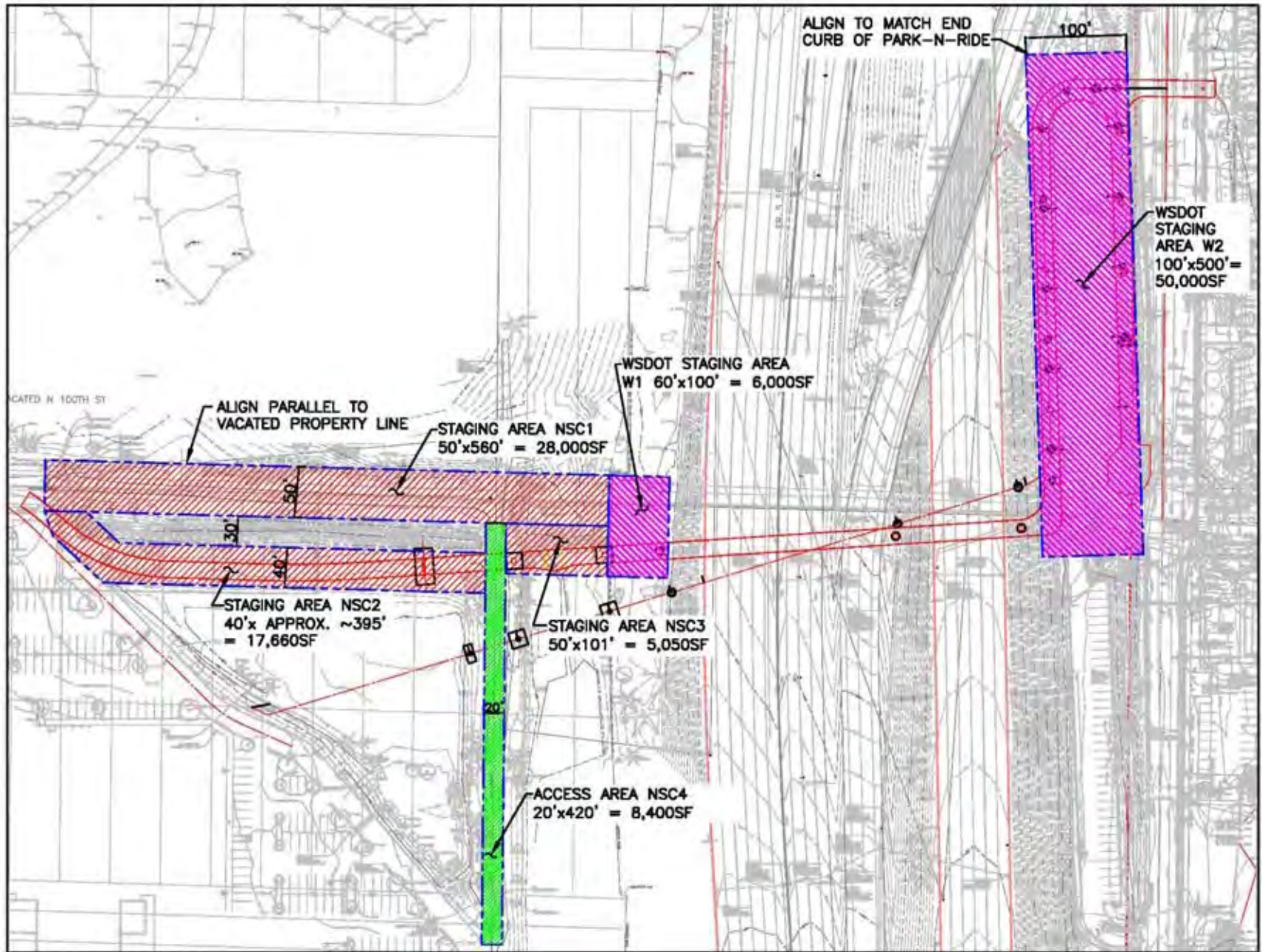


SOURCE: City of Seattle 2017; Sound Transit 2017; Esri 2016

Northgate Pedestrian Bridge Project. 130125

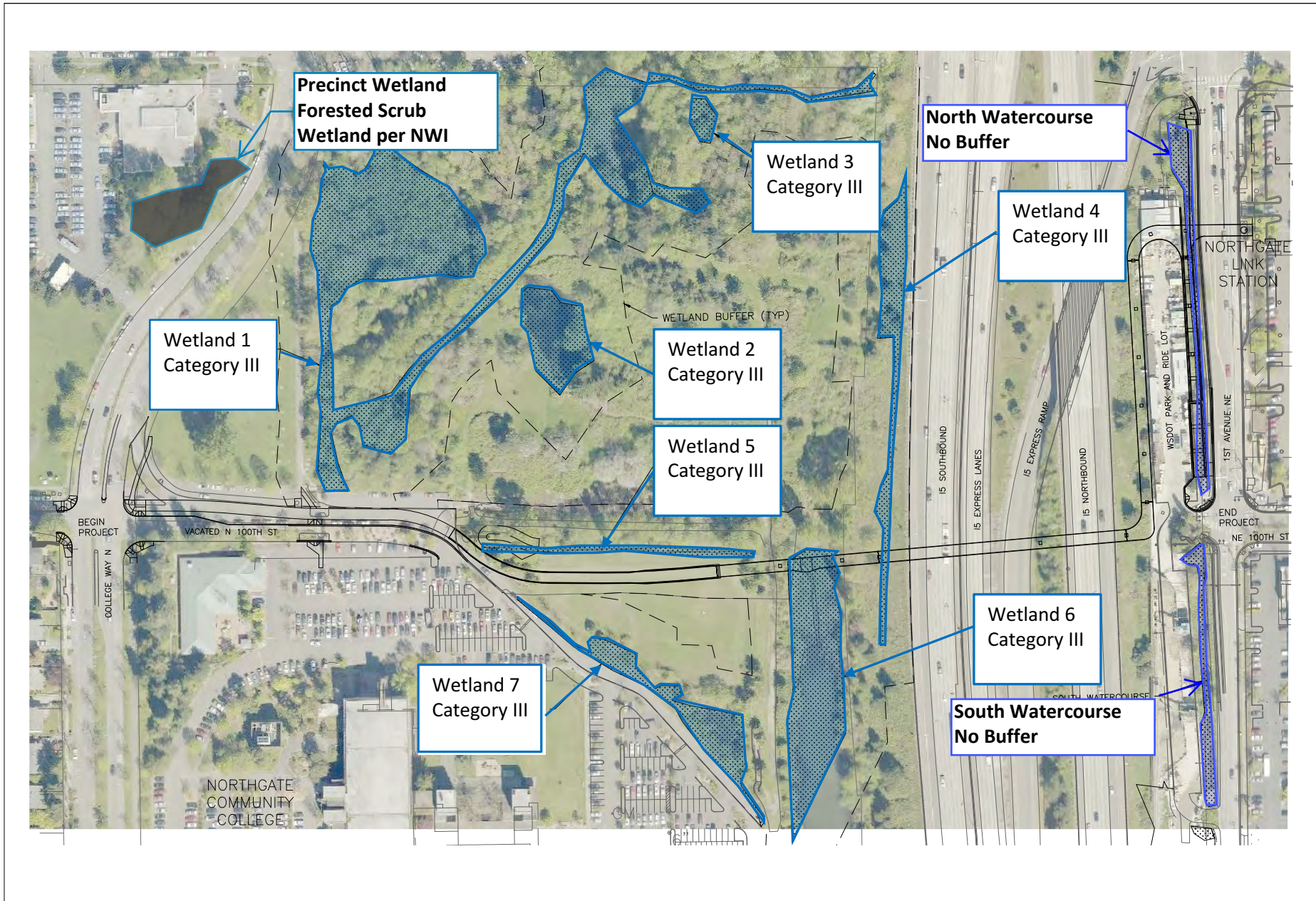
-  Bridge Structure
-  Earthfill Section
-  16' Wide Multi-Use Path
-  1st Avenue NE Protected Bike Lane (PBL)/Multi-Use Path

**Figure 2**  
Project Location

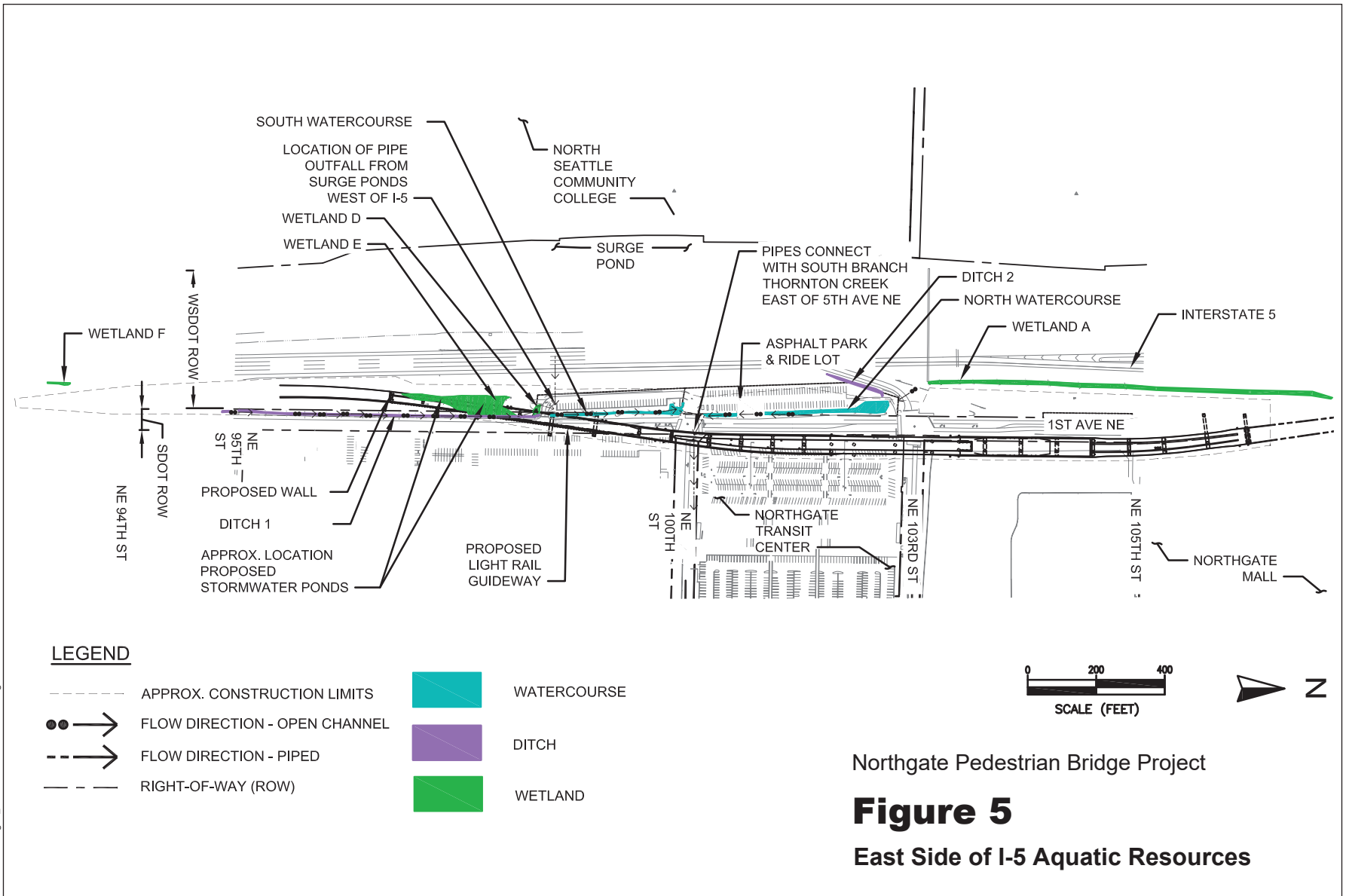


Northgate Pedestrian Bridge Project

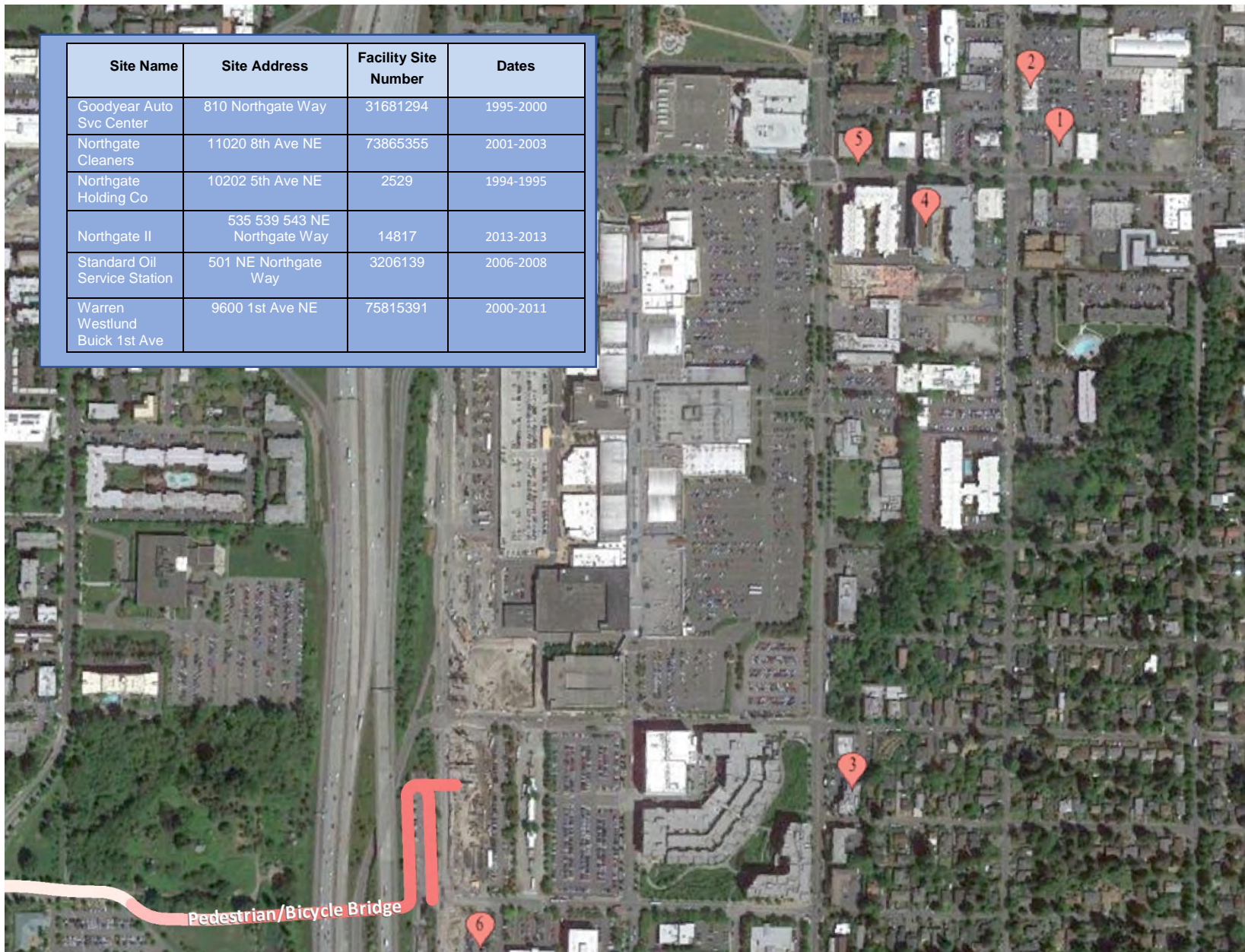
**Figure 3**  
Staging Areas



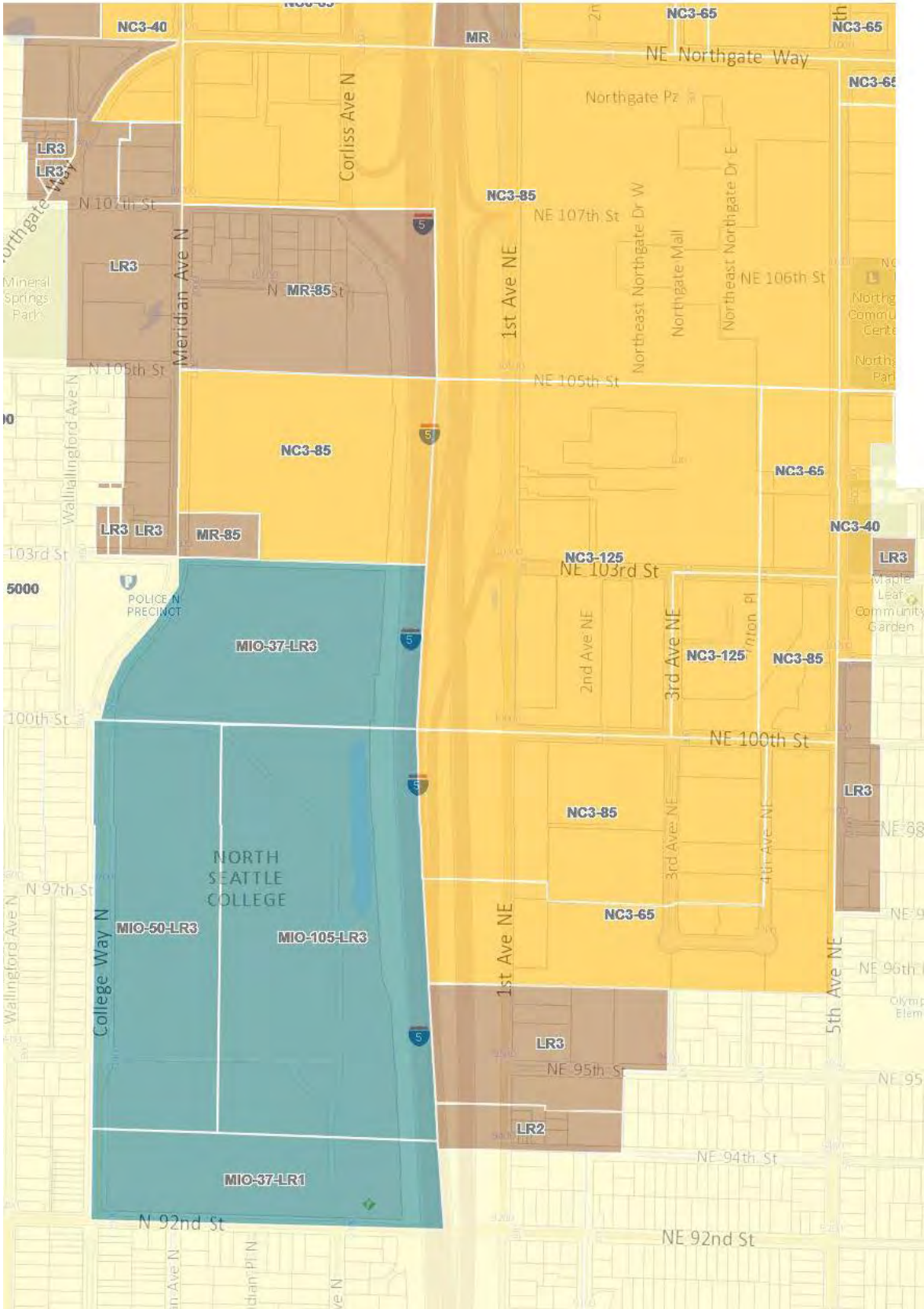
FILE NAME: Fig03\_Wetlands-Streams.ai / MitigationPlan / CREATED BY: JAB / DATE LAST UPDATED: 11/21/12



Source: ESA. Sound Transit North Link Extension Wetland and Watercourse Mitigation plan 11/12/2012



**Figure 6**  
Hazardous Materials Sites



Northgate Pedestrian Bridge Project  
**Figure 7**  
 Current Zoning



Northgate Pedestrian Bridge Project  
**Figure 8**  
West Bridge Approach



**Figure 9**

Visual Simulation View to the East from Trail on  
Vacated N 100th Street Alignment

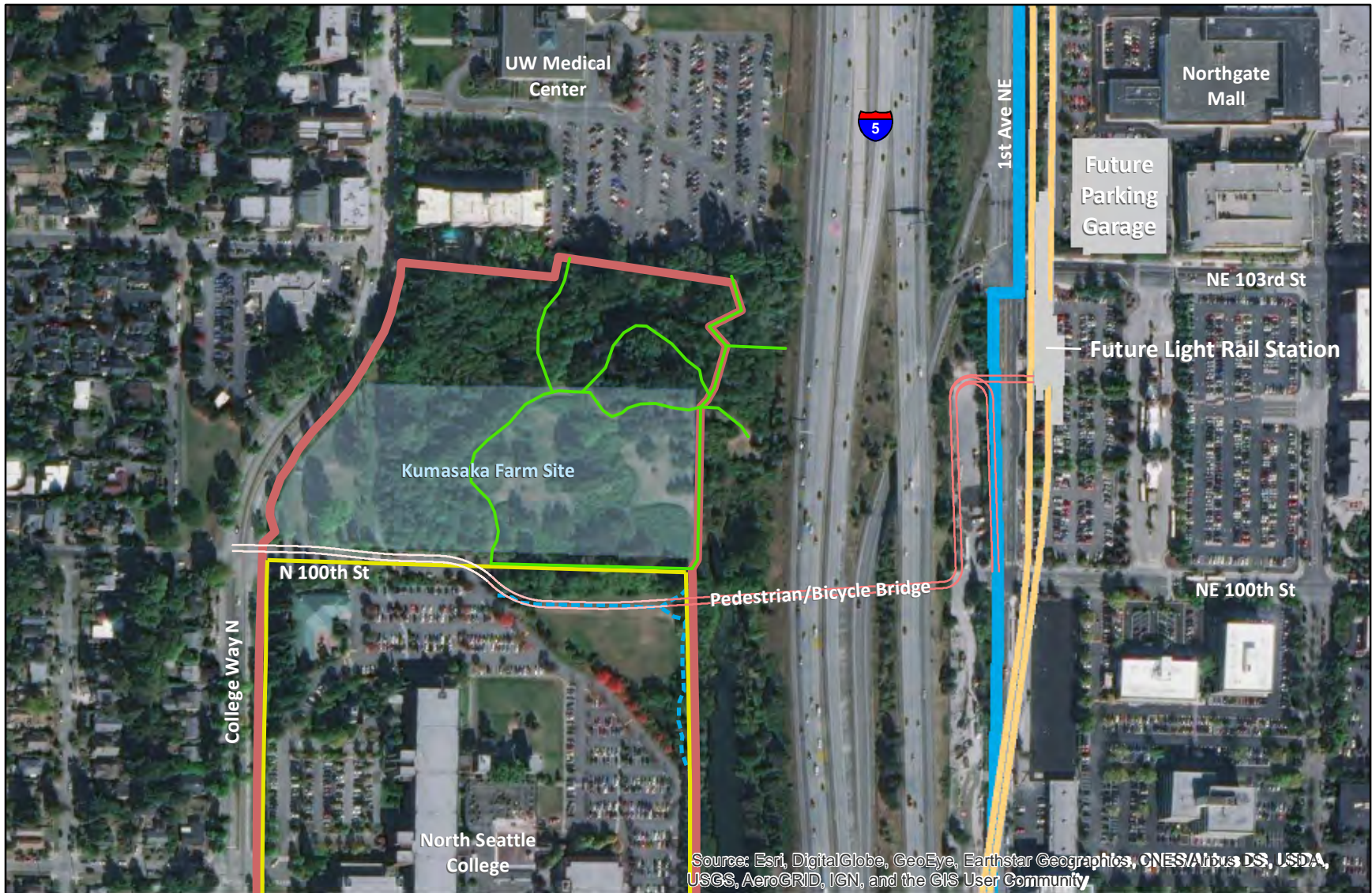












**Figure 10**

Visual Simulation View to the West from Bridge over  
North Seattle College Open Space

FEBRUARY 19, 2018



SOURCE: City of Seattle 2017; Sound Transit 2017; Esri 2016

- |   |                                |   |                    |  |                    |
|---|--------------------------------|---|--------------------|--|--------------------|
|  | Bridge Structure               |  | Cranberry Loop     |  | Kumasaka Farm Site |
|  | Earthfill Section              |  | Khaki Loop         |  |                    |
|  | 16' Wide Multi-Use Path        |  | Green Nature Trail |  |                    |
|  | 1st Avenue NE Bicycle Facility |  | Berm Trail         |  |                    |

### Northgate Pedestrian Bridge Project

**Figure 11**  
Recreation Opportunities  
in the Project Vicinity