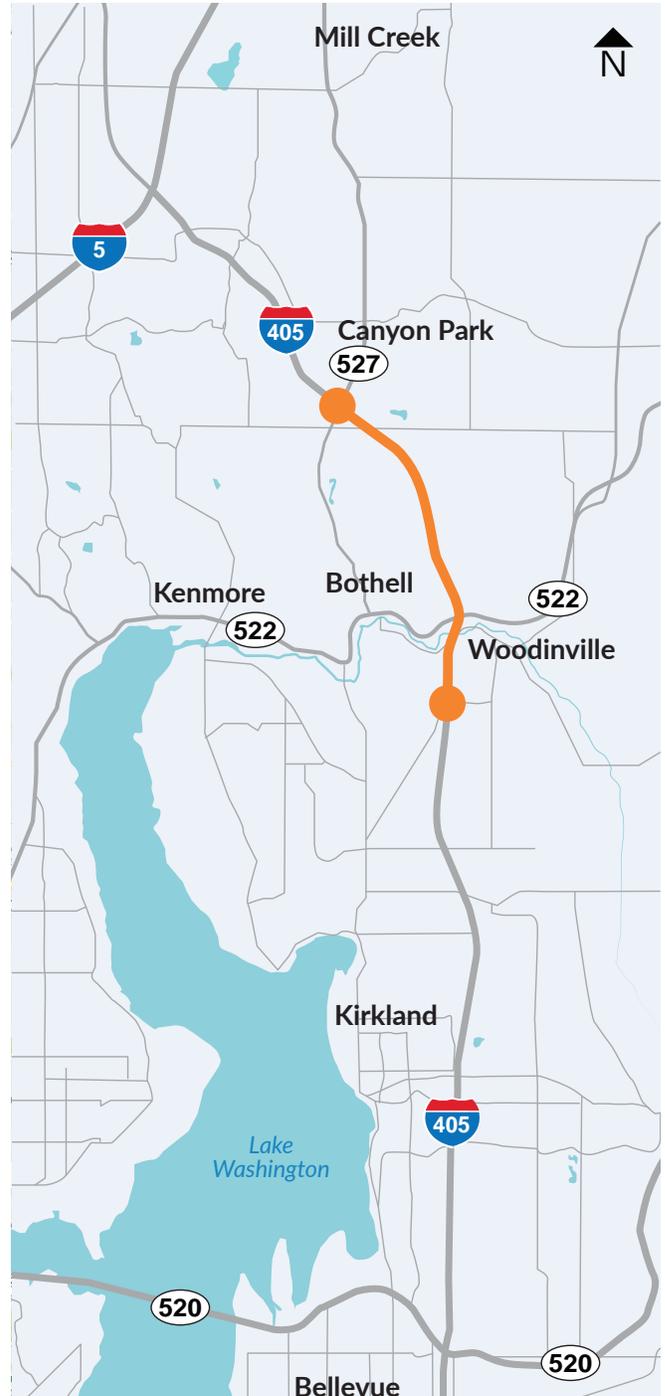


ENVIRONMENTAL ASSESSMENT

Appendix H:

Recreational, Section 4(f), and Section 6(f) Resources Technical Memorandum

I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project (MP 21.79 to 27.06)



Title VI Notice to Public

It is the Washington State Department of Transportation's (WSDOT) policy to assure that no person shall, on the grounds of race, color, national origin or sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its federally funded programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For additional information regarding Title VI complaint procedures and/or information regarding our non-discrimination obligations, please contact OEO's Title VI Coordinator at (360) 705-7090.

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This material can be made available in an alternate format by emailing the Office of Equal Opportunity at wsdotada@wsdot.wa.gov or by calling toll free, 855-362-4ADA (4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

Notificación de Título VI al Público

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Información del Acta Americans with Disabilities Act (ADA)

Este material es disponible en un formato alternativo enviando un email/correo electrónico a la Comisión Estadounidense de Igualdad de Oportunidades en el Empleo wsdotada@wsdot.wa.gov o llamando gratis al 855-362-4ADA (4232). Personas sordas o con discapacidad auditiva pueden solicitar llamando Washington State Relay al 711.

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Attachment A Acronyms and Abbreviations

Attachment B Preliminary Construction Sequencing at Sammamish River Trail

SECTION 1 SUMMARY

The *Recreational, Section 4(f), and Section 6(f) Discipline Report* was prepared in support of the I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project (Project) Environmental Assessment (EA). This report evaluates the environmental effects of proposed improvements on Interstate 405 (I-405) from milepost (MP) 21.79 to MP 27.06 in support of the EA.

1.1 Purpose of the Report

This report documents and determines Project effects on recreational resources during operations and construction, including those protected under Section 4(f) of the U. S. Department of Transportation Act of 1966 or 6(f) of the Land and Water Conservation Fund (LWCF) Act of 1965. Section 4(f) also protects historic and cultural resources listed on or eligible for listing on the National Register of Historic Places (NRHP).

1.2 Study Approach

The Washington State Department of Transportation (WSDOT) identified recreational resources in the study area, which includes locations related to property acquisition and construction activities. We then evaluated effects related to proximity, such as noise or visual quality, that could impair the use, function, and experience of recreational facilities. The study area consists of recreational resources and historic resources subject to Section 4(f) within 0.25 mile of the Project limits.

1.3 Existing Conditions Overview

The study area contains 14 recreational resources (12 existing and two planned). Thirteen are considered Section 4(f) resources, and one is also considered a 6(f) resource. In addition, there are two historic properties near the I-405/SR 522 interchange that are considered 4(f) resources.

1.4 Project Effects Overview

1.4.1 No Build Alternative

The No Build Alternative would involve WSDOT's continued routine maintenance of I-405. These activities would include short-term minor construction necessary for continued operation of the existing I-405 facility and minor safety improvements, as required within the Project limits. As a result, there would be no direct, proximity, and/or construction effects at any of the recreational, Section 4(f), or Section 6(f) resources.

1.4.2 Build Alternative

The Project would have limited effects on four recreational resources in the study area and no adverse effects on historic resources protected under Section 4(f). The Project would also have no negative effects on the one Section 6(f) resource in the study area.

The Project would affect the following resources:

- **Sammamish River Trail** –The Project would require temporary realignment of the trail to allow for construction of three new overhead structures and demolition of two existing overhead structures. This work would require nighttime trail closures. In addition, a portion of this trail would need to be permanently realigned outside of its existing footprint to maintain King County Trail specifications and/or to improve sight distance. Both the temporary and permanent trail realignments are expected to occur within WSDOT’s existing right of way. However, it is possible that some of the temporary and/or permanent realignment may take place on property owned by King County, at the request of the County, to improve sight distance on the trail. Because of this possibility, a Section 4(f) *de minimis* determination has been made. A *de minimis* use is one that would not adversely affect the activities, features, or attributes of the Section 4(f) property. Concurrence from King County Parks, the agency with jurisdiction, is needed to conclude that the use of the Sammamish River Trail would have a *de minimis* use. WSDOT will work with King County Parks to obtain this concurrence. In addition, a 30-day public review and comment period is required. That review will occur as part of the 30-day review and comment period for this EA. After construction is complete, the Project would have no negative effects on the Sammamish River Trail.
- **West Sammamish River Trail** – The Project would not negatively affect future construction of this planned King County trail. The Project would construct a new I-405 overhead structure, requiring WSDOT to obtain an airspace lease from King County Parks, but there would be no negative effects on the proposed trail because adequate clearance would be maintained. A temporary construction easement would be needed for clearing vegetation and establishing a temporary construction staging area, and the area would be restored after construction is complete. The construction activities meet the criteria for a temporary occupation exception criteria in Section 23 Code of Federal Regulations (CFR) 774.13(d) and would not result in a temporary use under Section 4(f). A temporary use occurs when there is a temporary occupancy of land that is “adverse in terms of the statute’s preservation purpose as determined by the criteria in 23 CFR 774.13(d).” Concurrence from King County Parks, the agency with jurisdiction, is needed to conclude that the proposed activities qualify for a temporary occupancy exception. WSDOT will work with King County Parks to obtain this concurrence.
- **North Creek Trail** – The Project would build a new nonmotorized connection between the North Creek Trail and the proposed bus station in the northwest quadrant of the I-405/SR 522 interchange. This work would require a temporary detour and/or flagging during construction at the connection with the North Creek Trail. WSDOT expects that most of the construction would occur outside of the existing trail, minimizing the need for trail closures. Because WSDOT owns this section of the trail and leases the land to University of Washington (UW) Bothell, it is not subject to Section 4(f). Furthermore, the lease agreement between WSDOT and the UW Bothell includes language that the highway use is paramount to any other use, including a bicycle and pedestrian trail. After construction is complete, there would be no negative effects on the North Creek Trail.

- **North Creek Forest** – Proposed construction activities would require a temporary construction easement from the City to build the proposed improvements. The Project would reconstruct and realign portions of one stream, Stream 25.0L, within the North Creek Forest to correct a fish barrier. The work on Stream 25.0L would benefit fish and aquatic species by restoring full anadromous fish access to upstream habitat and replacing the existing stream channel, which is currently in a pipe, with an open stream channel. Construction activities would be located within an area of approximately 0.75 acres and would include clearing existing mature trees and vegetation, regrading soils, and constructing ground improvements by driving untreated timber piles to stabilize steep slopes. The Project would restore the area with native trees and vegetation after construction is complete. While the fish barrier correction and stream enhancement would improve the natural setting and features within the park, it would take time for replanted vegetation to mature. Because of this, a Section 4(f) *de minimis* determination has been made. Concurrence from the City of Bothell, the agency with jurisdiction, is needed to conclude that the use of the North Creek Forest would have a *de minimis* use. The required 30-day public review and comment period will occur as part of the 30-day review and comment period for this EA. Because portions of the North Creek Forest were purchased with Land and Water Conservation Fund (LWCF) grant assistance, it is protected as a Section 6(f) resource. However, the Project would not convert land to a transportation-related use, and construction in North Creek Forest would occur for less than 6 months. Therefore, there would be no Section 6(f) use of the North Creek Forest. The Project would improve the natural environment by restoring the stream connection at Stream 25.0L and improving fish habitat.

Findings of Section 4(f) use will be made after concluding consultation with affected agencies and jurisdictions and review of public comments. The Project will incorporate mitigation measures so that the uses would not adversely affect the activities, features, or attributes of the Sammamish River Trail and North Creek Forest; therefore, Section 4(f) avoidance analysis is not required. WSDOT has also identified mitigation measures for effects to the Sammamish River Trail, West Sammamish River Trail, North Creek Trail, and North Creek Forest as described in Section 6, Mitigation Measures. Because there would be no Section 4(f) effects on historic resources or effects on Section 6(f) resources, specific mitigation for those elements is not required.

SECTION 2 PROJECT DESCRIPTION

2.1 Proposed Project Elements

The Project begins on I-405 south of the I-405/SR 522 interchange at milepost (MP) 21.79 and continues to just north of the I-405/SR 527 interchange to MP 27.06. Exhibit 2-1 lists improvements proposed with the Project. Exhibit 2-2, Sheets 1 through 5, show the locations of the proposed improvements.

Exhibit 2-1. Improvements Proposed with the I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project

Project Element	Proposed Improvements
I-405 lanes and shoulders from SR 522 to SR 527	<ul style="list-style-type: none"> – Create a dual ETL system from MP 21.79 (south of the I-405/SR 522 interchange) to MP 27.06 (just north of the I-405/SR 527 interchange). <ul style="list-style-type: none"> • From MP 21.79 to MP 22.30: Restripe existing lanes to create a dual ETL system. • From MP 22.30 to MP 26.30: Resurface and widen I-405 to add one ETL in each direction. • From MP 26.30 to MP 27.06: Widen I-405 to construct direct access ramps and connect to the existing single ETL starting near MP 26.30.
I-405 tolling from SR 522 to SR 527	<ul style="list-style-type: none"> – Construct new tolling gantries to collect tolls for the ETLs and direct access ramps.
I-405/SR 522 interchange area	<ul style="list-style-type: none"> – Construct new direct access ramps and two inline transit stations in the I-405 median (one in each direction). Transit stations would include station platforms, signage, artwork, lighting, fare machines, and site furnishing such as shelters, lean rails, benches, bollards, bicycle parking, and trash receptacles. – Construct a bus station and turnaround loop, pick-up and drop-off facilities, and new nonmotorized connection near the SR 522 interchange. Funding and construction timeline to be coordinated with local transit agencies. – Construct new northbound bridge through the SR 522 interchange. <ul style="list-style-type: none"> • Reconfigure the northbound I-405 to eastbound SR 522 ramp from one lane to two lanes. – Reconfigure I-405 on- and off-ramps. <ul style="list-style-type: none"> • Realign the southbound I-405 to westbound SR 522 ramp. • Realign the eastbound and westbound SR 522 ramps to northbound I-405.
SR 522 roadway	<ul style="list-style-type: none"> – Add three signalized intersections, which would change where the freeway portion of SR 522 begins and ends. Signals would be added at the following locations: <ul style="list-style-type: none"> • The northbound I-405 to westbound SR 522 off-ramp and the eastbound SR 522 to northbound I-405 on-ramp. • The southbound I-405 to eastbound SR 522 ramp. • Between the above two locations where the new I-405 ETL direct access ramps connect with SR 522.
228th Street SE	<ul style="list-style-type: none"> – Widen the northbound I-405 bridge over 228th Street SE.

I-405, SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT
RECREATIONAL, SECTION 4(F), AND SECTION 6(F) RESOURCES DISCIPLINE REPORT

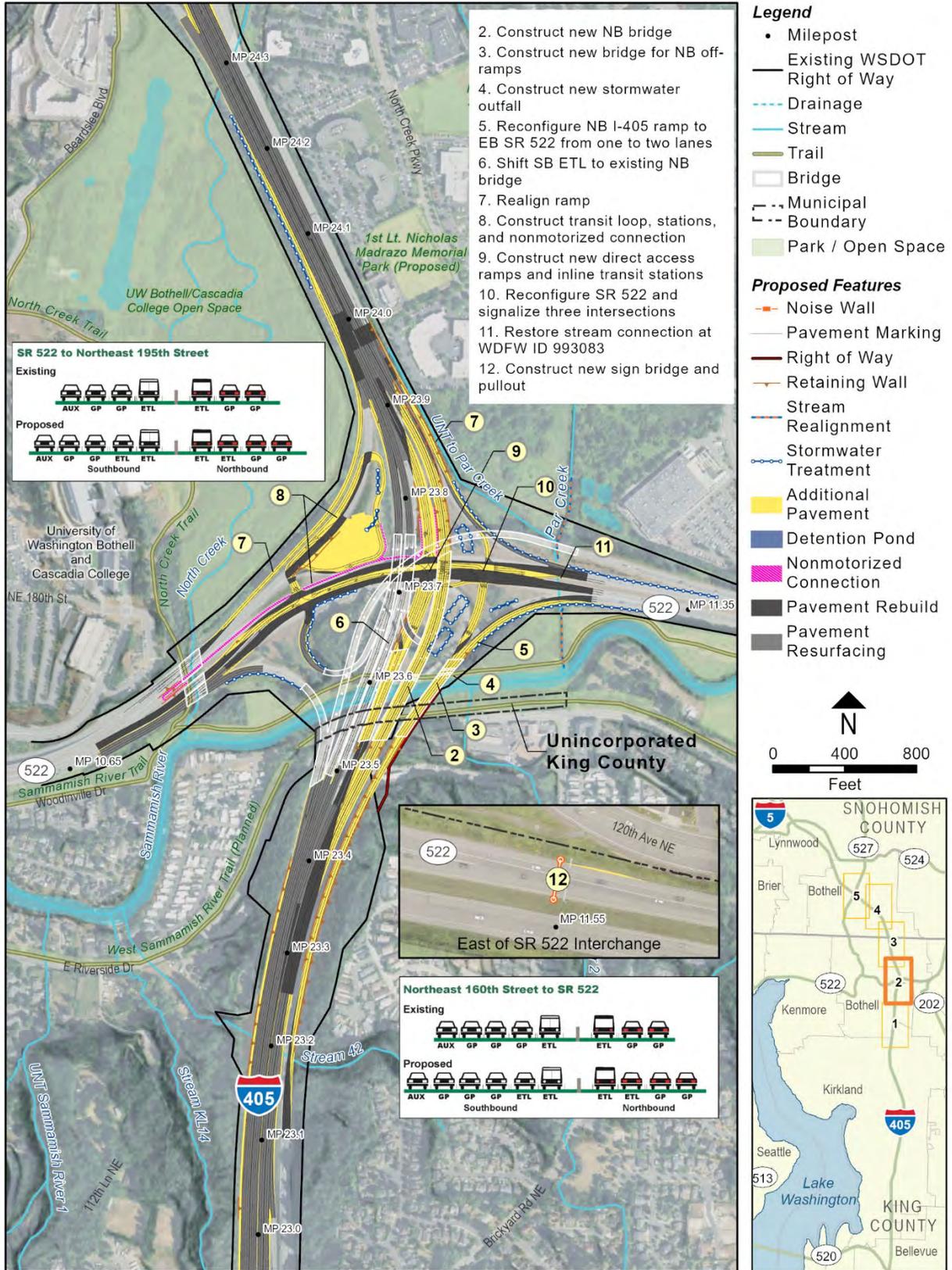
Exhibit 2-1. Improvements Proposed with the I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project

Project Element	Proposed Improvements
SR 527 interchange area	<ul style="list-style-type: none"> – Construct new direct access ramps to the north, south and east just south of SR 527 at 17th Avenue SE. – Construct two inline transit stations (one in each direction) in the I-405 median. Transit stations would include station platforms, signage, artwork, lighting, fare machines, and site furnishing such as shelters, lean rails, benches, bollards, bicycle parking, and trash receptacles. – Reconstruct the pedestrian bridge over I-405.
17th Avenue SE, 220th Street SE, SR 527	<ul style="list-style-type: none"> – Reconfigure 17th Avenue SE and portions of 220th Street SE and SR 527 to include a roundabout at the Canyon Park Park and Ride, and bicycle and pedestrian improvements.
Fish barrier corrections	<ul style="list-style-type: none"> – Replace five fish barriers with restored stream connections at the following streams: <ul style="list-style-type: none"> • Par Creek (WDFWID 993083) • Stream 25.0L (WDFWID 993104) • North Fork of Perry Creek (WDFW ID 08.0070 A0.25) • Two fish barriers at Queensborough Creek (WDFWID 993084 and 993109)
Sammamish River bridges	<ul style="list-style-type: none"> – Remove the existing northbound I-405 to eastbound SR 522 bridge over the Sammamish River, including two bridge piers within the OHWM. – Remove the existing northbound I-405 to westbound SR 522 bridge over the Sammamish River, including two bridge piers within the OHWM. – Build a new bridge for northbound I-405 traffic over the Sammamish River. – Build a new bridge over the Sammamish River for the new direct access ramp at SR 522. – Build a new bridge over the Sammamish River for the northbound I-405 to SR 522 ramp.
Noise and retaining walls	<ul style="list-style-type: none"> – Construct 3 new noise walls near NE 160th Street and SR 527. See Exhibit 2-2, Sheets 1, 4 and 5. – Construct several new retaining walls. See Exhibit 2-2, Sheets 1 through 5.
Stormwater management	<ul style="list-style-type: none"> – Provide enhanced treatment for an area equivalent to 100 percent of new PGIS (approximately 24 acres). – Retrofit about 23 acres of existing untreated PGIS and continue to treat stormwater from the approximately 44 acres of PGIS that currently receives treatment. – Construct three new stormwater outfalls, one on the Sammamish River and two on the North Fork of Perry Creek.
Construction duration	<ul style="list-style-type: none"> – Construction is expected to last 3 to 4 years, beginning in 2021.

ETL = express toll lane; ID = identification number; MP = milepost; OHWM = ordinary high water mark; PGIS = pollution-generating impervious surfaces; WDFW = Washington Department of Fish and Wildlife

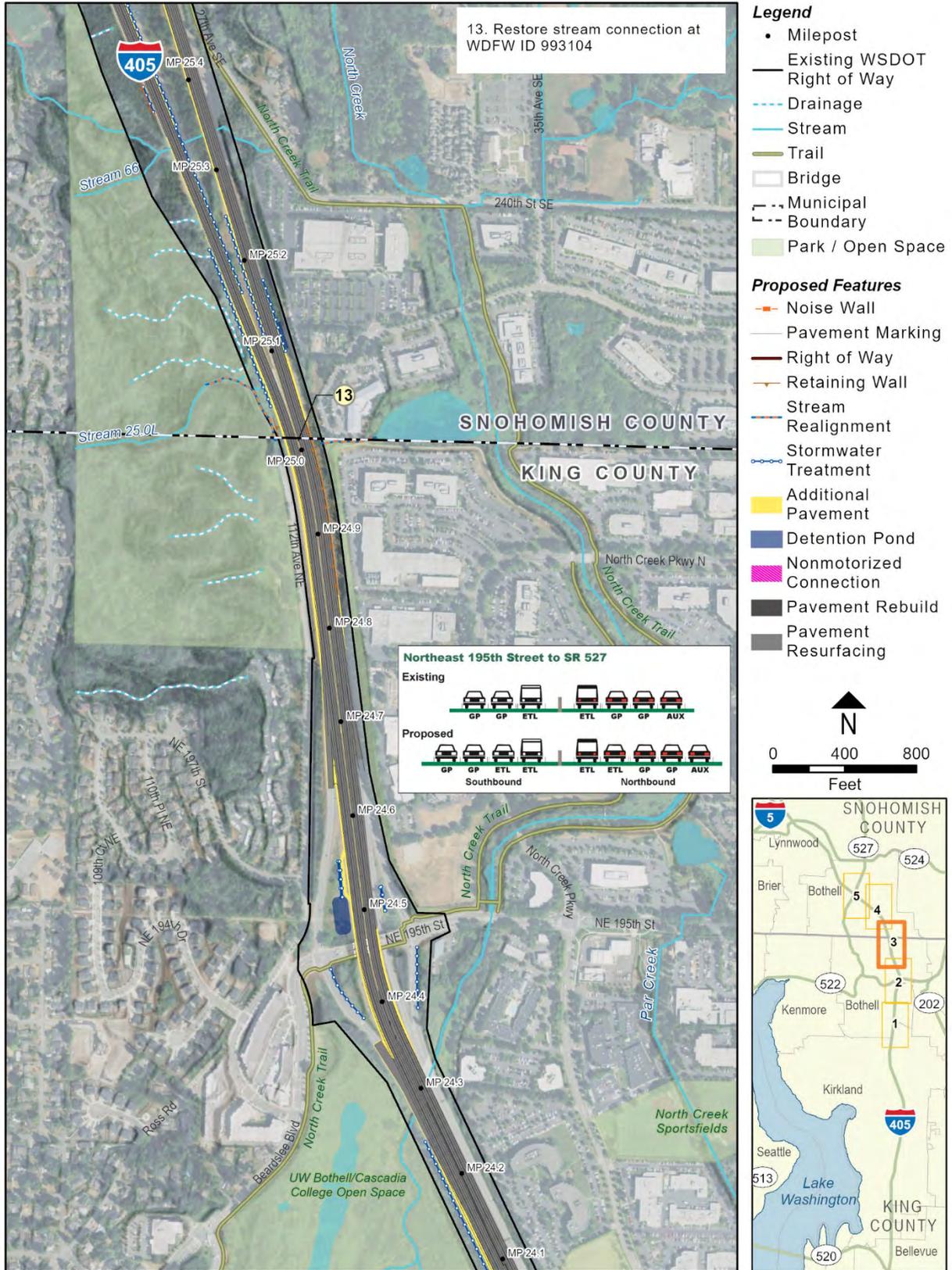
I-405, SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT
RECREATIONAL, SECTION 4(F), AND SECTION 6(F) RESOURCES DISCIPLINE REPORT

Exhibit 2-2. I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project, Sheet 2 of 5



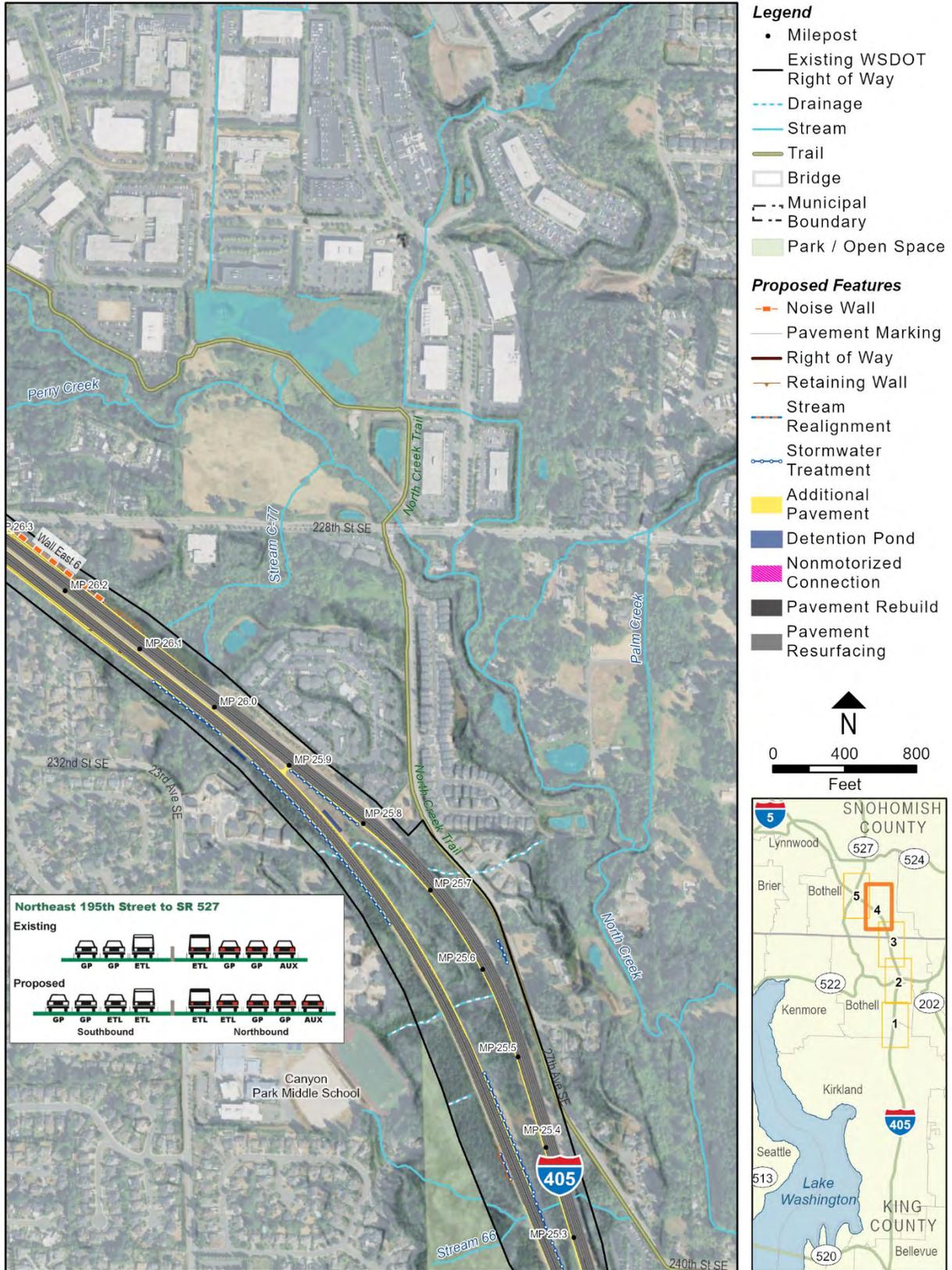
I-405, SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT
 RECREATIONAL, SECTION 4(F), AND SECTION 6(F) RESOURCES DISCIPLINE REPORT

Exhibit 2-2. I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project, Sheet 3 of 5



I-405, SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT
 RECREATIONAL, SECTION 4(F), AND SECTION 6(F) RESOURCES DISCIPLINE REPORT

Exhibit 2-2. I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project, Sheet 4 of 5



2.2 Express Toll Lanes Overview

WSDOT expects that the new ETL that would be built in this section of I-405 would operate in the same way as the existing ETL. WSDOT expects the ETLs would operate from 5 a.m. to 7 p.m. on weekdays. At all other times and major holidays, the ETLs would be free and open to all without a *Good To Go!* pass. During operating hours:

How do I get more information about ETLs on I-405?

<https://wsdot.wa.gov/Tolling/405/>

- **Single-occupancy vehicles** would pay a toll to use the ETLs with or without a *Good To Go!* pass.
- **Transit, High-Occupancy Vehicles (HOV) 3+, and motorcycles** would travel for free with a *Good To Go!* flex or motorcycle pass.
- **HOV 2+** would travel for free from 9 a.m. to 3 p.m. with a *Good To Go!* flex pass. From 5 a.m. to 9 a.m. and 3 p.m. to 7 p.m. HOV 2+ would pay a toll to use the ETLs with or without a *Good To Go!* flex pass.
- **Large vehicles** over 10,000 pounds gross vehicle weight would not be able to use the ETLs at any time.

2.3 Project Construction Overview

WSDOT expects to construct the Project using a design-build delivery method, in which WSDOT executes a single contract with one entity for design and construction services. With design-build projects, contractors have the flexibility to offer innovative and cost-effective alternatives to deliver the project, improve project performance, and reduce project effects. If the contractor proposes design modifications not covered by this Environmental Assessment, additional environmental review would be conducted as needed.

Construction would generally occur between 2021 and 2025, but construction activities in some areas would be complete prior to 2025. Once a contractor is selected for the Project, they could use multiple work crews in multiple locations to reduce the overall construction period. Work would include removing existing asphalt and concrete surfaces, clearing and grading adjacent areas, laying the aggregate roadway foundation, placing new asphalt and concrete surfaces, replacing culverts, and building and demolishing bridges. Removing bridge piers from the Sammamish River could require the construction of temporary work bridges and would require in-water work, which may include temporary use of cofferdams and a work barge, depending on the contractors' chosen means and methods. Realigning the I-405 mainline would require approximately 170,000 cubic yards of excavation and 166,000 cubic yards of fill.

Construction equipment would include backhoes, excavators, front-end loaders, pavement grinders, jack hammers, trucks, vector trucks, cranes, drilling rigs and augers, concrete pumping equipment, and slurry processing equipment. Specific haul routes and the number of construction vehicles would not be known until a construction contract is signed. When possible, the work sites would be accessed from I-405 and SR 522. Construction staging areas for employee parking, large equipment storage, and material stockpiles would be located within WSDOT and Bothell right of way to the extent possible. The contractor may also find other locations for construction staging.

SECTION 3 STUDY APPROACH

This section presents the approach to the recreational resources, Section 4(f), and Section 6(f) analysis. It describes the study area, relevant policies and regulations, and data collected for the analysis, as well as how the analysis team evaluated the effects.

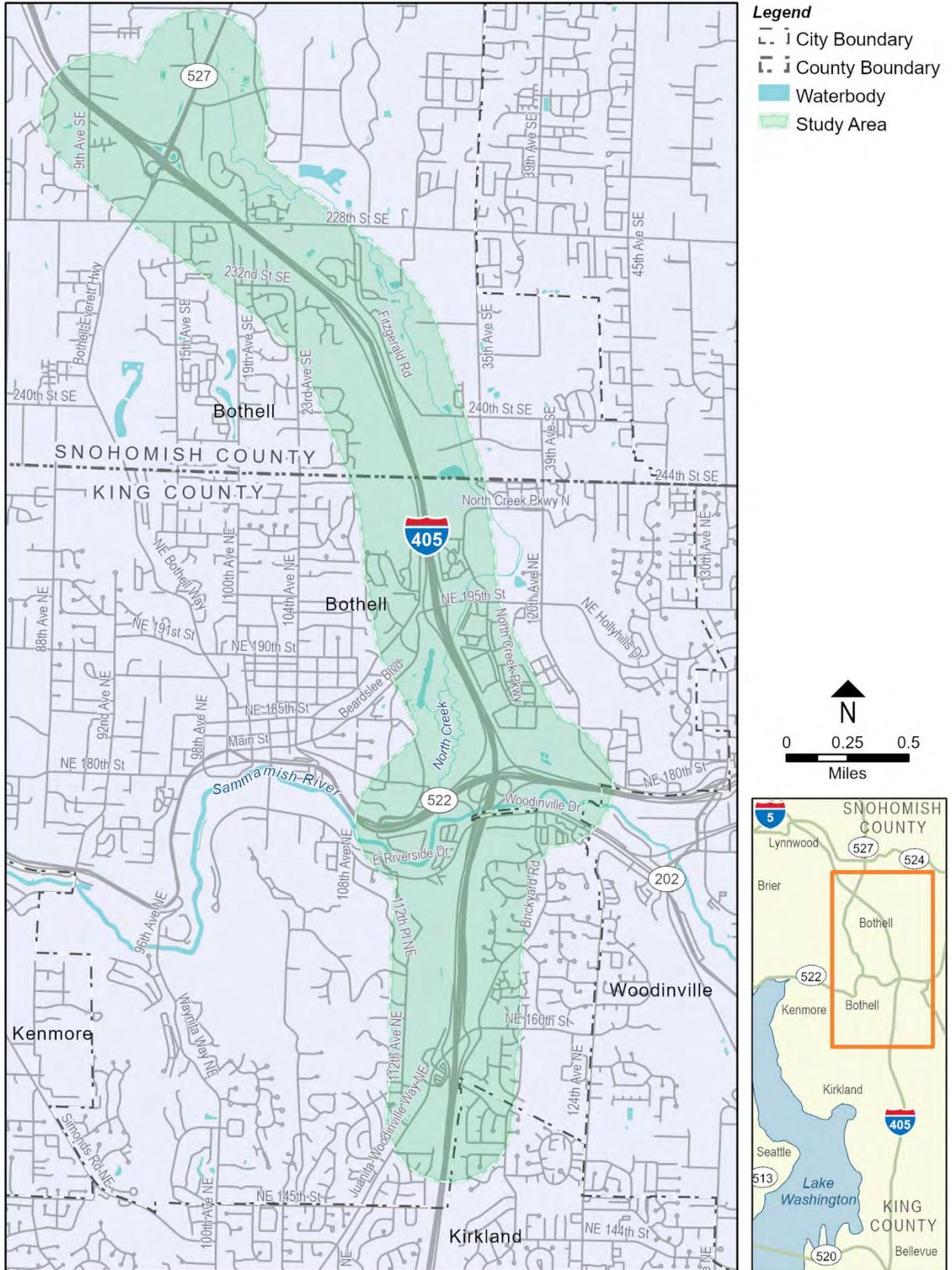
3.1 Study Area

To evaluate effects during construction and operation of the Project, WSDOT defined recreational resources in the study area as those within 0.25 mile of the proposed improvements on I-405 between milepost (MP) 21.79 and MP 27.06, as shown in Exhibit 3-1. WSDOT assumed that this radius adequately captures potential effects related to acquisition and construction activities, and proximity effects, such as noise or visual quality, that could impair the use and function of recreational resources.

The study area also encompasses the area of potential effects (APE) used for the Project Environmental Assessment Appendix E, *Cultural Resources Survey* and Appendix E1, *Cultural Resources Survey Addendum*. The APE includes areas where archaeological resources may be encountered or disturbed and areas where historic structures, landscapes, and viewsheds may be directly or indirectly affected. For the Project, per the 2008 I-405 Corridor Programmatic Agreement, the archaeological APE is defined as the limits of construction, and the built environment APE includes one adjacent tax lot parcel on each side of the affected right of way, or 200 feet from the Project margins, whichever distance is less (WSDOT 2008).

I-405, SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT
 RECREATIONAL, SECTION 4(F), AND SECTION 6(F) RESOURCES DISCIPLINE REPORT

Exhibit 3-1. Study Area



3.2 Policies and Regulations

3.2.1 Section 4(f)

Section 4(f) of the U. S. Department of Transportation Act of 1966 (23 United States Code [USC] 138) prohibits the Federal Highway Administration (FHWA) from approving a project or program that uses land from a significant park, recreational area, wildlife or waterfowl refuge, or historic site, except if either of the following criteria is met: (1) there is no feasible and prudent alternative to the use of the land, or (2) the project includes all possible planning to minimize harm to the property. The term *use*, as it relates to Section 4(f), denotes an adverse impact on, or occupancy of, a Section 4(f) property.

3.2.2 Section 6(f)

Section 6(f) is a component of the Land and Water Conservation Fund (LWCF) Act of 1965 and protects recreational properties that have been acquired or developed with LWCF Act funds that could be affected by transportation and other projects. Once land has been purchased or developed, partially or entirely, with LWCF assistance, it is considered a Section 6(f) property, and no Section 6(f) property can be wholly or partly converted to a use other than public outdoor recreation uses without the approval of the Washington State Recreation and Conservation Office (RCO). If a Section 6(f) property must be used to meet the purpose and need of a project and there is no feasible and prudent avoidance alternative, the RCO can approve a conversion of the use of a Section 6(f) property and replacement property of equal fair market value and use.

3.3 Data Collection and Coordination

WSDOT reviewed land uses within the study area to identify recreational resources. We collected site-specific information about the type and function of each potentially affected recreational resource from the City of Bothell, City of Kirkland, King County, and Snohomish County websites. WSDOT also searched the RCO online database for study area recreation projects with LWCF grants and Section 6(f) long-term obligations for maintenance and public access. WSDOT is consulting with King County Parks and the City of Bothell regarding recreational resources affected by the Project.

WSDOT coordinated with the cultural resource analyst for the Project to identify historic resources protected under Section 4(f). Additionally, WSDOT is consulting with the Muckleshoot Indian Tribe, Sauk-Suiattle Tribe, Snoqualmie Tribe, Stillaguamish Tribe, Yakama Nation, and Duwamish Tribe regarding cultural and historic resources and the APE for the Project. For more information, see the Project EA Appendix E, *Cultural Resources Survey*, and Appendix E1, *Cultural Resources Survey Addendum*.

3.4 Evaluation of Effects

WSDOT evaluated the Project's effects on the functions, activities, features, or attributes of recreational resources. Considerations included property acquisition (both permanent and temporary); changes in the level of traffic noise and access to the resources; degradation of the

visual setting; or changes in the nature of the surrounding land use that could affect the continued viability, integrity, usage, or value of the recreational resource and that could degrade the overall recreational experience.

WSDOT evaluated Section 4(f) properties to determine if the Project would result in an exception to the requirement for Section 4(f) approval as identified under Section 23 Code of Federal Regulations (CFR) 774.13. Section 4(f) properties were also evaluated to determine if a use as defined in 23 (CFR) 774.17 would occur. A use results when one of the following occurs:

- A permanent use occurs when land from a Section 4(f) property is permanently incorporated into a transportation project. This may occur as a result of partial or full acquisition of the Section 4(f) property, permanent easements, or temporary easements that exceed regulatory limits.
- A temporary use occurs when there is a temporary occupancy of land this is “adverse in terms of the statute’s preservation purpose as determined by the criteria in 23 CFR 774.13(d).” If the criteria in 23 CFR 774.13(d) are met, the temporary use exception applies, meaning that the temporary occupancy of the land is so minimal that it does not constitute a “use” within the meaning of Section 4(f). If the criteria in 23 CFR 774.13(d) are not met, the use is evaluated as permanent. Temporary occupancies are met if they meet each of the five following criteria:
 1. Duration must be temporary; i.e. less than the time needed for construction of the project, and there can be no change in ownership of the land;
 2. The scope of work must be minor, i.e., both the nature and magnitude of the changes to the Section 4(f) property are minimal;
 3. There are no anticipated permanent adverse physical impacts, nor can there be interference with the activities, features, or attributes of the property, on either a temporary or permanent basis;
 4. The land being used must be fully restored, i.e. the property must be returned to a condition that is at least as good as that which existed prior to the project; and
 5. There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.
- A constructive use occurs when a transportation project does not incorporate land from a Section 4(f) property, but the project's proximity effects are so severe that the protected activities, features, or attributes that qualify a property for protection under Section 4(f) are substantially impaired. In determining where noise effects would constitute a constructive use under Section 4(f), WSDOT referred to the following portion of 23 CFR 774.15(f):

(f) The Administration has reviewed the following situations and determined that a constructive use does not occur when:

- (1) Compliance with the requirements of 36 CFR 800.5 for proximity impacts of the proposed action, on a site listed on or eligible for the National Register, results in an agreement of “no historic properties affected” or “no adverse effect;”
- (2) The impact of projected traffic noise levels of the proposed highway project on a noise-sensitive activity do not exceed the FHWA noise abatement criteria as contained in Table 1 in Part 772 of this chapter, or the projected operational noise levels of the proposed transit project do not exceed the noise impact criteria for a Section 4(f) activity in the FTA guidelines for transit noise and vibration impact assessment;
- (3) The projected noise levels exceed the relevant threshold in paragraph (f)(2) of this section because of high existing noise, but the increase in the projected noise levels if the proposed project is constructed, when compared with the projected noise levels if the project is not built, is barely perceptible (3 decibels (dBA) or less);
- (4) There are proximity impacts to a Section 4(f) property, but a governmental agency's right-of-way acquisition or adoption of project location, or the Administration's approval of a final environmental document, established the location for the proposed transportation project before the designation, establishment, or change in the significance of the property. However, if it is reasonably foreseeable that a property would qualify as eligible for the National Register prior to the start of construction, then the property should be treated as a historic site for the purposes of this section; or
- (5) Overall (combined) proximity impacts caused by a proposed project do not substantially impair the activities, features, or attributes that qualify a property for protection under Section 4(f);
- (6) Proximity impacts will be mitigated to a condition equivalent to, or better than, that which would occur if the project were not built, as determined after consultation with the official(s) with jurisdiction;
- (7) Change in accessibility will not substantially diminish the utilization of the Section 4(f) property; or
- (8) Vibration levels from project construction activities are mitigated, through advance planning and monitoring of the activities, to levels that do not cause a substantial impairment of protected activities, features, or attributes of the Section 4(f) property.

A de minimis use is one that would not adversely affect the activities, features, or attributes of the Section 4(f) property. The *de minimis* determination can only be made after receipt and consideration of public comment, and after FHWA receives concurrence with the official(s) with jurisdiction.

For parks, recreation, and refuges, a *de minimis* use on a public parkland, recreational area, or wildlife and waterfowl refuge is defined as that which does not “adversely affect the features, attributes or activities qualifying the property for protection under Section 4(f)” (23 CFR 774.17). For historic properties, as defined in 23 CFR 774.5 and 774.17, a *de minimis* use determination is made if FHWA makes a finding for a property of “No Adverse Effect” or “No Historic Properties Affected” through consultation under Section 106 of the National Historic Preservation Act (NHPA), and the State Historic Preservation Office (SHPO) concurs with that finding.

For historic and cultural resources, WSDOT reviewed the findings of the Project EA Appendix E, *Cultural Resources Survey*, and Appendix E1, *Cultural Resources Survey Addendum*, to identify whether the Project would result in adverse effects on Section 4(f) historic resources protected by Section 106 of the NHPA. These resources include buildings, structures, sites, objects, and districts.

WSDOT evaluated Section 6(f) properties to determine if the Project would result in a conversion of the property to another use. Conversions can occur in three different ways:

- When use of an entire Section 6(f) resource site would be changed for longer than 6 months.
- When use of a portion of Section 6(f) resource would be changed for longer than 6 months.
- When a project would occur on the same property where the Section 6(f) resource is located and would not affect the Section 6(f) resource but would affect access to the Section 6(f) resource for more than 6 months.

As part of developing this report, coordination is ongoing with King County Parks and the City of Bothell regarding potential effects of the proposed Project to Section 4(f) and Section 6(f) resources, and the identification of mitigation and minimization measures.

SECTION 4 EXISTING CONDITIONS

This section describes the existing conditions in the study area for recreational resources, including Section 4(f) and Section 6(f) resources and historic resources subject to Section 4(f).

4.1 Recreational Resources

Exhibit 4-1 summarizes the recreational resources in the study area, and Exhibit 4-2, Sheets 1 and 2 show the location of these resources. All of the recreational resources in the study area are considered Section 4(f) resources except for the following:

- The portion of North Creek Trail within WSDOT right-of-way: WSDOT leases land to the University of Washington (UW) Bothell for the North Creek Trail, which includes the area where the trail connects to the Sammamish River Trail and travels north under SR 522. The lease agreement includes terms to return the property to WSDOT for transportation or highway purposes.

In addition to the resources described in Exhibit 4-1, three private schools (Evergreen Academy Elementary School, Cedar Park Christian School, and Woodinville Montessori School) located in the study area have playgrounds and sportsfields that are not open to the public. The UW Bothell/Cascadia College Sports and Recreation Complex located in the study area is also not open to the public and maintained for current students. Because these facilities are not open to the public, they are not considered public recreational resources and would not be subject to Section 4(f). Based on the review of properties within the study area, there are no designated wildlife or waterfowl refuges.

I-405, SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT
RECREATIONAL, SECTION 4(F), AND SECTION 6(F) RESOURCES DISCIPLINE REPORT

Exhibit 4-1 Recreational Resources in Study Area

Resource Name	Resource Type	Ownership	Section 4(f)	Section 6(f)
Parks and Recreational Areas				
Bud Homan Park	2.2 acre neighborhood park	City of Kirkland	Yes	No
KG1	0.05 acre open space	City of Kirkland	Yes	No
Brackett's Landing	0.5 acre mini park	City of Bothell	Yes	No
North Creek Sportsfields #1-#4	14 acre athletic field	City of Bothell	Yes	No
UW Bothell/Cascadia College Open Space	58 acre open space	UW	Yes	No
North Creek Forest	64 acre open space	City of Bothell	Yes	Yes
1st Lt. Nicholas Madrazo Memorial Park ^a	3.5 acre community park	City of Bothell	Yes	No
Cedar Grove Park	13.75 acre community park/open space	City of Bothell	Yes	No
Canyon Park Middle School ^b	School sportsfield	Northshore School District	Yes	No
Crystal Springs Elementary School ^b	School playground	North Shore School District	Yes	No
Trails				
Tolt Pipeline Trail	Approx. 14-mile multi-use trail	King County Parks	Yes	No
Sammamish River Trail	Approx. 10-mile multi-use trail	King County Parks	Yes	No
West Sammamish River Trail ^c	Approx. 5.4-mile multi-use trail	King County Parks	Yes	No
North Creek Trail	Approx. 10-mile multi-use trail	Varies ^d	Varies ^d	No

UW = University of Washington

^a This is a planned facility. The park is anticipated to be constructed in 2020.

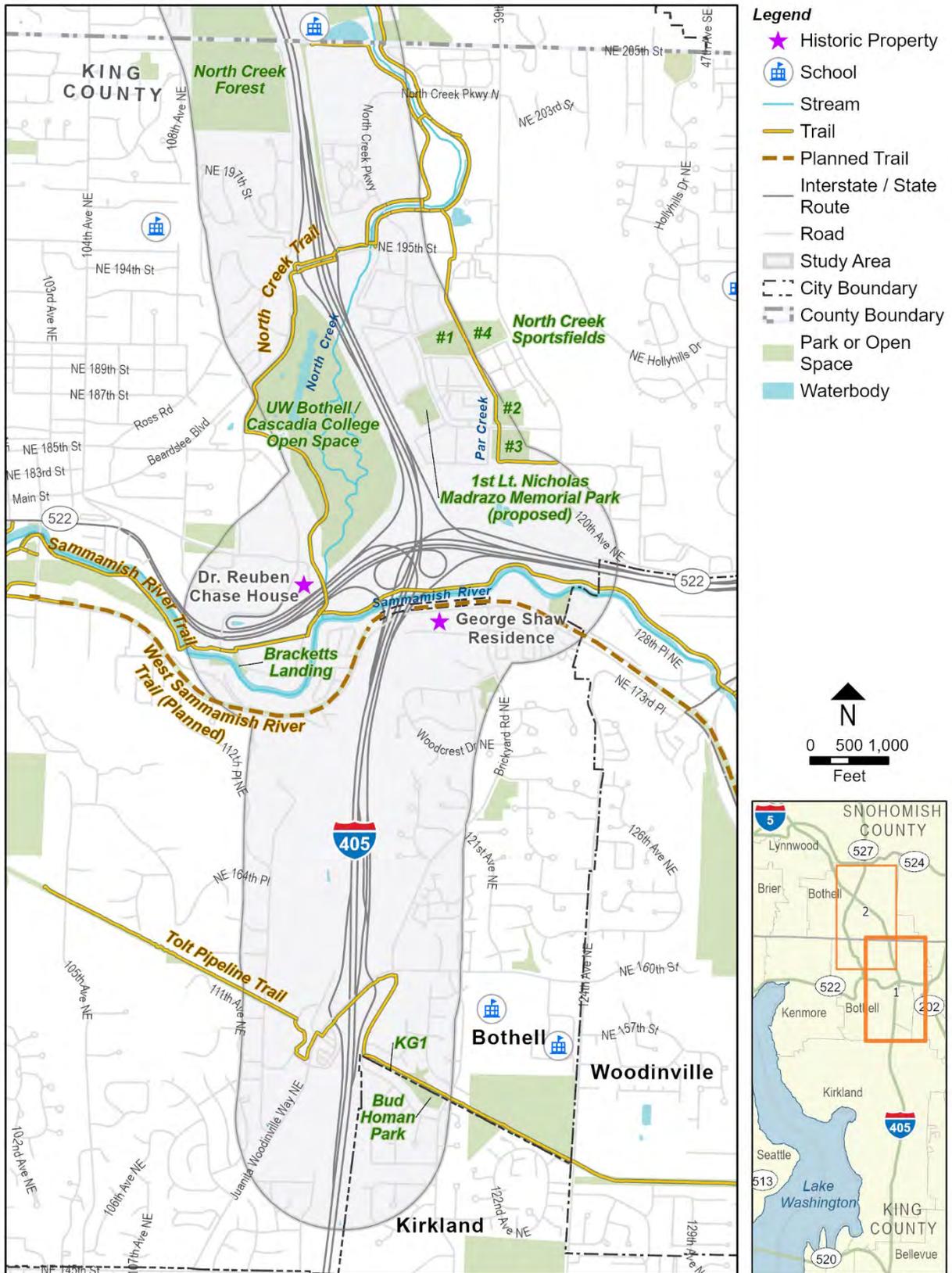
^b School district sports fields and playgrounds are available for public use during non-school hours (Bothell 2015).

^c This is a planned facility. There are currently no plans to construct the trail in the near future.

^d Within the study area the trail is owned and maintained by WSDOT, UW, City of Bothell, and private entities (North Creek Business Park and Canyon Park Business Park).

I-405, SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT
 RECREATIONAL, SECTION 4(F), AND SECTION 6(F) RESOURCES DISCIPLINE REPORT

Exhibit 4-2. Recreational Resources in the Study Area, Sheet 1 of 2



I-405, SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT
 RECREATIONAL, SECTION 4(F), AND SECTION 6(F) RESOURCES DISCIPLINE REPORT

Exhibit 4-2. Recreational Resources in the Study Area, Sheet 2 of 2



4.2 Parks and Recreational Areas

4.2.1 Bud Homan Park

Bud Homan Park is a 2.2-acre oblong-shaped park near the 119th Avenue NE and NE 153rd Street intersection in Kirkland. The park is owned and maintained by the City of Kirkland and includes open space with mature trees and playground equipment. It is located adjacent to the Tolt Pipeline Trail and approximately 800 feet east of the Project footprint.

4.2.2 KG1

KG1, owned and maintained by the City of Kirkland, is a 0.05-acre unimproved open space area located west of Bud Homan Park on 119th Avenue. The property is located adjacent to the Tolt Pipeline Trail and approximately 400 feet east of the Project footprint.

4.2.3 Brackett's Landing

Brackett's Landing is a 0.5-acre mini park (term for parks less than 1 acre), located just off of the Sammamish River, along the Sammamish River Trail at NE 174th Street. The park is owned and maintained by the City of Bothell. Amenities include access to the Sammamish River Trail and Sammamish River, and picnic tables. Brackett's Landing is approximately 800 feet south of the Project footprint.

4.2.4 North Creek Sportsfields

The North Creek Sportsfields are owned and maintained by the City of Bothell and are located within the North Creek Business Park east of I-405. There are four lighted athletic fields with dugouts, bleachers, picnic tables, and restrooms. The fields are primarily used by organized groups. Field No. 3 is grass and Field Nos. 1, 2 and 4 are turf. The fields are located approximately 800 feet from the Project footprint and east of I-405.

4.2.5 University of Washington Bothell/Cascadia College Open Space

The UW Bothell/Cascadia College campus includes a large natural area, situated northwest of the I-405/SR 522 interchange and covering approximately 58 acres. This open space, also referred to as the North Creek Wetlands, began as a floodplain restoration project in 1997, to restore the lower part of North Creek and surrounding land to a functioning ecosystem. Visitors can view the North Creek Wetlands from the North Creek Trail, which travels adjacent to portions of the open space, and through a boardwalk that travels into the middle of the open space (Exhibit 4-3). The North Creek Wetlands are adjacent to the Project footprint.

Exhibit 4-3. University of Washington Bothell/Cascadia College Open Space - Existing Conditions



4.2.6 North Creek Forest

North Creek Forest is a 64-acre undeveloped, mature forest owned and maintained by the City of Bothell. It is located west of I-405 approximately 100 feet from the Project footprint and split by the King and Snohomish County borders. Although the public can access the park and participate in research and learning opportunities, the park contains only informal unmaintained trails. The park includes wetlands and streams that provide wildlife habitat for a number of avian and terrestrial species. A portion of the North Creek Forest was acquired using Land and Water Conservation Fund (LWCF) assistance, and therefore is protected as a Section 6(f) resource. Exhibit 4-4 shows the North Creek Forest and one of the informal trails.

Exhibit 4-4. North Creek Forest - Existing Conditions



4.2.7 1st Lt. Nicholas Madrazo Memorial Park (Planned)

This 3.5-acre community park is planned along North Creek Parkway within property owned by the King County Wastewater Treatment Division. This property would be leased to the City of Bothell to maintain the planned park. The land is currently undeveloped, but the project is identified in the City of Bothell's 2019–2025 Capital Facilities Plan and is funded with mitigation funds associated with the construction impacts of the King County Wastewater Pump Station Storage Facility (Bothell 2018). It is also listed as a priority in the City's *Parks, Recreation and Open Space Action Program Update* (Bothell 2014). Planned amenities include a basketball court, walking paths, playfield, parking, landscaping, picnic tables and benches, a restroom, picnic shelter, and a memorial to 1st Lieutenant Nicholas Madrazo and veterans. The planned park would be about 250 feet from the Project footprint.

4.2.8 Cedar Grove Park

Cedar Grove Park is a 13.75-acre community/neighborhood park, owned and maintained by the City of Bothell. It is located along 9th Avenue SE, northwest of the I-405 and SR 527/Bothell-Everett Highway interchange area, and approximately 500 feet from the Project footprint. Amenities include a large picnic shelter area for up to 60 people, restrooms, barbeque grill facilities, picnic tables, a playground, basketball court, and a wetland boardwalk. The grass athletic field includes a dugout, restrooms, and parking.

4.2.9 Canyon Park Middle School

Sportsfields associated with Canyon Park Middle School are owned and maintained by the Northshore School District. The school is located just west of I-405 near the 23rd Avenue SE and 20th Avenue SE intersection in Bothell. The fields are about 325 feet from the Project footprint. There are two baseball diamonds, two tennis courts, and one soccer/football field, which are available only to students during school hours and open to the public after school hours.

4.2.10 Crystal Springs Elementary School

Owned and maintained by the Northshore School District, the Crystal Springs Elementary School playground is located in the northeastern portion of the study area. There are two playgrounds, one large gravel field, and a covered basketball court located about 900 feet from the Project footprint. The facilities are limited to students during school hours but are open to the public outside of school hours.

4.3 Trails

4.3.1 Tolt Pipeline Trail

The Tolt Pipeline Trail is a 14-mile soft-surface trail for foot, horse, and bicycle use. The trail extends from Bothell in the west through Kirkland, Woodinville, and Redmond, and ends near Duvall in the east. The trail is located within a strip of land acquired by the Seattle Water Department in 1963 to bring water from the Tolt River Reservoir to Seattle. The land is owned by the City of Seattle with King County Parks administering the trail. Within the study area, the soft-surface trail leaves the Tolt Pipeline right of way on the east side of I-405 at 116th Avenue

NE and crosses I-405 via the NE 160th Street/Juanita Woodinville Way NE overpass using existing sidewalks.

4.3.2 Sammamish River Trail

The Sammamish River Trail is a 10-mile regional trail owned and maintained by King County Parks and is part of the King County Regional Trails System. The trail follows the Sammamish River from Kenmore and through Bothell and Woodinville to Marymoor Park in Redmond. The trail is 12 feet wide and paved with a soft-surface shoulder for its entire length. It is Americans with Disabilities Act (ADA) accessible, and a popular corridor for nonmotorized commuters. The trail connects with a number of parks and trails, including the Burke-Gilman Trail in Seattle, Blyth Park in Bothell, the Tolt Pipeline Trail in Woodinville, and the North Creek Trail just south of the UW Bothell/Cascadia College campus.

I-405 and SR 522 are visible from the Sammamish River Trail. The Sammamish River Trail travels under the existing I-405 and SR 522 interchange where several overhead structures extend to the north and south. Exhibit 4-5 shows the existing conditions of the Sammamish River Trail looking west toward the I-405 and SR 522 elevated interchange.

Exhibit 4-5. Sammamish River Trail – Existing Conditions



4.3.3 West Sammamish River Trail (Planned)

King County Parks has acquired sections of an abandoned railway corridor on the southern side of the Sammamish River through the study area and has planned a soft surface trail for this location. The planned 5.4-mile trail would extend from 102nd Avenue NE in Bothell to NE 124th Street in Redmond. The trail is identified in the King County Open Space Plan 2016 Update (King County 2016). Because the trail has been identified in the King County Open Space Plan, it is considered a Section 4(f) resource. The railway corridor through the study area is unimproved (Exhibit 4-6).

Exhibit 4-6. West Sammamish River Trail (Planned) – Existing Conditions



4.3.4 North Creek Trail

The North Creek Trail is a 10-foot-wide regional, multipurpose trail that connects to the Sammamish River Trail at the SR 522 crossing, travels north through Bothell, and connects with the Snohomish County Regional Trails system. Within the study area, the North Creek Trail is owned and maintained by different entities depending on the location. WSDOT owns and leases to UW Bothell the portion of the trail north of its connection with the Sammamish River Trail (Exhibit 4-7). The City of Bothell, North Creek Business Park, and Canyon Park Business Park own and maintain other portions of the trail. Portions within the businesses parks are privately owned but open to the public.

Where the segment of the North Creek Trail is owned by WSDOT and maintained by the UW, it is not subject to Section 4(f) requirements. The lease agreement states that the property is for transportation purposes and would not be considered the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge.

Exhibit 4-7. North Creek Trail under SR 522 – Existing Conditions



4.4 Section 4(f) Historic Sites

The study area contains two Section 4(f) historic resources, as shown in Exhibit 4-2.

- Dr. Reuben Chase House – The Chase house, constructed in 1885, is located at 17819 113th Avenue NE in Bothell within the UW Bothell campus. It is eligible for listing on the National Register of Historic Places (NRHP). The house was relocated to its current location to allow for the construction of the UW Bothell campus.
- George Shaw Residence – This 1905 brick Craftsman residence is located at 11807 Bothell-Woodinville Road in Bothell, south of the Sammamish River and east of I-405. The construction of I-405 in the 1960s and the associated ramp structures at the SR 522 interchange altered the building's setting and feeling. The historic residence is eligible for listing on the NRHP.

The historic and cultural resources analysis for the Project identified no NRHP-eligible archaeological resources in the study area. For more information, see Appendix E, *Cultural Resources Survey*, and Appendix E1, *Cultural Resources Survey Addendum*, of the Project Environmental Assessment.

SECTION 5 PROJECT EFFECTS

This section describes the operational and construction effects on recreational resources if the Project were built; provides an assessment of the Project's use of Section 4(f) resources, both recreational and historic, as defined in 23 Code of Federal Regulations (CFR) 774.17; and determines whether a conversion would occur on any Section 6(f) properties.

5.1 No Build Alternative

The No Build Alternative would consist of WSDOT's continued routine maintenance of I-405 in the study area. These activities would include short-term minor construction necessary for continued operation of the existing I-405 facility and minor safety improvements, as required within the Project limits. As a result, there would be no direct impacts, constructive use, or conversion of recreational, Section 4(f) or Section 6(f) resources.

5.2 Build Alternative

The effects on recreational resources including Section 4(f) and Section 6(f) resources and Section 4(f) historic resources are based on the Build Alternative as described in Section 2, Project Description. Exhibit 5-1 summarizes the effects and Section 4(f) use for the public parks and recreational areas, trails, and historic resources in the study area.

I-405, SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT
RECREATIONAL, SECTION 4(F), AND SECTION 6(F) RESOURCES DISCIPLINE REPORT

Exhibit 5-1. Effects on Recreational Resources

Resource Name	Distance from Project Footprint	Permanent Acquisition	Effects and Section 4(f) Determinations
Public Parks and Recreational Areas			
Bud Homan Park	Approx. 800 feet	None	None, no Section 4(f) use
KG1	Approx. 400 feet	None	None, no Section 4(f) use
Brackett's Landing	Approx. 800 feet	None	None, no Section 4(f) use
North Creek Sportsfields	Approx. 800 feet	None	None, no Section 4(f) use
UW Bothell/Cascadia College Open Space	Adjacent to WSDOT right of way	None	None, no Section 4(f) use
North Creek Forest	Adjacent to WSDOT right of way	None	Reestablishment of trees and vegetation, <i>de minimis</i> use
1st Lt. Nicholas Madrazo Memorial Park (Planned)	Approx. 350 feet	None	None, no Section 4(f) Use
Cedar Grove Park	Approx. 400 feet	None	None, no Section 4(f) use
Canyon Park Middle School	Approx. 350 feet	None	None, no Section 4(f) use
Crystal Springs Elementary School	Approx. 900 feet	None	None, no Section 4(f) use
Trails			
Tolt Pipeline Trail	Within and adjacent to Project footprint	None	None, no Section 4(f) use
Sammamish River Trail	Within and adjacent to Project footprint	None	Relocation of trail, <i>de minimis</i> use
West Sammamish River Trail (Planned)	Within and adjacent to Project footprint	None	None. Temporary occupancy during construction meets the temporary use exception criteria in 23 CFR 774.13(d).
North Creek Trail	Adjacent to/within WSDOT right of way at closest point	None	None. WSDOT owns property with trail and is leased to UW where improvements occur. Other sections of trail owned and maintained by others there is no Section 4(f) use.
Historic Resources			
Dr. Reuben Chase House	Adjacent to WSDOT right of way	None	None, no Section 4(f) use and no adverse effects under Section 106.
George Shaw Residence	Approx. 200 feet	None	None, no Section 4(f) use and no adverse effects under Section 106.

CFR = Code of Federal Regulations; UW = University of Washington

5.2.1 Recreational/Section 4(f) Resources with No Effects

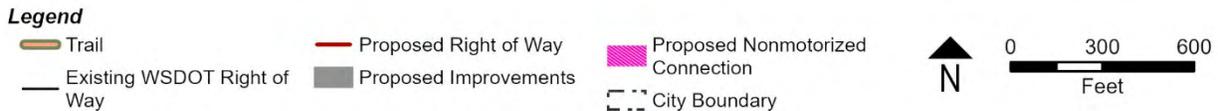
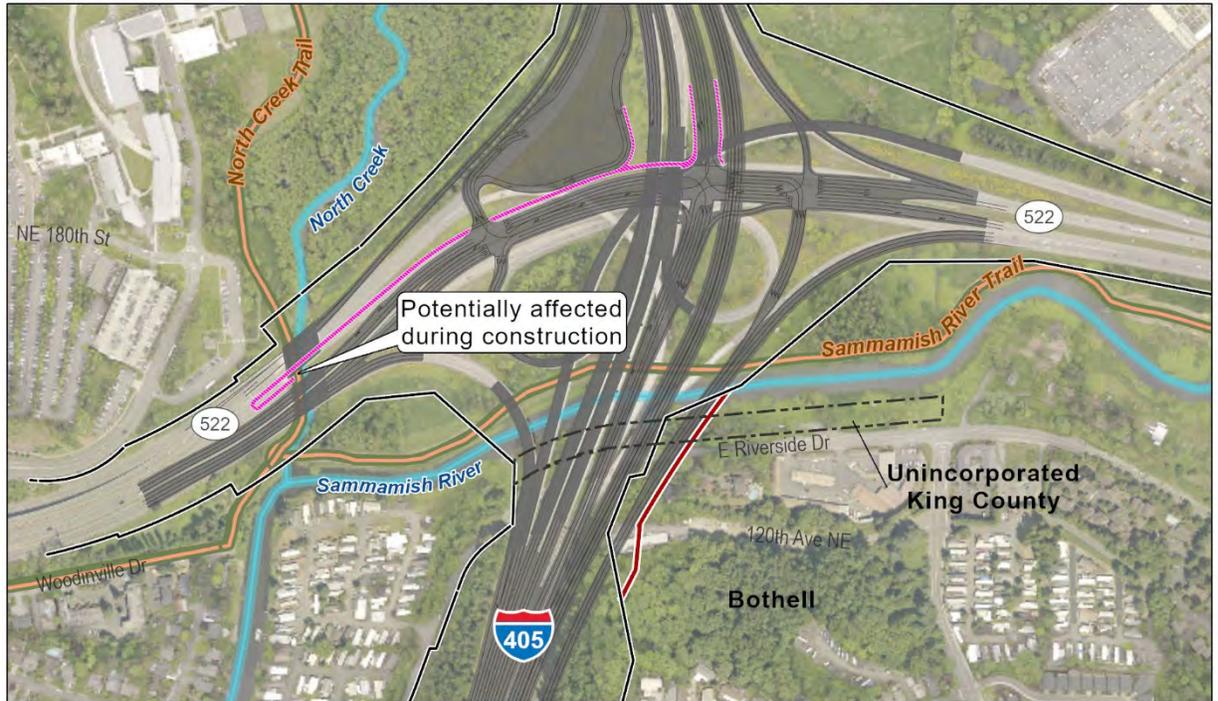
As shown in Exhibit 5-1, there are 11 recreational resources (9 public parks and recreation areas and 2 trails) in the Project study area where there would be no effects and no use (permanent, temporary, or constructive) under Section 4(f). The Project would not affect the protected activities, features, or attributes that qualify these properties for protection under Section 4(f) because:

- The Project would not acquire lands, either temporarily or permanently, from these facilities.
- The Project would not result in changes in access to these facilities during construction or operation.
- Noise levels would not increase at these facilities during operation of the Project, or the increase would be the same as or less than the No Build Alternative.
- No visual effects would occur at these facilities as a result of the Project improvements.

The Project would build a new nonmotorized connection between the North Creek Trail and the proposed bus station in the northwest quadrant of the I-405/SR 522 interchange (Exhibit 5-2). Construction of the new nonmotorized connection would largely occur on WSDOT property outside of the existing trail. This work would require a temporary detour and/or flagging during construction at the connection with the North Creek Trail. WSDOT expects that most of the construction would occur outside of the existing trail, minimizing the need for trail closures. If trail access cannot be maintained during daytime hours, it is anticipated that construction of the new nonmotorized connection point at the North Creek Trail would occur during the evening hours. Because WSDOT owns this section of the trail and leases the land to UW Bothell, it is not subject to Section 4(f). Furthermore, the lease agreement between WSDOT and the UW Bothell includes language that the highway use is paramount to any other use, including a bicycle and pedestrian trail.

If the lease is terminated, the use of the leased property would not be considered the use of a publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge. Therefore, there would be no use under Section 4(f) for work on this segment of the trail.

Exhibit 5-2. Nonmotorized Connection to North Creek Trail



5.2.2 Recreational/Section 4(f) Resources with Effects

Resources with a Section 4(f) Exception

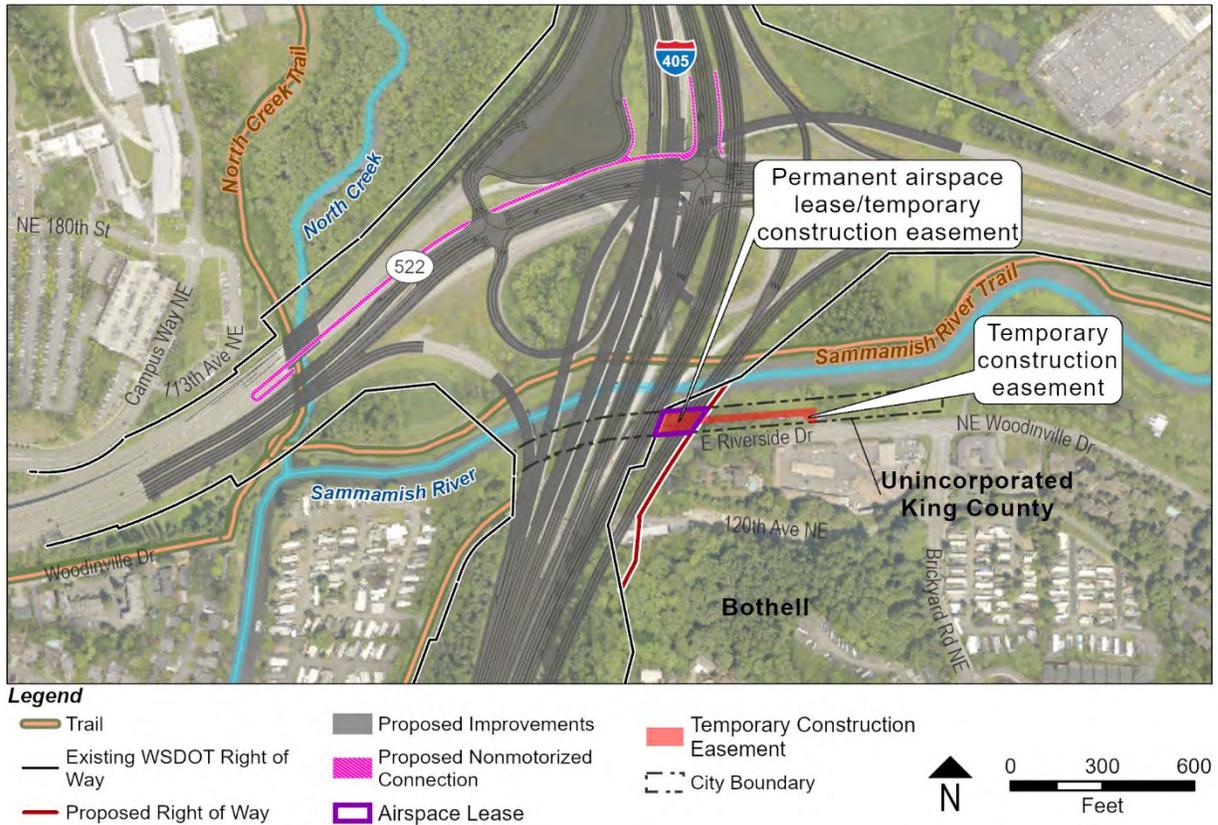
One property affected by the Project would not result in a Section 4(f) use because it would meet an exception requirement in 23 CFR 774.13.

West Sammamish River Trail

The Project would not negatively affect future construction of this planned King County trail. The Project would construct a new I-405 bridge over the planned trail. This work would require the removal of existing vegetation, including cottonwood trees and noxious weeds, and establishment of a temporary construction staging area within property owned by King County Parks and planned for the trail (Exhibit 5-3). These activities would require a temporary construction easement from King County Parks. After construction is complete, the property would be restored. The construction activities would meet the temporary occupancy exception criteria in 23 CFR 774.13(d), and would not result in a temporary use under Section 4(f). Concurrence that the use would not occur within the area planned for the West Sammamish River Trail is required from King County Parks as the agency with jurisdiction. WSDOT will work with King County Parks to obtain this concurrence. WSDOT would require an airspace lease from King County Parks for the bridge over the future trail. The lease would not impair

the future trail because minimum structure heights per King County trail specifications would be maintained and the trail would pass under other existing overpasses in this area.

Exhibit 5-3. West Sammamish River Trail (Planned) Construction Zone



Resources with a *De Minimis* Use Determination

Two properties in the study area would result in a *de minimis* use of a Section 4(f) recreational resource.

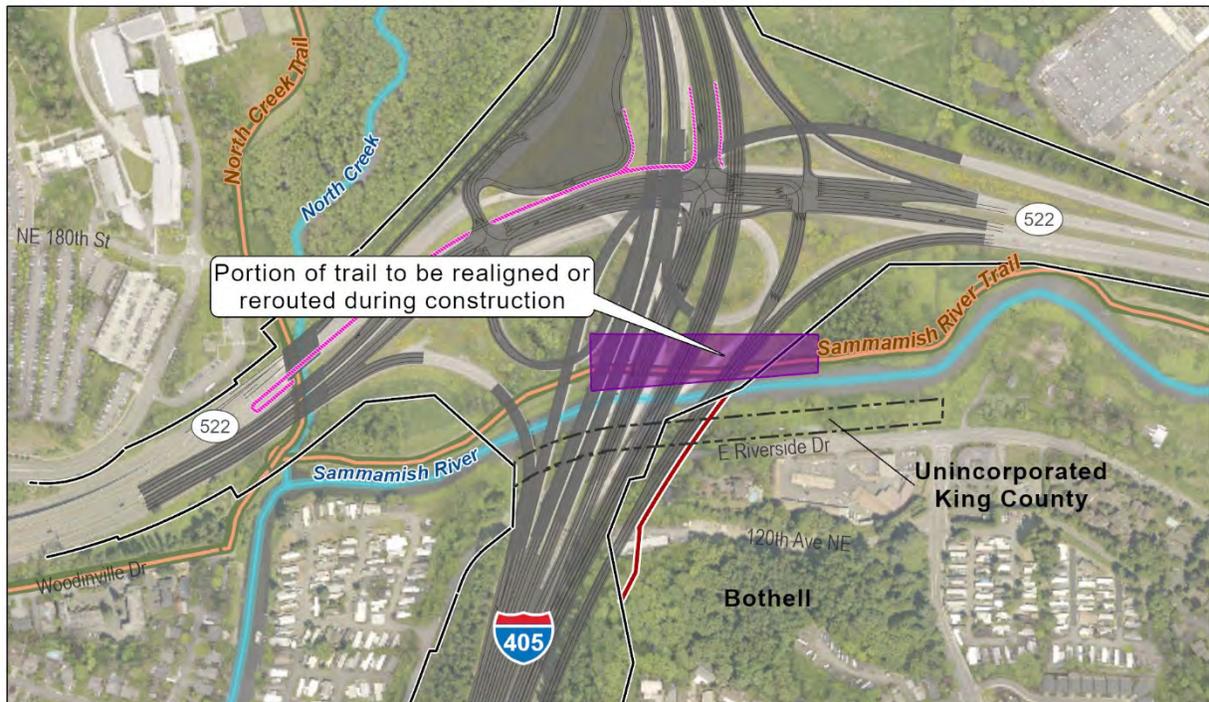
Sammamish River Trail

Construction would require a temporary relocation of a portion of this trail due to the construction of three new overhead structures and the demolition of two existing overhead structures. The construction of new structures includes the placement of columns, new abutments, and girders to support a new northbound I-405 bridge.

Trail use would be maintained during construction through temporary trail realignments, as shown in Exhibit 5-4, to allow construction activities to proceed and protect trail users. The temporary trail alignments would direct trail users away from the river, but east-west trail circulation would be maintained (refer to preliminary construction sequence in Attachment B, Preliminary Construction Sequencing at Sammamish River Trail). The temporary realignment would be constructed consistent with King County Parks standards for temporary trails. It is anticipated that two temporary realignments would be required, and the duration of the

temporary realignments may be a majority of the construction phase depending on the overall construction sequencing. The placement of girders for the new bridge would require nighttime closures of the trail for safety and/or equipment access to minimize effects on trail users. The nighttime closures would be limited, and advance notice would be provided. In addition, short-term closures, typically less than 15 minutes, may be required during daytime hours to allow for vehicle and/or equipment access over the trail.

Exhibit 5-4. Sammamish River Trail Construction Zone



Legend

- Trail
 - Proposed Right of Way
 - Proposed Nonmotorized Connection
 - Existing WSDOT Right of Way
 - Proposed Improvements
 - City Boundary
- 0 300 600 Feet

In order to maintain required clear zone distances from the new structures, a portion of the trail would be permanently realigned to ensure the trail alignment is consistent with King County Parks specifications. After construction is complete, all current recreational use of the trail would be maintained, and there would be no permanent change to the way the trail is currently used. Exhibit 5-5 shows a visualization of the proposed I-405 and SR 522 interchange improvements.

Both the temporary and permanent trail realignments are expected to occur within WSDOT's existing right of way. However, it is possible that some of the temporary and/or permanent realignment may take place on property owned by King County, at the request of the County, to improve sight distance on the trail. Because of this possibility, a Section 4(f) *de minimis* determination has been made.

Exhibit 5-5. Visualization of Proposed I-405/SR522 Interchange Improvements Viewed from Sammamish River Trail



Noise levels on portions of the trail would increase above 66 decibels (dBA), the FHWA noise abatement criteria (NAC) for parks. However, per 23 CFR 774.15(f)(3) as described in Section 3.4, there would be no noise-related constructive use. Noise levels with the Build Alternative would exceed the NAC at some trail locations, but the noise levels would be the same as or less than the No Build Alternative, or the increase would be no more than 1 dBA and not perceptible. The Sammamish River Trail travels under the I-405 and SR 522 interchange where several overhead structures extend to the north and south. The Project would remove two of these structures and build three new structures. The new structure would not degrade the visual setting in this area; therefore, no constructive use would occur. The temporary trail realignments and temporary closures for construction and the permanent realignment of the trail would meet the criteria for a *de minimis* use under Section 4(f) because the effect would be minor in nature. A determination of *de minimis* use on parks, recreation areas, and wildlife and waterfowl refuges may be made when all three of the following criteria are satisfied:

- The transportation use of the Section 4(f) resource, together with any effect avoidance, minimization, and mitigation or enhancement measures incorporated into the project, would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).
- The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.
- The official(s) with jurisdiction over the property are informed of the United States Department of Transportation's intent to make the *de minimis* use determination based on their written concurrence that the project would not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f).

Concurrence from King County Parks, the agency with jurisdiction, is needed to reach concurrence that the use of Sammamish River Trail would have a *de minimis* use. WSDOT will work with King County Parks to obtain this concurrence. Mitigation is addressed in Section 6,

Measures to Avoid or Minimize Effects. The 30-day public review and comment period for the Project Environmental Assessment (EA) includes the opportunity for public comment on this *de minimis* finding.

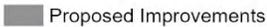
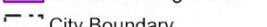
North Creek Forest

The Build Alternative would construct a restored stream connection at Stream 25.0L within a portion of the North Creek Forest protected under Section 4(f), as shown in Exhibit 5-6. This work would require a temporary construction easement from the City of Bothell, but the Project would not permanently acquire land from North Creek Forest and would not convert property from an existing use to a transportation use. The proposed improvements would be consistent with natural features in the North Creek Forest and would improve the natural environment.

Exhibit 5-6. North Creek Forest Restored Stream Connection



Legend

-  Trail
-  Proposed Improvements
-  Existing WSDOT Right of Way
-  Stream Realignment
-  City Boundary



Noise levels would increase with the Project in portions of the forest but would not result in a constructive use per 23 CFR 774.15(f)(3). The increase in noise levels compared to the No Build Alternative would be less than 1 dBA and not perceptible.

The Project would reconstruct and realign portions of Stream 25.0L within the North Creek Forest to correct a fish barrier. This work would benefit fish and aquatic species by restoring full anadromous fish access to upstream habitat and replacing the existing stream channel, which is

currently in a pipe, with an open stream channel. Construction activities for this fish barrier correction would be located within an area of approximately 0.75 acres and would include clearing of existing mature trees and vegetation and constructing ground improvements, such as regrading soils and drive untreated timber piles up to 25 feet deep to stabilize steep slopes. Disturbed areas would be replanted with native trees and vegetation to restore the natural setting. However, the new trees and vegetation would take time to mature. A *de minimis* determination has been made under Section 4(f) because effects from the proposed Project would be short-term and minor in nature. The Project would improve the natural environment by restoring the stream connection at Stream 25.0L and improving fish habitat.

A determination of *de minimis* use on parks, recreation areas, and wildlife and waterfowl refuges may be made when all three of the following criteria are satisfied:

- The transportation use of the Section 4(f) resource, together with any effect avoidance, minimization, and mitigation or enhancement measures incorporated into the project, would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).
- The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.
- The official(s) with jurisdiction over the property are informed of the United States Department of Transportation's intent to make the *de minimis* use determination based on their written concurrence that the project would not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f).

Concurrence from the City of Bothell, the agency with jurisdiction, is needed to establish that the Project would have a *de minimis* use at the North Creek Forest. WSDOT will work with the City of Bothell to obtain this concurrence. Mitigation is addressed in Section 6, Measures to Avoid or Minimize Effects. The 30-day public review and comment period for the Project EA includes the opportunity for public comment on this *de minimis* finding.

5.2.3 Section 4(f) Historic Resources

Based on a review of the Project EA Appendix E, *Cultural Resources Survey*, and Appendix E1, *Cultural Resources Survey Addendum*, the Project would not result in adverse effects under Section 106. On December 16, 2019, and January 16, 2019, WSDOT received concurrence from the Washington Department of Archaeology and Historic Preservation that the proposed Project will have no adverse effect on eligible or listed properties within the area of potential effects. Therefore, there is no use under Section 4(f).

Dr. Reuben Chase House

Although this historic resource is close to the I-405 corridor, it is within a highly modified setting on the edge of the UW Bothell campus. There is also an existing vegetated and timbered screen between the building and the I-405 corridor, which protects the resource's viewshed. Proposed construction in the adjacent zone would not cause an adverse effect under Section 106 to the resource.

George Shaw Residence

The building is located within a modified landscape, and planned construction activities in that area would not cause an adverse effect under Section 106 to the resource.

5.2.4 Section 6(f) Resources

The Project would not result in a permanent conversion of property to the North Creek Forest under Section 6(f). The Project would result in temporary effects to the North Creek Forest associated with the construction of one restored stream connection and would not convert Section 6(f) lands to a transportation-related use. All in-water work would be conducted within the fish window, and construction activities within the park would have a duration of less than six months. Because construction of the improvements within North Creek Forest would not exceed six months, this work would not result in a permanent conversion.

SECTION 6 MEASURES TO AVOID OR MINIMIZE EFFECTS

6.1 Operational Mitigation

- Coordinate with King County Parks on the permanent realignment of the Sammamish River Trail under I-405 to ensure it meets King County trail specifications.

6.2 Construction Mitigation

Mitigation measures developed for other Project resources, including air quality, noise, and transportation, will be implemented to minimize construction effects to recreational resources.

6.2.1 Sammamish River Trail

- Design temporary trail realignments to maintain access during construction and ensure the trail is consistent with King County Parks specifications for temporary trails, including needed signage.
- Schedule trail closures to build new structures and demolish existing structures at night to avoid peak-use hours. Coordinate the nighttime construction period with King County Parks.
- Use flaggers for short-term trail closures to facilitate construction vehicle access across the trail.
- Restore the property after construction and coordinate with King County Parks on the restoration of the disturbed areas.

6.2.2 West Sammamish River Trail

- Restore the property after construction and coordinate with King County Parks on the restoration of the disturbed areas.

6.2.3 North Creek Trail

- Coordinate with University of Washington Bothell/Cascadia College campus on any trail closures and detours. Use flaggers as needed to maintain trail access during construction.

6.2.4 North Creek Forest

- Complete construction of improvements in the North Creek Forest in a total of six months or less. The construction time does not include follow-up visits to inspect Project improvements, such as the fish barrier correction or proposed plantings.
- Coordinate with the City of Bothell to replant areas that are disturbed during construction with native vegetation as part of the stream restoration planned for this area. Remove invasive species and noxious weeds, if present, prior to planting native vegetation.

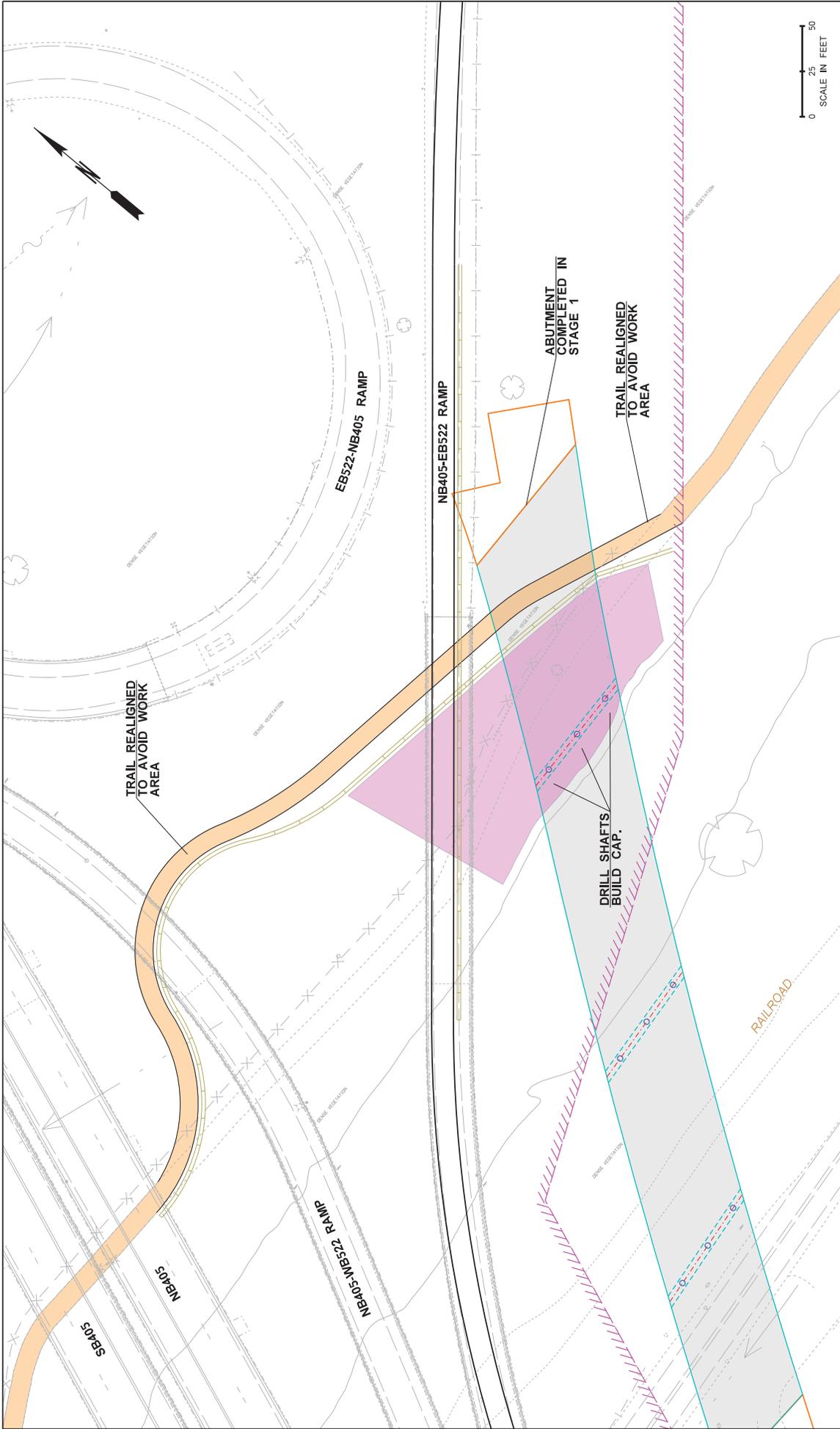
SECTION 7 REFERENCES

- Bothell, City of. 2014. *Parks, Recreation and Open Space Action Program Update*. Retrieved on April 24, 2019, from <https://www.bothellwa.gov/DocumentCenter/View/405/PROASP-PDF?bidId=>.
- Bothell, City of. 2015. *2015 Periodic Plan and Code Update – Imagine Bothell Comprehensive Plan*. Retrieved on April 24, 2019, from <https://www.bothellwa.gov/DocumentCenter/View/441/2015-Adopted-Plan-Version-PDF?bidId=>.
- Bothell, City of. 2018. *Capital Facilities Plan*. Retrieved on Aug. 23, 2019, from <https://www.bothellwa.gov/182/Capital-Facilities-Plan>.
- King County. 2016. *King County Open Space Plan 2016 Update*. Retrieved on August 12, 2019 from <https://www.kingcounty.gov/services/parks-recreation/parks/about/open-space-plan.aspx>.
- WSDOT (Washington State Department of Transportation). 2008. Programmatic Agreement Pursuant to Section 106 of the National Historic Preservation Act of 1966 Among the Federal Highway Administration, The Washington State Historic Preservation Officer, The Washington State Department of Transportation, The Muckleshoot Indian Tribe, and the Snoqualmie Indian Tribe For Improvements to Interstate 405 (I-405) Corridor, King County and Snohomish County, Washington. On file, Washington State Department of Transportation, Northwest Region, Seattle.

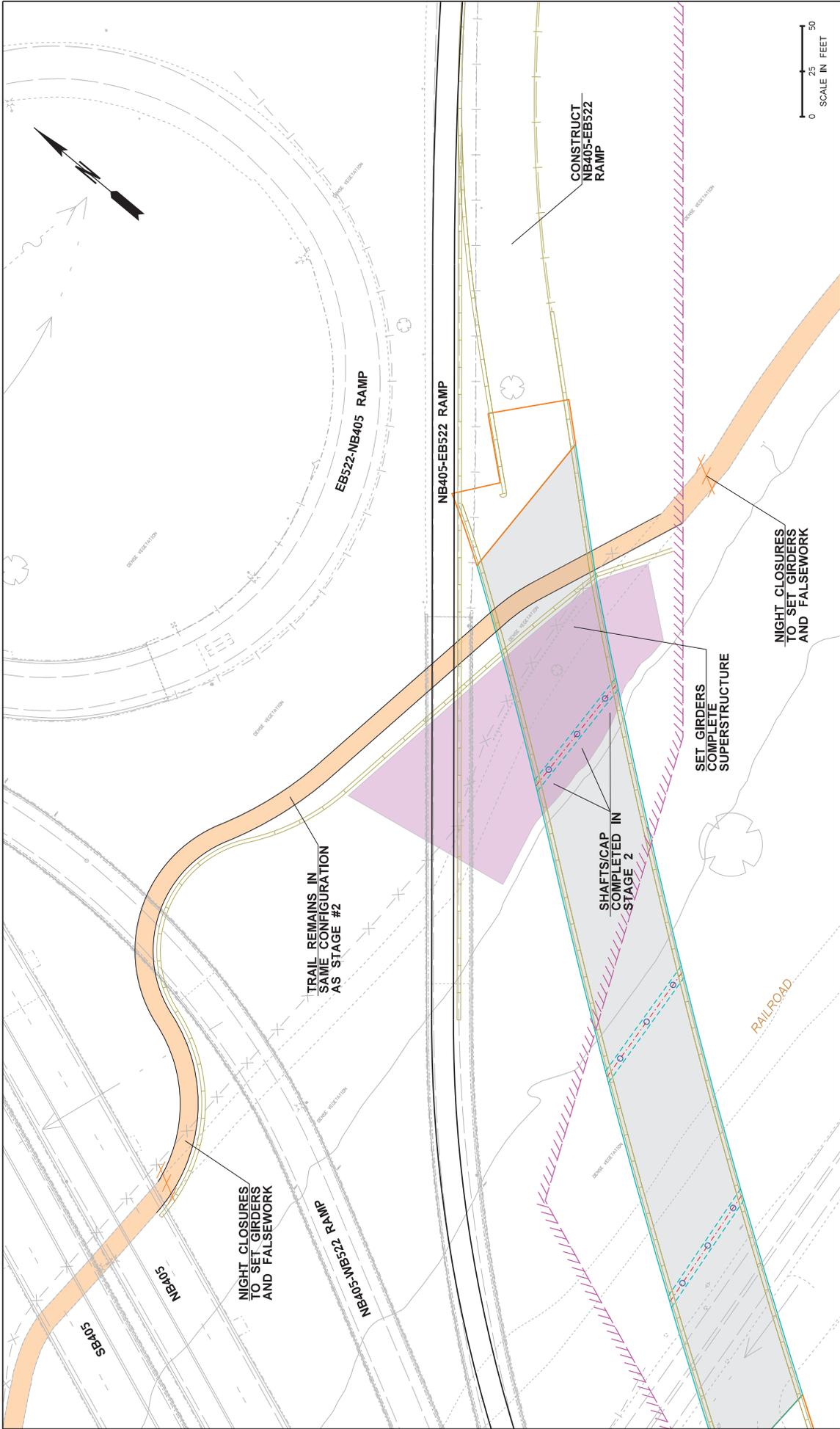
ATTACHMENT A ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
ADA	Americans with Disabilities Act
APE	Area of Potential Effects
CFR	Code of Federal Regulations
DAHP	Department of Archaeology and Historic Preservation
dBA	A-weighted decibel
DNR	Washington State Department of Natural Resources
EA	Environmental Assessment
ETLs	express toll lanes
FHWA	Federal Highway Administration
GP	general purpose
HOV	high-occupancy vehicle
I-405	Interstate 405
LWCF	Land and Water Conservation Fund
MP	milepost
NAC	Noise Abatement Criteria
NRHP	National Register of Historic Places
Project	I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project
RCO	Washington State Recreation and Conservation Office
SOV	single-occupancy vehicle
SR	State Route
USC	United States Code
UW	University of Washington
WSDOT	Washington State Department of Transportation

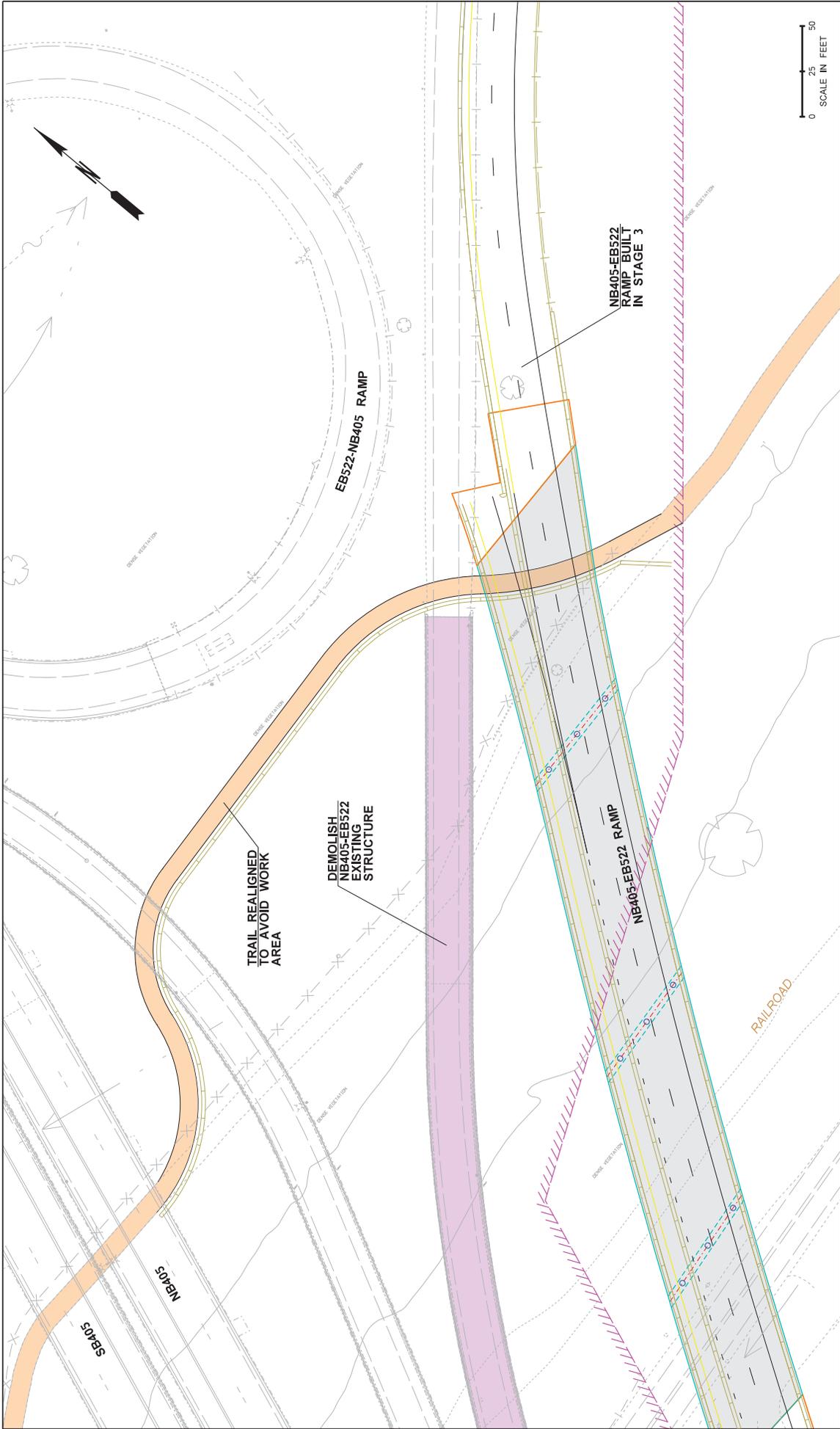
ATTACHMENT B PRELIMINARY CONSTRUCTION SEQUENCING AT SAMMAMISH RIVER TRAIL



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DESIGNED BY	CHECKED BY	PROJ. ENGR.	REGIONAL ADM.	DATE	BY	REVISION	
 Washington State Department of Transportation				P.E. STAMP BOX _____ DATE _____ P.E. STAMP BOX _____ DATE _____		STAGE 2	
DRAFT SHEETS							



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DESIGNED BY			LOCATION NO.		
ENGINEER			DATE	BY	
CHECKED BY			REVISION		
PROJ. ENGR.					
REGIONAL ADM.					
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION			P.E. STAMP BOX		
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Washington State Department of Transportation			STAGE 3		
DRAFT SHEETS					



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REGIONAL ADM.			REVISION		
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			Washington State Department of Transportation		
					
			STAGE 4		

DRAFT SHEETS