National Environmental Policy Act and
State Environmental Policy Act

Supplemental Environmental Assessment

SR 3 FREIGHT CORRIDOR – NEW ALIGNMENT

January 2024

Washington State Department of Transportation

U.S. Department of Transportation
Federal Highway Administration

SR 3 FREIGHT CORRIDOR – NEW ALIGNMENT

Mason and Kitsap Counties, Washington

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

Submitted pursuant to 42.U.S.C. 4332(2)(c)

By the

U.S. Department of Transportation – Federal Highway Administration
and
Washington State Department of Transportation

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CHAPTER 1: INTRODUCTION

State Route (SR) 3 regularly experiences congestion during peak commute hours, especially as drivers stop and make turns. Heavy congestion has the potential to negatively affect emergency response times and economic vitality. The SR 3 Freight Corridor – New Alignment (Freight Corridor) would reduce congestion and improve safety through Belfair and provide an alternate route during highway closures resulting from vehicular crashes and other incidents. Construction of this project would provide safe and reliable regional access to jobs, goods, and services, and improve travel times for all public service providers, on SR 3 through Belfair.

1.1 Where Is the Project Located?

The proposed Freight Corridor project is an approximate 6.5-mile corridor located mostly in Mason County, with its northern end located in Kitsap County. The project is designed to bypass the community of Belfair. Figure 1.1-1 shows the location of the project.

1.2 Why Do We Study Environmental Effects and Involve the Public in Project Decisions?

WSDOT's roadway improvement projects are planned to benefit the state's citizens by supporting safe travel and the efficient transportation of goods. The benefits derived from these improvements may reach beyond the local community, but it is at the community level where the project's effects are typically most concentrated.

We want your input, and we pledge that the decision makers will give it careful consideration.

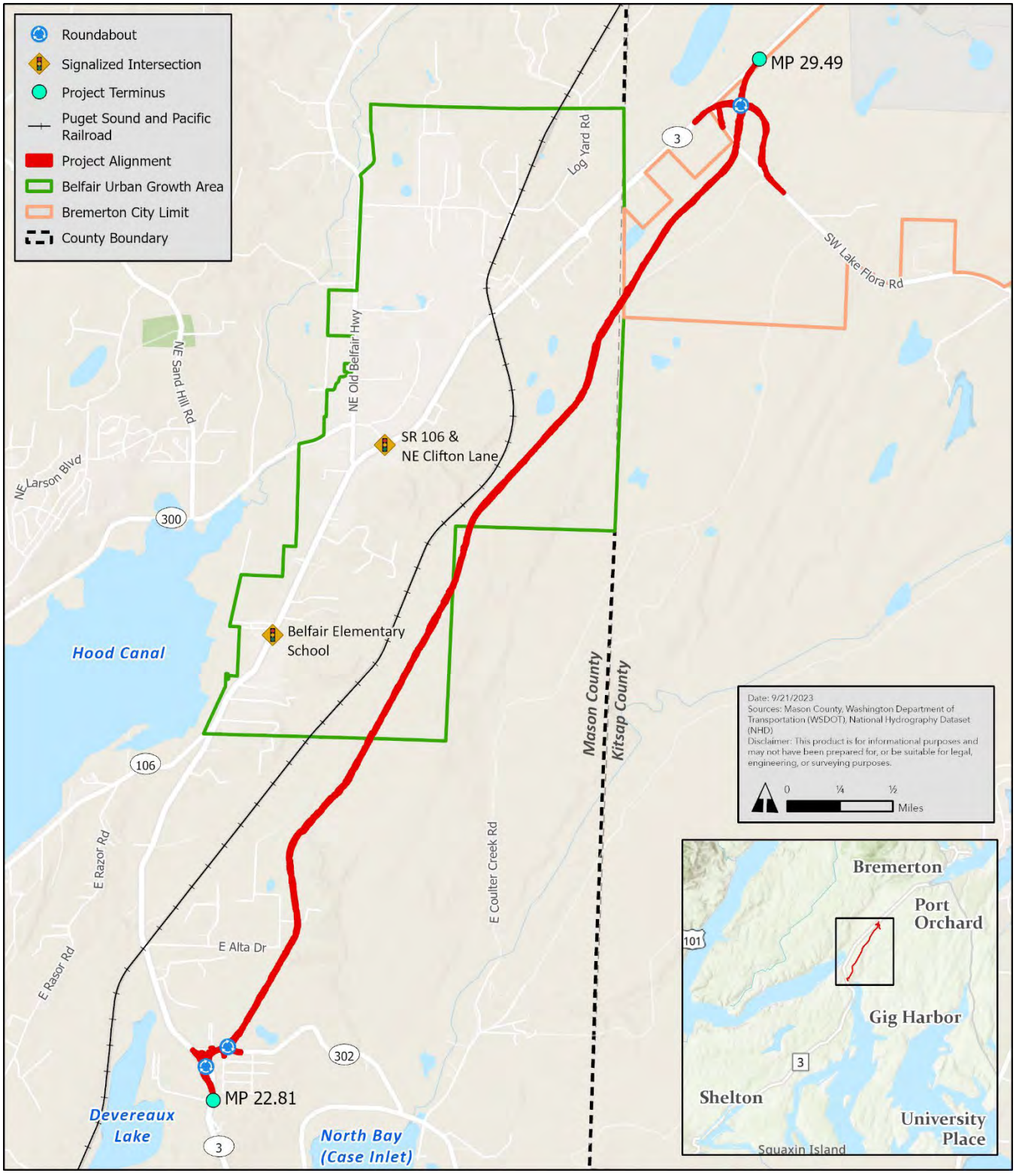
NEPA requires us to disclose the social, economic, and environmental effects of our project proposals. This ensures that all members of the community have the opportunity and are encouraged to contribute information and opinions that would be given careful consideration by the project's decision makers. Our interaction with the public, agencies, and tribal governments are documented in Chapter 6 – Agency, Tribal, and Public Coordination.

1.3 What Is the History of This Corridor and This Project?

This portion of existing SR 3 was originally constructed in 1919 as a county road. In 1955, the roadway was added to the old Secondary State Highway (SSH) System 14-A. The Shelton to Belfair portion of SSH 14-A became SR 3 when the current state highway system was posted in January 1964. Soon after this designation, studies were undertaken to identify the best way to provide better and safer flow of freight and goods, and people between SR 101 at Shelton and Belfair and beyond to Bremerton. In November 2001, Mason County proposed a bypass as an undivided two-lane principal arterial.

Between 2005 and 2009, the Washington State Legislature provided the Washington State Department of Transportation (WSDOT) funding for preliminary design and environmental analysis of the SR 3 Belfair Bypass project. In the 2009 transportation budget, the Legislature included a proviso directing WSDOT to engage the public in considering the scope and budget of the SR 3 Belfair Bypass project. The *Belfair Bypass Proviso Report* (2010) was published on June 23, 2010.

Figure 1.1-1 SR 3 Freight Corridor Project Vicinity



The Legislature provided funding in the 2010 supplemental budget to advance work related to environmental review. The Federal Highway Administration (FHWA) and WSDOT published an Environmental Assessment (EA) in January 2013 and a Revised EA in May 2013. Funding for construction of the Belfair Bypass project was not included in the transportation budget at that time. Since the project was not funded, FHWA was prohibited from publishing a final decision document due to regulations around fiscal constraint. As a result, design and further environmental analysis was stopped.

In 2019, the project received Connecting Washington funding and the project was restarted. Since that time, WSDOT has refined the design and begun work to update the environmental documentation to comply with the National Environmental Policy Act (NEPA).

1.4 Why Is the 2013 Environmental Assessment Being Supplemented?

Due to changes in the project's alignment and design, as well as the time lapse between project activities (approximately ten years), WSDOT initiated a series of activities to identify and evaluate any changes to the project's environmental impacts. The project modifications, along with outdated environmental studies from the 2013 NEPA EA, led to the need for a Supplemental Environmental Assessment (SEA) and revised technical studies. In October 2020, WSDOT began the process of updating and supplementing the 2013 EA documents. Changes since 2013 include:

- Updating the project name from SR 3 Belfair Bypass to SR 3 Freight Corridor;
- Revising terminus designs consistent with new traffic data which suggests the north and south connections would be better served with roundabouts instead of signalized intersections;
- Shifting the 2013 alignment to:
  - Minimize or avoid impacts to wetlands;
  - Eliminate impacts to the ballfield at North Mason High School;
  - Eliminate the proposed bridge north of the Alta-Brook neighborhood;
  - Be compatible with commercial growth along the existing SR 3 corridor, specifically at the north connection; and
- Updates due to changes in federal and state environmental regulations, such as protected species and critical areas (under the Endangered Species Act) regulations.

1.5 Why Is This Supplemental Environmental Assessment Required?

FHWA and WSDOT prepared this SEA to analyze and document whether the Project would have significant effects on the environment and has been prepared to comply with the National Environmental Policy Act of 1969 (42 U.S.C § 4321) (NEPA), Section 106 of the National Historic Preservation Act (NHPA) of 1966, Section 4(f) of the Department of Transportation Act of 1966, and other related laws. WSDOT will use FHWA's decision documentation and other supporting documentation to satisfy the Washington State Environmental Policy Act (SEPA) (WAC 197-11). As the NEPA lead agency, FHWA will decide if the environmental documentation process is adequate, if the project impacts are environmentally significant, and ultimately whether the project is recommended for construction. These decisions will rely on the information provided in this SEA, the technical studies that were prepared in support of the SEA, interaction with the public, other agencies and interested tribes, and pending the availability of funds.

1.6 How Is the Public Involved?

Citizens are invited to participate in this project by reviewing this SEA, attending the environmental hearing and other public meetings, and providing comments on the information presented in this document. The input

provided will be carefully considered in agency decision making. Opportunities to learn about the project and share input include:

- Project website: https://wsdot.wa.gov/construction-planning/search-projects/sr-3-freight-corridor-new-alignment
- An online open house, available at https://engage.wsdot.wa.gov/sr-3-freight-corridor
- An in-person open house, on February 13, 2024
- Comments on the Draft SEA during the comment period

1.7 How Long Would It Take to Build the Project?

The project is now in the environmental review phase. Construction is anticipated to start in late summer 2026. It is estimated construction would be complete by the end of 2028.

1.8 How Is the Project Being Funded?

In June 2019, the Legislature provided $66.9 million to design and construct the SR 3 Freight Corridor – New Alignment, and another $11.1 million in 2022. The total approved project funding is $78 million. The total cost includes environmental, preliminary engineering, right-of-way acquisition, and construction.

1.9 What Approvals, Permits, and Consultations Would Be Needed Before Construction Begins?

The project approvals and permits needed from local, state, and federal agencies are shown in Table 1.9-1.

Table 1.9-1 Anticipated Approvals and Permits

Agency	Permit/Approval/Consultation
Federal Agencies	
National Marine Fisheries Service	Endangered Species Act consultation
U.S. Army Corps of Engineers	Section 404 Nationwide Permit
U.S. Fish & Wildlife Service	Endangered Species Act consultation
Federal Aviation Administration	Approval of development near the airport
State Agencies	
Department of Archaeological & Historical Preservation	Section 106 Concurrence
Department of Ecology	Section 401 Water Quality Certification Section 402 National Pollutant Discharge Elimination System (NPDES) Permit Coastal Zone Management Certification
Department of Fish & Wildlife	Hydraulic Project Approval
Washington Department of Natural Resources	Property acquisition; Forest Practices Permit
Local Agencies	
Kitsap County	Critical Area Review; Noise Variance; construction permits
City of Bremerton	Turnback agreements; construction permits
Port of Bremerton	Property Acquisition
Mason County	Critical Area Review; Noise Variance; construction permits

CHAPTER 2: PURPOSE AND NEED

2.1 What Is the Purpose of This Project?

The purpose of constructing the SR 3 Freight Corridor – New Alignment (Freight Corridor) is the same as was proposed in the 2013 EA and Revised EA: to provide a reliable, high-speed, regional route between Kitsap and Mason Counties. This new route would move freight and regional traffic between Shelton and Bremerton, thus bypassing the urban center of Belfair. This project would reduce congestion and improve safety through Belfair and provide an alternate route during highway closures resulting from vehicular crashes and other incidents. Construction of this project would provide safe and reliable regional access to jobs, goods, and services, and improve efficiencies for all public service providers, on SR 3 through Belfair.

2.2 Why Is This Project Needed?

A Freight Corridor around Belfair is needed to improve regional mobility for freight, passenger vehicles and transit. The improvements would increase mobility, reduce congestion through Belfair, and improve safety.

Increase Mobility

SR 3 in the Belfair urban area experiences chronic traffic congestion and declining operational Levels of Service (LOS) for traffic. SR 3 is the major north-south link between Mason and Kitsap counties and Belfair is a choke point on this regional highway and is the only freight route through southwest Kitsap and northeast Mason Counties. SR 3 is designated as a critical rural freight corridor and is part of the National Highway Freight Network (NHFN). SR 3 is also identified as a National Highway System (NHS) route and as a Highway of Statewide Significance (HSS). The National Highway System route designation extends from the Hood Canal Bridge in the north to Shelton in the south, passing through the Belfair urban area, the City of Bremerton, the Puget Sound Industrial Center – Bremerton (PSIC-B), and connecting with SR 16.

Level of Service (LOS)

The LOS for an arterial/highway segment is based directly on the volume-to-capacity (v/c) ratio. LOS is designated as A through F, with A being the best and F being the worst. WSDOT's standard is LOS C for rural areas and LOS D for urban areas.

SR 3 carries most of the daily commute trips from SR 106, SR 300 and populated coastal areas in Mason County north to Bremerton and via SR 16 to points in Pierce and King Counties. Regional traffic using SR 3 must pass through the commercial area of Belfair having numerous access points with high turning volumes. Southbound traffic destined for Shelton, Grays Harbor, and Olympia also must pass through Belfair.

Reduce Congestion

A combination of freight, commute, and recreational traffic volumes cause severe congestion through the Belfair urban area. Congestion is occurring during peak commute hours (7:00–9:00 AM and 4:00–6:00 PM), weekends, holidays, and during the tourist season (May–September).

SR 3 had an average of 19,000 vehicles per day in 2018 south of Lake Flora Road. Highway LOS analysis shows the one-mile segment of SR 3 north of Lake Flora Road, the signalized intersection at NE Clifton Lane, and the

unsignalized intersection at Old Belfair Highway, are all failing LOS standards (see also the *SR 3 Freight Corridor Transportation Discipline Report*).

Several studies conducted over the last decade have shown that traffic congestion and safety concerns will overwhelm SR 3 in the near future. The operational analysis of the project area indicates that the roadway currently operates below minimum acceptable service standards on this portion of the highway. Without the Freight Corridor, operational performance for freight and regional through traffic on the portion of existing SR 3 through Belfair will continue to decline to the point of chronic failure by 2050. If no action is taken, travel times in the project area are expected to get worse as future traffic volumes increase.

The current highway does not support regional transportation needs. This route experiences seasonal fluctuations from tourist traffic and recreational users and is the most direct and expedient alternate land route for traffic from Bremerton to Interstate 5 if SR 16 or the Tacoma Narrows Bridge becomes blocked. Southbound traffic destined for Shelton, Grays Harbor, and Olympia must pass through Belfair. As land located in the corridor continues to be developed, and regional trips continue to increase, traffic congestion through Belfair will be exacerbated. The Bremerton Economic Development (BED) Study for US 101, SR 3 and SR 16 in Mason and Kitsap Counties (WSDOT 2012) showed the Freight Corridor project was the top priority project for the local communities and stakeholders.

If the Freight Corridor project is not built, SR 3 would be an important regional facility that will fail to provide efficient regional and local traffic mobility. A bypass would improve the roadway system around Belfair and would reduce travel time.

Improve Safety

Crash records in the study area indicate that the type and severity of crashes appears to be consistent with congested urban conditions. Rear-end and property damage only or non-injury crashes account for the greatest number of crashes. The number of crashes tends to increase under congested conditions, but the severity of those crashes is generally lower, due to lower speeds. In the study area, between January 2018 and December 2022, 402 crashes were reported. Two were fatal crashes and eight were serious injury crashes. One serious injury crash was at the Lake Flora Road intersection (MP 28.78). The remaining two fatal crashes and seven serious injury crashes were non-intersection crashes. During this time, 330 crashes occurred between the study intersections with the majority occurring between Lake Flora Road to NE Clifton Lane (42%) and between NE Clifton Lane to SR 106 (40%).

Support of Local Plans

The area is developing based on local agency comprehensive plans and zoning. However, the area lacks a completed transportation network appropriate for the community. The Bremerton Economic Development (BED) Study showed the SR 3 Freight Corridor is the top priority project for the local communities and stakeholders. The Freight Corridor has been included in the transportation elements of the Mason County and the City of Bremerton comprehensive plans.

CHAPTER 3: DESCRIPTION OF THE ALTERNATIVES

3.1 What Alternatives Are Under Consideration in This Supplemental Environmental Assessment?

Two alternatives are presented in this SEA:

- **No Build Alternative:** Would not construct the State Route (SR) 3 Freight Corridor – New Alignment
- **Build Alternative:** Would construct the SR 3 Freight Corridor – New Alignment

With either alternative, the existing SR 3 would receive on-going preservation, maintenance and safety improvements as projects are funded. Future preservation and safety improvements on existing SR 3 would be evaluated under other NEPA studies, as applicable, and are not analyzed in this SEA.

3.1.1 What Is the Build Alternative?

FHWA and WSDOT propose to construct the SR 3 Freight Corridor on a new alignment to the east of existing SR 3, as shown in Figure 1.1-1. The new road would become the mainline SR 3 and the existing segment of SR 3 through Belfair would become a business loop.

3.1.2 Project Description

The proposed Freight Corridor would construct a two-lane, 6.5-mile highway with a design and posted speed of 50 miles per hour (mph) on a new alignment approximately 3,000 feet to the east of existing SR 3. The major portion of the highway would run through Mason County while the northern end would be located in Kitsap County. The proposed alignment would begin at MP 22.81 on SR 3 and connect to the existing SR 3 alignment at MP 29.49 (see Figure 1.1-1). The south connection is just south of the intersection with SR 302 while the north connection to existing SR 3 is proposed just north of SW Lake Flora Road. Since the Freight Corridor alignment is through mostly forested land, the majority of the work would not lead to direct disruption to existing traffic.

The freight corridor would be a managed access facility from the beginning of the alignment at MP 22.81 to the intersection with SR 302 (MP 23.26); then, the facility would switch to limited access from the intersection with SR 302 to the intersection with Lake Flora Road at MP 28.78, where it would change back to managed access to the end of the alignment at MP 29.49. Managed access highways allow access to the roadway from adjacent properties; limited access highways do not allow access to the roadway from adjacent properties. Access will be maintained for existing uses at the south and north connections to the existing SR 3 and will be provided for approximately five residences off E Brazier Lane and for utility providers. The proposed bypass highway would carry regional through traffic from Shelton to Bremerton and would be the mainline for SR 3. The existing SR 3 would become a “Business Loop” serving downtown Belfair with connections to SR 106, SR 300, and the Old Belfair Highway.

The typical cross-section of the proposed improvement is shown in Figure 3.1-1 and its construction elements would include the following:

- Two 12-foot travel lanes with 8-foot shoulders
- Stormwater treatment facilities – natural dispersion and infiltration, compost-amended vegetated filter strips, and treatment wetlands
- Two roundabouts to connect the south end of the new corridor to the existing SR 3 corridor at SR 302 (see Figure 3.1-2)
  - The western roundabout would provide access to the existing SR 3 corridor
  - The eastern roundabout would provide access to SR 302 and the proposed SR 3 Freight Corridor
- A roundabout at the north end of the alignment to connect the existing SR 3 corridor to the new corridor at Lake Flora Road (see Figure 3.1-3)
- Right-in/right-out access to provide access to North Mason High School and Belwood Lane

Figure 3.1-1 SR 3 Freight Corridor – Proposed Highway Cross Section

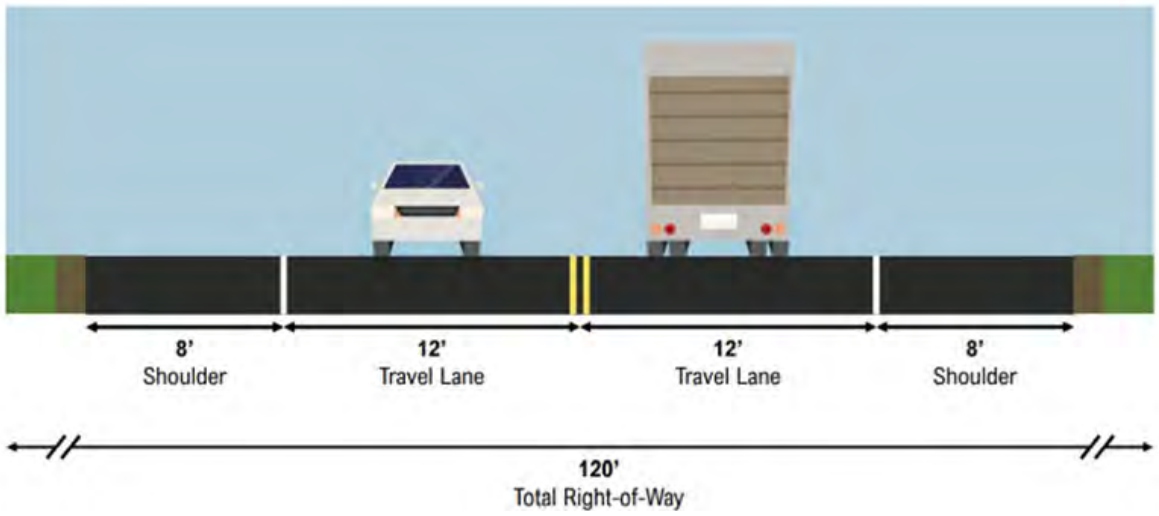


Figure 3.1-2 South End Roundabout Connections

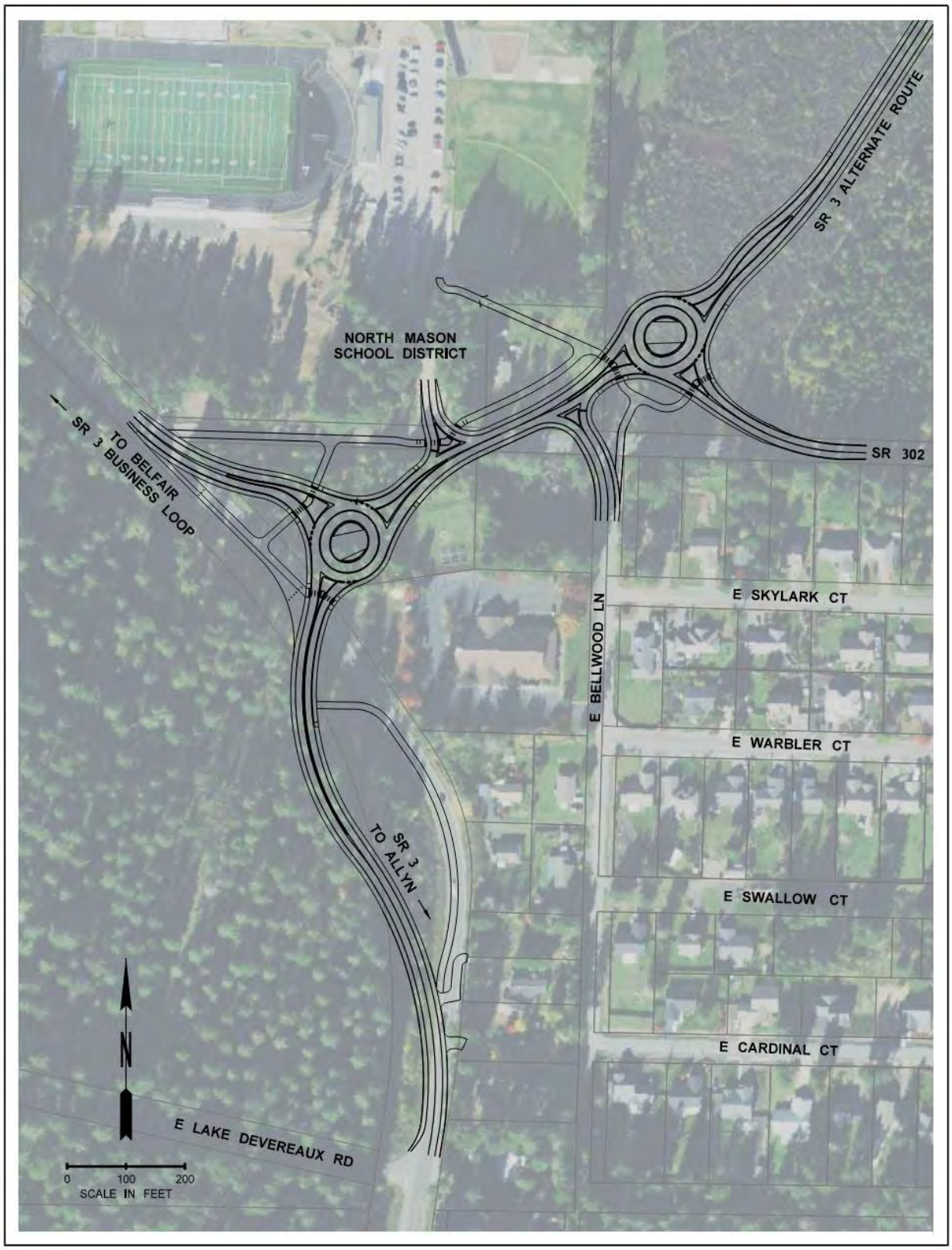


Figure 3.1-3 North End Roundabout Connection

3.2 How Was the Build Alternative Developed? What Alternatives Were Considered but Dismissed from Further Consideration?

In 2006 through 2009, WSDOT worked on the preliminary design and environmental analysis for the SR 3 project. The traffic and transportation analysis done by WSDOT during this time period included the development of eight alternative improvement concepts. These consisted of various new local connector roads, the two-lane Freight Corridor bypass on the currently proposed alignment, and several combinations of these components. These were compared in terms of meeting the goal of achieving an acceptable transportation level of service through the project area, through the year 2035.

The conclusions from these previous studies were:

- Roadway widening and intersection improvements on existing SR 3 through Belfair would be necessary with or without the Freight Corridor,
- Construction of the Freight Corridor and connector roads (between the Freight Corridor and existing SR 3) would reduce congestion on existing SR 3, and
- Construction of the Freight Corridor is needed to improve regional connectivity.

In May 2020, WSDOT completed a value engineering study of the end connections and proposed connection to the Alta-Brook neighborhood. The outcomes of the value engineering study proposed:

- A two roundabout intersection connection at the southern terminal in the vicinity of the existing SR 3/SR 302 intersection.
- A single roundabout intersection connection at the northern terminal in the vicinity of the SR 3/Lake Flora Road intersection.
- A mainline alignment for the Freight Corridor east of E. Alta Drive, west of the steep ravine, with no connection of the existing SR 3 alignment with the new alignment via Alta Road.

WSDOT completed a traffic and transportation analysis in July 2020 that included the No Build and the currently proposed Freight Corridor Build Alternative, as described in this chapter. That report was updated in October 2023 to incorporate current transportation data. In addition, the horizon year for transportation modeling was changed to 2050.

This analysis concluded the Freight Corridor, with Limited Access between the southern and northern connections to SR 3, would offer the best prospects for improving travel times through the corridor for freight and regional traffic. Limited Access would not preclude future access in the vicinity of Romance Hill Road and the vicinity of the Kitsap County line.

For more detail on connection analysis and design, see the *Final Engineering Study Value Engineering Report, Belfair Bypass (SR3) Freight Corridor* (WSDOT 2020), and the *SR 3 Freight Corridor Transportation Discipline Report* (WSDOT 2023j).

CHAPTER 4: EXISTING ENVIRONMENT, DIRECT EFFECTS, AND MITIGATION

4.1 Introduction

Roadway projects can potentially affect the natural environment (wetlands, vegetation, fish and wildlife, etc.) and the built environment (residential areas, businesses and supporting infrastructure such as roads and services) in many ways.

The proposed SR 3 Freight Corridor has been studied since 1997 when a new roadway alignment was identified to improve mobility between Shelton and Bremerton for freight, commute, and recreational traffic. This early analysis was documented in several reports between 2001 and 2011, and the Belfair Bypass EA was prepared in 2013. The 2013 Draft EA analyzed the environmental consequences of construction and operation of the Build Alternative and identified and evaluated mitigation measures for environmental impacts. The No Build Alternative, which leaves the roadway mostly as it exists today, was also examined. WSDOT began work to update the environmental documentation in 2020, as described in Chapter 1.

4.1.1 What Types of Environmental Effects Were Evaluated?

The different kinds of effects or impacts evaluated are:

- **Direct temporary** or **short-term effects –** These effects are typically related to a construction activity and go away when the construction activity stops.
- **Direct permanent** or **long-term effects –** These effects are more lasting and are associated with the permanent roadway. These effects are often called operational effects because they are associated with the opening and operation of the roadway.
- **Indirect effects –** Also known as secondary impacts, indirect effects are caused by the project and occur at a later time or a distance from the project. These impacts are discussed in Chapter 5 of this SEA.
- **Cumulative effects –** These are incremental changes that occur in the project area that are considered in relationship to impacts associated with both past development and anticipated future development. This is the sum of the direct and indirect effects so part of these may be caused by the project. These impacts are discussed in Chapter 5 of this SEA.

4.1.2 What Technical Studies Were Prepared and Where Can I Review Them?

Technical specialists prepared studies to determine the project effects on the local environment for both the No Build Alternative and the Build Alternative in support of the 2013 EA. Those technical studies were updated for this SEA and provide new information to address changes to the existing environment, regulations, and the proposed project design since the 2013 EA was completed. The supporting discipline reports are incorporated by reference into this document and are summarized in the following sections. Electronic copies of the studies are available on the project website and hard copies are available upon request.

4.2 Transportation

SR 3 in the Belfair urban area experiences chronic traffic congestion and declining operational Levels of Service (LOS) for traffic. Traffic projections show that without the Freight Corridor, operational performance for freight and regional through traffic on the portion of existing SR 3 through Belfair will continue to decline to the point of ongoing failure. This chapter presents a discussion of how transportation impacts associated with the corridor were evaluated. It documents how the system currently operates and is expected to operate in the near-and longer-term (2028 and 2050) for conditions with and without the proposed Freight Corridor. This chapter also addresses short-term traffic impacts related to construction along with expected mitigation.

4.2.1 How Were Transportation Impacts Identified?

A *Transportation Discipline Report* was completed in August 2011 as part of the previous EA effort. The transportation study used information that was available from previous studies and analyses to show how the Build Alternative meets the project purpose and need and compares with the No Build Alternative. Data and analyses were updated only where appropriate and incorporated into a new *Transportation Discipline Report* in 2023. This report references the methodology and results from previous studies when applicable. Since the focus of the Build Alternative is regional mobility, performance measures such as travel time, operating speed, and reduction in intersection delay were compared between the 2050 No Build and the 2050 SR 3 Freight Corridor alternative. The *SR 3 Freight Corridor Transportation Discipline Report* is incorporated by reference into this SEA (WSDOT 2023j).

What Data Sources Were Used for This Analysis?

Traffic data collected in May 2019[1] as part of the planning-level analysis for the SR 3 Freight Corridor project were used for this analysis. In addition to the updated traffic data, WSDOT GIS Workbench data layers, county, transit, and other agency plans and programs were used to identify non-roadway transportation systems.

Travel forecasts were updated to reflect current input[2] from Mason and Kitsap County models and updated network and land use assumptions. This update was done in coordination with Mason County, Kitsap County, and City of Bremerton staff. Travel forecasts along SR 3 were estimated using a combination of historical growth and peripheral travel demand data from PSRC and SR 16 Travel Demand Models. Additional detail on the data sources used in this analysis can be found in the *Transportation Discipline Report* (WSDOT 2013j).

How Was the Study Area Determined?

The study limits for the project were determined during travel demand modeling and alternatives analysis in prior planning efforts. The model developed for the study incorporated Mason County and Kitsap County models and ensured influence areas of the alternatives were adequately considered.

[1] Traffic data collected by WSDOT on SR 3 (at permanent traffic counter R089S, south of Lake Flora Road) were evaluated to determine potential growth between 2023 and 2019. While the data indicate a significant decrease in traffic volumes during the COVID pandemic in 2020, there has been a rebound, and current volumes are now roughly equivalent to those recorded in 2019. Consequently, the 2019 count data remains suitable for representing existing conditions.

[2] As of January 2024, the "existing year" for the Kitsap County travel demand model is still the year 2019.

4.2.2 What Are the Existing Transportation Conditions in the Study Area?

What Are the Key Transportation Systems in the Study Area?

SR 3 provides service between Shelton and Bremerton, connecting with US 101 in Shelton and SR 16 in Bremerton. SR 3 is a Highway of Statewide Significance (HSS) and part of the National Highway System (NHS). Within the limits of the proposed project, SR 3 is a two-lane rural principal arterial with speed limit of 35 miles per hour (mph), except from milepost 27 to milepost 29 where the speed limit is 50 mph. The route is a critical freight corridor that handles a little over 3 million tons of freight per year (T-3 classification). It is currently signalized at intersections with SR 106, NE Clifton Lane, and at Belfair Elementary School Exit. There is a roundabout at the intersection with Log Yard Road. Access control on the route varies from managed access to limited access control. Within the project study area, SR 3 connects with SR 106, SR 302, and Old Belfair Highway in Belfair, all of which are non-HSS facilities. The remainder of the public roadway network consists of county roads.

SR 3 carries most of the daily commute trips from SR 106, SR 300 and populated coastal areas in Mason County north to Bremerton and to points in Pierce and King Counties via SR 16. Regional traffic using SR 3 must pass through the commercial area of Belfair having numerous access points with high turning volumes. Southbound traffic destined for Shelton, Grays Harbor, and Olympia also must pass through Belfair.

Mason Transportation Authority provides scheduled bus service five to six days a week between Belfair, Bremerton, and Shelton. Local service is provided in Belfair, between downtown Belfair to North Mason High School on SR 3, and Belfair State Park on Old Belfair Highway. Two park-and-ride lots are available in Belfair, at Log Yard Road and at The Bridge Church on SR 3.

Non-motorized transportation facilities are limited in Belfair and along SR 3 in the study area. Within the Belfair urban center, sidewalks and non-signed bicycle lanes exist on both sides of SR 3. Clearly marked pedestrian crosswalks are present at major intersections within Belfair and there is a signalized pedestrian crossing on SR 3 at the elementary school. Outside the urban center, paved shoulders are present on SR 3, ranging in width from 5 feet to 12 feet.

The Puget Sound and Pacific Railroad (PSAP) operates a freight rail line that runs through the study area. The rail line is grade-separated from SR 3 where it crosses the highway on the north and south sides of Belfair.

How Does the Existing Roadway System Operate in the Study Area?

A combination of freight, commute, and recreational traffic volumes cause commute hour congestion through the Belfair urban area. Because SR 3 is the major north/south link between Mason and Kitsap counties, Belfair is a choke point on this regional highway and serves as the only freight route through southwest Kitsap and northeast Mason Counties. Congestion is occurring during peak commute hours, weekends, holidays, and during the tourist season.

SR 3 had up to 19,000 annual average daily vehicles per day in 2018 south of Lake Flora Road. Operations analysis shows the one-mile segment of the highway north of Lake Flora Road (MP 28.78 to MP 29.78) is operating at LOS D. The signalized intersection at NE Clifton Lane operates at LOS D and E during the AM and PM peak periods, respectively, failing to meet LOS standards. The unsignalized intersection at Old Belfair Highway is operating at failing conditions of LOS E and F during the AM and PM peak periods, respectively. The intersection operations for 2019 (analysis year) are shown in Table 4.2-1.

Table 4.2-1 2019 AM and PM Peak Hour Intersection Operations

			AM Peak Hour			PM Peak Hour		
Intersection on SR 3	**Traffic Control[a]**	**LOS Standard**	**LOS[b]**	**Delay (sec/veh)**	**V/C Ratio[c]**	**LOS**	**Delay (sec/veh)**	**V/C Ratio**
Lake Flora Road	Stop Sign[a]	D	C	24	0.34	D	27	0.33
Log Yard Road	Stop Sign	C	C	17	0.11	C	16	0.06
NE Clifton Lane	Signal		D	40	1.02	E	76	1.28
Old Belfair Highway	Stop Sign		E	42	0.45	F	54	0.90
SR 106	Signal		B	18	0.66	C	23	0.94
SR 302	Stop Sign		C	15	0.24	B	13	0.24

[a] Stop controlled on minor leg(s).

[b] For unsignalized intersections, the LOS and delay are reported for the worst movement. For signalized intersections, LOS and delay are reported for the intersections as a whole.

[c] V/C ratio provided represents v/c ratio of the worst approach at the intersection.

Crash records in the study area indicate that the type and severity of crashes appears to be consistent with congested urban conditions. Rear-end and property damage only or non-injury crashes account for the greatest number of crashes. The number of crashes tends to increase under congested conditions, but the severity of those crashes is generally lower, due to lower speeds. In the study area, between January 2018 and December 2022, 402 crashes were reported. Two were fatal crashes and eight were serious injury crashes. One serious injury crash was at the intersection of at the Lake Flora Rd intersection (MP 28.78). The remaining two fatal crashes and seven serious injury crashes were non-intersection crashes. During this time, 330 crashes occurred between the study intersections with the majority occurring between Lake Flora Road to NE Clifton Lane (42%) and between NE Clifton Lane to SR 106 (40%).

4.2.3 How Would the No Build Alternative Impact Transportation?

Under a No Build Alternative, growth in traffic volumes on the existing corridor would result in additional congestion, increased duration of delay, longer travel times and exacerbation of safety issues. Access to and from businesses and other services would continue to be difficult as gaps between groups of vehicles in the corridor are reduced. The PM Peak Hour traffic under the No Build Alternative as compared to the Build Alternative is shown in Table 4.2-2.

Table 4.2-2 PM Peak Hour Highway Operations

	SR 3 without Freight Corridor			SR 3 with Freight Corridor		
Year	**Percent Time Spent Following (PTSF)[a]**	**LOS**	**V/C Ratio**	**Percent Time Spent Following (PTSF)[1]**	**Delay (sec/veh)**	**V/C Ratio**
2019	77%	D	0.44	–	–	–
2028	79%	D	0.47	46%	B	0.14
2050	84%	E	0.55	78%	D	0.44

[a] Average time percent of total travel time that vehicles must travel in platoons behind slower vehicles due to inability to pass on a two-lane highway (HCM 6th Edition, 2016).

4.2.4 How Would the Build Alternative Impact Transportation Long-Term?

How Were Future Traffic Impacts Evaluated?

Travel demand modeling and traffic operations analysis results provide the basis for evaluating the long-term effects of the Build Alternative relative to the No Build condition. The most straightforward measure of the project's value is its potential to reduce traffic volumes on SR 3.

Operations Analysis Results

No Build Alternative

Several studies conducted over the last decade have demonstrated that traffic congestion and safety concerns will eventually overwhelm SR 3 in the near future. Traffic projections show that without the Freight Corridor, operational performance for freight and regional through traffic on the portion of existing SR 3 through Belfair will continue to decline to the point of chronic failure (Table 4.2-2). It is expected that the corridor will operate at LOS E in 2050 and the volume to capacity (v/c) ratio would increase. The corridor will experience increased delay, longer travel times, and exacerbation of safety issues. Access to and from businesses and other services would become difficult as gaps between vehicle platoons progressing through the corridor become smaller.

Build Alternative

Model data from the *SR 3 Transportation Discipline Report* (WSDOT 2023j) indicates the SR 3 Freight Corridor may be able to reduce 2050 PM peak hour intersection approach volumes in the Belfair commercial area by as much as 43 percent relative to No Build conditions (Table 4.2-3). As capacity is added to the Belfair network with the SR 3 Freight Corridor, vehicle trips would be redistributed across a greater number of trip path choices, resulting in a generalized reduction in congestion and improvement in travel time and average operating speed.

Table 4.2-3 SR 3 Bi-Directional Volumes – 2050 PM Peak Hour Traffic Forecast

Location	SR 3 No Build	SR 3 with Freight Corridor (Build Alternative)	% Change
SR 3, South of Lake Flora Rd	2,085	1,455	-43%
SR 3, North of NE Old Clifton Rd	2,500	1,845	-36%
SR 3, South of Old Belfair Hwy	2,610	1,845	-41%
SR 3, North of SR 106	2,650	1,950	-36%

Construction of the SR 3 Freight Corridor would provide an alternative route around the Belfair community, diverting regional through traffic away from the existing highway and lessening traffic volumes through the community. This would help to mitigate aesthetic impacts, noise pollution, air quality impacts, and would separate local ingress and egress access issues within the community from regional throughput. The project would improve travel times through the corridor for pass-through traffic.

The Build Alternative would also improve intersection performance. Under the No Build Alternative, the intersections at NE Clifton Lane and Old Belfair Highway are forecast to reach LOS F in the AM and PM peaks by 2050. The intersection at SR 106 is also forecast to operate at LOS F during the PM peak by 2050. The Build Alternative would improve operations and decrease delay at all intersections in the study area. The reduction in intersection approach volumes and delay would result in improved intersection operations.

Multimodal Transportation Impacts

The Freight Corridor will be designed to include an eight-foot shoulder that can provide accommodations for bicycles and pedestrians that will meet WSDOT Complete Street guidelines for limited access facilities.

The project would provide an alternate route during emergencies and for emergency services. Regional response times would likely improve.

The project is expected to have beneficial impacts to transit operations. Reduced congestion and delay would allow for efficient transit operations and the bypass would provide alternate faster regional transit routes.

4.2.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

The Build Alternative would create minimal, temporary construction effects. Travelers would experience construction related traffic delay and might need to take detour routes during construction of the roadway connections to the existing SR 3. Since the majority of the Freight Corridor alignment is through forested land, most of the work would not lead to direct disruption to existing traffic. There would be an increase in traffic on existing streets as construction workers go to work sites or bring in and remove equipment and materials. Temporary closures of roadway segments may be required while the new corridor is connected to the existing SR 3 alignment. Other than minor increases in travel times, no impacts to traffic, transit services, pedestrians, or bicyclists through the corridor are expected.

4.2.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

A Transportation Management Plan (TMP) would be prepared prior to the beginning of construction activities. The TMP would be monitored and amended over time as necessary during the construction contract. Mitigation measures that could be implemented to manage construction traffic include:

- Providing advance communications to all affected parties about closures, including times and dates.
- Signing for detour routes to optimize routing and to minimize impacts to local streets.

4.2.7 Would There Be Any Adverse Transportation Impacts from the Build Alternative?

No adverse transportation impacts are anticipated as a result of the Build Alternative. The SR 3 Freight Corridor would improve the level of service on the existing SR 3 corridor by diverting traffic away from the existing alignment. Additionally, the SR 3 Freight Corridor is forecasted to operate within WSDOT LOS standards. The results of this analysis support the conclusion that there would be beneficial transportation impacts due to the Build Alternative.

4.3 Noise

Traffic noise is the sound generated by motor vehicles moving on streets and highways. The relative loudness of noise (and all sound) is described in units called decibels (dB), a measure of sound pressure on a logarithmic scale. The human ear does not respond to all frequencies of sound or changes in noise levels equally. As a result, sound levels (measured in dB) are adjusted to better reflect how an average person hears. The adjusted sounds are called "A-weighted levels," or dBA. For traffic related projects under FHWA regulations, noise levels are presented using the peak hour energy average noise level, the Leq. Additional information can be found in the *SR 3 Freight Corridor – New Alignment, Noise Discipline Report* (WSDOT 2023g).

4.3.1 How Were Traffic Noise Impacts Identified?

A Noise technical report was initially completed in March 2012 for the Belfair Bypass project. A new analysis for the Freight Corridor project was completed in June 2021, and updated in November 2023 to reflect the current conditions. A traffic noise analysis is required by regulation for federally funded projects and required by state policy for other funded projects that include construction of a new highway. Therefore, this project was required to complete the *Noise Discipline Report* (WSDOT 2023g).

The noise analysis follows WSDOT's *Environmental Manual,* which is consistent with the FHWA *Procedures for Abatement of Highway Traffic Noise and Construction Noise,* Federal Regulation 23 CFR 772. The study established a study area based on land uses and the FHWA Activity Categories. The study area must be large enough to identify any noise sensitive properties that may meet or exceed the FHWA and WSDOT regulations, and for this project was approximately 500 feet east and west of the project's proposed centerline. The FHWA Activity Categories applicable to this project include Category B (residences) and Category C (hospitals, schools, churches and similar). Although there are some Category E Activities (Hotels, Offices, etc.) nearby, none were identified with project noise impacts, or are within the noise study area. All other activities in this noise study area are undeveloped, agriculture, industrial, or other land use activities that are not considered noise sensitive by the FHWA.

WSDOT has established criteria (consistent with FHWA regulations) for identifying when noise impacts occur and when abatement should be considered for highway projects. These Noise Abatement Criteria (NAC) are based on the FHWA Activity Categories. Traffic noise impacts are defined as predicted noise levels that "approach" or "exceed" the NAC for the neighboring land uses, or a substantial increase above existing noise levels.

WSDOT defines "approach" as 1 dBA below the NAC and a substantial increase as 10 dBA or more over existing noise levels, even if it does not approach the NAC. Summarizing the criteria, Category B and Category C impacts occur when outside noise levels reach 66 dBA Leq. For reference, the criteria for Category E is 71 dBA Leq.

How Are Traffic Noise Levels Predicted?

Traffic noise levels are predicted using methods and FHWA software *Traffic Noise Model* version 2.5 (TNM). The noise monitoring was validated during the 2012 noise analysis and there have not been any notable changes to the area conditions that warranted any additional noise monitoring. The FHWA TNM predicts noise levels based on traffic volumes, vehicle types, speeds and distance and topography between the roadways and noise sensitive properties. The modeling effort was used to provide the following traffic noise level conditions:

- Existing condition traffic noise levels using existing year 2018 traffic volumes.
- No Build condition traffic noise levels using future year 2050 traffic volumes.
- Build condition traffic noise using future year 2050 traffic volumes.

Figures 4.3-1 and 4.3-2 show the proposed SR 3 Freight Corridor alignment and identify the locations of the receivers used in the noise analysis. Due to the large number of receivers near the southern end of the corridor in the Belfair vicinity, two additional detail figures are provided: Figure 4.3-3 showing the area north of Mason

High School (north Belfair) and Figure 4.3-4 showing the area just east of the school (south Belfair). Note that receiver locations identified with noise impacts are under the Build Alternative only. For a complete listing of the existing, No Build, and Build Alternative traffic noise levels, refer to the *Noise Discipline Report* (WSDOT 2023g).

4.3.2 What Are the Existing Traffic Noise Levels in the Study Area?

Under the existing conditions, traffic noise levels in the corridor range from 38 dBA Leq in areas far from any existing roadway to 68 dBA near the existing SR 3. Currently there are 7 locations with noise levels above the NAC of 66 dBA Leq or more. Under the existing conditions there is no project and therefore no project noise abatement is considered.

4.3.3 How Would the No Build Alternative Impact Noise?

Under the No Build Alternative, noise levels are projected to increase by about 1-3 dBA from existing noise levels ranging from 40 dBA Leq to 70 dBA Leq. This change is a result of normal increases in traffic volumes on SR 3 in the design year of 2050 due to increased travel demand. The result shows that nine receivers representing 12 residences are projected to have noise level above 66 dBA Leq. Under the No Build Alternative there is no project and therefore no project noise abatement is considered.

4.3.4 How Would the Build Alternative Impact Noise Long-Term?

Future 2050 PM Peak traffic data was used in the TNM model to determine the design year traffic noise levels at all modeled receiver locations. Under the Build Alternative, noise levels are projected to increase by 5 dBA to 20 dBA over existing noise levels for receivers located near the new freight corridor. Some other receivers along SR 3 would benefit from the SR 3 freight corridor with reductions of 2 to 6 dB over the existing conditions, as many vehicles are diverted onto the freight corridor. The modeling results show that three receivers representing five residences are projected to meet or exceed the NAC under the Build condition. All five of these receivers also currently exceed the NAC. In addition, there are an additional seven receivers representing 10 residences that would meet the substantial increase impact criteria under the Build Alternative for a total of 15 traffic noise impacts. Overall, future Build traffic noise levels ranged from 44 to 68 dBA Leq. As required by WSDOT and FHWA, all 15 impacted properties in the Build Alternative scenario were analyzed for noise abatement, discussed in Section 4.3.6.

Figure 4.3-1 Traffic Noise Modeling Locations – Northern Study Area

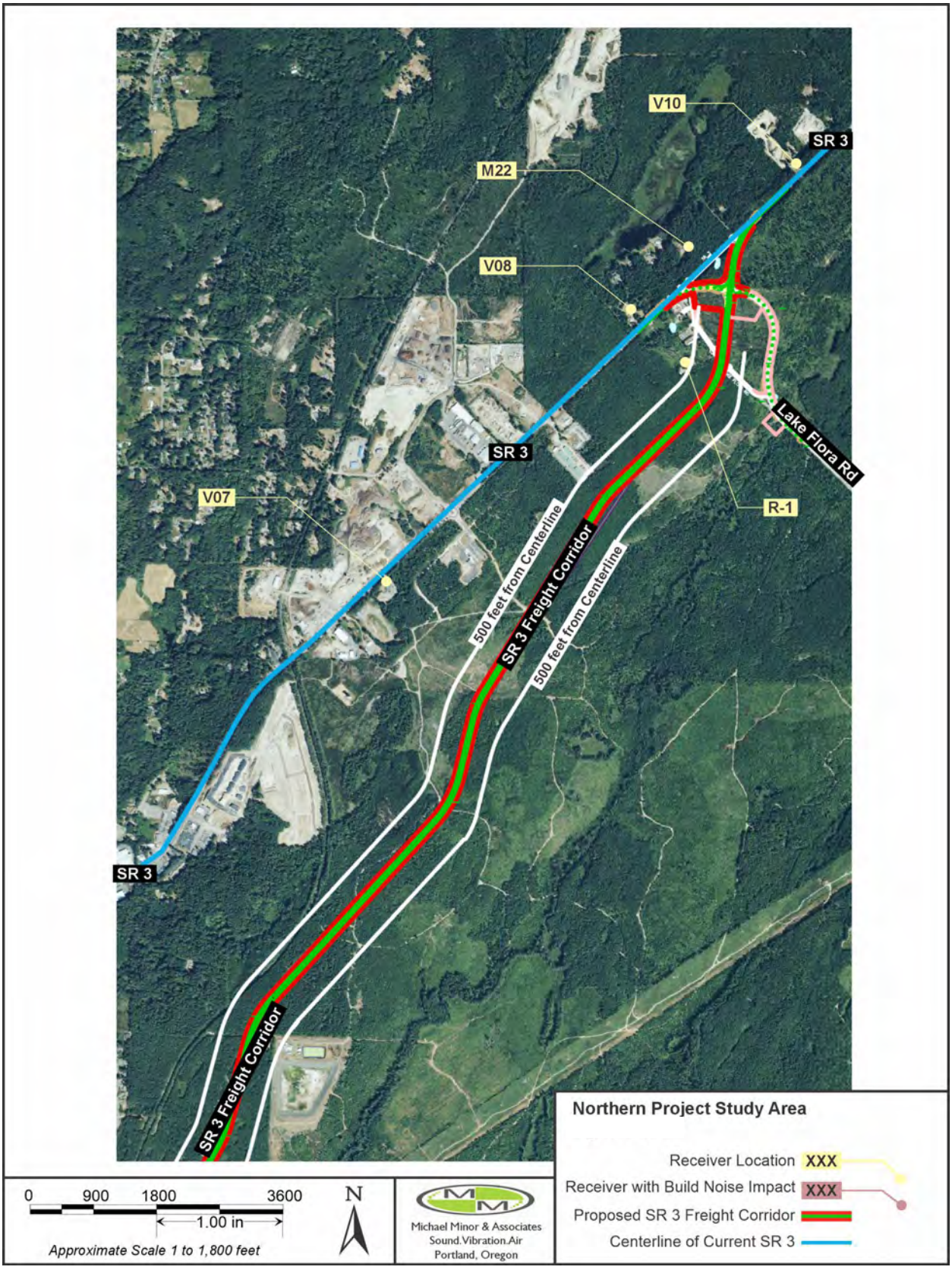


Figure 4.3-2 Traffic Noise Modeling Locations – Southern Study Area

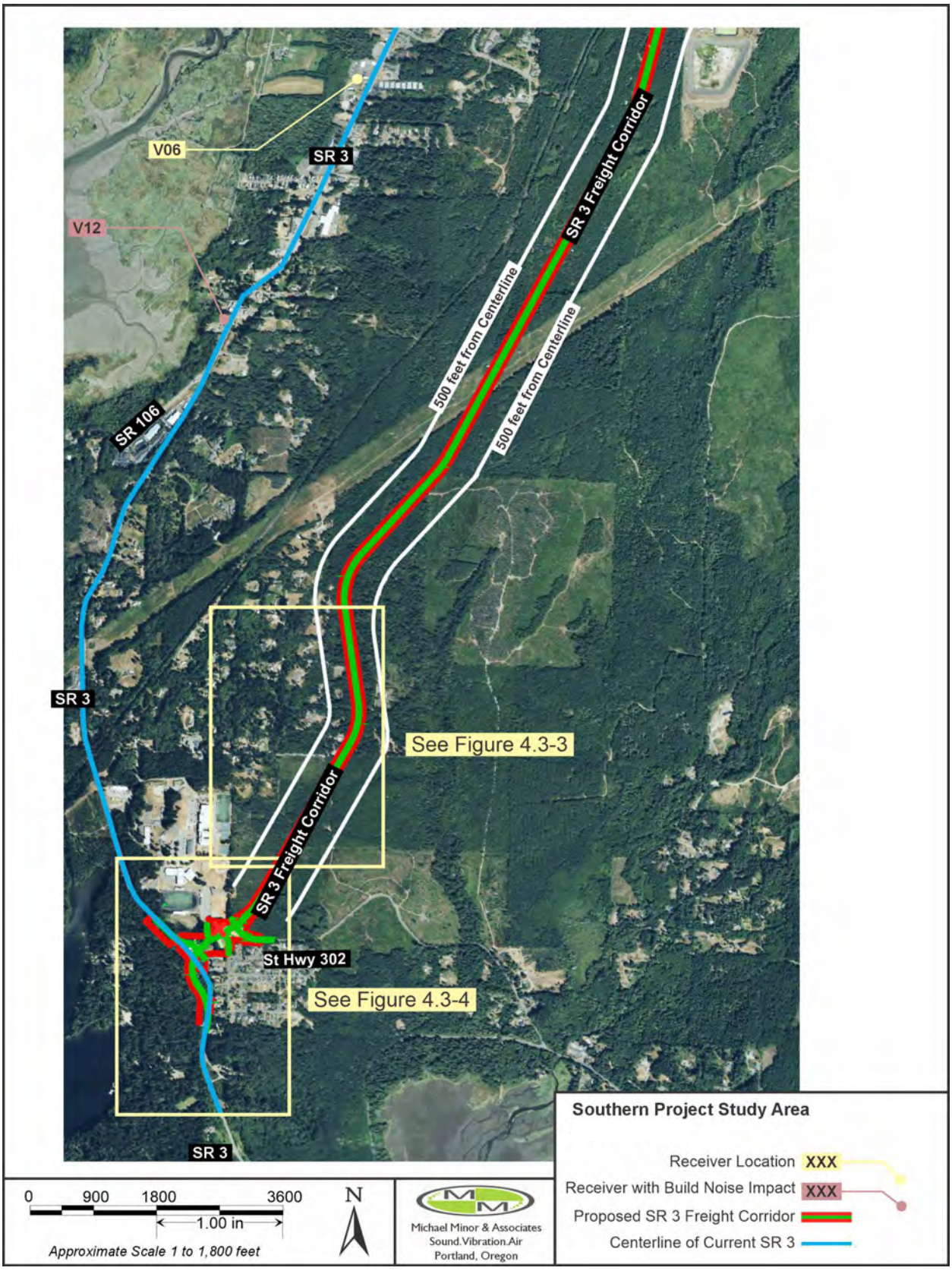


Figure 4.3-3 Traffic Noise Modeling Locations – North Belfair Detail

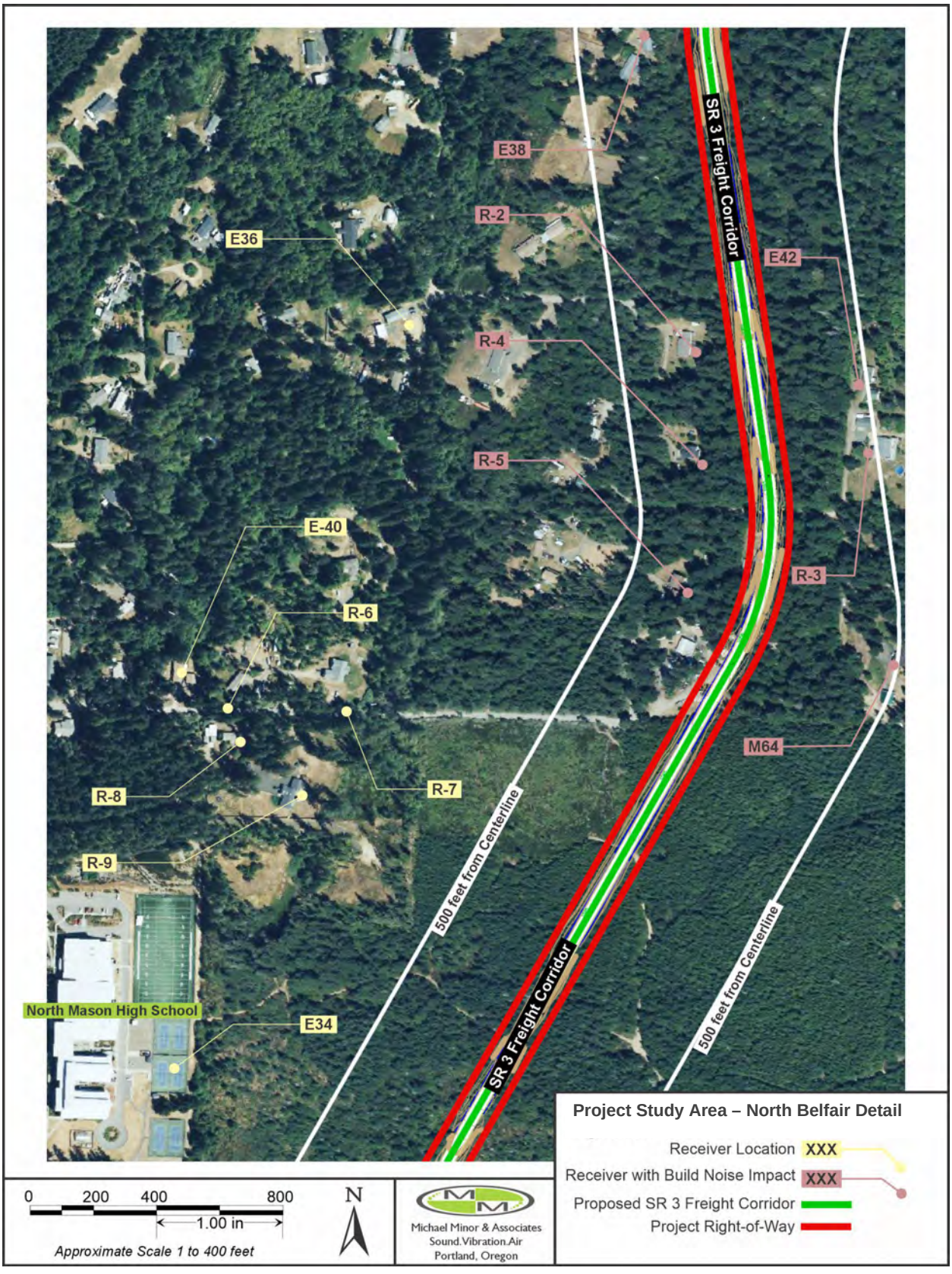
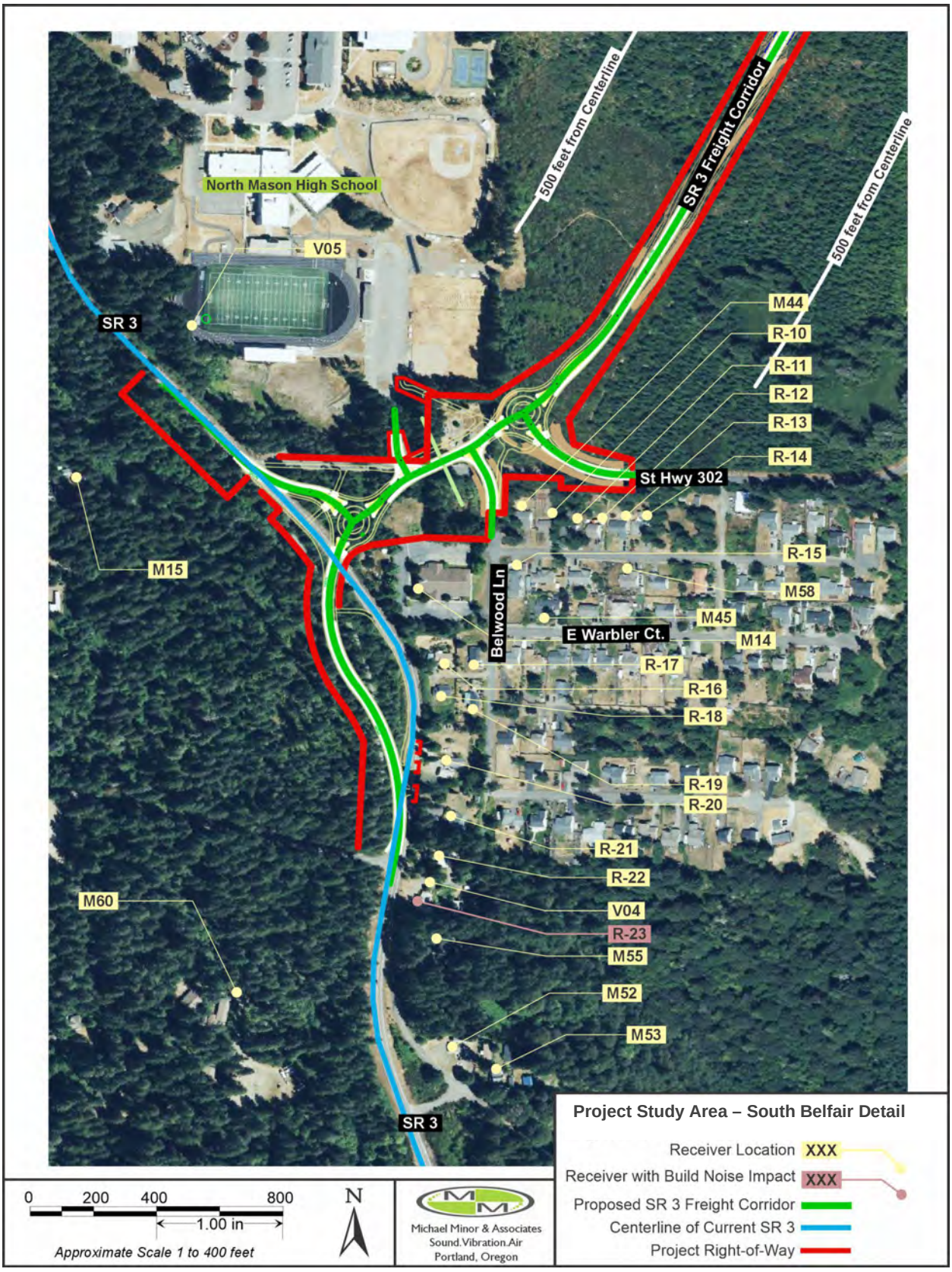


Figure 4.3-4 Traffic Noise Modeling Locations – South Belfair Detail



4.3.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

Construction of the Build Alternative would create temporary noise. Noise levels during construction would depend on the type, amount, and location of construction activities.

The most constant noise source at construction sites is engine noise. Mobile equipment generally operates intermittently or in cycles of operation, while stationary equipment (such as generators and compressors) generally operates at fairly constant sound levels. Trucks are present during most phases of construction and are not confined to the project site, so noise from trucks may affect more receivers than other construction noise. Other common noise sources include impact equipment, which could be pneumatic, hydraulic, or electric powered.

The maximum noise levels of construction equipment would typically range from 69 to 106 dBA at a distance of 50 feet. Construction noise is exempt from noise limits during daytime hours, but noise limits apply to construction noise at night. At night, construction noise must meet the Washington State Department of Ecology property line regulations that set limits based on the Environmental Designation for Noise Abatement (EDNA) of the land use: residential, commercial, and industrial (WAC 173-60-040).

4.3.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

Long-Term Impacts

Noise abatement must be considered under the Build Alternative where noise impacts are identified. Noise abatement must meet WSDOT criteria for reasonableness and feasibility abatement. If the wall is determined to be both reasonable and feasible, meeting the WSDOT criteria, it can be recommended for construction as part of the transportation project, pending approval from the residences using WSDOT polling policy. WSDOT's definition of Feasibility and Reasonableness is summarized to the right.

What are WSDOT's Reasonable and Feasible Criteria for Noise Walls?

*To be considered **feasible**, a noise wall must be physically constructible and provide at least 5 dBA of noise level reduction at a minimum of 3 first row receivers with impacts. To be considered **reasonable**, construction costs must be equal to or less than the established allowed cost per square foot of the wall for each benefitted residence and at least one receiver (regardless of impact) must achieve a 7 dBA noise reduction.*

Four noise walls were considered, and complete information on the walls considered is provided in the *Noise Discipline Report* (2023). Noise wall #1 was for receivers V04 and R-23. A 413 foot long, 10 foot tall wall would provide noise reductions of up to 7 dBA; however, the wall cost of $148,998 exceeds the allowed cost of $72,254, and therefore was not recommended for construction. Noise wall #2 was similar, providing abatement for three receivers represented by E38. A 768 foot long, 12 foot tall noise wall would provide the required 7 dBA reduction; however, the wall cost of $446,014 exceeds the allowed cost of $108,381.

Noise wall #3 was for receivers E42, M64 and R-3. A 1,636 foot long, 14 foot tall wall would provide the required noise reduction; however, the actual wall cost of $1,033,439 exceeds the allowed cost of $144,508. Finally, noise wall #4 was to abate the substantial increased impacts at receivers R-2, R-3, and R-4. A 1,368 foot long noise wall with a height up to 16 feet would provide the required noise reduction. However, the wall cost of $923,819 exceeds the allowed cost of $108,381. All walls were found to be feasible but not reasonable or cost effective. Therefore, no wall was recommended for this project.

Short-Term Construction Impacts

Construction noise can be reduced by using enclosures or walls to surround noisy equipment, installing mufflers on engines, substituting quieter equipment or construction methods, minimizing time of operation, and locating

equipment farther away from noise sensitive receivers (e.g., homes). To reduce construction noise at nearby receptors, the following abatement measures can be incorporated into construction plans and contractor specifications:

- Limiting construction activities to between 7 a.m. and 10 p.m.
- Using haul vehicles with rubber bed-liners to reduce loading noise
- Equipping trucks with ambient backup alarms
- Equipping construction equipment engines with adequate mufflers, intake silencers, and engine enclosures
- Specifying the quietest equipment available
- Turning off construction equipment during prolonged periods of nonuse
- Requiring contractors to maintain all equipment and train their equipment operators
- Locating stationary equipment away from receiving properties
- Constructing temporary noise barriers or curtains around stationary equipment that must be located close to residences

If nighttime construction is required for this project, WSDOT would apply for variances or exemptions from local noise ordinances for the night work.

4.3.7 Would There Be Any Adverse Noise Impacts from the Build Alternative?

There are 10 receivers that represent 15 properties projected to be at or above 66 dBA Leq residential NAC or that will meet the substantial increase NAC of 10 dB in the Build scenario. Receiver V04 and R23 are residences located along SR 3, south of the newly proposed southern roundabouts (see Figure 4.3-4). These receivers also exceed the NAC under the existing conditions and No Build Alternative. Receivers R2, R3, R4, R5, E38, E42 and M64 are all located in a quiet area in the central part of the new corridor and have substantial increase impacts (see Figure 4.3-3). Finally, receiver V12 represents two front-row residences along the existing SR 3, which are predicted to exceed the NAC under the existing conditions and No Build Alternative in addition to the Build Alternative.

4.4 Air Quality

Roadway projects have the potential to affect air quality by changing traffic volumes and/or vehicle operating characteristics at specific locations. The air quality impacts of roadway projects range from intensifying existing air pollution problems to improving ambient air quality.

The EPA designates regions as being in "attainment" or "nonattainment" with respect to National Ambient Air Quality Standards (NAAQS) for certain pollutants. An attainment area is one in which air quality conditions meet the NAAQS. A non-attainment area is one in which air quality conditions exceed the NAAQS.

4.4.1 How Were Impacts to Air Quality Evaluated?

An Air Quality technical study was completed in March 2012 for the Belfair Bypass project. A new analysis was completed in June 2021 and updated in 2023 (WSDOT 2023a) for this SR 3 Freight Corridor project to reflect the current conditions and is summarized in this section.

4.4.2 What Are the Primary Air Quality Pollutants of Concern in the Study Area?

The project is in an attainment area for all EPA criteria pollutants, including carbon monoxide (CO), particulate matter (PM_{10} and $PM_{2.5}$), ozone (O_3), sulfur dioxide (SO_2), lead (Pb), and nitrogen dioxide (NO_2). Due in part to a lower population density and lack of industry, the project area has never exceeded any state or federal standards for air pollutants.

4.4.3 How Would the No Build Alternative Impact Air Quality?

There would be no temporary or long-term air quality effects associated with the No Build Alternative.

4.4.4 How Would the Build Alternative Impact Air Quality Long-Term?

Under the Build Alternative, the projected peak hour traffic volume is higher compared to existing conditions and slightly lower compared to the No Build Alternative. The proposed SR 3 Freight Corridor Project would move a significant amount of vehicle trips away from the existing SR 3, relieving congestion through downtown Belfair. Table 4.4-1 shows the vehicle miles traveled (VMT) for the years and alternatives under consideration.

Table 4.4-1 Project Vehicle Miles Traveled (VMT)

	2021 Existing	2028 No Build	2028 Build	2050 No Build	2050 Build	% Change 2028 to 2050 No Build	% Change 2028 to 2050 Build	% Change 2050 No Build to 2050 Build
Daily VMT	84,967	114,077	109,824	168,728	160,432	48%	46%	-5%

Because the Build Alternative will reduce VMT, it will not increase emissions of the NAAQS pollutants or mobile source air toxics (MSAT) relative to the No Build Alternative. Following the FHWA *Interim Guidance* on Mobile Source Air Toxics (MSATs; 2023), the SR 3 Freight Corridor was determined to be a project with low potential impact, and therefore a quantitative analysis is not required. Projects are considered to have low potential impact where projected Annual Average Daily Traffic (AADT) is less than 140,000 vehicles. The project adds capacity to the existing roadway but does not increase the average daily traffic compared to the No Build Alternative. Because the estimated traffic volumes with the future Build Alternative are lower than under the future No Build Alternative, it is expected that overall MSAT emissions for the Build and No Build Alternatives would be similar. Future year emissions would also likely be lower than present levels as a result of the EPA's

national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050. The magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

Would the Build Alternative Affect Greenhouse Gas Emissions?

Vehicles emit a variety of gases during their operation; some of these are greenhouse gases (GHGs). The GHGs associated with transportation are water vapor, carbon dioxide (CO_2), methane, and nitrous oxide. Any process that burns fossil fuel releases CO_2 into the air. Carbon dioxide makes up the bulk of the emissions from vehicles.

In Washington State, the transportation sector is the number one source of GHG emissions, contributing approximately 40% of the state's carbon emissions. The next largest contributors to total GHG emissions in Washington are fossil fuel combustion in the residential, commercial, and industrial sectors at 25%; and in electricity consumption at 21%.

In general, project-level actions that can help reduce greenhouse gas emissions include:

- Reducing stop and go conditions
- Improving roadway speeds to a moderate level
- Improving intersection traffic flow to reduce idling
- Creating more safe and efficient freight movement
- Expanding transit and non-motorized options for travelers
- Increasing the reliability of transit and HOV travel times

The SR 3 Freight Corridor project would not lead to an increase in regional emissions of GHGs. Compared to the No-Build scenario, emissions of GHGs are expected to decrease slightly as use of the new corridor would lower VMT and reduce congestion on existing local roads.

What Are the Monetary Damages from Greenhouse Gas Emissions?

The social cost of CO_2 eq (SC-GHG) is a measure used by the EPA and other federal agencies to estimate the monetary value of climate change damages and includes changes in agricultural productivity, human health, property damages from increased flood risk and changes in energy system costs.

The Council on Environmental Quality's (CEQ) 2023 interim guidance on analyzing GHGs recommends that GHG emissions be evaluated using the SC-GHG metric to best assess a project's costs or benefits compared to the No Build alternative.

As emphasized in 2023 by the Center on Environmental Quality, an important rationale for quantifying GHG emissions and estimating the SC-GHG is to enable agencies to better address issues of environmental justice. The costs of GHG emissions, including negative effects on human health, environmental degradation, and damages due to a higher frequency of extreme weather events, have not been borne equally; communities of color, low-income communities, and Tribal Nations and Indigenous communities have been impacted disproportionately. It is therefore important to assess how much the GHG emissions caused by the project will contribute to these inequalities.

The project is not expected to increase GHG emissions relative to the No Build scenario, and the long-term costs associated with GHG emissions will not increase with the Build Alternative. It is therefore unlikely that the project itself will exacerbate inequalities in the health and environmental impacts of climate change.

4.4.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

Construction activities may cause temporary increases in air pollutant emissions. Construction activities would include soil-disturbing activities (source of large particulates), use of heavy-duty equipment (source of small

particulates, MSATs and GHGs), commuting construction workers, and the laying of asphalt that would generate emissions that can temporarily affect air quality. The total emissions and the timing of the emissions from these sources would vary depending on the construction phasing of the project.

Temporary fugitive PM_{10} emissions from construction activities would be noticeable, if uncontrolled. Mud and dust from trucks would also be noticeable if construction trucks are routed through residential neighborhoods. In addition to PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate $PM_{2.5}$, CO, and nitrogen oxide in exhaust emissions. If construction traffic and lane closures were to increase congestion and reduce the speed of other vehicles in the area, emissions from traffic would increase temporarily while those vehicles are delayed. These emissions would be temporary and limited to the immediate area where the congestion is occurring. Some construction phases (particularly during paving operations using asphalt) would result in short-term odors. These odors might be detectable to some people near the site and would be less noticeable as further from the site.

4.4.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

Long-Term Impacts

No air quality impacts are anticipated from long-term operation of the project; therefore, no long-term mitigation measures are required.

Short-Term Construction Impacts

Construction contractors would be required to comply with all local, state and federal regulations concerning air pollution abatement related to construction activities. The mitigation measures that were imposed under the 2003 Record of Decision that remain relevant to the project are listed below.

- Mitigation measures to control PM_{10}, deposition of particulate matter, and emissions of CO and NO_x would be implemented during construction per the Associated General Contractors of Washington guidelines and Puget Sound Clean Air Agency regulations.
- Project construction staging would be managed to reduce overall system congestion and delays, which would reduce regional emissions of pollutants, to the greatest extent practicable.

In addition, construction would comply with the procedures outlined in the October 1999 Memorandum of Agreement between WSDOT and the Puget Sound Clean Air Agency for controlling fugitive dust emissions, which may require the following actions:

- Spray exposed soil with water or other dust suppressant to reduce emissions of particulate matter less than 10 microns in diameter (PM_{10}).
- Use phased development to keep disturbed areas to a minimum.
- Use wind fencing to reduce wind disturbance of soils.
- Minimize dust emissions during transport of excavated or fill materials by wetting down loads or ensuring adequate space from the top of the material to the top of the truck bed.
- Promptly clean up spills of transported material on public roads.
- Schedule work tasks to minimize disruption of the existing vehicle traffic on streets.
- Restrict traffic onsite to reduce soil disturbance and tracking material onto roadways.
- Provide wheel washers to decrease deposition of particulate matter on area roadways.
- Locate construction equipment and truck staging areas away from sensitive receptors.
- Cover dirt, gravel, and debris piles as needed to reduce dust and wind-blown debris.
- Find alternatives to the burning of land-clearing debris, such as chipping for use as mulch or compost.

- Coordinating construction activities with other projects in the area to reduce the cumulative effects of concurrent construction projects.

4.4.7 Would There Be Any Adverse Air Quality Impacts from the Build Alternative?

The Build Alternative would have no adverse effects associated with air quality. The Build Alternative would improve traffic operations within the study area and regionally, thereby reducing traffic congestion and the rate of expected collisions. By reducing chronic traffic congestion, vehicles would be able to operate at consistent and moderate speeds where they run most efficiently. Fewer collisions would lead to reductions in periodic traffic congestion, thereby also reducing emissions.

4.5 Wetlands and Other Waters of the U.S.

Wetlands improve water quality in streams, rivers, and lakes by filtering pollutants; protect neighboring areas by retaining flood waters; often recharge groundwater; and provide other important ecological functions. Wetlands provide fish and wildlife habitat, and they often host a wider variety of plant and animal species compared to other land types. Some wetlands in the study area may be considered waters of the United States; impacts to those wetlands would require authorization from the U.S. Army Corps of Engineers. Wetlands are also protected under several state laws and regulations, such as the Water Pollution Control Act and the Shoreline Management Act. A wetland that does not fall within the jurisdiction of the U.S Army Corps of Engineers may still be regulated by the Washington State Department of Ecology or local jurisdictions. The jurisdictional status of individual wetlands would be determined when the project design is sufficiently advanced to undergo permitting review.

This section is summarized from the *SR 3 Freight Corridor Wetlands Discipline Report* (WSDOT 2023n).

4.5.1 How Were Impacts to Wetlands Evaluated?

Previously delineated wetlands, as described and mapped in the 2012 WSDOT *Wetland Assessment Report* (WSDOT 2012a), were located and boundaries were confirmed based on on-site observations of vegetation, soils, and hydrology. In 2019, 2020, and 2022, wetland boundaries were re-verified and re-delineated as needed. These updates were incorporated into a new *Wetlands Discipline Report* (WSDOT 2023n) and a *Wetland and Stream Assessment Report* (August 2020; updated August 2023).

The study area for this wetland investigation is an approximately 600-foot-wide corridor extending from the existing SR 3/SR 302 intersection in Belfair northward to just north of SW Lake Flora Road, ending in the Bremerton city limits.

4.5.2 What Wetlands and Other Waters Currently Exist in the Study Area?

The study area contains 39 wetlands. As described in detail in the *Wetland and Stream Assessment Report*, all provide low to moderate levels of biological, chemical, and physical functions. All of the surveyed wetlands are depressional, and most are dominated by a scrub-shrub vegetation class, although forest, emergent, and aquatic vegetation classes were also apparent during the field visits. The wetlands are shown on Figures 4.5-1a through 4.5-1g, in Section 4.5.4, below.

There is only one stream that occurs within the fish and wildlife study area. The stream, located northeast of the Alta neighborhood near the southern end of the study area, is an extreme headwater of an unnamed tributary to the North Bay of Case Inlet. The stream originates from wetlands within the study area, flows into a small ravine, and eventually drains to the unnamed tributary to Case Inlet. The lower reaches of the unnamed tributary to Case Inlet intersects SR 302 at milepost (MP) 0.9, outside of the project limits. At the SR 302 crossing the unnamed stream to Case Inlet, is documented as fish bearing and the culvert under SR 302 (Site Number 991599) is considered a total fish passage barrier for upstream migration based on a water surface elevation drop that is greater than 3 feet. The delineated stream with the study area is approximately one mile upstream of this total fish barrier. The stream was surveyed by project biologists and is considered to be non-fish bearing within the study area.

4.5.3 How Would the No Build Alternative Impact Wetlands?

No permanent direct, indirect, or cumulative effects on wetland habitats would take place under the No Build Alternative.

4.5.4 How Would the Build Alternative Impact Wetlands Long-Term?

Permanent impacts would occur where existing wetlands or wetland buffers would be converted to pavement, unvegetated road shoulder, stormwater facilities, or other built or impervious surfaces. Permanent impacts would also include the long-term alteration of vegetation structure (e.g., forest converted to mown roadside right-of-way).

The proposed alignment would permanently impact a total of 0.11 acre of wetland habitat and 5.44 acres of wetland buffer habitat. Impact areas are shown in Figures 4.5-1a through 4.5-1g and are quantified in Table 4.5-1.

Table 4.5-1 Wetland Impacts

Wetland	Ecology[a]/Local Jurisdiction[b]	Wetland Size (acre)	Water Resource Inventory Area[c]	Permanent Wetland Impact Area (acre)	Permanent Wetland Buffer Impact Area (acre)
AD	III	~0.40	14	0	0.61
AP	III	0.12	15	0	0.17
AQ	IV	~0.03	15	0.01	0.16
AY	II	3.74	15	0	0.80
B	IV	0.04	15	0.01	0.16
BC	IV	0.10	15	0	0.04
BG	IV	0.34	15	0	< 0.01
BK	III	0.21	15	0	0.56
BL	III	0.09	15	0	0.29
BO	III	0.14	15	0	0.15
I	IV	0.04	15	0.02	0.17
K	IV	~0.20	15	0	0.03
U	III	0.68	15	0	0.26[d]
V	IV	0.04	15	0	
W	IV	0.01	15	< 0.01	
Y + Z	III	~0.30	14	0.06	2.03
Total	-	**6.48**	-	**0.11**	**5.44**

[a] Ecology rating according to Hruby (2014).
[b] Mason County Code (MCC) Chapter 8.52.110; Bremerton Municipal Code (BMC) 20.14.300.
[c] WRIA 14 – Kennedy-Goldsborough; WRIA 15 – Kitsap.
[d] The buffers of Wetlands U, V, and W overlap; impacts to those buffers are counted together.

Figure 4.5-1a Wetland and Stream Impacts

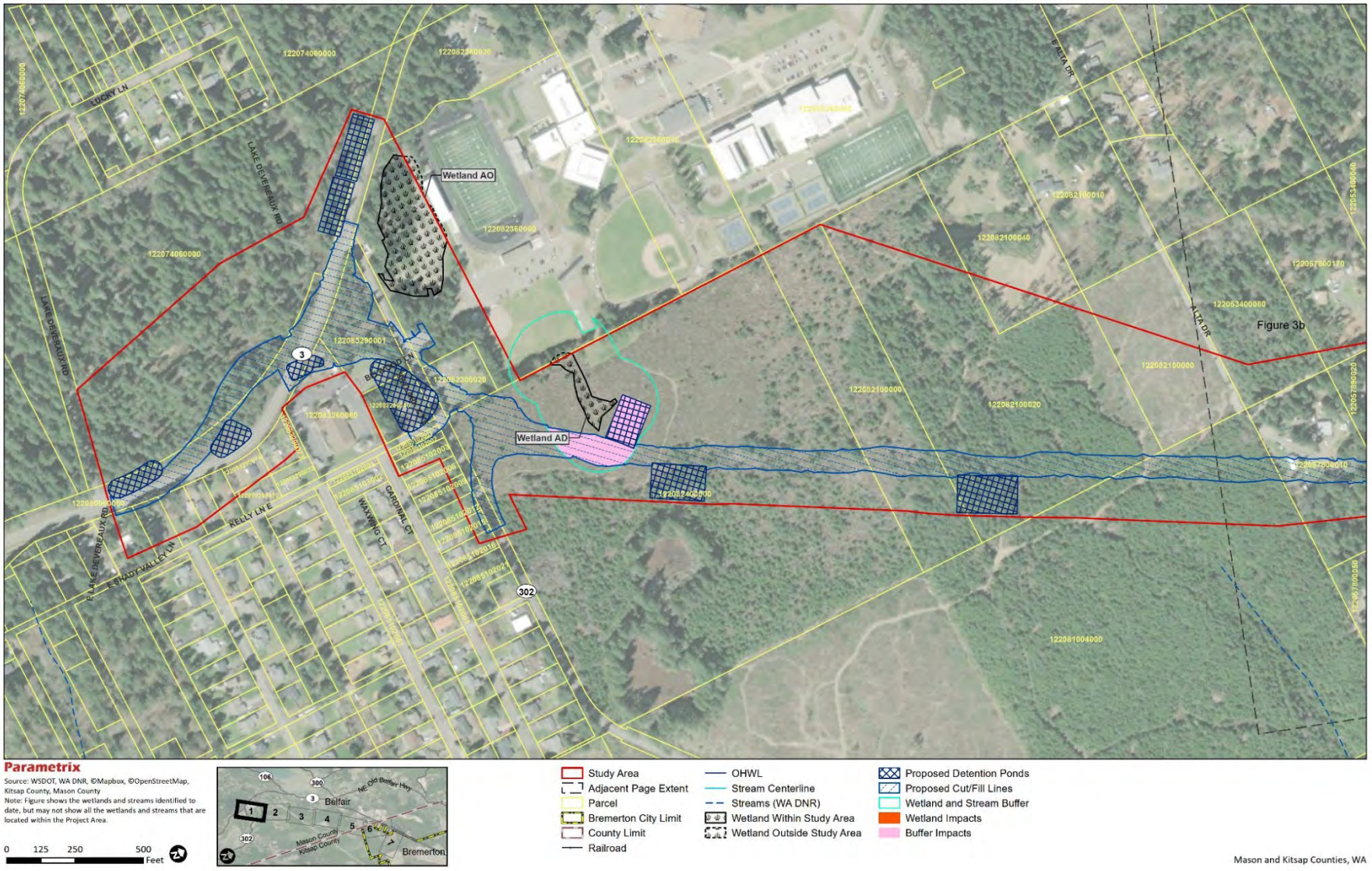


Figure 4.5-1b Wetland and Stream Impacts

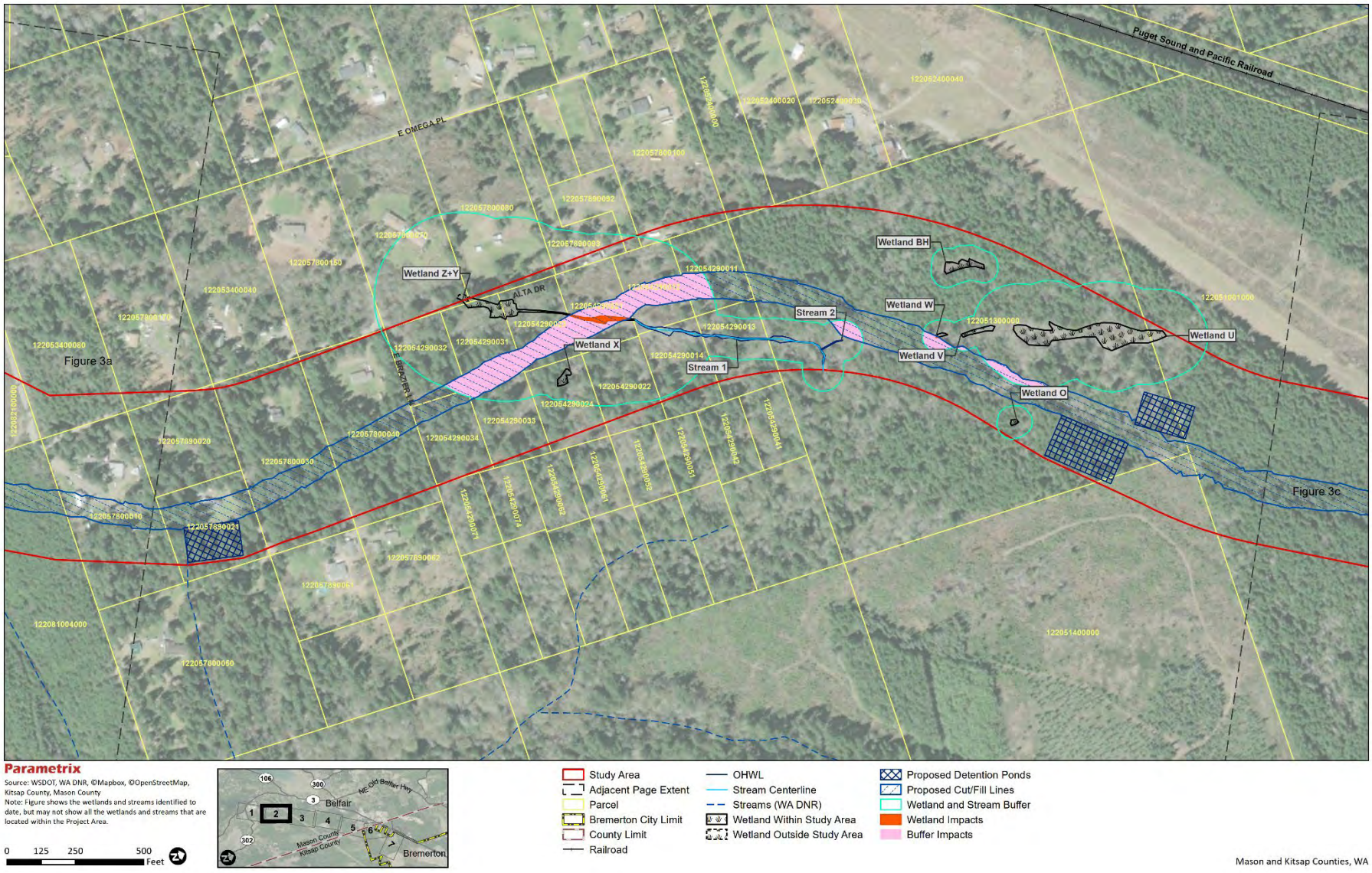


Figure 4.5-1c Wetland and Stream Impacts

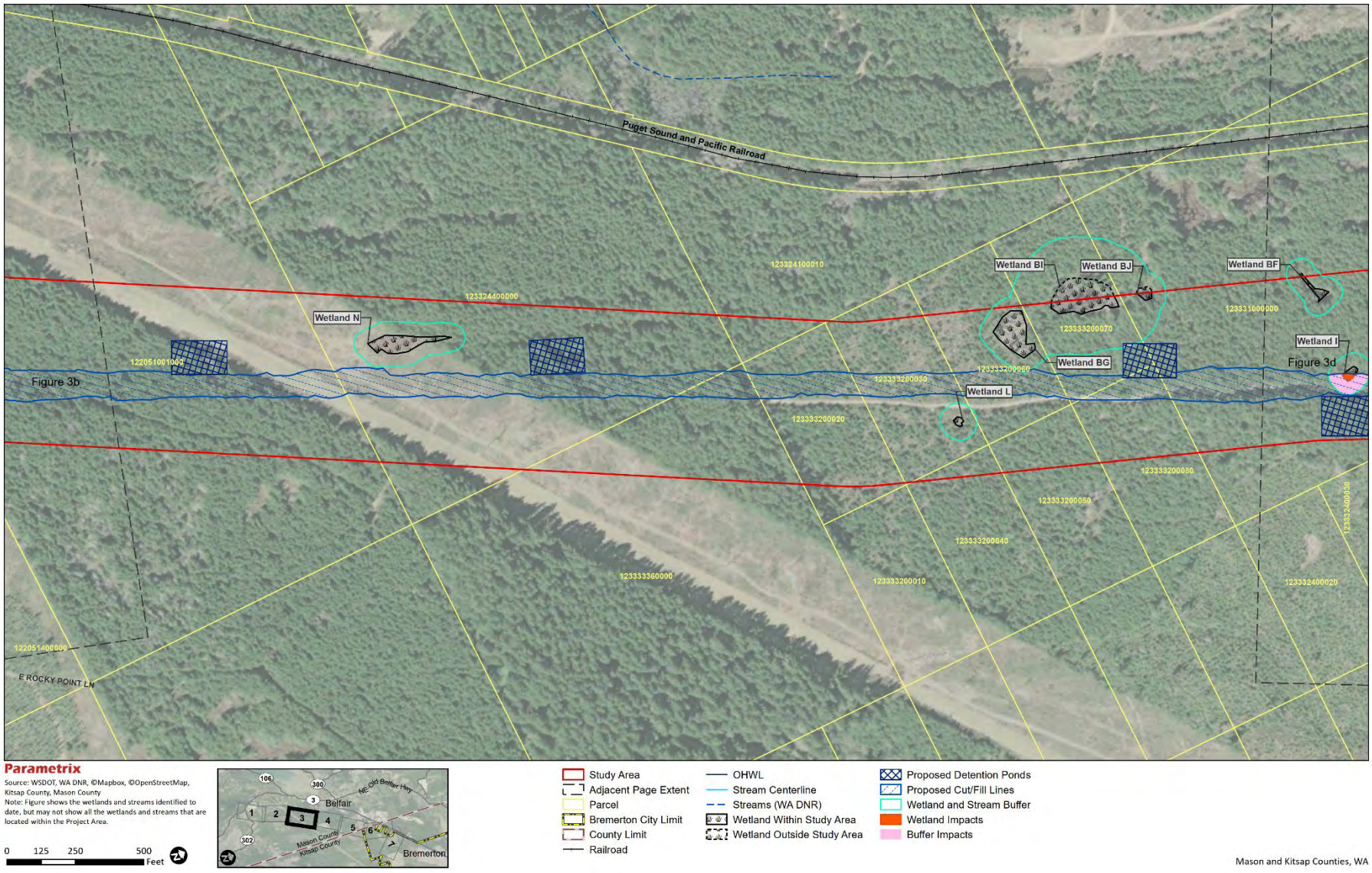


Figure 4.5-1d Wetland and Stream Impacts

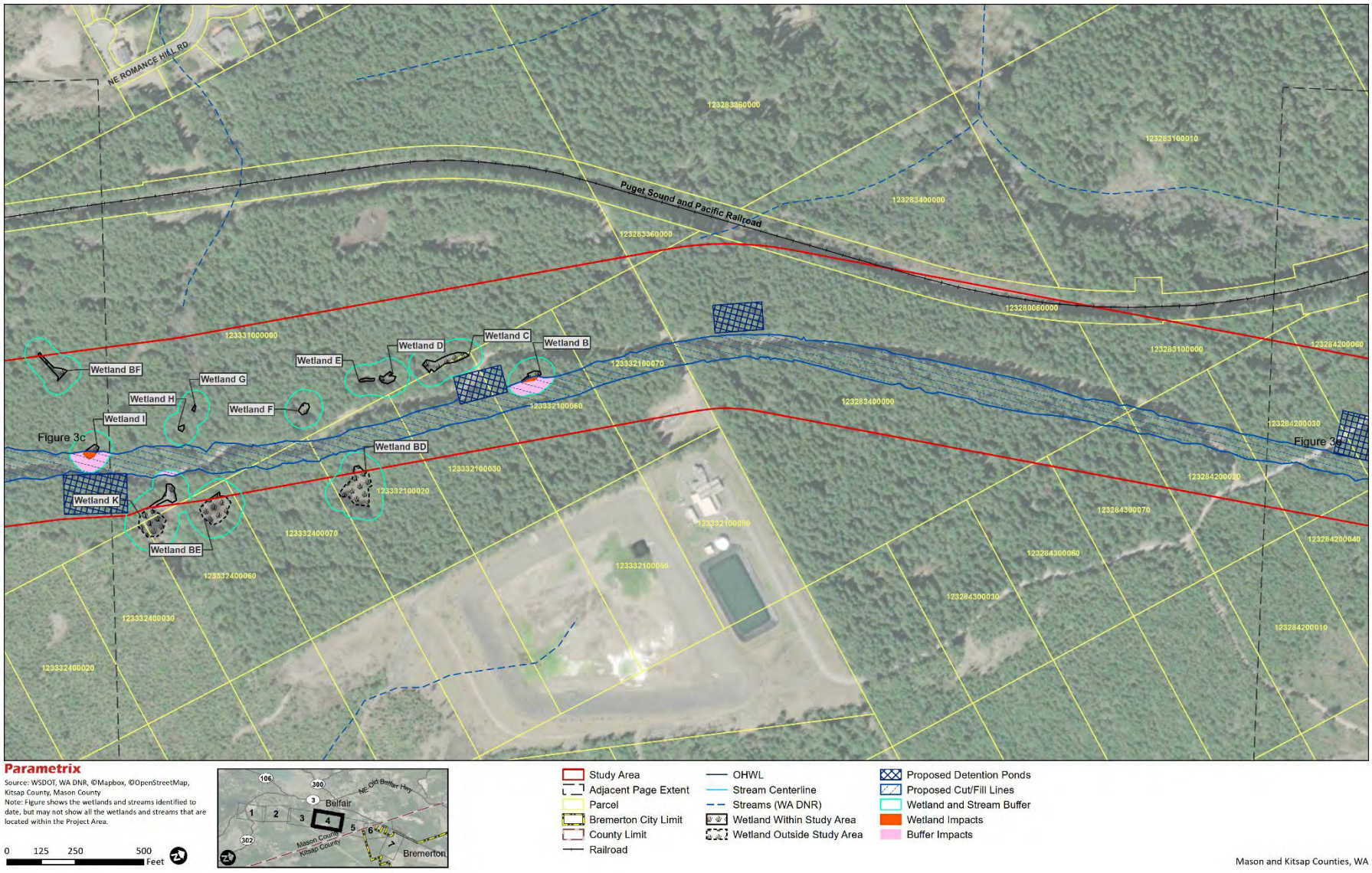


Figure 4.5-1e Wetland and Stream Impacts

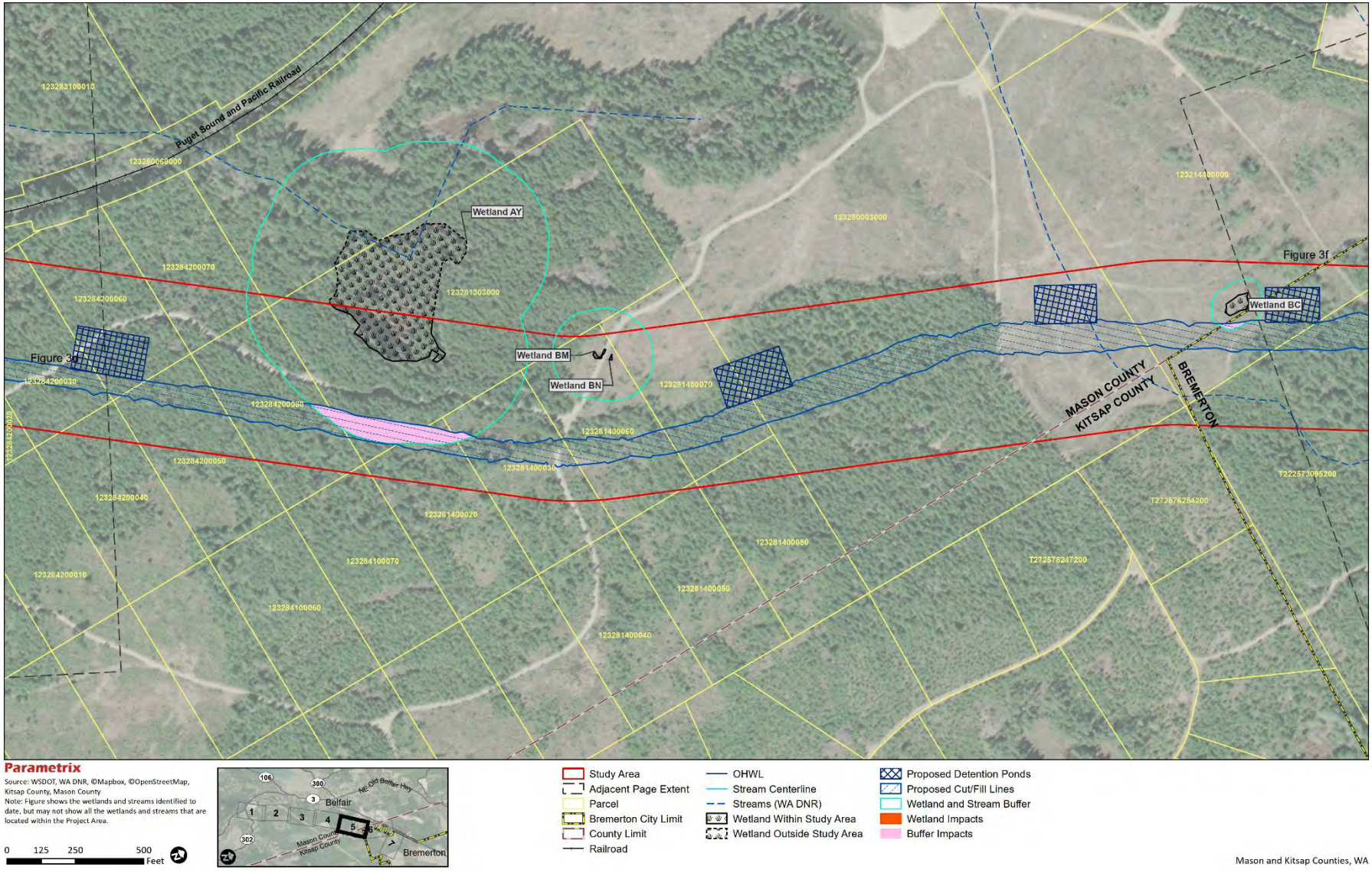


Figure 4.5-1f Wetland and Stream Impacts

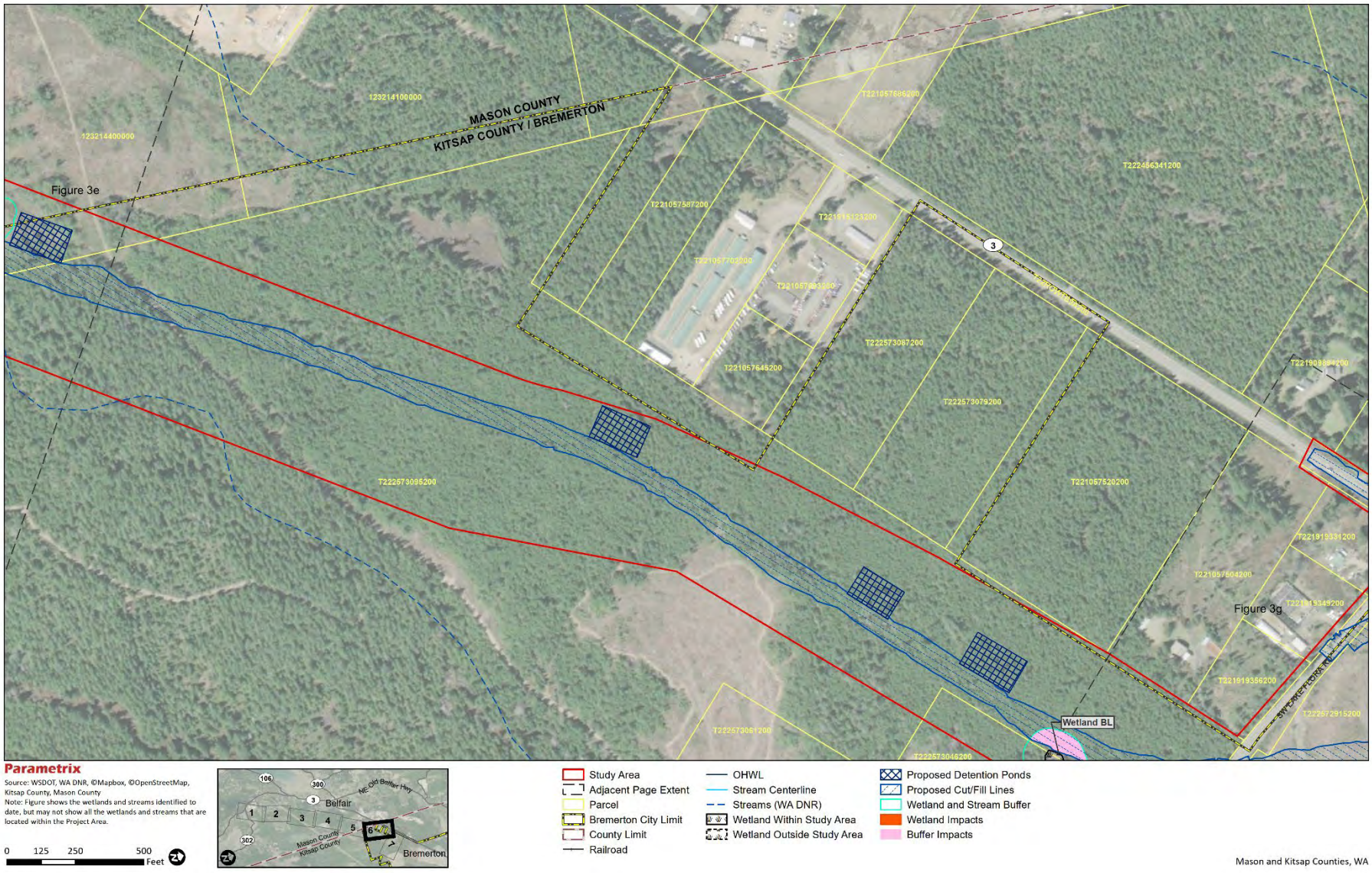
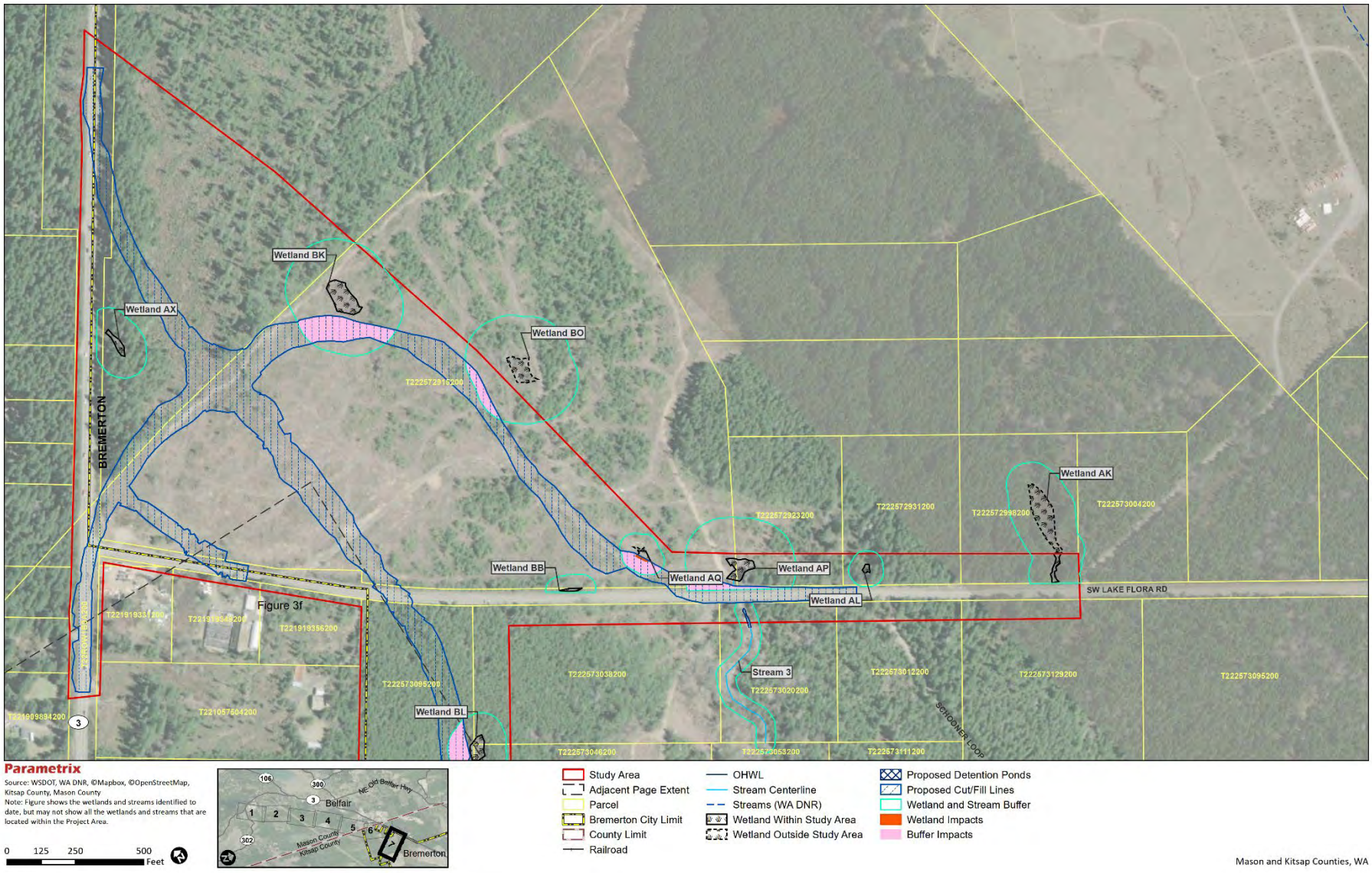


Figure 4.5-1g Wetland and Stream Impacts



4.5.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

Temporary impacts would include vegetation removal or temporary fill and/or excavation associated with construction of support structures. Temporarily disturbed areas would be restored to existing conditions (or better) after construction. The extent of temporary impacts to wetlands and buffers would be determined as the project design is refined.

4.5.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

Long-Term Impacts

Impacts to wetlands have been minimized to the greatest extent possible based on the current limited design level. As the level of design increases, additional measures would be used to avoid and minimize the impacts. Examples of minimization measures that may be used include retaining walls, steeper slopes, and adjustments to the alignment to eliminate some of the permanent impacts. However, due to the constraints of the area (existing development and the amount of wetlands) and design standards, some impacts to wetlands would still occur. For impacts that cannot be avoided, WSDOT would compensate for the permanent impacts by conducting compensatory mitigation. See also Sections 4.7.6, 4.8.6, and 4.9.6 for additional measures.

An in-lieu fee program is currently available through the Hood Canal Coordinating Council (HCCC). This program provides an alternative mitigation option for authorized, unavoidable impacts to freshwater and marine aquatic resources. The HCCC in-lieu fee program could be used to mitigate wetland impacts within the program's service area. Impacts to Wetlands B, I, and W (see Table 4.5-1) may be eligible for mitigation through the in-lieu fee program. Those impact areas are located in Mason County.

Short-Term Construction Impacts

Temporary impacts to wetlands and buffers would be restored by replanting with suitable native vegetation. Shade impacts to wetlands would be partially mitigated by planting shade-tolerant wetland species.

4.5.7 Would There Be Any Adverse Wetlands Impacts from the Build Alternative?

Impacts to wetlands have been avoided and minimized to the extent possible; however, there would be some permanent impacts from the project. All impacts would be fully mitigated, as described above.

4.6 Fish and Wildlife

NEPA requires the evaluation of project-related impacts on the environment, which includes fish and wildlife. The federal Endangered Species Act of 1973 (ESA) and the Magnuson-Stevens Act provides programs for the conservation of those species and the prevention of their extinction.

4.6.1 How Were Impacts to Fish and Wildlife Evaluated?

A *Fish and Wildlife Discipline Report* was prepared by WSDOT in May 2012 to document the existing conditions and potential impacts from the Belfair Bypass project as part of the previous EA effort. That report was updated in May 2021, and again in August 2023 (WSDOT 2023c), to reflect changed conditions and regulatory requirements in support of this SEA. The analyses focused on mapping and characterizing habitats in the study area and evaluating potential impacts on species that may use those habitats, with particular consideration of species that receive regulatory protection (e.g., species protected under the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act).

The study area for fish and wildlife discipline report was determined to be those areas extending 300 feet in all directions from and inclusive of the Build Alternative footprint.

4.6.2 What Fish and Wildlife Species and Habitats Currently Exist in the Study Area?

Habitats in the Study Area

As discussed in the *Fish and Wildlife Discipline Report* (WSDOT 2023c) for this project, the study area does not include any streams that provide habitat for resident or anadromous fish. Habitats for terrestrial wildlife species are defined by the vegetation cover types described in Section 4.7, Vegetation.

Presence of Species in Study Area

Numerous wildlife species likely use terrestrial habitats in the study area. Those species include rodents, insectivores (e.g., shrews and moles), opossum (*Didelphis marsupialis*), raccoons (*Procyon lotor*), black-tailed deer (*Odocoileus hemionus*), black bear (*Ursus americanus*), coyotes (*Canis latrans*), birds, western toad (*Anaxyrus boreas*), and other amphibians. During field visits, biologists observed evidence of rodents, insectivores, coyote, opossum, black-tailed deer and black bear in the study area. No bald eagle nests or communal roost sites have been documented within 660 feet of the study area. Bird species protected under the Migratory Bird Treaty Act may be present in all habitats in the study area.

Habitat Connectivity

The proposed highway segment is fully within the connected habitat networks of two focal species (black-tailed deer and western toad) that were included in the Washington Connected Landscapes Project: Statewide Analysis (Washington Habitat Connectivity Working Group 2010). The area is important to wildlife movements because of the narrow terrestrial connection between the north end of North Bay and the eastern terminus of Hood Canal. For wildlife that do not move across marine waters, this narrow terrestrial passage is all that connects the vast land area of the Kitsap and Tahuya Peninsulas with the rest of western Washington.

4.6.3 How Would the No Build Alternative Impact Fish and Wildlife?

Under the No Build Alternative, the proposed project would not be constructed. No impacts to fish and wildlife would occur, aside from those incurred during normal maintenance activities or small-cost operational enhancements.

4.6.4 How Would the Build Alternative Impact Fish and Wildlife Long-Term?

Impacts associated with operation are those that would occur after project completion. This includes day-to-day vehicle traffic and maintenance activities. These impacts are considered long-term.

One noteworthy change since the Revised EA was issued in May 2013 is that the alignment has been adjusted slightly, to avoid crossing a ravine near the headwaters of a stream that drains to Case Inlet. Direct effects on fish species during operation of the SR 3 Freight Corridor are unlikely because no fish-bearing streams occur within project limits.

The other noteworthy change is that the design and locations of proposed stormwater treatment facilities have been refined. Under the current design none of the facilities would discharge directly to any stream channels; any stormwater that passes through or bypasses a treatment facility would flow overland for several hundred feet through forested areas on native soils with comparatively high infiltration rates before entering any streams. Based on the substantial natural dispersion that would take place during overland flow, there is no potential for any residual sediment or contaminants in project-related stormwater runoff to be delivered to surface-flowing streams.

Potential long-term impacts of the Build Alternative on wildlife would include habitat modification and an increased risk of vehicle-wildlife collisions. Conversion of forested habitats to a roadway and associated right-of-way would entail habitat modification and fragmentation. Species adapted to urbanized landscapes (e.g., raccoons, crows, rock pigeons, European starlings) may become more abundant along the project corridor, possibly outcompeting or preying upon native species that depend on interior forest habitat. In addition, animals would face an increased risk of injury or mortality due to collisions with vehicles traveling on the new roadway. Vulnerable species include raptors that hunt along road rights-of-way and mammals or amphibians that cross the roadway during dispersal or daily foraging activities.

Operation of the completed project would also increase disturbance levels along the corridor, especially in areas where development currently does not exist. Increased disturbance, combined with conversion of vegetated habitats to a developed condition (roadways, maintained right-of-way) may cause the displacement of wildlife into neighboring habitats. Depending on the capacity of such areas to support additional wildlife, displacement may lead to crowding of wildlife and a decrease in habitat quality.

ESA Compliance

No ESA-listed species are known or expected to use habitats in the study area, and no critical habitat for ESA-listed species has been designated in the study area. In September 2012, WSDOT submitted a biological assessment to the US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), initiating informal consultation in accordance with Section 7(a)(2) of the ESA. On February 28, 2013, USFWS issued a letter of concurrence, concluding that the proposed project was not likely to adversely affect bull trout or marbled murrelets (USFWS Reference No. 01FWFW00 2013 I 0105). On April 30, 2013, NMFS also issued a letter of concurrence, concluding that the proposed project was not likely to adversely affect Puget Sound steelhead, Puget Sound Chinook salmon, Hood Canal summer-run chum salmon. NMFS also concurred with determinations that the proposed project was not likely to adversely affect designated critical habitat for Puget Sound Chinook salmon or Hood Canal summer-run chum salmon, and that it would have no adverse effects on essential fish habitat for species protected under the Magnuson-Stevens Act (NMFS Tracking No. NWR 2012 4161).

WSDOT submitted an informational update to the biological assessment to USFWS and NMFS in August 2023 to document current species and critical habitat that have been designated since 2013 and whose range overlaps the action area. On September 1, 2023, USFWS concurred with the informational update. NMFS concurred with the update on September 5, 2023.

4.6.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

No direct effects on fish species are expected during construction because no fish-bearing streams are present in the project limits and all relevant best management practices (BMPs) would be used to ensure no sediment-containing runoff would enter fish bearing waters of the state. BMPs would also be used to minimize the risk of accidental release and spills of chemical pollutants into the surrounding environment.

Potential short-term effects of constructing the project on wildlife (including species protected under the Migratory Bird Treaty Act) would include temporary displacement and loss of nesting and foraging habitat.

4.6.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

Long-Term Impacts

WSDOT would use all practicable means to minimize impacts to habitats. Measures related to landscaping, soil retention, site rehabilitation and habitat restoration have been incorporated into the design of the Build Alternative that would help reduce the impacts to wildlife and habitat. New stormwater treatment, including natural dispersion and infiltration, compost-amended vegetated filter strips, and treatment wetlands, would minimize the effects of runoff from the roadway (see also Section 4.9.6 for additional detail).

Short-Term Construction Impacts

Existing native plants and trees would be preserved wherever possible. Vegetation buffers would also offer wildlife protection from construction noise and human activity on the site. Landscaping with native species would mitigate temporary habitat losses in the alignment right of way. In addition, the Biological Assessment prepared for the project in 2012 states that a biologist shall reevaluate the project for changes in design and potential impacts associated with those changes, as well as the status and location of ESA listed species, every six months until project construction is completed.

4.6.7 Would There Be Any Adverse Fish and Wildlife Impacts From the Build Alternative?

With the implementation of the mitigation measures identified above, the Build Alternative would have minor adverse effects on fish and wildlife, such as increased wildlife mortality, habitat loss/fragmentation, and increased pollution from roadway runoff. Impacts on fish and wildlife have been minimized to the extent possible through design changes, such as the alignment shift to avoid wetlands, and the use of new stormwater treatment and construction BMPs.

4.7 Vegetation

The SR 3 Freight Corridor area lies primarily within a rural environment while passing through the unincorporated Belfair Urban Growth Area (UGA) and terminating within the South Kitsap Industrial Area (SKIA) recently annexed into the City of Bremerton. Much of the area in both Mason and Kitsap Counties are undeveloped forested land. This section evaluates the potential effects on vegetation from implementation of the project.

4.7.1 How Were Impacts to Vegetation Evaluated?

A *Vegetation Discipline Report* was prepared for the previous EA effort in 2012 and was updated in August 2023 (WSDOT 2023k) in support of this SEA. The analysis focused on mapping and characterizing habitat and evaluating the potential for protected vegetation to be present, as presented in the 2013 Draft EA. This section provides a brief summary of the 2012 findings as well as updates to existing conditions and policies.

The study area for vegetation was determined to be the area approximately 300 feet on either side of the proposed SR 3 Freight Corridor right of way, as shown in Figure 4.7-1a-d.

Applicable Plans, Policies, and Regulations

To conduct a preliminary analysis of the vegetation and land-uses in the study area, the following resources were consulted, many of which have been updated since the 2012 analysis:

- ESRI World Imagery (2018)
- Kitsap County Weed List (Kitsap County 2013)
- Mason County Weed List (Mason County 2019)
- Geographical Information System (GIS) data available from WSDOT
- Washington Department of Natural Resources (DNR) Washington Natural Heritage Program database (DNR 2021a)
- Washington Department of Natural Resources (DNR) Washington Wetlands of High Conservation Value (DNR 2021b)
- Washington Gap Project – Land Cover for Washington State (Washington Cooperative Fish and Wildlife Research Unit, University of Washington 1991)
- Washington State Noxious Weed Control Board (2021)
- Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species data (WDFW 2021)

Background Research and Previous Documentation

The WDFW Priority Habitats and Species Program, USFWS, and the Washington Natural Heritage Program maintain records of sensitive, threatened, and endangered species occurring in the state. None of these sources identify any records of sensitive, threatened, or endangered plant species in the study area, and none were observed in the study area during field investigations.

Site Visits

Field verification visits were originally conducted by WSDOT biologists on October 5th and December 8th, 2011. Parametrix biologists conducted a follow-up field visit on January 14th, 2021. Vegetation units were confirmed and/or revised on the base map as a result of this visit. Noxious weeds, as listed by the Washington State Noxious Weed Control Board (WSNWCB 2021), were documented during these visits.

Figure 4.7-1a Vegetation Types and Potential Impacts

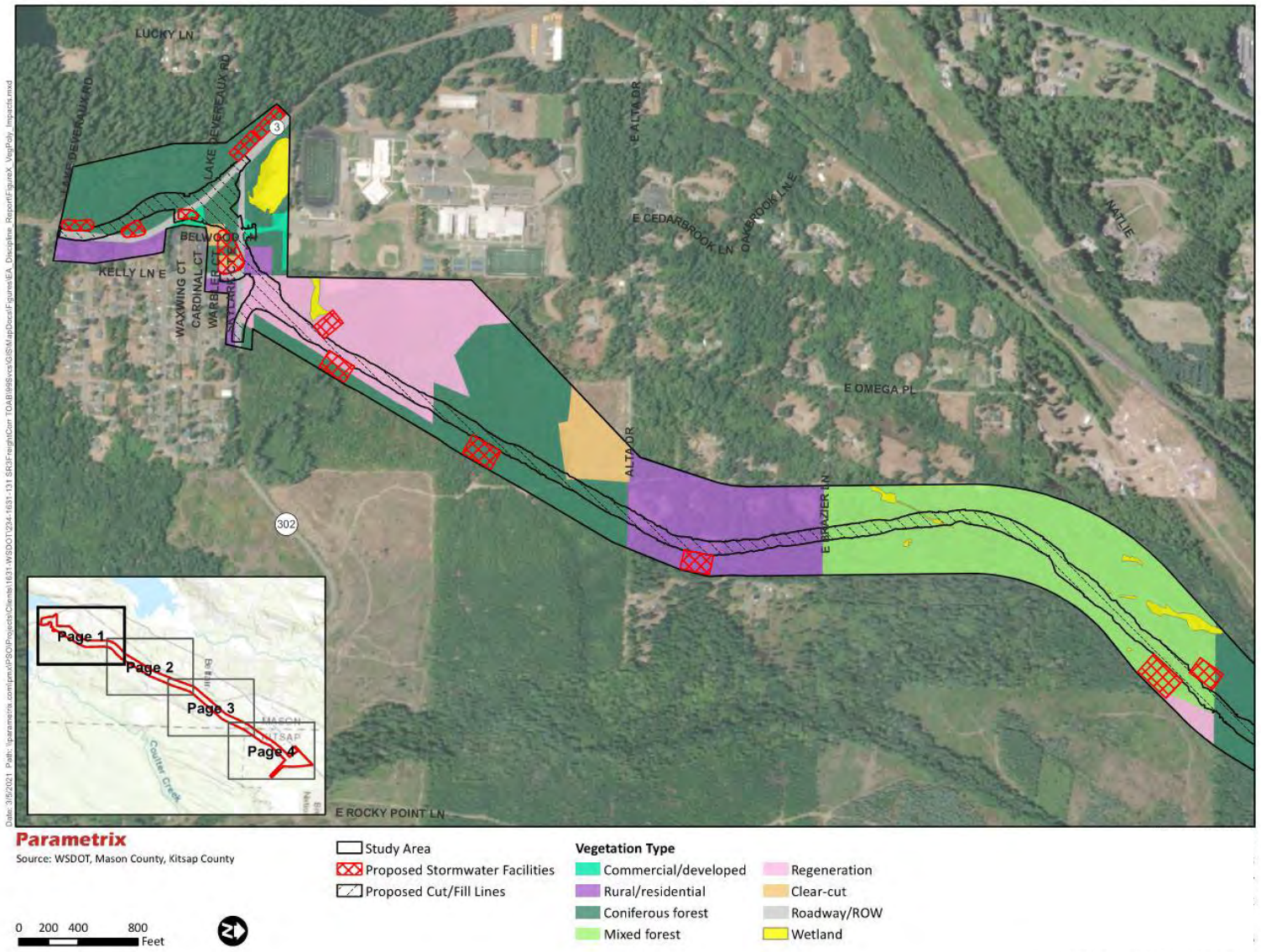


Figure 4.7-1b Vegetation Types and Potential Impacts

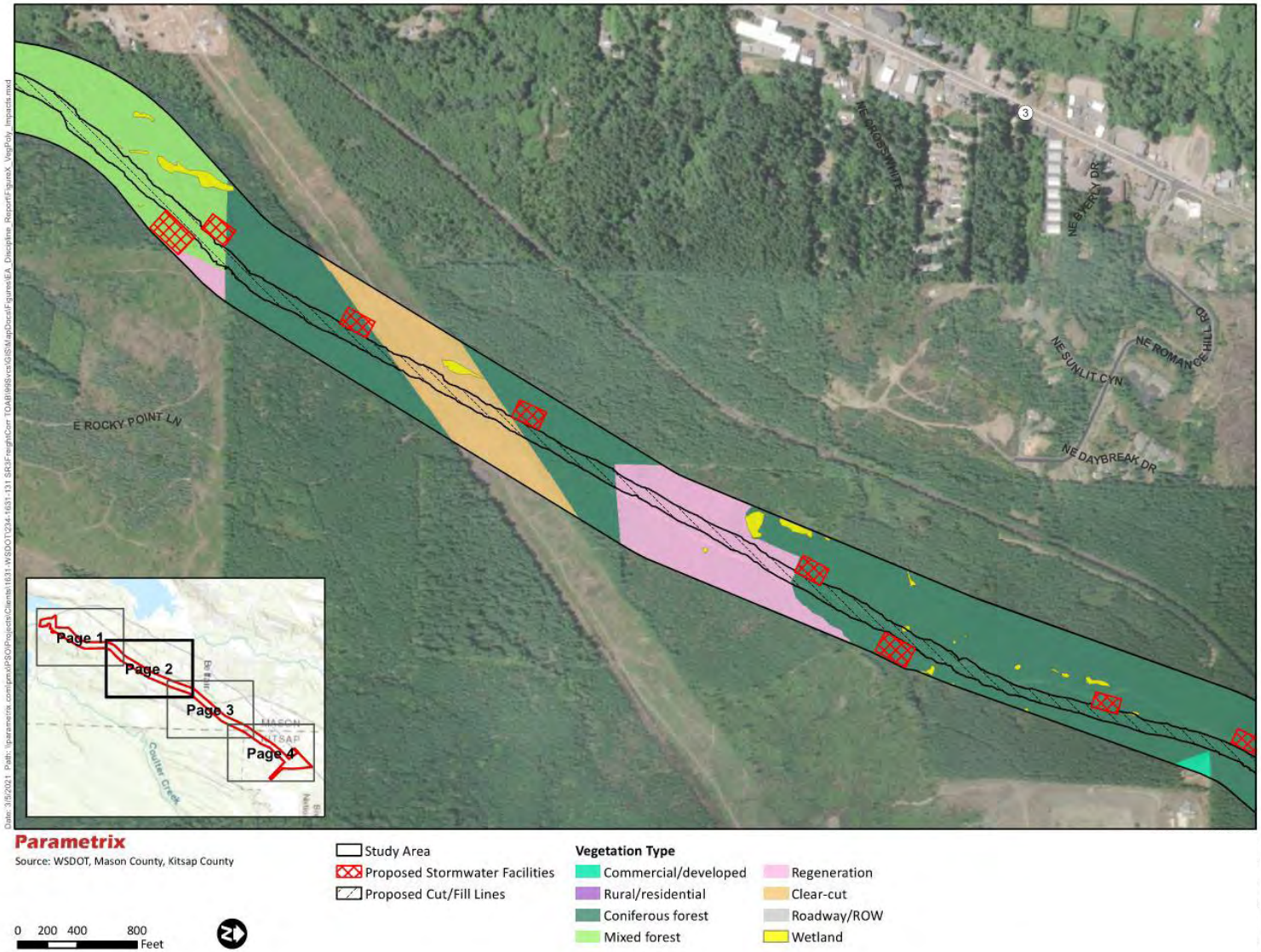


Figure 4.7-1c Vegetation Types and Potential Impacts

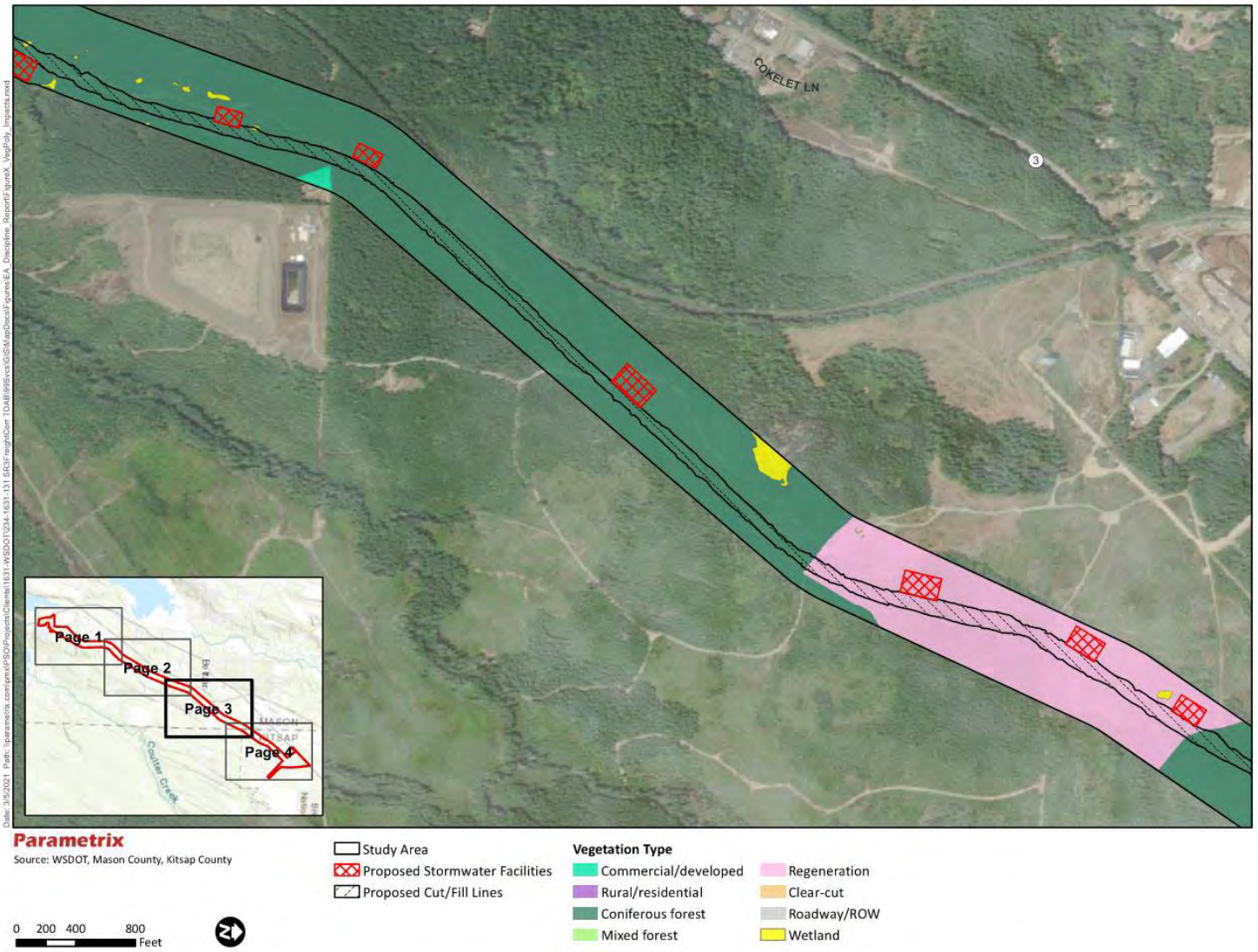
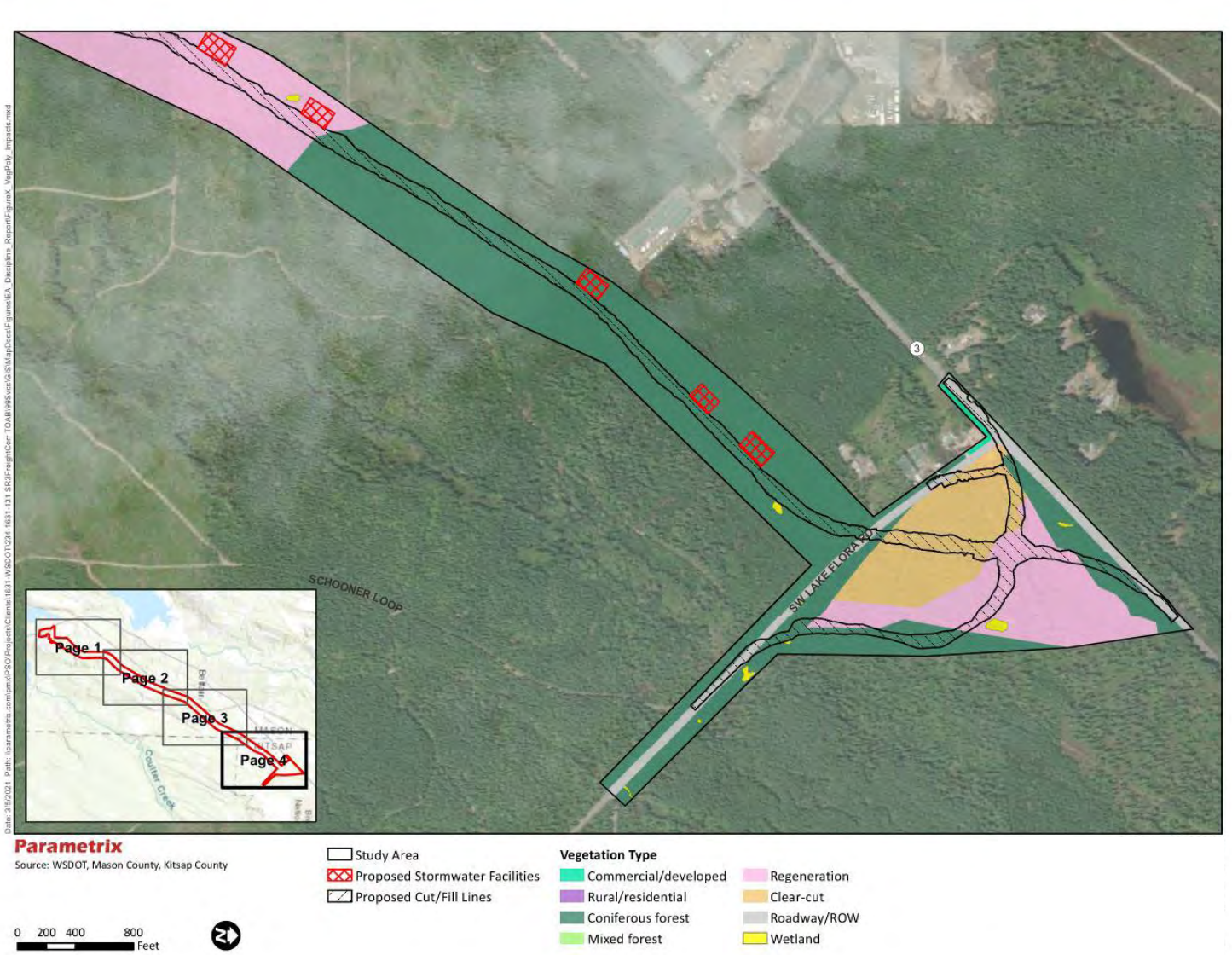


Figure 4.7-1d Vegetation Types and Potential Impacts



4.7.2 What Vegetation Types Currently Exist in the Study Area?

Vegetation and land use within the study area were classified to assess wildlife associations and evaluate vegetation impacts. The classifications generally follow those used in *Wildlife-Habitat Relationships in Oregon and Washington* (Johnson and O'Neil 2001). Analysts identified the following eight cover types in the study area: Commercial and Developed, Rural Residential, Coniferous Forest, Mixed Forest, Regeneration, Clear-cut, Wetlands, and Roadway/ROW. These cover types are described in the *SR 3 Freight Corridor Vegetation Discipline Report* and are shown on Figures 4.7-1a through 4.7-1d.

Noxious Weeds

Noxious weeds are non-native, invasive species that contribute to the loss of agricultural production or ecological diversity, as identified by the Washington State Noxious Weed Control Board (WSNWCB 2021). Noxious weeds were found at minimal levels scattered throughout the study area. Those observed include reed canary grass (*Phalaris arundinacea*), oxeye daisy (*Leucanthemum vulgare*), common St. John's wort (*Hypericum perforatum*), Canada thistle (*Cirsium arvense*), bull thistle (*Cirsium vulgare*), Scot's broom (*Cytisus scoparius*), field bindweed (*Convolvulus arvensis*), and hairy cat's ear (*Hypochaeris radicata*).

Special-Status Plant Species

Special-status plants species include those listed or proposed for listing as threatened or endangered under the Endangered Species Act; candidates for such listing; species of local importance; and species included in the Washington Natural Heritage Program database. There is no documented evidence of special-status plant species in the study area (DNR 2021). No special-status plant species were observed during on-site field investigations.

4.7.3 How Would the No Build Alternative Impact Vegetation?

Under the No Build Alternative, the proposed project would not be constructed. No impacts to vegetation would occur, aside from those incurred during normal maintenance activities or small-cost operational enhancements.

4.7.4 How Would the Build Alternative Impact Vegetation Long-Term?

Permanent impacts on vegetation would occur where vegetated areas are converted to a developed condition (e.g., roadway or maintained right-of-way) within the project footprint. Permanent impacts areas are shown in Figures 4.7-1a through 4.7-1d, above. Table 4.7-1 summarizes the acreage of permanent impacts to different land cover types.

Table 4.7-1 Permanent Impacts by Cover Type

Cover Type	Area Affected (acres)
Coniferous Forest	**46**
Regeneration	**19**
Mixed Forest	**8**
Clear-cut	**5**
Roadway/ROW	**4**
Rural/Residential	**4**
Commercial / Developed	**< 0.5**
Wetlands	**< 0.5**
Total	**87**

Approximately 79 acres of vegetated land (i.e., areas classified as Coniferous Forest, Mixed Forest, Regeneration, Clear-cut, or Wetland) would be permanently affected under the Build Alternative. An additional 4 acres of Rural/Residential lands (which typically have a vegetated component) would also be affected. The remaining 4 acres of land within the Build Alternative footprint consists of the Roadway/ROW and Commercial/Developed cover types, which do not have a substantial vegetated component.

Vegetation in the SR 3 Freight Corridor ROW would be managed as part of WSDOT's regular maintenance work. Management activities would include periodic mowing and selective herbicide application, removal of dead or dying trees and tree limbs that could fall on the roadway, and clearing brush that encroaches on the roadway. These activities would affect vegetation by preventing trees from establishing too close to the road and preventing forested areas from developing natural features such as snags and downed wood where there is potential to impact traffic safety.

4.7.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

Temporary effects on vegetation would occur where areas cleared for project construction are subsequently restored. For this analysis, the temporary impact area was defined as areas within 10 feet of the cut and fill lines for the Build Alternative footprint. Additional temporarily affected areas (e.g., staging areas) have not yet been identified. The full extent of temporary impacts to vegetation would be determined as the project design is refined. Approximately 10 acres of land within the temporary impact area consists of the Coniferous Forest cover type, and another approximately 4 acres consists of the Regeneration cover type. The remaining area (approximately 4 acres) is divided among the other cover types.

Temporarily disturbed areas would be replanted with native vegetation and managed to minimize reestablishment of noxious weeds. Some areas may also be seeded with a standard erosion control mix that includes appropriate non-invasive, non-native species. Temporary impacts by vegetation type are shown in Table 4.7-2.

Table 4.7-2 Temporary Impacts by Cover Type

Cover Type	Area Affected (square feet)	Area Affected (acres)
Coniferous Forest	435,977	**10.**
Regeneration	158,100	**4**
Mixed Forest	66,490	**2**
Clear-cut	54,970	**1**
Roadway/ROW	35,570	**1**
Rural/Residential	39,321	**1**
Commercial / Developed	8,045	**<0.5**
Wetlands	2,025	**<0.5**
Total	**800,499**	**19**

As shown in Tables 4.7-1 and 4.7-2, most project effects would occur in the Coniferous Forest and Regeneration vegetation types, which are common in the region. Fewer impacts would occur in areas classified as Mixed Forest, Clear-cut, Roadways/ROW, Rural/Residential, Commercial/Developed, and Wetlands. Among these habitat types, unique vegetation types are not expected to be lost as a result of this project.

Noxious Weeds

The project would eradicate some of the noxious weeds through vegetative and seed bank removal. Conversely, there is a potential to introduce additional noxious and invasive species through movement of seeds on construction equipment or vehicles.

4.7.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

Minimization measures and BMPs would be implemented to reduce or eliminate project-related effects on vegetation. These are included in the WSDOT Standard Specifications (WSDOT 2021b), Special Provisions, and the contract plans. Some examples of these follow:

- Existing vegetation, where shown in the plans or designated by the Engineer, shall be saved and protected through the use of a site preservation line, high visibility fencing, or individual flagging.
- Roadside cleanup, as directed by the Engineer, may include smoothing and contouring the ground, and reshaping disturbed areas to blend naturally with surroundings. Methods and equipment used in roadside cleanup shall be approved by the Engineer.
- The Contractor shall acquire all permits and approvals required for the use of the disposal site. The Contractor shall provide the Engineer the location of all disposal sites and provide copies of the permits and approvals before any waste is hauled off the project site. Disposal of excess material within a wetland area shall not be allowed without a Section 404 permit issued by the U.S. Army Corps of Engineers and approval by the local agency with jurisdiction.

Areas temporarily disturbed by construction would be restored following construction using a combination of native and naturalized species appropriate to the highway roadside. Weed control activities would be carried out using Integrated Vegetation Management prescriptions for most effective control and/or eradication of these legally designated noxious weeds, while protecting and preserving desirable species.

4.7.7 Would the Build Alternative Have Any Adverse Impacts on Vegetation?

No adverse effects on vegetation are anticipated as a result of the Build Alternative.

4.8 Water Resources

Water is a beneficial resource essential to agriculture, industry, recreation, human, and ecological health. Water sources are typically subdivided into two types: surface water and groundwater. Surface water resources include streams and rivers that provide fish and wildlife habitat, support vegetation, and contribute to human health and quality of life. Groundwater resources serve as underground storage of fresh water that can be used for drinking, irrigation, and general water supply.

4.8.1 How Were Impacts to Water Resources Evaluated?

A qualitative assessment of project-related impacts to water resources was performed based on existing conditions and proposed modifications to SR 3 in the 2012 *SR 3 Water Resources Discipline Report* (WSDOT 2023m). Potential water quality impacts from operation of the Build Alternative were estimated quantitatively through guidance from WSDOT's *Environmental Manual* (WSDOT 2021a).

This analysis builds on previous assessment completed in 2012 and incorporates updates to applicable regulations, summarizes relevant changes to project design, and evaluates potential impacts of the Build Alternative on water resources. The updated *Water Resources Discipline Report* (April 2021) presents information about existing water resources conditions based on data obtained from federal, state, and local government agencies that administer and regulate water resources in the vicinity of the study area. Information sources include:

- *SR 3 Wetland Discipline Report* (WSDOT 2023n)
- Geographic Information Systems (GIS) data available from WSDOT and local jurisdictions (2020)
- *SR 3 Geology and Soils Discipline Report* (WSDOT 2023d)
- WSDOT Highway Runoff Manual (WSDOT 2020)
- WSDOT Environmental Procedures Manual (WSDOT 2021a)
- Stormwater Management Manual for Western Washington (Ecology 2019)

Water quality impacts associated with the construction and operation of the project were assessed by comparing existing and proposed annual pollutant loads to the project study area receiving waters.

The Clean Water Act Section 401 – water quality certification, which covers discharges to waters of the U.S. subject to a federal permit. In addition, it requires certification that the discharge will not violate state water quality standards. Ecology is the lead agency for permitting and enforcement through the state 303(d) list of impaired water bodies. For any water body on the 303(d) list, a total maximum daily load (TMDL), which specifies limits of pollutants entering a water body, must be developed.

4.8.2 What Water Resources Currently Exist in the Study Area?

Water resources located in the study area include surface water, groundwater, and floodplains. These resources are described below.

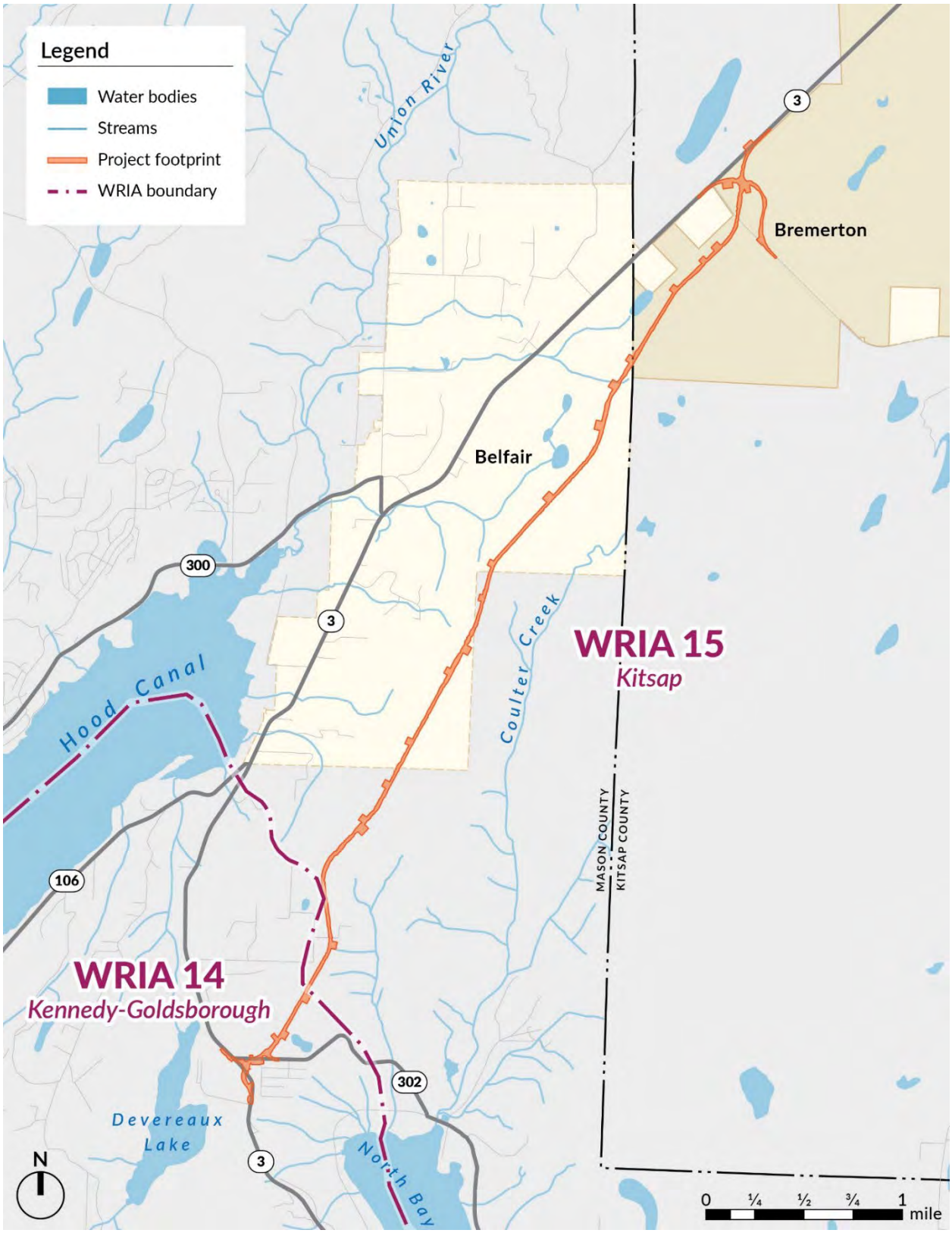
Surface Water

The project study area lies within the Kennedy-Goldsborough 14 and Kitsap 15 Water Resource Inventory Areas (WRIA). Figure 4.8-1 shows the project limits relative to the WRIA boundaries.

The only stream in the project area is the Unnamed Tributary to North Bay–Case Inlet. Wetlands within the study area are described in Section 4.6, above.

Located at the south end of the project and ½ mile to the southeast is the north end of Case Inlet. Hood Canal lies within ¾ mile to the east of the south half of the project.

Figure 4.8-1 Water Resource Inventory Area (WRIA) Boundaries



Ecology 303(d) is a list of surface water bodies that do not meet the state's water quality standards. Ecology uses categories to rate the water quality of the water body. Categories range from one to five, with five being an impaired water body on the 303(d) list that exceeds one or more of the pollutants and that there are no set TMDLs or pollution plan. No TMDLs have been identified within the project limits or within a half mile radius of the project (Ecology GIS, 2021).

Groundwater

Most of the study area is located within Watershed Resource Inventory Area (WRIA) No. 15 ("Kitsap") as defined by the Washington State Department of Natural Resources (DNR) and the Washington State Department of Ecology (DOE). The southwest end of the project crosses the administrative boundary into WRIA No. 14 ("Kennedy-Goldsborough").

Numerous local resource studies indicate the presence of both shallow and deep groundwater resources in the vicinity of the project, the presence of perched groundwater and permanent and seasonal wetlands, and the possible presence of seasonal springs in areas where the groundwater table and/or glacial till layers may be close to the ground surface. These issues are discussed in more detail in the Water Resources, Wetlands, and Hazardous Materials Discipline Reports.

Floodplains

The project footprint is located outside of the 100-year floodplain.

4.8.3 How Would the No Build Alternative Impact Water Resources?

The No Build Alternative assumes that the Build Alternative would not be constructed, and therefore would not result in any modifications to surface water, groundwater, or floodplain resources. If the SR 3 Freight Corridor is not built, water resources in the study area could see negative effects from increased traffic congestion and continued development consistent with available zoning.

4.8.4 How Would the Build Alternative Impact Water Resources Long-Term?

Surface Water

Operational impacts may result from stormwater runoff, roadside maintenance activities, and spills from vehicular crashes. Pollutants in stormwater runoff from roadways typically include total suspended solids (TSS; sediment typically consisting of sand, silts, and clays); nutrients; toxic metals; biochemical oxygen demand; and oil and grease. The Build Alternative would result in a net increase of approximately 33 acres of impervious surfaces. The estimated existing and projected annual pollutant loadings for the project have not been estimated because roadway runoff would receive treatment and infiltration and would not enter any surface water bodies.

Groundwater

Increases in impervious surface areas restrict groundwater infiltration and subsequent recharge of a shallow aquifer system. This project would have an impact on groundwater in the form of recharge rates. The 33 acres of new impervious surface would cause a decrease in groundwater recharge rates in some areas. These effects will be offset by the installation and use of flow control facilities that utilize infiltration as the primary treatment method.

Floodplains

The proposed project is outside the mapped floodplain boundaries and is not anticipated to change floodplain or flooding characteristics due to proposed stormwater flow control facilities.

4.8.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

Under the Build Alternative, water quality of adjacent waterbodies could be temporarily affected by construction activities such as materials staging, earthwork and grading, utility placement, and construction of roadway lanes, retaining walls, and other structures.

Surface Water

Activities that may impact water resources include asphalt paving, culverts installation, soil disturbance, clearing and grading of vegetation, and utility and conduit installation. The proximity of construction vehicles to water resources increases the risk of hazardous materials, sediment, and other substances impacting water resources. Additional discussion on wetland impacts can be found in Section 4.5.5, above.

Groundwater

Construction activities that result in vegetation clearing, soil compaction, and other practices that decrease the permeability of ground surface and impede infiltration of precipitation can potentially affect groundwater resources. Spills from construction equipment, if not properly contained, could enter and impact a shallow aquifer. A Stormwater Pollution Prevention Plan (SWPPP) and Spill Containment and Countermeasures (SPCC) are required to prevent construction activities from contaminating groundwater.

Floodplains

The proposed Build Alternative is located outside the mapped floodplain boundaries and is not anticipated to change floodplain or flooding characteristics throughout construction.

4.8.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

Long-Term Impacts

Water quality treatment would be provided for all pollution-generating surfaces prior to infiltration or discharge to protect groundwater quality. Flow control would be provided for all runoff from created or replaced impervious surface.

The increase in impervious surfaces and associated runoff would be mitigated by implementing the stormwater management controls required by the *Highway Runoff Manual*. The Build Alternative would be required to maintain existing drainage patterns to existing waterbodies to minimize impacts downstream.

Natural dispersion and infiltration would provide the majority of the treatment and flow control for this project. However, some sections may not be able to accommodate the use of natural dispersion and infiltration, due to roadway geometry creating concentrated flows. In these areas the use of compost-amended biofiltration swales (CABS) and/or stormwater treatment ponds would be constructed to control and treat stormwater runoff from the new highway. Permit conditions from regulatory agencies along with BMPs would be utilized to mitigate project impacts.

See Section 4.5.6 for additional information on mitigation for impacts to wetlands.

Short-Term Construction Impacts

The Build Alternative would be required to use BMPs during construction to minimize the quantity of pollutants reaching surface waters and groundwater. BMPs would include measures such as preserving vegetation, installing straw wattles, compost socks, silt fence, temporary sediment trap/pond, check dams, etc. The use of BMPs would minimize short-term erosion effects associated with clearing and grading activities, like increased

turbidity and sedimentation on receiving waters. The contractor would also be required to prepare and implement a TESC Plan to minimize construction-related water quality effects.

An SPCC Plan, compliant with WSDOT standards, would be developed and implemented by the contractor as required by the NPDES General Stormwater Construction Permit for the duration of the project. The plan would specify where petroleum products and other toxic materials can be stored along the right of way or in staging areas. In case of spills, a contingency plan would be established to avoid degradation of surface and groundwater. Spill control BMPs, including the proper storage and containment facilities, would be used during construction to minimize the potential effects of a spill.

For any in-water work, the HPA and 401 water quality certification would provide additional requirements for water quality monitoring (WQM), reporting, additional BMPs to isolate the work area from stream water, pH and turbidity limits, in-water work window, etc. It is anticipated that a WQM plan would be required during construction through final stabilization. Impact Avoidance and Minimization Measures were outlined in the Biological Assessment prepared for the project (WSDOT, 2012) and include these additional measures:

- The contractor would designate at least one employee as the erosion and spill control (ESC) lead, who would be responsible for the installation and monitoring of erosion control measures and maintaining spill containment and control equipment. The ESC lead would also be responsible for ensuring compliance with all local, state, and federal erosion and sediment control requirements.
- All equipment used for construction activities would be cleaned and inspected prior to arriving at the site to ensure no potentially hazardous materials are exposed, no leaks are present and the equipment is functioning properly.
- All BMPs would be installed according to WSDOT standards and would be inspected and maintained throughout the duration of the project.
- WSDOT policy and construction administration practice is to have a WSDOT inspector on site during construction. The role of the inspector would ensure contract and permit requirements.
- There would be no discharge of oil, fuels, or chemicals to surface waters, or onto land where there is a potential for reentry into surface waters.
- No cleaning solvents or chemicals used for tools or equipment cleaning would be discharged to ground or surface waters.
- Standard WSDOT contract language prohibits the disposal of waste, construction, or any materials into the waters of natural water bodies or groundwater.
- All treated wood would be disposed of at a disposal facility approved for treated wood.
- Sediment-laden water generated during construction would be discharged to an upland site to infiltrate or pumped to a containment tank and disposed of at a permitted and approved site.
- Project staging and material storage areas would be located a minimum of 150 feet from surface waters in currently developed areas such as parking lots or managed fields, unless otherwise allowed by the project biologist.

4.8.7 Would the Build Alternative Have Any Adverse Impacts on Water Resources?

Complete avoidance of water resources is not possible. However, any risks to surface water and groundwater posed by construction of the Build Alternative can be avoided through design and minimized using BMPs. Groundwater recharge impacted by the increase in impervious surface area will be mitigated by using infiltration for stormwater flow control. Therefore, no direct or indirect adverse effects to these resources are expected.

4.9 Land Use

Land use designations, plans, and policies guide development within communities. They establish where people live, work, shop, and participate in community activities. In Washington State, land use is controlled by city and county governments through the comprehensive planning process under the Growth Management Act. Transportation projects are required to be consistent with local planning. Land use analysis is conducted to help decision makers understand the effect transportation projects may have on land use and development patterns.

4.9.1 How Were Land Use Impacts Evaluated?

A *Land Use and Relocation Discipline Report* was created in December 2011 and updated in November 2023 (WSDOT 2023f) for the current project. This section of the SEA has been updated from the 2013 EA to reflect changes in local and regional planning efforts, existing and planned development, and changes in land use that would result from the updated project design.

The study area for land use is defined as the area of land approximately one-half mile in all directions of the Build Alternative footprint (see Figure 4.9-1). The affected environment includes the footprint of the project, and all areas where direct and indirect effects could occur.

Existing Land Use

Various applicable land use and transportation plans, policies, regulations, and maps from Mason and Kitsap Counties and the City of Bremerton were reviewed to determine existing land uses and goals and policies for the study area and to evaluate the effects of the proposed project, many of which have been updated since the original analysis in 2011. The following plans, policies, and studies were reviewed:

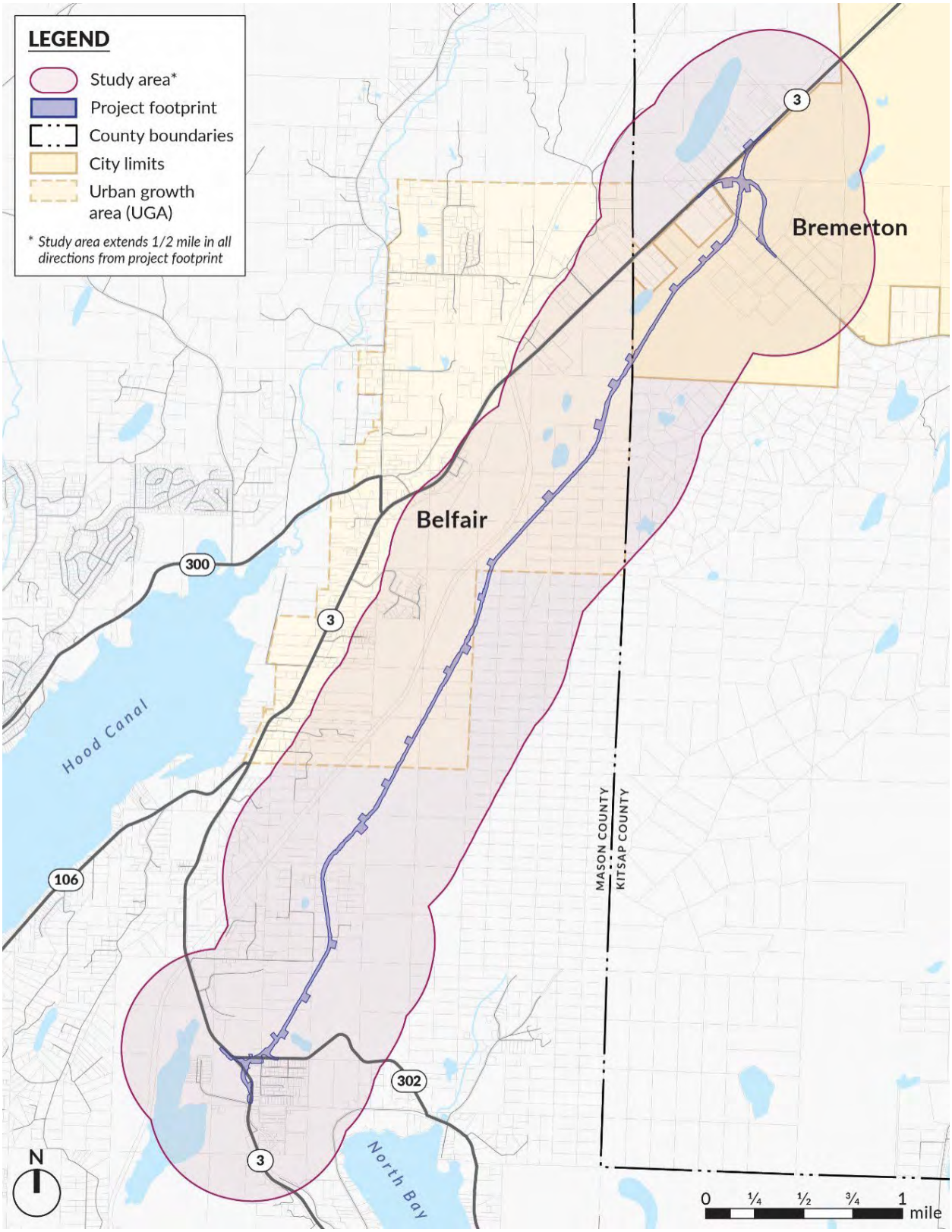
- Mason County and Kitsap County Comprehensive Plans
- City of Bremerton Comprehensive Plan
- Mason County and Kitsap County Countywide Planning Policies
- Mason County and Kitsap County Shoreline Management Program
- Mason County and Kitsap County Zoning Codes
- Belfair Urban Growth Area Subarea Plan
- Belfair Mobility Plan
- Puget Sound Industrial Center Planned Action EIS and Subarea Plan
- Peninsula RTPO Regional Transportation Plan and Peninsula Regional Non-Motorized Connectivity Study
- Puget Sound Regional Council Vision 2050 and Regional Transportation Plan 2018
- Washington Transportation Plan 2040
- 2007-2026 Washington State Highway System Plan and Technical Update

Farmland

The NRCS web based Web Soil Survey (USDA 2023) was used to determine soil types within the study area. The viability of land in long-term agricultural use and the importance of individual farms are the focus of the State of Washington's various farmland protection acts. Farmland is usually divided into three distinct categories:

- Prime farmland is land of exceptional physical and chemical soil characteristics that can be used in agriculture with minimum user input of nutrients, labor, etc. The land must also not be in, or committed to urban development or water storage.
- Unique farmland is lower quality than prime farmland but is able to produce high-value food or grain products.
- Farmland of Statewide or Local Importance is farmland that meets Washington State and USDA guidelines but is not protected within the other two groups.

Figure 4.9-1 Land Use Study Area



Acquisitions and Relocations

Acquisition and relocations impact analysis considered the number of businesses and residences that would be displaced as a result of right of way (ROW) acquisition. Right of way requirements and associated displacements and substantial disruptions were determined based on WSDOT preliminary project design drawings. Site inspections and aerial photographs were used to verify county assessor assigned land use codes and to assist in determining the nature of potential displacements and disruptions (business names, residential developments, type of structure, etc.).

Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966 applies to historic sites of significance, significant publicly owned parks and recreation areas, wildlife and waterfowl refuges, as well as historic sites of nation, state, or local significance. The information on 4(f) resources in the 2013 report was updated by compiling existing documents, maps, aerial photographs, and Geographic Information System (GIS) data obtained from federal and state agencies, Mason and Kitsap Counties, and the City of Bremerton. The updated *SR 3 Cultural Resource Inventory* (WSDOT 2023b) prepared for the project was also reviewed to determine the presence of historic resources that could be classified at Section 4(f) properties.

6(f) Resources

The Land and Water Conservation Fund (LWCF) established by Congress in 1964, is a federal grant program which helps pay for the acquisition of outdoor recreation sites and facilities. Property within the study area was reviewed for the use of funds from the federal LWCF by examining the National Park Service (NPS) database of Section 6(f) investments.

4.9.2 What Land Uses Currently Exist in the Study Area?

The study area is primarily located in the northeast corner of Mason County with the northern terminus of the project located in the southwest corner of Kitsap County. Beginning at the southern end of the study area, the Build Alternative footprint passes through the unincorporated Belfair urban growth area (UGA) and then terminates within the Puget Sound Industrial Center (PSIC) located at the southern end of the City of Bremerton. The land within the area is primarily rural and mostly undeveloped forested land.

The SR 3 Freight Corridor project passes through a variety of land use zones and types within the 6.5-mile length of the study area. Land use types in the study area vary and include residential, commercial, industrial, vacant, or undeveloped, public, utility, forest, and resource lands. Figure 4.9-2 provides a generalized map of current land use in the study area.

Farmland

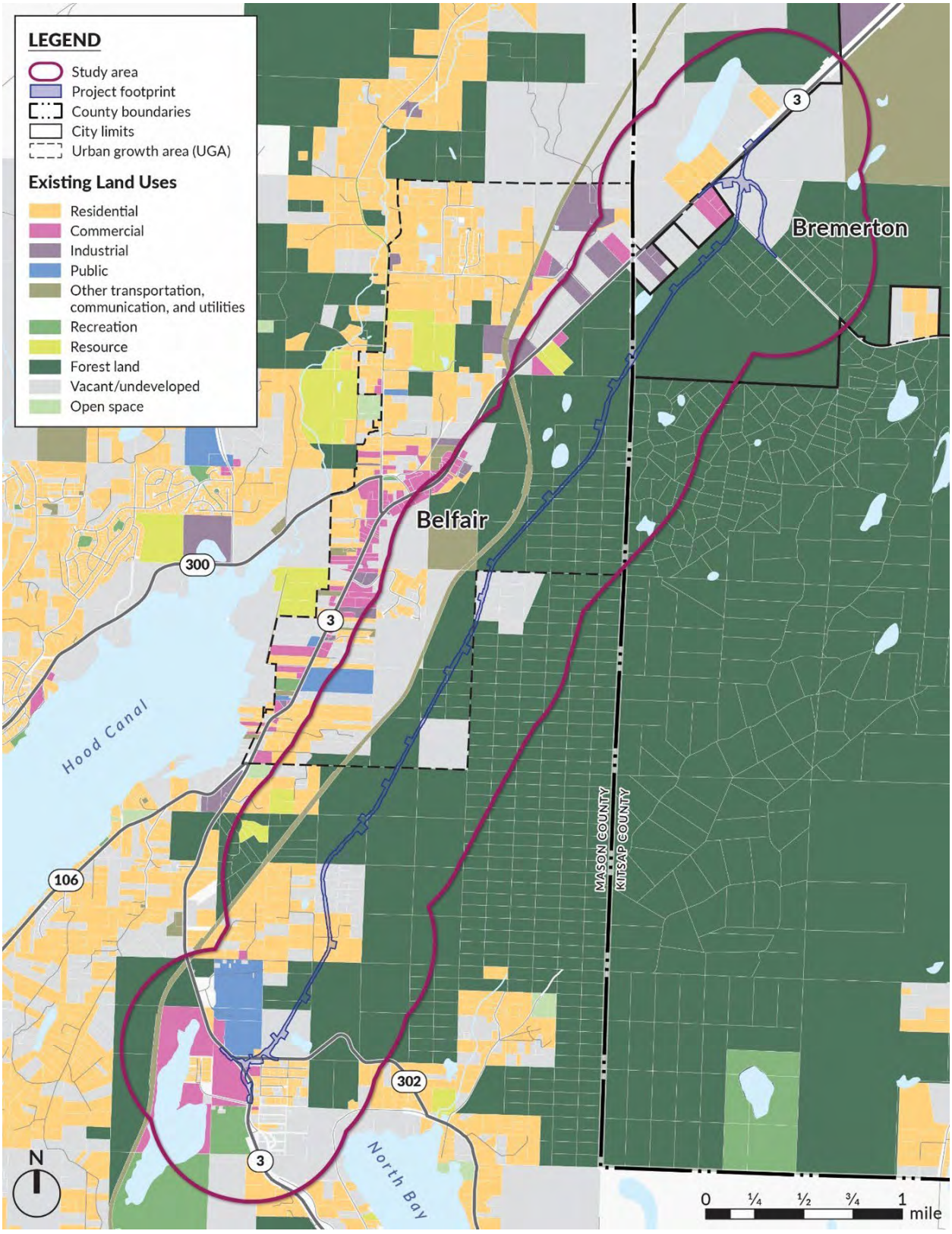
As defined in the federal Farm Protection Policy Act (FPPA), transportation projects must make efforts to protect any farmlands in the project area. While large portions of both Mason and Kitsap Counties are devoted to agricultural uses, there are no active commercial farmlands and no farmland of statewide importance in proximity of the proposed Build Alternative footprint.

Section 4(f)

Section 4(f) resources in the project area include the following recreation facilities:

- Belfair State Park
- Sandhill County Park
- Theler Wetlands
- Union River Wildlife Recreation Area
- Mary E. Theler Community Center
- Devereaux Lake

Figure 4.9-2 Generalized Land Use



One historic-era Section 4(f) resource was identified in the Cultural Resource Inventory prepared for the project (WSDOT 2023b). The BPA Shelton–Kitsap No. 2 115-kV Transmission Line was recommended as eligible for listing in the National Register of Historic Places. None of the transmission towers or poles fall within the area of potential effect (APE); however, the project improvements would pass under the conduit (wires).

There are no wildlife or waterfowl refuges identified within the project study area.

Section 6(f) Resources

No Section 6(f) lands purchased or improved with land and water conservation funds are located within ½ mile of the project corridor (RCO 2023).

4.9.3 How Would the No Build Alternative Impact Land Use?

With time, land use in the study area would continue to change under the No Build Alternative consistent with local land use plans, but for reasons unrelated to the SR 3 Freight Corridor. Land use development and growth would occur as planned in Mason and Kitsap Counties, as well as in the City of Bremerton's Puget Sound Industrial Center (PSIC).

The No Build Alternative would not be consistent with adopted land use plans, especially related to what is envisioned for transportation and land use in the study area over time. Under the No Build Alternative, the SR 3 Freight Corridor would not be built.

4.9.4 How Would the Build Alternative Impact Land Use Long-Term?

As proposed, the Build Alternative would provide relief to worsening congestion along SR 3, particularly in the Belfair area. Local and regional transportation plans underscore the importance of improving mobility for freight, transit, cars, and active transportation modes in the study area. The Freight Corridor will be designed to include an eight-foot shoulder that can provide accommodations for bicycles and pedestrians that will meet WSDOT Complete Street and ADA guidelines for limited access facilities.

Farmland

There are no farmlands located within the study area in either Mason or Kitsap Counties. Therefore, no effects to farmlands during operation are anticipated.

Acquisitions and Displacements

A total of 72 parcels would be directly affected by the Build Alternative, depending upon the project's final design. The majority of the land directly affected by and adjacent to the proposed Freight Corridor is currently undeveloped, forested land. Apart from the right of way acquisitions totaling approximately 115 acres as required to build the project, and the conversion of property zoned for other uses to transportation use, operation of the proposed project is not expected to affect or influence any existing or future planned land uses.

Displacements would be limited to three residential units: two single-family residences along with associated outbuildings (sheds, garages, etc.) and one single-wide mobile home. At the time of publication of this document, one of the residences was purchased by WSDOT at the request of the homeowner. The project may require acquisition of all or a portion of a parcel owned by the Church of Jesus Christ of Latter-Day Saints, located at the intersection of SR 3 and SR 302, due to right of way requirements. The parcel contains a water tank and a well house that would have to be relocated. No businesses would be displaced.

A breakdown of the acquisitions and displacements is shown in Table 4.9-1.

Table 4.9-1 Acquisitions and Displacements

Effect Type	Area Affected (acres)
Right-of-Way Acquisition/ Conversion to Transportation Use	**115 (72 parcels)**
Residential	5.7
Commercial/Industrial	0.5
Public	4.4
Forest	84.2
Private Recreation	2.4
Undeveloped/Vacant	17.4
Displacements	**8.5 (3 parcels)**

Section 4(f) Impacts

No Section 4(f) resources would be used as part of the project.

One historic resource was identified within the project area – the BPA Shelton–Kitsap No. 2 115-kV Transmission Line. None of the transmission towers or poles fall within the APE. The project improvements would pass under the conduit (wires) without impacting any of the towers or poles adjacent to but outside of the APE. Based on the results of the Section 106 consultation, the proposed Build Alternative would have no adverse effect on historic properties.

"Use" in the Section 4(f) context is defined in 23 CFR 774.17 (Definitions) and can be one of three forms: permanent conversion to transportation use, temporary occupancy (whole or in part), or impairment of the property's activities, features, or attributes (constructive use).

Section 6(f) Resource Impacts

There are no Section 6(f) properties in the ½ mile study area, thus no impacts would occur.

4.9.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

Short-term construction impacts would be the same as those identified in the 2013EA. Construction impacts would include impacts on access to businesses and/or residences, and vehicle delays or detours. Vehicle delays would occur particularly as the result of lane reductions established to provide work zones. Short and long-term shoulder and lane closures may be necessary.

No construction impacts are anticipated to disrupt or prevent development or use of land within the study area. All applicable regulations would be adhered to during the construction process to offset the temporary impacts to surrounding land uses.

4.9.6 How Would the Build Alternative Impacts Be Minimized or Mitigated?

To the extent feasible, the final design for this project would attempt to minimize or avoid displacements and disruptions. It is anticipated that some impacts may be able to be avoided, through design measures. These could include the additional design features such as retaining walls, design modifications to project improvements that result in reduced right of way requirements, etc. Where possible the relocation of buildings

and facilities on the existing property could help to mitigate impacts to the property. Where right of way acquisition is needed, the acquisition and relocation program would be conducted in accordance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended.

Since the Build Alternative is consistent and compatible with state, local and regional plans and regulations, no mitigation would be required.

4.9.7 Would the Build Alternative Have Any Adverse Effects on Land Use?

The project alignment was refined from the 2013 design to avoid impacts to sensitive resources, including Section 4(f) properties, to the extent possible. All impacts to property from acquisition would be minimized further, where possible, during final design. WSDOT would comply with the Uniform Relocation and Real Property Acquisition Policies Act where impacts are unavoidable. No adverse land use impacts are anticipated as a result of the Build Alternative.

4.10 Socioeconomic and Environmental Justice

The assessment of socioeconomic and environmental justice effects considers potential impacts and benefits of proposed transportation projects to communities or neighborhoods, especially those with concentrations of minorities, low-income populations, or people with limited ability to speak and read English. The analysis includes economic, health, and demographic considerations.

Transportation projects must not disproportionately impact minority and low-income populations; every effort has been made to provide:

- Equal access to benefits and services for all groups;
- Minimization of displacement;
- Equal access to information and meaningful involvement in the decision-making process;
- Opportunities for persons with Limited English Proficiency to participate; and
- Compliance with Title VI via documenting inclusive public involvement.

This section is summarized from the *SR 3 Freight Corridor Socioeconomics and Environmental Justice Discipline Report* (WSDOT 2023h).

4.10.1 How Were Socioeconomic and Environmental Justice Impacts Evaluated?

The evaluation of social and economic characteristics of the area focused on community context, employment opportunities, and the demographics of the area. The environmental justice analysis was conducted in accordance with federal and state policies and plans that guide the evaluation of effects on social resources and environmental justice. Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987 prohibit discrimination on the grounds of race, color, national origin, age, or disability.

In addition, the following statutes, regulations, and guidance relate to environmental justice:

- Presidential Executive Order (EO) 12898 on Federal Actions to Address Environmental Justice in Minority and Low-income Populations – recognized that minority and low-income populations have historically been unequally burdened with the negative impacts of public works projects, such as pollution, noise, and community disruption, and also have not been proportionately represented in public involvement and decision-making. This order requires WSDOT to:
    - Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
    - Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
    - Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and/or low-income populations.
- Presidential EO 13166 on Improving Access to Services for Persons with Limited English Proficiency (LEP) – requires federal agencies to identify and respond to needs for language translation to assist people who do not speak English as their primary language and have limited ability to read, write, speak or understand English.
- The Americans with Disabilities Act of 1990 and The Age Discrimination Act of 1975 – direct WSDOT to ensure that people with disabilities and people 65 years of age or older have fair and equal access to decision-making processes and to the benefits of publicly-funded projects.

- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as Amended – ensures that owners of property acquired and other people displaced by federally funded projects are treated fairly.
- Presidential EO 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All – expanded the scope of EO 12898 to provide guidance to agencies on how to consider Environmental Justice while satisfying their directives. The new guidance includes the requirement to look at effects related to climate change.

Guidance for the analysis was also taken from Federal Highway Administration's Technical Advisory, T6640.8A and Chapter 458 of the WSDOT *Environmental Manual*, "Social and Community Effects," and Chapter 460, "Environmental Justice" (WSDOT 2021a).

Demographic information was evaluated to determine if minorities or low-income populations in the study area would be disproportionately impacted by the Build Alternative. The transportation analysis provided information regarding potential traffic, access, and mobility changes within the study area that would result from construction of the Build Alternative. Demographic information was used to determine if any benefits or adverse effects would disproportionately affect environmental justice populations, and if so, whether those effects would be high or severe. Disparate impact analysis under Title VI was also conducted to understand whether the project would have a disparate impact on specific EJ groups.

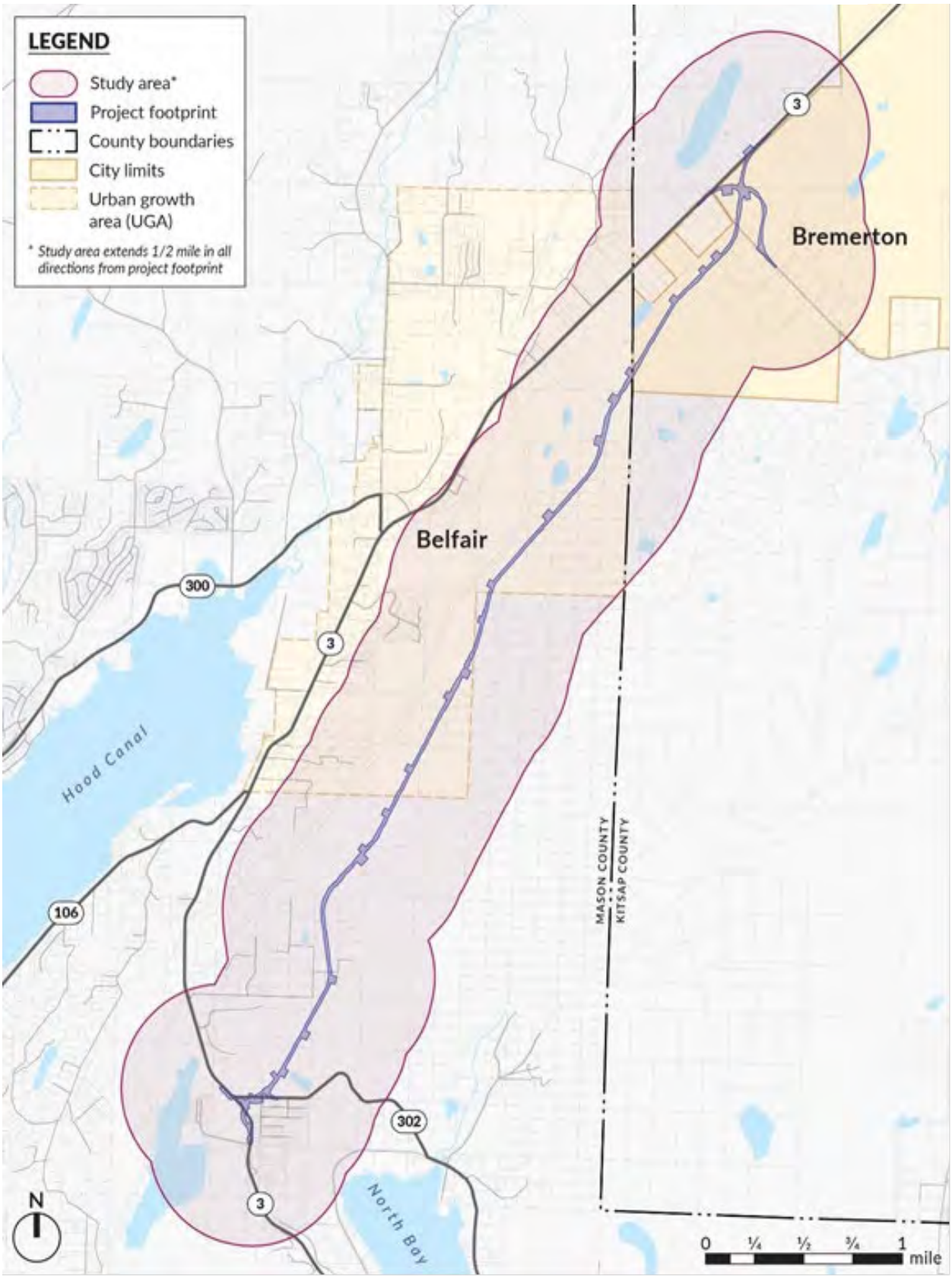
To help identify the Build Alternative's potential impacts or benefits to the community, in particular Environmental Justice populations in the study area, a review was also conducted of the following information:

- U.S. Census Bureau American Community Survey (ACS) data
- Washington State Superintendent of Public Instruction (OSPI) school district data
- Washington State Department of Revenue data
- Washington State Department of Employment Security data
- Washington State Office of Minority and Women's Business Enterprises data
- County Assessor maps
- Local planning documents
- Google Maps and aerial photographs
- Geographic Information Systems (GIS) data

How Was the Study Area Defined?

Because the potential social, economic, and environmental justice effects of the Build Alternative likely extend beyond its physical limits, the study area extends ½ mile beyond the Build Alternative footprint in all directions. The study area includes school districts, neighborhoods, and commercial areas in the vicinity of the proposed Build Alternative, and areas with potential noise, visual, and traffic effects resulting from the Build Alternative. Data from the census block groups that intersect the study area were used to identify the potential impacts associated with the Build Alternative (see Figure 4.10-1).

Figure 4.10-1 Socioeconomic and Environmental Justice Study Area



What Are Environmental Justice Populations?

Federal Executive Orders (EO), regulations, and guidance address the fair treatment of low-income and minority populations. New projects must assure public involvement is inclusive, and potential project impacts are not disproportionately burdensome to those populations. If the impact to Environmental Justice populations is disproportionately high and adverse, possible mitigation measures for the impacts are considered. The Environmental Justice population groups include:

- **Minority:** Individuals who identify themselves as Black, Hispanic, Asian/Pacific Islander, or American Indian/Alaska Native.
- **Low-Income:** Individuals whose household income falls below the federal poverty guidelines as defined by the U.S. Department of Health and Human Services.

Demographic statistics on race and poverty status, we well as overall study area characteristics, are used to evaluate environmental justice effects. The environmental justice evaluation determines whether low-income populations or minority populations would suffer disproportionately high and adverse effects of an action, as defined by EO 12898 and EO 14096. This means that:

1. Low-income populations or minority populations would predominately bear the adverse effects; or
2. Low-income populations or minority populations would suffer the effects and the effects would be considerably more severe or greater in magnitude than the adverse effects suffered by the general population.

If there are Limited English Proficiency (LEP) populations – people who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English – public outreach efforts are tailored to provide assistance as needed, including translation of written materials and provision of interpreters at public meetings regarding the project. Additionally, members of Tribal Nations are part of the definition of an environmental justice population. Tribal consultation is described in Chapter 6 of this document.

4.10.2 What Are the Existing Social and Community Conditions?

Review of existing social and economic characteristics of the study area focused on understanding the general community context, community resources, employment opportunities, demographic characteristics, and Environmental Justice populations within the study area. These are described below.

Community Context

The project area includes the Belfair commercial district, with retail, general, and professional services located along existing SR 3. Belfair Elementary School, North Mason High School, and the Theler Wetlands and Community Center also front SR 3 in Belfair. The proposed Freight Corridor passes through mostly undeveloped, forested land east of Belfair, along with an area of suburban and rural residential to the south. The alignment is approximately 80% in Mason County, and 20% in Kitsap County. SR 3 generally extends south to north, from Shelton in Mason County to the east end of the Hood Canal Bridge in Kitsap County.

Within the study area, SR 3 connects with SR 106, SR 302, and with SR 300 in Belfair- all are non-HSS facilities. SR 3 is currently signalized at intersections with SR 106, at Belfair Elementary School (MP 25.4), and at NE Clifton Lane. Facilities for pedestrians and bicycles are otherwise fairly limited in the study area. The shoulder on SR 3 is usable for bicycle and pedestrian travel. Mason Transportation Authority (MTA) provides scheduled transit service Monday through Saturday between Belfair, Bremerton and Shelton. Local service is provided in Belfair, between downtown Belfair to North Mason High School on SR 3, and Belfair State Park on SR 300. Transit travel within Mason County is free.

There is a range of housing types in the study area. The new alignment would pass through largely undeveloped rural, forested and semi-forested land, with the south connection to SR 3 in a suburban area and the north connection in a rural setting. Census data indicate the percentage of the population within the two study census tracts that rents their home ranges from 22.4% to 24.2%.

Community Cohesion

Community cohesion is a term referring to the interaction of people in the community that leads to a sense of connection. This is indicated by such features as: pedestrian facilities, low-turnover in home ownership and rentals, identifiable neighborhoods, regular community events, and gathering places. Typical gathering places include schools, parks, libraries, community centers, churches, markets or coffee shops. Belfair has many assets that support a sense of identity and community cohesion.

The library, post office, several churches, and markets are located on SR 3 in Belfair. The Theler Wetlands is a community focus in Belfair and is a regional center for environmental education including the Theler Community Center, where many events are held. A farmer's market, held here May through September, is a draw for local residents as well as visitors. A number of major annual festivals are held in the area, including The Hood Canal Summerfest and car shows.

Interaction within the community can also be gauged by its civic groups and organizations. The Belfair community supports local chapters of the Boy Scouts of America, Girl Scouts, Boys and Girls Club, Veterans of Foreign Wars, Fraternal Order of Eagles, Freemasons, and the Lions Club, among others.

Demographic Characteristics

Table 4.10-1 provides a breakdown of the demographic characteristics in the study area by Census Tract.

Table 4.10-1 Population Characteristics, 2021

	Mason County		Kitsap County	
	Census Tract 9604.01	**Census Tract 9604.02**	**Census Tract 921.01**	**Census Tract 921.02**
Age 65+	20.4%	16.2%	18.8%	8.6%
No Vehicle Available	6.6%	5.4%	2.0%	0.0%
Disabled (by Age Group)				
Under 5 Years	0.0%	0.0%	0.0%	0.0%
5 to 17 Years	12.9%	9.0%	2.4%	5.0%
18 to 34 Years	7.3%	0.0%	14.0%	7.0%
35 to 64 Years	15.5%	15.9%	30.5%	19.3%
65 to 74 Years	31.7%	40.7%	18.6%	13.5%
75 Years and Up	64.2%	48.7%	56.7%	100.0%
Below Poverty Level	6.9%	2.0%	5.4%	10.7%

Source: U.S. Census Bureau, ACS 2021 5-Year Estimates, Tables S1701, S1810, DP04

Environmental Justice Populations in the Study Area

There was no evidence in the community of a recent immigrant population increase or of a language commonly in use other than English. No business signs, advertisements, or establishment observed in a windshield survey through the study area indicated the use of another language. The U.S. Census Bureau ACS 2021 5-Year

Estimates indicate 3.6 percent of the population within the four census tracts comprising the SR 3 Freight Corridor study area has LEP.

As defined by Executive Order 12898, a minority person is an individual who is Black, Hispanic, Asian/Pacific Islander, or American Indian/Alaska Native. Ethnicity in the study area by Census Tract is shown in Table 4.10-2.

Table 4.10-2 Ethnicity by Census Tract, 2021

	Mason County		Kitsap County	
	Census Tract 9604.01	**Census Tract 9604.02**	**Census Tract 921.01**	**Census Tract 921.02**
White alone	76.3%	75.8%	81.8%	77.4%
Black or African American	2.1%	0.7%	1.6%	0.6%
American Indian and Alaska Native	0.5%	0.1%	0.0%	0.4%
Asian	1.5%	4.0%	5.6%	6.5%
Native Hawaiian or Other Pacific Islander	0.0%	3.1%	0.9%	2.8%
Some other race	10.8%	6.4%	1.8%	2.0%
Two or more races	8.8%	9.9%	8.2%	10.2%
Hispanic or Latino (of any race)	11.6%	17.1%	7.9%	7.4%

Source: U.S. Census Bureau, ACS 2021 5-Year Estimates, Table S0601

4.10.3 How Would the No Build Alternative Impact Socioeconomic and Environmental Justice?

Without the proposed Freight Corridor, the traveling public would experience continued traffic congestion and high collision rates in this segment of SR 3. As traffic volume continues to increase, safety problems through the Belfair area would be exacerbated.

4.10.4 How Would the Build Alternative Impact Socioeconomic and Environmental Justice Long-Term?

The social and economic aspects of reducing congestion on SR 3 would benefit the entire study area and the region. The Build Alternative would result in reduced traffic congestion and increased safety through Belfair, and increased transportation efficiency and capacity on SR 3. The Freight Corridor will be designed to include an eight-foot shoulder that can provide accommodations for bicycles and pedestrians that will meet WSDOT Complete Street guidelines. The project is expected to have beneficial impacts to transit operations. Reduced congestion and delay would allow for efficient transit operations and the bypass would provide alternate faster regional transit routes.

Long-term negative effects of the project include permanent changes such as 115 acres of property acquisition, three residential displacements for the required right-of-way, noise and visual impacts to those properties adjacent to the new alignment, changes to traffic patterns, and land use changes. See also Table 4.9-1, above, for a description of the proposed acquisitions.

4.10.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

Construction of the Build Alternative would have temporary impacts to the surrounding area, including dust, equipment emissions, noise, and possible traffic interruptions. Other impacts associated with construction

would include the establishment of temporary staging areas and possible movement of heavy equipment on local streets. These effects would be localized and temporary.

SR 3 is the major route between Shelton and Bremerton used by fire, police, and emergency medical providers. Construction of the Freight Corridor would temporarily increase congestion on SR 3, north and south of Harrison Medical Center's Belfair Clinic. This would affect patients traveling to the clinic from north or south of the study area. Patients who live within Belfair would not be affected by the construction.

Construction of the proposed Build Alternative would also have temporary beneficial effects in the form of construction jobs that could benefit all populations, including Environmental Justice populations, during the 2-year construction period. Short-term benefits would also likely be realized during construction by the local suppliers of fill, gravel, aggregate, and asphalt needed to build the new roadway.

4.10.6 How Would Impacts of the Build Alternative be Minimized or Mitigated?

Approximately 72 parcels would be directly affected by construction of the Freight Corridor. The majority of the land directly affected and adjacent to the Freight Corridor is currently undeveloped, forested land. Displacements would be limited to two single-family homes and one mobile home. One of the single-family homes has recently been purchased by WSDOT at the request of the homeowner. That homeowner was not an Environmental Justice population. The landowners of property purchased or adjacent to new right-of-way will have various perspectives and may experience it as a positive or a negative effect. All owners of property to be purchased would be treated equally under the provisions of the Uniform Relocation Assistance and Real Property Acquisition Polices Act of 1970, as amended. At the community level, negative effects are outweighed by the social and economic benefits of increased safety and decreased congestion. If it is determined that there is a potential for disproportionately high and adverse impacts to Environmental Justice populations during final design, additional mitigation will be developed and considered.

During construction, road closures and detour routes, if needed, would be closely coordinated with police, fire and emergency services, transit agencies, and school districts. A Traffic Management Plan (TMP) would be implemented to manage work zone impacts for the duration of the construction phase. The TMP would address planned temporary traffic control measures including traffic operations and public information elements. Input from transit providers, emergency response providers, local jurisdictions, and school districts would be incorporated into the TMP.

WSDOT will provide Spanish translation services for all public meetings to be held during the NEPA process. All notices for the project will state that other translation services are available upon request.

4.10.7 Would the Build Alternative Have a Disproportionate Impact on Environmental Justice Populations?

Because the project's effects are minor and will affect both Environmental Justice and non-Environmental Justice populations, and because the project will provide improvements that benefit Environmental Justice and non-Environmental Justice populations alike, no disparate impact was identified. As the project effects are minor this evaluation concludes that no Environmental Justice populations would be disproportionately adversely affected by this project.

4.11 Hazardous Materials

Hazardous materials are substances that can potentially cause harm to humans, animals, or the environment. For a construction project, these materials may already be present at a project site in the form of contaminated groundwater or soil. Hazardous materials could also be present in structures such as buildings that might be demolished as part of a construction project. When performing construction where potentially hazardous materials are present, there is a risk of spreading the contamination if proper construction procedures are not followed. Assessment for the potential of contamination is necessary to ensure that proper measures are taken during construction to prevent further contamination, and that contaminated materials are properly handled and disposed of.

4.11.1 How Were Hazardous Materials Impacts Evaluated?

A Hazardous Materials technical study was prepared in September 2011. That original report was updated in April 2021 for the current project alignment, and again in 2023 (WSDOT 2023e). The hazardous materials study area extends approximately ½-mile in all directions of the project limits. Due to the limited development of the lands immediately surrounding the proposed bypass, research concentrated on sites where the existing SR 3 corridor intersects the new alignment.

The analysis methodology for the project included:

- Review of federal, state, and local agency online environmental regulatory databases for the Project Area and adjoining properties, focusing on the identification of any record of the presence of hazardous substances, underground storage tanks (USTs), or hazardous substance spills.
- Review of historical documentation including:
    - Historical aerial photographs
    - Historical topographic maps.
- Review of existing reports documenting previous environmental investigations of the Project Area and/or adjoining properties .
- Performing a visual reconnaissance of the Project Area and adjacent properties from public Right of Way (ROW) or publicly accessible properties (windshield survey) to document ground surface conditions, recent activities, and to identify existing and/or potential hazardous materials conditions within the study area.
- Evaluation of the information, data, and observations collected during the above activities to identify potential hazardous materials conditions at the Project Area and/or adjoining properties.
- Assessing the potential impacts that hazardous materials conditions might have on the project and describing appropriate mitigation measures.

How Are Hazardous Materials Regulated?

Hazardous materials identification, handling, disposal, and remediation are governed by numerous State and Federal laws, regulations, guidance documents, and policies. Chapter 447 (Section 447.02) of the WSDOT *Environmental Manual* lists the primary statutes and regulations applicable to hazardous materials issues.

4.11.2 What Existing Hazardous Materials Are in the Study Area?

The regulatory database search identified several regulatory-listed properties within a half mile to a mile of the Project Area corridor. No EPA National Priority List (NPL), proposed NPL, Federal Superfund Liens, delisted NPL, Superfund Enterprise Management System (SEMS) or SEMS Archive sites were identified within one mile of the Project Area corridor.

4.11.3 How Would the No Build Alternative Impact Hazardous Materials?

As construction would not occur, the No Build Alternative would not impact hazardous materials. Any existing hazardous materials within the proposed project corridor would remain and would not be cleaned up.

4.11.4 How Would the Build Alternative Impact Hazardous Materials Long-Term?

Based on the nature or status of the identified hazardous materials database listings, media affected, and the distance and/or location of these properties relative to the Project Area corridor; these identified properties were considered unlikely to have an adverse impact on the Project Area corridor. As part of the Build Alternative, a number of property acquisitions have been proposed. Acquisition of contaminated sites is not anticipated, and it is not anticipated proposed property acquisitions would create liability for WSDOT with respect to hazardous materials cleanup.

4.11.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

Proposed construction activities within the Build Alternative footprint may include cut slopes, over excavation of unsuitable soils, and installation of stormwater features and utility lines. Pre-existing contaminated material may be encountered during site grading or subsurface work.

Accidental hazardous materials spills may occur due to construction activities. Construction sites involve various activities, equipment, and materials that can result in a release of hazardous materials into the environment. Construction vehicles and equipment typically use gasoline, diesel, motor oil, transmission fluid, radiator coolant, brake fluid, and hydraulic oil. New construction work typically uses cement, asphalt, tar, paving oils, tack, and paint.

4.11.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

Long-Term Impacts

Once the Build Alternative is constructed, appropriate BMPs would be in place to control both flow and water quality of stormwater runoff generated by the additional impervious surface. These measures would help minimize effects from any hazardous materials (transported in the runoff) to surface water quality. See Section 4.9.6 for additional detail.

Short-Term Construction Impacts

WSDOT would properly handle and dispose of any contaminated soil and/or groundwater encountered. Construction activities would eliminate potential contaminant sources and remove contamination that might otherwise have remained in the environment and continued to migrate. A general special provision would be included in the contract document to address encountering hazardous materials.

A Spill Prevention Control and Countermeasure (SPCC) Plan is required for all WSDOT construction projects per Standard Specifications Section 1-07.15 (WSDOT 2021b). Prior to beginning construction, the contractor is required to prepare a project-specific plan to be used throughout the duration of the project. The plan must be updated to reflect actual site conditions and practices. Preventing a spill is the primary goal; however, the contractor is expected to be prepared to minimize the impacts of a spill through immediate and appropriate response actions should such a need arise.

4.11.7 Would the Build Alternative Have Adverse Hazardous Materials Impacts?

WSDOT would implement procedures to properly handle and dispose of any contaminated materials encountered and appropriate BMPs would be in place to help prevent spills and respond to any that occur during construction. No significant, adverse impacts are expected to result from the proposed project.

4.12 Archaeological and Historic Resources

Projects that receive federal funding or subject to federal approval must comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966. Section 106 requires federal agencies to identify and evaluate the effects of federally funded or permitted projects on historic properties and to consult with stakeholders to avoid, minimize or mitigate adverse effects. An historic property is typically 50 years or older, and includes prehistoric or historic districts, sites, buildings, structures, objects, and properties of traditional religious and cultural importance that are listed or eligible for listing on the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. If historic properties are identified, potential adverse effects must be assessed, and resolution methods recommended. Because the Freight Corridor project has federal funding, the project is subject to Section 106.

The following sections are summarized from the *Cultural Resources Inventory for the SR 3 Freight Corridor – New Alignment Project* (WSDOT 2023b).

4.12.1 How Were Impacts to Archaeological and Historic Resources Evaluated?

A *Cultural Resources Inventory* was prepared by WSDOT in 2011 for the Belfair Bypass project and was used as the basis of the current study, prepared in September 2023 (WSDOT 2023b). This section has been updated from the 2013 EA to reflect current conditions.

The procedures under Section 106 require identification of an Area of Potential Effect (APE), identification of historic properties located within the APE, and evaluation of a project's effects on historic properties. An APE is the geographic area within which a project may directly or indirectly cause alterations in the character or use of historic properties. WSDOT, in coordination with the Washington Department of Archaeology and Historic Preservation (DAHP) and other stakeholders, defined the APE for the Project, shown in Figure 4.12-1. Ground disturbance would take place within the project footprint only, which includes project clearing limits and stormwater facilities. The current APE has not significantly changed from 2013.

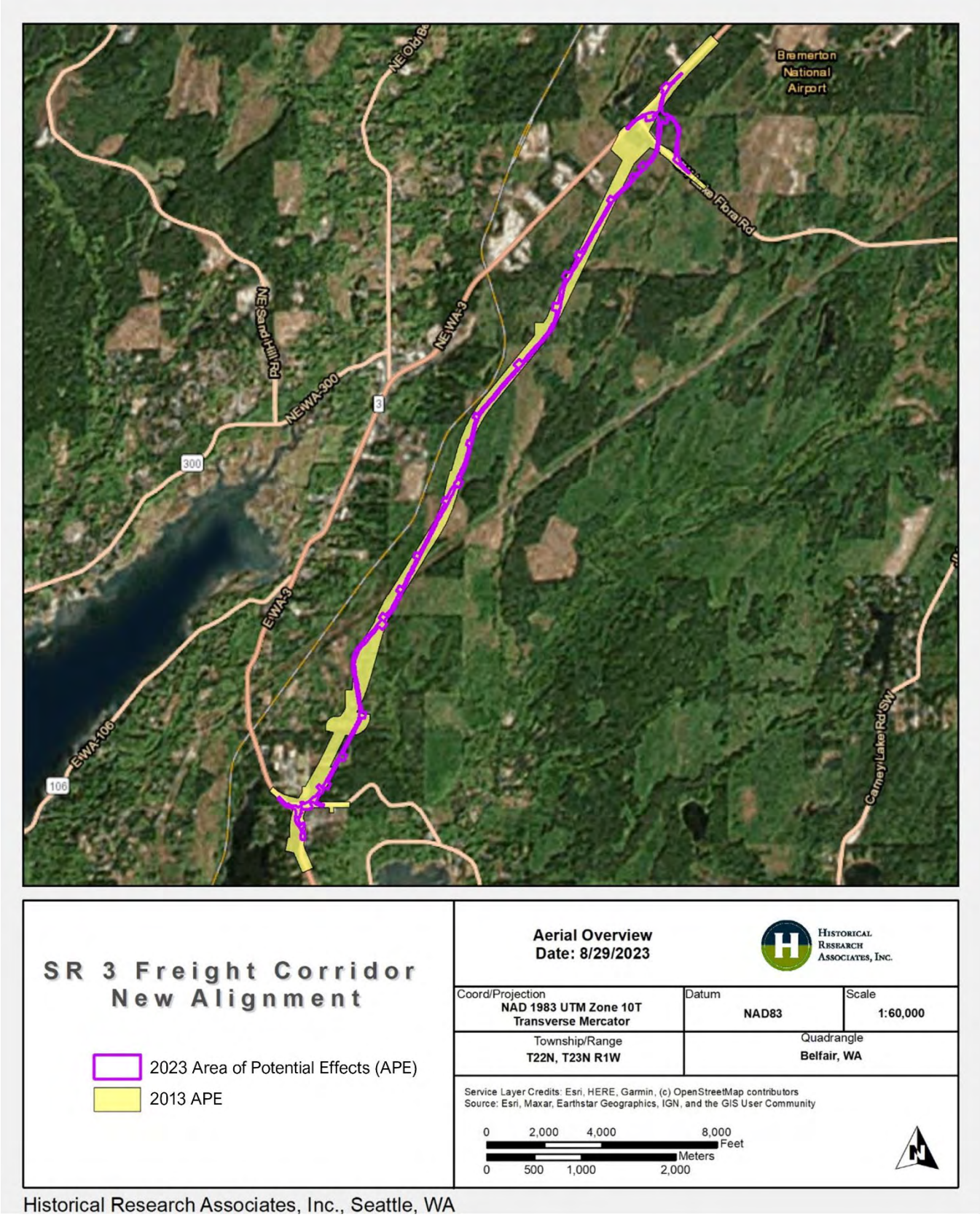
Background research was conducted using a research radius of ½ mile. Background data sources included:

- Washington Information System for Architectural and Archaeological Records (WISAARD)
- WISAARD statewide predictive model
- Literature on the context and ethnographic history of the project area
- Historic-period plats from the US Surveyor General's General Land Office
- Online historic-period map archives, newspaper articles, local histories, and aerial photographs.

Archaeologists conducted field investigations within the APE between August 18 and 22, 2022, to identify areas with a high potential to contain archaeological resources, and to determine if any archaeological resources would be affected by the proposed project. A pedestrian survey was completed for all areas that had not been surveyed during the work in 2011. In-ground survey was completed in areas that had not been previously surveyed and are considered to have a high potential for finding resources. Due to refinements in the project alignment, additional pedestrian survey was conducted on August 1, 2023.

Archival and field research for the architectural survey was initially conducted in 2011, and again in December 2021. Field research included the collection of digital photographs and field notes documenting materials, style, and the history of use and alteration for all resources within the APE that were constructed in 1978 or earlier (i.e., would reach the age of 50 years before project completion). That survey was updated with additional archival and field research in July 2023. Additional details on the survey methods can be found in the *Cultural Resources Inventory*.

Figure 4.12-1 Area of Potential Effect



Historical Research Associates, Inc., Seattle, WA

How Are Properties Determined to Be Historic?

The National Park Service (NPS) administers the NRHP, which is the official list of the nation's historic places worthy of preservation. In order to be eligible for listing on the NRHP, a historic property must be significant in American history, architecture, archaeology, engineering, or culture. Additionally, an historic property must meet one or more of the four NRHP criteria:

- **Criterion A:** Be associated with events that have made a significant contribution to the broad patterns of our history.
- **Criterion B:** Be associated with the lives of persons significant in our past.
- **Criterion C:** Embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- **Criterion D:** Have yielded, or may be likely to yield, information important in prehistory or history.

The integrity of a historic property is a key consideration in NRHP eligibility. Integrity is the ability of an historic property to convey its significance through historic qualities such as location, design, setting, materials, workmanship, feeling, or association. The degree of integrity is taken into consideration when evaluating resources under the NRHP criteria. For example:

- If eligible for historic associations under **Criterion A**, a resource should **retain substantial aspects of its overall integrity**, although design and workmanship may not weigh as heavily as those aspects related directly to its historic associations.
- To be eligible for association with a prominent person under **Criterion B**, the resource should **retain some aspects of integrity**, although design and workmanship may not be as important as the other considerations.
- To be eligible under **Criterion C**, a resource must **retain its physical features that constitute a significant construction technique or architectural style**. Critical aspects of integrity for such properties are design, workmanship, and materials. Location and setting are also important for those resources whose design reflects their immediate environment.
- Resources significant under **Criterion D** may not have the type of integrity described under the other criteria. **Location, design, materials, and workmanship are generally the most important aspects of integrity** for Criterion D resources.

4.12.2 What Are the Existing Archaeological and Historic Resources in the APE?

Archaeological and Historic Resources in the APE

The DAHP predictive model indicates the APE has a low or moderately low probability of containing archaeological resources, and very few archaeological resources have been identified during previous archaeological work in the vicinity. However, the topography across much of the APE is undeveloped forest terrain situated between Hood's Canal and North Bay, two prominent waterways in the area. Historic map and aerial research of the vicinity of the APE revealed that the area has been largely undisturbed, with the exception of SR 3, a few roads at the north and south ends of the APE, the BPA Shelton–Kitsap No. 2 115-kV Transmission Line crossing the south-central portion of the APE, and logging activity in the vicinity throughout the historic period. Numerous meandering streams and wetlands in the project vicinity were also depicted within the APE as early as 1856. Indigenous populations regularly utilized settlement and subsistence systems within saltwater, river, and inland environments in their territories. The lack of development, as well as the proximity to wetlands, fresh and salt water, and associated natural resources suggests at least a moderate likelihood of encountering intact cultural resources.

The 2011 survey of the Belfair Bypass project identified one archaeological resource, a historic-period concrete foundation (Site 45MS200). Site 45MS200 has been determined not eligible for listing in the NRHP. No other archaeological resources have been identified within the proposed APE or within a 0.5-mile radius.

Two historic-period, built-environment resources were identified within the APE. One of these resources, a residence at 20400 E SR 3, is recommended not eligible for listing in the NRHP. The Bonneville Power Administration (BPA) Shelton–Kitsap No. 2 115-kV Transmission Line, which overlaps with the APE, has been previously determined NRHP-eligible elsewhere in Mason County. The portion of the line within the APE has not been previously evaluated and is recommended eligible for listing in the NRHP under Criterion A. The resource's period of significance is 1950, and its boundaries are the entire transmission corridor.

4.12.3 How Would the No Build Alternative Impact Archaeological and Historic Resources?

Under the No Build Alternative, no SR 3 Freight Corridor would be constructed; therefore, no impacts to archaeological and historic resources would occur.

4.12.4 How Would the Build Alternative Impact Archaeological and Historic Resources Long-Term?

Two historic-period, built-environment resources were identified within the APE. One of these resources is recommended not eligible for listing in the NRHP. The segment of the BPA Shelton–Kitsap No. 2 115-kV Transmission Line within the APE is recommended eligible for listing in the NRHP under Criterion A, as it meets the eligibility requirements laid out in the BPA Transmission System Multiple Property Document (MPD). The resource's period of significance is 1950, and its boundaries are the entire transmission corridor. None of the transmission towers or poles fall within the APE. The project improvements would pass under the conduit (wires) without impacting any of the towers or poles adjacent to but outside of the APE. While the project improvements would slightly diminish the transmission line's integrity of setting, the changes would not detract from the resource's ability to convey its significance.

No long-term impacts to any archaeological or historic resources are anticipated from the project.

4.12.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

There are no short-term construction impacts anticipated from the Build Alternative.

4.12.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

No impacts to archaeological or historic resources are anticipated. In the event that archaeological deposits are inadvertently discovered during construction in any portion of the APE, ground-disturbing activities should be halted immediately, and the project proponent should be notified. The project proponent would then contact DAHP and the affected Tribes, as appropriate.

4.12.7 Would the Build Alternative Have Any Adverse Impacts on Archaeological and Historic Resources?

Based on the results of the Section 106 consultation, the proposed Build Alternative would have no adverse effect on historic properties. DAHP concurred with this finding on November 28, 2023.

4.13 Public Services and Utilities

The Build Alternative was evaluated to identify long-term and construction-related impacts on existing utilities in the study area. Existing utilities include public and private providers of electricity, water, sewer, natural gas, telephone, data, fiber optic, and other services that could be affected by construction activities.

4.13.1 How Were Impacts to Public Services and Utilities Evaluated?

A *Public Services and Utilities Discipline Report* was completed in April 2012 and updated in August 2023 (WSDOT 2023h) for the new project alignment and to updated existing conditions. The report describes the existing public services and utilities located in the study area and evaluates potential impacts with and without the Build Alternative. Information collected through various sources (local agencies, service providers and utilities, GIS maps, planning documents, etc.) was used to define typical service routes used by public services and to map existing utilities. For public services, typical service routes were analyzed to determine how the project might impact the normal operations of each public service. Existing utilities were identified through study of conceptual-engineering drawings and aerial photos of the study area. Maps of existing facilities were provided by the utility companies.

4.13.2 What Are the Existing Public Services and Utilities in the Study Area?

The majority of the Build Alternative footprint is currently undeveloped land. As the proposed Freight Corridor leaves SR 3 near the SR 3/SR 302 intersection, heading northeast, it passes through a corridor for high-powered transmission lines, at which point it enters the Belfair Urban Growth Area (UGA). The route continues through the Belfair UGA until it reaches the border of Kitsap County, where it enters the Bremerton City Limits. Public services and utilities can currently be accessed at the southern end of the Build Alternative footprint near the existing intersection of SR 3 and SR 302 (Victor Cutoff Road), and at the northern end of the Build Alternative footprint near the existing intersection of SR 3 and Lake Flora Road. This report focuses on the proposed Freight Corridor, within 0.5 miles of the proposed route.

Public Services

The majority of the study area lies within Mason County, a large portion of which falls within the Belfair UGA. Because the Belfair community is not an incorporated city, most services are provided by Mason County or special districts. The northeastern portion of the study area that is within Kitsap County lies mainly inside the Bremerton city limits. This area's public services are provided by the City, county special districts, or community groups.

Police

Law enforcement within the study area is provided by three separate agencies:

- The Mason County Sheriff's Office provides police protection and patrols the community of Belfair and Mason County. This jurisdiction covers the majority of the study area.
- The Kitsap County Sheriff's office provides law enforcement for the northern portion of the study area within Kitsap County.
- The Washington State Patrol covers the entire study area. The District 8, Bremerton Detachment is responsible for patrol duties throughout the entire study area, with primary responsibility of SR 3 and secondary responsibility for collision investigations on county roads.

Fire and Emergency Medical Services

Fire and emergency medical services are provided by North Mason Regional Fire and Mason County Fire District No. 2. Services are provided from two fire stations, located in Belfair and Collins Lake, 24 hours a day. Patients within the study area in need of emergency medical treatment would need to be transported to Harrison Medical Center's Bremerton hospital, the closest medical facility providing 24-hour emergency care.

Public Health

Mason County Public Hospital District 2 supports medical care in Belfair and within the study area. It is a public governmental district with the responsibility of ensuring that the residents of North Mason County have access to high-quality health care in the local community. The Hospital District contracts with Harrison Medical Center to provide local urgent and primary medical care at a clinic in Belfair, located at 21 NE Romance Hill Road.

Transportation

Transportation providers and facilities in the study area include:

- Mason County Transportation Authority (Park and Ride Lots, Dial-A-Ride service, vanpools, and bus service)
- Bremerton National Airport
- Puget Sound and Pacific Railroad

Public Education

North Mason School District serves the majority of the study area. Schools within the district include:

- Belfair Elementary School
- Hawkins Middle School
- HomeLink School
- North Mason High School
- Pace Academy
- Sand Hill Elementary School
- James A. Taylor High School

South Kitsap School District serves the northern portion of the study area outside of Mason County. District schools that serve this portion of the study area include:

- Sunnyslope Elementary School
- Cedar Heights Junior High School
- South Kitsap High School

Libraries

The study area has one public library, North Mason Timberland Library in Belfair.

Religious Institutions

Residents within the study area have access to many religious institutions located throughout the community. While many religious institutions exist in nearby communities in Mason and Kitsap Counties, only those within and around the study area might be affected by the proposed Build Alternative. Religious institutions in the study area include:

- Jehovah's Witnesses (Belfair Kingdom Hall)
- North Mason Bible Church
- North Mason United Methodist Church
- Church of Jesus Christ of Latter-Day Saints
- The Bridge Church
- Belfair Community Church

Utilities

Existing utilities within the study area are generally located along the SR 3 right of way and include public and private providers of electricity, water, sewer, natural gas, telephone, data, fiber optic, and other services that could be affected by construction activities.

Electrical Service

Electrical service providers in the study area include:

- Mason County Public Utility District (PUD) No. 3
- Puget Sound Energy (Kitsap County)

Natural Gas

Natural gas service for residential, commercial, and industrial customers in the study area is provided by Cascade Natural Gas (CNG).

Stormwater

Stormwater along existing SR 3 through the study area is treated mainly by grass-lined ditches. Culverts under driveways, intersections, and SR 3 itself convey stormwater when necessary. In Kitsap County, the Surface and Stormwater Management Program administered by Kitsap County Public Works cleans and maintains the county's stormwater facilities, including ditches, catch basins, and ponds.

Telecommunications

Communications service providers in the study area include:

- CenturyLink
- Comcast XFINITY
- Mason County PUD No. 3 (fiber optic lines)

Drinking Water

Belfair Water District No. 1, formed in 1966, provides water to the community of Belfair and the surrounding study area in Mason County. The northeastern portion of the study area in Kitsap County is mostly within the Bremerton city limits, which borders SR 3 on the southeast side. Within the city limits, residents are supplied drinking water by the City of Bremerton. Those residents on the northwest side of SR 3 in Kitsap County have no public water system and must rely on private wells.

Solid Waste Disposal

Garbage and recycling services within the study area are provided by both Mason and Kitsap Counties' Solid Waste Divisions.

Sewer

Sewer service within the study area is provided by Mason County, Kitsap County, and the City of Bremerton.

4.13.3 How Would the No Build Alternative Impact Public Services and Utilities?

The No Build Alternative would have no impacts to local utilities or public services. The increase in traffic congestion expected over time could create difficulties for some public service providers, such as emergency services, to access adjacent properties.

4.13.4 How Would the Build Alternative Impact Public Services and Utilities Long-Term?

Completion of the proposed Freight Corridor would allow for increases in public services. SR 3 currently serves as the only freight route through southwest Kitsap and northeast Mason Counties and is a major north-south link for commuters. The new alignment would allow for quicker response times from police, fire, and emergency medical responders by allowing them to bypass Belfair.

Emergency service providers (police, fire, emergency medical, etc.) would experience faster and safer response times. Likewise, public transit would be able to offer faster travel times between Shelton and Bremerton.

Completion of the proposed Freight Corridor would allow for increased development within the study area, which would increase demand on utilities as population density increases. The Belfair UGA Plan estimated that the area will substantially increase in population over the next 20 years (Mason County, 2021).

4.13.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

Because the Build Alternative would be constructed in a mostly undeveloped corridor with limited intersections, there are few utilities within the proposed construction area. Current WSDOT policy requires that all conflicting utilities within the construction boundaries of the Build Alternative footprint be relocated or mitigated prior to the project being advertised for construction bidding. This allows the Build Alternative to be constructed without risks of impacts to those utilities.

Public Services

SR 3 is the primary north-south highway used by fire and emergency medical responders in this area. Construction of the SR 3 Freight Corridor would temporarily increase congestion on SR 3, particularly at the proposed intersections of the Freight Corridor and SR 3, which could delay response times.

Response times for sheriff and state patrol officers may or may not be affected by temporary construction related congestion and delays, since officers on patrol would be dispersed throughout the study area.

Construction of the Freight Corridor would temporarily increase traffic congestion during construction of the south and north termini, impacting transit service and public school buses transporting students to and from school. With adequate public notice school bus routes could be temporarily altered to avoid areas of construction and minimize delays.

SR 3 is the major route between Shelton and Bremerton used by fire, police, and emergency medical providers. Construction of the Freight Corridor would temporarily increase congestion on SR 3, north and south of Harrison Medical Center's Belfair Clinic. This would affect patients traveling to the clinic from north or south of the study area. Patients who live within Belfair would not be affected by the construction.

Utilities

The adjustments and relocations of utilities would result in minimal service interruptions, typically lasting only minutes. Existing utilities within the project area would experience limited construction impacts, mainly in the two locations where the proposed Freight Corridor would connect with SR 3.

Existing water and sewer lines would be located prior to construction so they can be avoided. Coordination with the utility may be required to provide adequate clearance for existing structures.

Existing electrical lines (underground and overhead) follow SR 3. These would be located prior to construction so that construction activities could be coordinated with the electric utilities. Underground lines would be avoided if possible, but may need to be relocated due to the construction of the bypass. The proposed centerline would pass under BPA high voltage power lines and coordination with BPA would be essential to provide adequate overhead clearance for the power lines as the Freight Corridor is built.

Existing natural gas lines would be located along with other utilities prior to construction so they can be avoided. Construction of the Freight Corridor would have no effect on natural gas delivery.

Existing telecommunications lines would be located along with other utilities prior to construction so they can be avoided. Construction of the Freight Corridor would have no effect on telecommunications.

4.13.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

Long-Term Impacts

Public Services

The proposed Freight Corridor would require consultation with some public services in the area to determine how the corridor would be incorporated in their service areas. For instance, coordination with Mason Transit

would determine the need and placement for transit stops along the Freight Corridor. These same stops could be used by school buses.

Utilities

Once the Freight Corridor is operational, additional mitigation measures would not be required.

Early and frequent communications with utility companies would occur during the final design phase of the Build Alternative. Utilities affected by construction would be identified as early as possible and utility relocation/ mitigation plans would be developed jointly between the design team and the utility to ensure that relocation/ mitigation actions meet utility companies' needs, as well as any applicable safety, regulatory, or industry standards.

Short-Term Construction Impacts

Temporary construction effects would be coordinated with the service providers to minimize effects.

Public Services

A project-specific traffic management plan (TMP) would be developed to avoid or minimize potential impacts to public services during construction. Traffic impacts would mainly be concentrated in the area around the intersection of SR 3, E Lake Deveraux Road, and SR 302 in the southern portion of the Build Alternative where the proposed new alignment would intersect with existing SR 3, as well as the area around the intersection of SR 3 and Lake Flora Road in the northern portion of the Build Alternative where the proposed alignment would intersect with SR 3. Providing advance notice to police, fire, and emergency medical services regarding the particular dates for anticipated construction disruptions, would help mitigate agency concerns over potential construction impacts to public services. Public schools in the area would require adequate public notice and coordination so that school bus routes could be temporarily altered to avoid areas of construction and minimize delays. In addition, as discussed in Section 4.14.5, a portion of the southern end of the North Mason High School property would be directly impacted. The North Mason School District would receive financial compensation for the portion of the high school property that would be needed to construct the Freight Corridor.

The following items are under consideration to be implemented during project construction to avoid disruptions to those using the roadway:

- Current and upcoming construction activities would be posted on the project website.
- Variable message signs would be located in advance of the construction area to provide information regarding upcoming closures or delays.
- Consideration would be given to advertising construction activities with traffic impacts in local newspapers and radio stations.
- Access to all businesses would be maintained.

Utilities

The final design and location of the proposed Build Alternative should be closely coordinated with all potentially affected utilities to help minimize or avoid construction impacts. Utilities affected by the project would be identified early with development of relocation or mitigation plans to follow. Relocation plans would be developed with input from the utility owners so that utilities are moved to a safe distance beyond the edge of roadway and construction activities.

4.13.7 Would the Build Alternative Have Any Adverse Impacts on Public Services and Utilities?

No adverse impacts to public services or utilities are anticipated as a result of the Build Alternative.

4.14 Visual Quality

People's primary experience of an environment is through what they see. Visual resources are an important aspect of environmental quality; they can influence a viewer's perception of an area, provide a sense of community, and contribute to overall quality of life. Potential visual changes resulting from road construction include changes to vegetation, new features in the visual landscape, light and glare, and night sky impacts.

4.14.1 How Were Visual Quality Impacts Evaluated?

A visual assessment was completed in 2012 as part of the original EA analysis. Since that time, changes have occurred in the area, primarily residential and commercial construction in the Belfair area. An updated *Visual Impact Assessment and Discipline Report* (WSDOT 2023k) was completed in August 2023 in support of this SEA effort.

A project's visual impact is influenced by how compatible it is with the surrounding area, how sensitive viewers are to the changes associated with the project, and the degree of the impact. FHWA's *Guidelines for the Visual Impact Assessment of Highway Projects* (FHWA 2015) characterize the degree of visual impact of a road project as either beneficial, neutral, or adverse. A project may benefit the visual character of an area by creating better views of visual resources or it may adversely affect visual quality by degrading visual resources, obstructing or altering desired views.

Existing conditions were analyzed using a combination of GIS mapping, field investigations, photographs, and a review of preliminary engineering plans and past visual quality analyses. This analysis also included a review of the existing zoning codes and comprehensive plans for each of the jurisdictions that would be affected by the project to understand each jurisdiction's future land use plans and urban design goals.

What Is the AVE and How Was It Determined?

Consistent with FHWA methodology, the study area for visual resources is known as the area of visual effect (AVE). The AVE encompasses areas from which changes associated with the project would be potentially visible. The project area includes landscapes ranging from dense stands of trees which restrict views along much of the route, to wide-open spaces containing buildings and landscaped areas. Given this variety of landscape types within the project area, the AVE varies by location. For this project, the AVE is considered to consist of areas along both sides of the proposed SR 3 Freight Corridor alignment that are within approximately 0.25 miles of the project footprint.

4.14.2 What Existing Visual Resources Are in the AVE?

Land use types in the project area vary and include residential, commercial, vacant or undeveloped, and resource lands. Despite increasing populations in urban growth areas (UGAs) in recent decades, the majority of the AVE lies primarily in a rural, undeveloped forest land. There are no designated Wild and Scenic Rivers within the project area.

What Is the Existing Visual Quality of the AVE?

Consistent with FHWA's methodology, the AVE was divided into a series of landscape units defined by viewshed and landscape type. Landscape units are visually distinct areas, each with a relatively homogeneous visual character and viewer type. Landscape units often correspond to land use types since these tend to have a particular visual identity and generally correspond with viewer sensitivity.

The project's AVE contains three landscape units that represent the distinct visual environments existing within the project area:

- **Landscape Unit 1:** The southern terminus of the project alignment, from the southern end of the AVE to approximately 0.25 mile north of SR 302.
- **Landscape Unit 2:** The central portion of the project alignment, from just north of SR 302 to just south of Log Yard Road.
- **Landscape Unit 3:** The northern terminus of the project alignment, from approximately 0.25 mile south of Log Yard Road to the northern end of the AVE.

These three landscape units are described below. The location of each landscape unit is shown in Figure 4.14-1.

The views in each landscape unit are described for both travelers and neighbors. Travelers would be temporary viewers traveling along SR 3 and connecting roads in the project area, including motorists, pedestrians, and bicyclists. Neighbors include everyone who would be looking toward the proposed alignment, rather than traveling on it. The exposures, awareness, and sensitivity of the viewers are also described.

Landscape Unit 1

The character of this landscape unit is lightly developed and somewhat forested, typical of a rural state highway. A few commercial/public land uses, including the North Mason School District campus and the LDS church, are located near the intersection of SR 3 and SR 302. Some sparse residential development is also present in this landscape unit, including the Belwood Estates development south of SR 302.

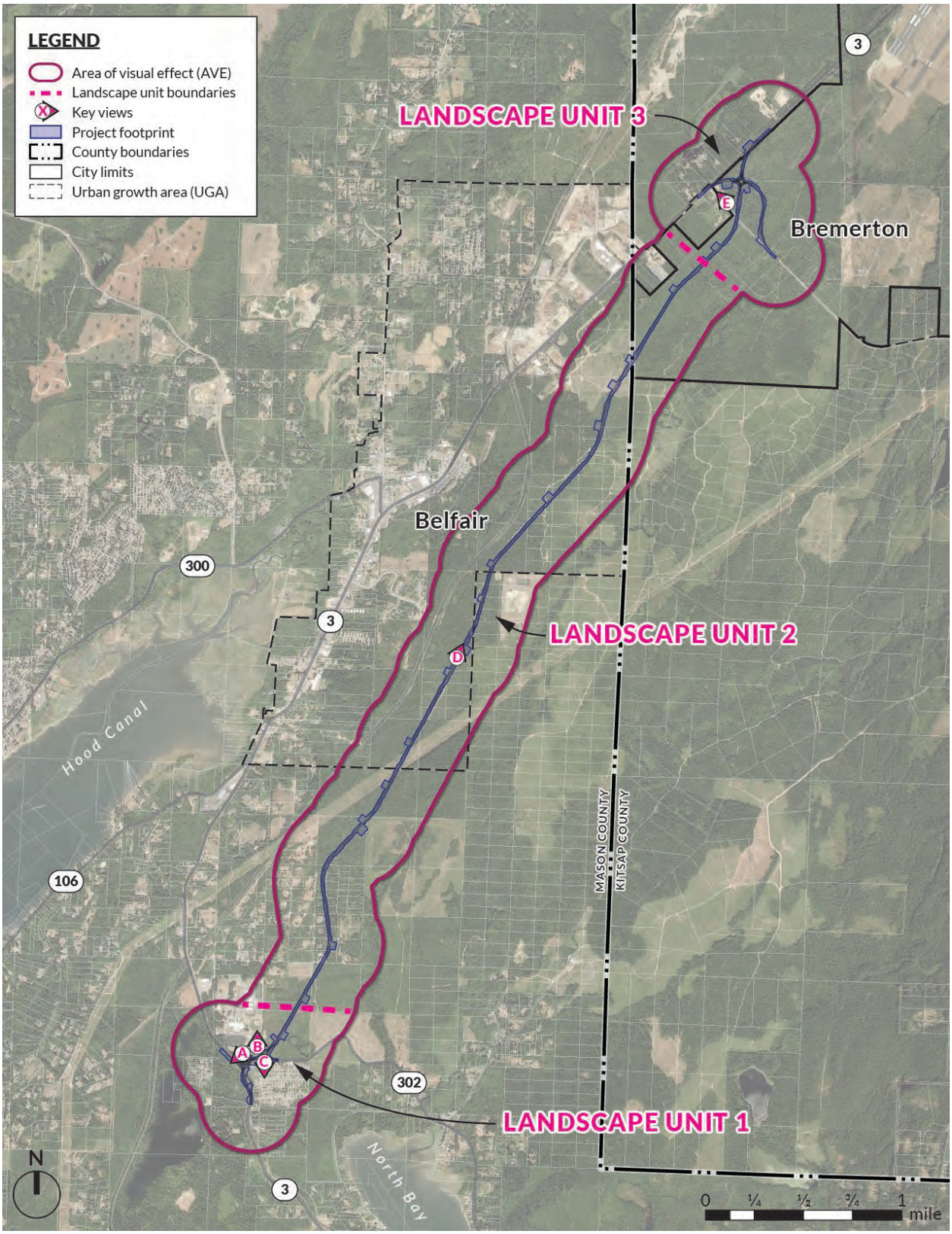
Landscape Unit 1 – Looking West toward SR 3 from SR 302

Travelers in this landscape unit would be exposed to the landscape for a relatively short duration. Their awareness of and sensitivity to changes in the landscape would be low.

Neighbors in this landscape unit include visitors to North Mason High School and the LDS church (students, teachers, parishioners) as well as motorists and pedestrians along SR 302 and nearby roads. These neighbors would be exposed to the landscape on a near-daily basis, and their awareness of and sensitivity to changes in the landscape would be high.

Views in this landscape unit have an average to high degree of natural harmony and an average degree of cultural order.

Figure 4.14-1 Visual Quality Units in the Area of Visual Effect



Landscape Unit 2

This landscape unit is forested, largely with second- and third- growth coniferous forest. The alignment is partially cleared through some of the proposed project area. However, the cleared portion is currently only about 20 feet wide; this corridor would need to be widened and further cleared to accommodate the proposed highway.

As this landscape unit is not currently developed, there are no travelers experiencing this landscape unit currently. There are a handful of neighbors – motorists and pedestrians near the north and south ends of this landscape unit, as well as some residents nearby, mostly toward the southern end. Though neighbors in this landscape unit are few, their exposure to the landscape would be high, and they would have a high degree of awareness and sensitivity to changes in the landscape.

Landscape Unit 2 – View within Existing Forested Corridor

Views in this landscape unit have a high degree of natural harmony and a low degree of cultural order.

Landscape Unit 3

This landscape unit is lightly developed and somewhat forested with third- and fourth-growth vegetation, typical of a rural state highway. It is less developed than Landscape Unit 1; there are very few residential neighbors in the area. There are some existing industrial uses to the west of the landscape unit, along the existing SR 3 corridor.

Travelers in this landscape unit would be exposed to the landscape for a relatively short duration. Their awareness of and sensitivity to changes in the landscape would be low.

Neighbors in this landscape unit include visitors and workers at the industrial uses in the area, as well as motorists and pedestrians along Lake Flora Road and other nearby roads. These neighbors would be exposed to the landscape on a fairly regular basis, and their awareness of and sensitivity to changes in the landscape would be average to high.

Landscape Unit 3 – Looking West toward SR 3 from Lake Flora Road

Views in this landscape unit have an average degree of natural harmony and an average degree of cultural order.

4.14.3 How Would the No Build Alternative Impact Visual Quality?

Because construction would not take place, there would be no visual changes to the area with the No Build Alternative.

4.14.4 How Would the Build Alternative Impact Visual Quality Long-Term?

The Build Alternative would produce changes to the footprint of SR 3 that could be seen by adjacent viewers and people traveling on SR 3 in the vicinity of MP 22.81 and MP 29.49, where the proposed freight corridor would connect into the existing highway. Changes would also occur along the proposed freight corridor alignment, which is currently largely forested.

Landscape Unit 1

The project would eliminate approximately 79 acres of native vegetation, some of which are buffer areas adjacent to the North Mason School District, the LDS church, Log Yard Road, and adjacent residential locations. As noted below, by removing these buffers, the project corridor would be more visible to neighbors. Travelers would also be more aware of the surrounding built environment. Headlight glare may be more apparent to neighbors.

Overall, impacts would be minor and would become less noticeable over time as vegetation replanted consistent with WSDOT's R*oadside Policy Manual* (WSDOT 2015) becomes mature.

The roadway at the corridor's southern terminus would be widened to accommodate the western roundabout at the southern terminus of the new highway. With the new alignment, the secondary entrance to North Mason High School would become a right-in/right-out access, and the access would be widened to accommodate a triangular island to maintain the right-in/right-out traffic flow. Removal of vegetation to construct the new alignment would make stadium and vehicular lighting from the school grounds more visible to the surrounding neighbors.

Landscape Unit 2

The project would eliminate many forested acres in this landscape unit, which is currently largely forested, to construct the new highway. Mitigation best practices would minimize impacts, but some mitigation measures (such as replanting of native vegetation) would take years to reach maximum effectiveness.

The view within the middle of the proposed bypass would be adversely affected with construction of the new corridor. Due to native vegetation being removed to provide for the new alignment, headlight glare would be more apparent to existing and potential neighbors. These existing and potential neighbors consist predominantly of residential neighborhoods, although existing neighbors are currently few. In order to reduce headlight glare, the entire corridor would have to be replanted with native vegetation to provide a visual buffer between the vehicle traffic and any surrounding neighbors.

There would also be an addition of glare and light simply due to construction of a new roadway, caused primarily by vegetation removal and construction activities. The light impact would primarily have an influence on adjacent residential units, of which there are currently very few.

While the impacts to this landscape unit would be adverse due to the fact that the corridor is not currently developed, they would become less noticeable over time as vegetation replanted consistent with WSDOT's *Roadside Policy Manual* becomes mature. The proposed new highway would be consistent in character with the connecting state highways (SR 3 and SR 302).

Landscape Unit 3

The project would eliminate acres of native vegetation buffer adjacent to the existing SR 3 corridor. As noted below, by removing these buffers, the project corridor would be more visible to neighbors. Travelers would also be more aware of the surrounding built environment. Headlight glare may be more apparent to neighbors. There are currently relatively few neighbors in this landscape unit.

The roadway at the corridor's northern terminus would be widened to accommodate the roundabout and connection to SR 3 at the northern terminus of the new highway. Overall, impacts would be minor and would become less noticeable over time as vegetation replanted consistent with WSDOT's *Roadside Policy Manual* becomes mature.

4.14.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

The project would create temporary visual impacts for SR 3 users and neighbors during construction. Construction activities typically detract from visual quality because construction sites are by nature dynamic and hectic. These activities would include clearing and grading, which would detract from the visual character of the roadside and nearby areas. Impacts on visual resources are typically highest during the construction phase of the project.

Construction activities could cause increases in dust levels that could partially obscure views. If construction takes place after sundown, viewers could be exposed to glare and increased ambient nighttime light levels from heavy equipment and temporary lighting. Construction would comply with local policies and regulations regarding construction mitigation activities, such as earth wetting, fencing, and light shielding, which would reduce the overall visual effect of construction activities.

Other temporary visual impacts would include the presence of heavy construction equipment, materials, signage, and staging areas in the construction zone that would contrast with the vegetated background of the project area and reduce the visual quality of the immediate area during construction. Removal of trees in certain areas would result in temporary debris piles that would not be consistent with the visual character the area and would temporarily reduce visual quality. The presence of materials yards, concrete forms, and roadway fill would also have temporary impacts to the overall visual quality of the AVE.

4.14.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

Long-Term Impacts

The project would be developed with community input to ensure that community concerns relating to visual impacts would be met early in the project. The following measures would be implemented as part of the project and in accordance with WSDOT's *Roadside Policy Manual* in order to reduce or eliminate adverse visual impacts that may result from development of the proposed SR 3 Freight Corridor project:

- Grading limits would be adjusted where possible, within geometric design standards, to protect desirable vegetation; screen undesirable views or expose scenic views; provide natural habitat; and protect wetlands, sensitive areas, and cultural resources.
- Consistent design types, textures, materials, and colors would be applied to structures, lights, and signs throughout the project site to ensure they are compatible with surrounding developments.
- Additional lighting along roadways and the SR 3 corridor would be placed only in areas deemed necessary for safety. Directional and downcast lighting would be used when feasible to minimize nighttime glare in surrounding areas.
- Removal of mature vegetation would be minimized to the areas necessary for construction of the improvements.
- Areas disturbed as part of the SR 3 Freight Corridor project would be replanted as part of a comprehensive roadside restoration plan to restore and enhance roadside functions including screening, corridor continuity, blending of new structures, light and glare reduction, water retention and water quality protection, and view framing consistent with the WSDOT *Roadside Policy Manual* and applicable local design standards.

- Targeted use of vegetation would be employed that adheres to WSDOT *Roadside Policy Manual* guidance to mitigate corridor-wide loss of visual quality.

Short-Term Construction Impacts

In accordance with the WSDOT *Roadside Policy Manual*, the following measures would be used to mitigate for temporary impacts associated with construction.

- Set limits of work areas for vehicles and equipment to minimize and prevent excessive soil compaction. Use flagging and fencing in conjunction with signs to define work areas.
- Minimize compaction during construction. Avoid heavy machinery use on saturated soil.
- Minimize site disturbance to protect trees and native soils and keep ecosystem functions intact.
- Minimize the removal of trees and shrubs and pruning needed during construction.
- Locate staging and laydown areas where there is no vegetation, undesirable vegetation (such as Himalayan blackberry), or vegetation, such as grassed road shoulders, that is easy to restore.
- Restore staging areas once decommissioned to preconstruction conditions or better by restoring natural contours, rehabilitating soils, and planting native vegetation in accordance with WSDOT's *Roadside Policy Manual* (WSDOT 2015).
- Minimize fugitive light from portable sources used during construction.

4.14.7 Would the Build Alternative Have Any Adverse Visual Quality Impacts?

No adverse visual impacts are anticipated as a result of the Build Alternative.

4.15 Geology and Soils

This section includes information on the geologic and soils conditions within the project area, including geologic hazards (steep slope areas, landslides, and earthquake-hazard-prone areas).

4.15.1 How Were Impacts to Geology and Soils Evaluated?

A *Geology and Soils Discipline Report* was completed in September 2011, and was updated in March 2021, and again in August 2023 (WSDOT 2023d), in support of this SEA effort. It describes the existing soils conditions in the project study area and evaluates potential impacts with and without the proposed project. The sources of information used for this evaluation included U.S. Geological Survey (USGS) topographic and geologic maps; WDNR Geology and Natural Resource Division geologic maps; Natural Resource Conservation Service (NRCS) county soil surveys; county geologic hazard and critical areas maps; field review of the site; and project site data provided by the Olympic Region Project and Environmental and Hydraulics Offices.

The Washington State Department of Natural Resources and numerous county, state, and federal information websites were also consulted during preparation of the discipline report.

4.15.2 What Are the Existing Geology and Soils Conditions in the Study Area?

Soils

All of the soils along the subject highway corridor in the Kitsap County portion are assigned to the general soil association 4-Alderwood-Harstine: Nearly level to steep, moderately deep, moderately well drained soils; on uplands. For additional detail on the region's soils, please see the *Geology and Soils Discipline Report* (WSDOT 2023h). The regional soil association is subdivided further into numerous soil units including, in part, the Indianola loamy sand, 15 to 30 percent slopes, and Neilton gravelly loamy sand, 15 to 30 percent slopes.

Geologic Hazards

Erosion

The following soil designations within the proposed corridor are identified as having a potential for severe erosion when vegetation is removed: Indianola loamy sand, 15 to 30 percent slopes, and Neilton gravelly loamy sand, 15 to 30 percent slopes. Construction activities for the new alignment would expose loose surface soils that could be subject to water and wind erosion.

Landslides

The south end of the project encroaches upon an existing mapped landslide feature.

Seismic Hazards

There are a number of active faults within the region that are capable of generating significant earthquakes that could affect the site and there are surface scarps and lineaments within the project corridor area that suggest past seismic ground deformation in the vicinity.

Settlement

While most of the soils mapped within the corridor limits are relatively dense coarse-grained deposits of glacial origin, several soil designations have been mapped within the corridor limits that could potentially result in excessive settlement, if not mitigated by design features or avoided.

Presence of Locally High Groundwater

Areas where the groundwater table is relatively close to the surface (or perched on relatively impermeable materials) can affect highway projects in several ways:

- In areas underlain by fine-grained soils, high groundwater can render these areas susceptible to seismically-induced liquefaction.
- In areas where adjacent wells have been developed in unconfined shallow aquifers, changes in the groundwater levels due to construction activities (construction cuts that intercept the groundwater table, dewatering and drainage provisions) can affect water yields in these wells.
- Areas of high groundwater can affect the availability of storage for potential stormwater treatment facilities (e.g., stormwater ponds).
- High groundwater can substantially affect the stability of proposed cut slopes and embankment slopes.

Additional studies relative to groundwater levels along the corridor would be needed during the final design phase to evaluate the applicability and extent of these areas of limitation. See also Section 4.8 Water Resources.

Low Soil Permeability Areas

Areas of low soil permeability are reported in many areas along the subject corridor. These include areas of compact glacial till, as well as fine-grained silts and clays, sediment-filled depressions and wetlands. Areas of low soil permeability could affect required design runoff calculations for surface water management and the sizing of stormwater facilities and conveyance systems.

4.15.3 How Would the No Build Alternative Impact Geology and Soils?

Under the No Build Alternative, there would be no potential impacts to the geology and soils along the project corridor, as existing conditions and processes would remain as they are currently.

4.15.4 How Would the Build Alternative Impact Geology and Soils Long-Term?

Under the Build Alternative, potential long-term impacts to the geology could include increased erosion due to disturbance of soils; possible locally altered groundwater conditions due to infiltration of runoff and/or interception of shallow groundwater tables in construction cuts; potential for introducing contaminants into the groundwater due to traffic spills and highway runoff; and partial depletion of local aggregate resources. Detailed geotechnical investigations (including subsurface exploration, sampling, laboratory testing, analyses, and instrumentation monitoring) performed during the final design phase would help quantify the potential long-term impacts. These are design elements typically addressed by WSDOT during the design and construction phases using best management practices and various standardized design procedures.

Based on the literature review and site reconnaissance, risks associated with potential landslides appear to be primarily located on slopes adjacent to the unnamed tributary of Coulter Creek in the southern portion of the alignment and could impact design and construction of the embankment. In addition, potential landslide risks may be present at the southern terminus of the project (near the Allyn Landslide) and may impact the design of cut slopes in that area.

The active faults within the region can generate significant earthquakes that could affect the project site. The Tacoma Fault, in particular, has significant design implications for structures within the project. If significant new structures (other than at-grade pavement areas) are planned in this area, further investigation will occur.

4.15.5 Would There Be Short-Term Construction Impacts from the Build Alternative?

Potential impacts of the proposed project to the geology and soils include the potential to increase erosion, possible effects to nearby shallow water wells, and the partial depletion of local aggregate resources. Potential impacts of the geology and soils to the project include the geologic hazards of erosion, landslides, earthquakes, frost action, settlement, and the presence of areas with localized high groundwater and low soil permeability.

4.15.6 How Would Impacts of the Build Alternative Be Minimized or Mitigated?

Long-Term Impacts

Currently potential landslide hazards are present adjacent to the unnamed Tributary to Coulter Creek and possibly at the south end of the project, near the Allyn Landslide. The active faults within the region can generate significant earthquakes and could affect the project site. If significant grade changes or structures are proposed in these areas, detailed subsurface investigation (including sampling, laboratory testing, and slope stability analyses) may be needed for advanced design.

Short-Term Construction Impacts

Erosion

Limiting the acreage of newly exposed soils can reduce erosion. Earthwork operations would be limited to the drier times of the year, when erosion potential is reduced, as much as possible. If the soil remains moist, it is unlikely to be eroded by wind during typical construction operations. One way to mitigate wind erosion (and dust generation) is to apply water to the newly exposed soils during construction operations.

Following the BMPs outlined in the TESC Plan sections of the WSDOT *Highway Runoff Manual* and the WSDOT *Environmental Procedures Manual* would reduce the potential for erosion during construction operations.

Water exiting culverts on embankment slopes would be controlled or dissipated by extending culverts near the base of the slope and/or designing hardened, energy-dissipating outflow channels on the face of the embankment slopes.

Structural Foundation Excavation

Structural foundation excavation material stored on-site would require similar mitigation methods and techniques as those described for erosion in the previous section.

4.15.7 Would the Build Alternative Have Any Unavoidable Adverse Impacts on Geology and Soils?

No unavoidable adverse impacts to geology and soils are anticipated as a result of the Build Alternative.

CHAPTER 5: INDIRECT AND CUMULATIVE EFFECTS

This chapter discusses the potential indirect and cumulative effects resulting from the Build Alternative.

5.1 What Are Indirect Effects?

Indirect effects are effects that are caused by the proposed project but occur later in time or at some distance from the project but are still reasonably foreseeable.

5.1.1 How Were Indirect Effects Analyzed?

Per the Code of Federal Regulations (40 CFR § 1508.8) indirect effects "may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." Indirect effects result from one project but, unlike direct effects, typically involve a chain of cause and effect relationships that can take time to develop and can occur at a distance from the project site.

Under the Washington State Growth Management Act, land use changes are the direct result of local planning decisions. FHWA and WSDOT do not control this process. However, indirect impacts may be associated with a transportation project if the project affects the rate and pattern of land use development by adding a new access or a bypass route.

This analysis included the consideration of potential indirect effects for all of the discipline studies. The study area for each resource was used to assess the potential for indirect effects on each resource. Analysis also sought regional data and studies prepared by Mason and Kitsap Counties and the City of Bremerton. The method for assessing the potential for indirect effects on each resource was similar to the methods for assessing direct effects described in the corresponding discipline reports and technical memoranda.

5.1.2 What Indirect Effects Are Expected from the Build Alternative?

WSDOT looked at interactions between the Build Alternative's effects to identify ways in which it would contribute to effects further removed in time or place.

The possibility of indirect effects related to all the Build Alternative's direct impacts were examined. The Build Alternative would have impacts to both the natural and built environments, as described in Chapter 4.

No indirect effects were identified for air quality, noise, water resources, or hazardous materials. In these resource areas, very little difference was found in development or land use patterns between the No Build and Build Alternatives. The Build Alternative *does not encourage changes in land use beyond those disclosed as direct property impacts (areas where WSDOT is converting land to transportation use)*.

Land Use

Potential indirect impacts could result from project improvements that would directly increase accessibility of the land in and around the designated urban areas as well as improve travel time. The most direct influences on local land uses would likely occur in the PSIC area and the Belfair UGA, particularly in the eastern portion of the Belfair

UGA. Highway improvements could induce development by improving travel times and increasing accessibility to currently undeveloped land making areas more attractive to developers.

The Build Alternative would not indirectly change the residential or commercial character of the area. The project corridor is within the Belfair UGA. None of the local jurisdictions (Mason County, Kitsap County, City of Bremerton) have plans to change existing comprehensive plan designations or zoning as a result of the SR 3 Freight Corridor – New Alignment project. However, Mason County's Belfair UGA Subarea Plan identifies the project alignment in an area of planned residential development of varying densities, with small areas of mixed-use and public facility zones. Because the SR 3 Freight Corridor is planned as a limited access roadway, it would not cause the planned development in that area to occur sooner than without the roadway.

Socioeconomics and Environmental Justice

The project residential displacements would not affect the customer base of businesses, or employment, in or beyond the study area, nor does it displace any businesses.

The potential for new access into undeveloped land could facilitate growth and development in those areas. According to the *Land Use and Relocation Discipline Report* for the project, the proposed Freight Corridor would accommodate growth anticipated from new development (WSDOT 2023f).

The improved mobility within the Belfair commercial area on SR 3 resulting from the diversion of regional through-traffic is expected to contribute to improving the experience of doing business there. It could spur additional growth and development, facilitate the County's vision for the Belfair UGA to serve as an economic and social center, and attract more tourism. The improved travel time and operating speeds for through-traffic on the Freight Corridor is also expected to benefit the economic growth in the region.

Transportation

The Build Alternative would enhance the transportation network, particularly in the Belfair area, by reducing congestion on the existing SR 3 corridor and improving regional traffic mobility, thereby yielding positive indirect effects. These changes may facilitate planned community improvements, such as residential and commercial development.

The Build Alternative would increase accessibility to land that is currently designated forested and undeveloped, particularly in the eastern portion of the Belfair UGA. Being a limited access facility, it is reasonable to anticipate that any development would occur first in the vicinity of planned access points along the Freight Corridor. Though accessibility to undeveloped land will be increased, other factors would also limit the rate of development, such as availability of other infrastructure, including sewer system and local road infrastructure. Future development in the areas around the Freight Corridor have been planned for in Mason County's Comprehensive Plan and Belfair UGA Plan for over a decade.

Visual Quality

As discussed above, the Build Alternative could contribute to development in the area happening in the study area sooner than it would without the Freight Corridor. Indirect effects to the Visual Quality of the project area could result from that development through additional clearing of forested areas. The character of the area would change from natural to a more rural development; however, this change has been anticipated by the County and included in all of their long-range planning processes (Mason County 2017 and 2022).

5.2 What Are Cumulative Effects?

Under NEPA, cumulative effects result from the incremental effects of the Build Alternative when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-federal) or person undertakes the action. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Past and present actions affecting environmental resources are reflected in the existing conditions discussion for the Build Alternative. Reasonably foreseeable future actions include those that are being implemented or have recently been implemented, including planned and funded transportation improvements, and other local and regional infrastructure proposals.

The analysis of cumulative effects helps decision makers and the public know whether or not there are incremental changes to a given resource which could, if left unmitigated, reach significant proportions.

5.2.1 How Were Cumulative Effects Analyzed?

WSDOT's *Environmental Manual* (WSDOT 2021a) was consulted in the identification and analysis of potential cumulative impacts. This document provides guidance for addressing indirect and cumulative impacts to comply with the overarching NEPA analysis and complies with the 2016 *Practitioner's Handbook #12: Assessing Indirect Effects and Cumulative Impacts Under NEPA* issued by AASHTO. The guidance outlines five stages and five analytical steps for identifying and assessing cumulative impacts:

1. Information Gathering
2. Initial Assessment of Cumulative Impacts
3. Determining Scope and Methodology for Cumulative Impacts Analysis
4. Conducting the Cumulative Impacts Analysis
    - Step 1: Describe Resource Conditions and Trends
    - Step 2: Summarize Effects of the Proposed Action on Key Resources
    - Step 3: Describe Other Actions and Their Effects on Key Resources
    - Step 4: Estimate Combined Effects on Key Resources
    - Step 5: Consider Minimization and Mitigation
5. Documentation

For the cumulative effects analysis, effects within spatial and temporal boundaries were considered. In framing the historic and future context, analysis looked at the land use and transportation development patterns since the early 1800s.

Study areas were defined for each resource. The cumulative effects evaluation used the same study areas used in assessing direct effects in the previous chapter of this SEA. Information provided in the 2013 Belfair Bypass EA was considered, in addition to regional data and studies prepared by Mason and Kitsap Counties and the City of Bremerton. The analysis relied on the information in the discipline studies and the regional and local studies referenced in the Land Use section of this SEA (Section 4.10). Information provided in the affected environment and direct effects analysis helped to characterize current conditions and future trends.

The analysis considered the potential for cumulative effects to all resource areas analyzed in this SEA. In addition, the measures to minimize direct effects of the Build Alternative were evaluated in making the cumulative effect determination. For example, temporary construction effects that are fully mitigated during construction are not likely to contribute to a cumulative effect. In general, the study focused on operational effects of the proposed Build Alternative.

Consistent with the *WSDOT Environmental Manual* (WSDOT 2021a), the study of cumulative effects only focused on the resource areas where potential direct and indirect effects were identified. If there are no project impacts on a particular resource, then that resource was not included in the cumulative effects analysis.

5.3 What Are the Reasonably Foreseeable Projects in the Study Area?

This analysis considered how this project, in combination with past, present, and future actions, is likely to affect the natural and built environment.

5.3.1 Future Projects in the Study Area

Individual elements of the Build Alternative have been evaluated to ensure consistency with regionally-adopted policies and priorities.

In addition to the Build Alternative, planned future transportation projects were identified, to be evaluated as part of this cumulative effects analysis. Table 5.2-1 lists these future projects located within the general study area.

Table 5.2-1 Current and Reasonably Foreseeable Future Actions

Project[a]	Location	Purpose	Proponent	Expected Construction Timeframe[b]
Port of Bremerton Multi-Purpose Facility	Bremerton/PSIC Subarea	Construction of an 8,900 square foot building facility housing a hangar, aeronautical use office, pilot planning facility, and a restaurant. Within PSIC subarea	Port of Bremerton	2023
Old Belfair Highway Road Improvements	Belfair	Maintenance, Paving/Reconstruction, Site Development	Mason County	2023
Belfair View Apartments	Belfair	Continued development of apartment complex consisting of 126 apartments and recreation center across seven buildings. Within Belfair UGA	Private developer	2024
Olympic Ridge Residential	Belfair	144-unit residential development	Private developer	Through 2025

[a] Only major planned projects are listed. Many other projects that could be implemented in the reasonably foreseeable future are not shown.
[b] Dates are approximate.

5.4 What Were the Results of the Cumulative Effects Analysis?

The Build Alternative is designed to meet WSDOT environmental stewardship guidance, as well as to comply with all environmental laws. All reasonable measures to minimize adverse effects have been incorporated into the Build Alternative design. The measures combine avoidance, minimization, mitigation, and enhancement. Disciplines that were determined to not have cumulative effects include Noise, Air Quality, Wetlands and Other Waters of the U.S., Fish and Wildlife, Water Resources, Hazardous Materials, Archaeological and Historic Resources, Public Services and Utilities, and Geology and Soils.

Transportation

The Build Alternative directly benefits local and regional transportation. No increase in total traffic is predicted in or around the study area as a result of Build Alternative construction. Beneficial cumulative effects on transportation are anticipated.

Vegetation

Approximately 115 acres would be directly converted to transportation-related use under the Proposed Action Alternative. Of this total, 84 acres are vegetated land types including Coniferous Forest, Mixed Forest, Regeneration areas, and Wetlands. This incremental effect along with other reasonably foreseeable future actions could contribute to and hasten the development of similar vegetated lands within the area. These types of effects would likely be most noticeable at near the north and south access points of the project. In these areas some Coniferous Forest land may become converted to Rural and Residential and Commercial. Some Rural and Residential area may become converted to Commercial (See Appendix A of the *SR 3 Vegetation Discipline Report*). Lands near the interior of the project are less likely to see accelerated changes due to limited access (WSDOT 2021a). The Build Alternative's contribution to the cumulative effect on vegetation would not be adverse or substantial in combination with other past, present, and reasonably foreseeable future actions in Kitsap and Mason Counties.

Land Use

Cumulative impacts associated with the Build Alternative relate to the combination of factors that could create development pressure to convert forested and undeveloped land lying outside of the study area. The proposed project would contribute to cumulative impacts on adjacent land uses that could result from other projects that may occur along, or near, the proposed project route.

Approximately 115 acres would be directly converted to transportation-related use under the Build Alternative. This incremental effect along with other land use effects and transportation improvement projects in the region could contribute to and hasten the development within the project area.

In Mason County, the Build Alternative may serve to accelerate planned development along the proposed corridor by substantially improving travel and accessibility, especially in the vicinity of new access points The SR 3 Freight Corridor has the potential to make the eastern undeveloped portion of the Belfair UGA attractive by providing access to an area that has been isolated, until now requiring access primarily via logging roads. Accessibility combined with improved travel time would attract new interest to the area.

There are currently very few local roads on the east side of SR 3 extending into the undeveloped areas, both within and outside of the UGA. As identified in the Belfair subarea plan the lack of road networks within the UGA is a significant limitation to development. Mason County began planning efforts through the development of a Future Roads Map to help identify the network of roadways needed to accommodate development and plan connections to the Freight Corridor. The roadway recommendations have not been adopted at this time.

Several projects are planned for construction in the reasonably foreseeable future in Mason County. The projects involve transportation and utilities improvements and residential development. The Build Alternative along with other transportation improvements, such as the SR 3 Belfair widening project, is consistent with plans and policies established by Mason County, which encourage investment in infrastructure within the UGA, mobility, economic development, and urban development. Though conversion to higher intensity land uses is expected, it will occur according to land use plans, zoning designations and regulations adopted pursuant to the Growth Management Act (GMA) by Mason County.

On the northern end of the project in Kitsap County, the PSIC area has recently been redefined through a subarea planning process. This major planning effort by the City of Bremerton details regulatory and zoning

designations as part of the subarea plan. The Build Alternative is compatible with existing land use plans. It is assumed that the management of growth and development will be consistent with the draft growth management subarea plan.

Again, many other factors will influence land use decisions, including economic conditions, zoning, and land supply. Cumulatively, impacts from the proposed alternative would contribute to impacts associated with other proposed and future changes that may occur in the PSIC area. The Build Alternative's contributions to the cumulative effects on the conversion of land use would not be adverse or substantial in combination with other past, present, and reasonably foreseeable future actions in Kitsap County.

The Build Alternative represents one of a number of planned improvements occurring within the study area. Overall, it is anticipated that the Build Alternative would support economic development in the area. The Build Alternative's contributions to the cumulative effects on the conversion of land use, farmland, or recreational lands would not be adverse or substantial in combination with other past, present, and reasonably foreseeable future actions.

Socioeconomic and Environmental Justice

There are currently very few local roads on the east side of SR 3 extending into the undeveloped areas, which is a significant limitation to development. Once the proposed Freight Corridor is available, there could be a rapid increase in subdivision, building permit applications, and conversion of forest land to residential, given the right economic conditions.

A small number of projects, including transportation and utilities improvements and residential development, are currently planned for construction in the reasonably foreseeable future in the study area. The Build Alternative along with other planned improvements is consistent with established local plans and policies. Overall, it is anticipated that the Build Alternative would support economic development in the area. The Build Alternative's contributions to the cumulative effects on socioeconomic and environmental justice populations in the study area would not be adverse or substantial in combination with other past, present, and reasonably foreseeable future actions.

Visual Quality

The transformation of the visual landscape began with the arrival of nonindigenous settlers in the mid-19th century. Over a century-and-a-half, people harvested forests, created farms, and built transportation routes for trade and access to resources, steadily developing the Puget Sound region. Urban centers in the area were built and connected through rail and roadways, which over time became significant features of the visual landscape.

The Build Alternative would directly convert approximately 115 acres, most of which is currently undeveloped, to transportation-related use. Along with other planned land use and transportation projects in the area, this conversion could facilitate development within the project area, particularly on the east side of SR 3 which is largely undeveloped, which could result in a decreased visual quality in the cumulative impacts analysis area. However, it would also decrease the visual impacts of traffic congestion within the study area, particularly in the commercial area of Belfair. The Build Alternative would connect to the existing SR 3 north and south of Belfair with the visual consistency of a modern limited access highway, resulting in a neutral visual impact. In the context of the existing and future roadway network, the visual elements of the Build Alternative would not contribute to a cumulative visual impact.

5.5 What Mitigation Measures Were Considered?

The Build Alternative would result in long-term improvements to transportation and would further the goals of regional and local land use and transportation plans. Overall, operations of the Build Alternative would not contribute to adverse cumulative impacts and no mitigation would be necessary.

5.6 How Were Potential Climate Change and Extreme Weather Risks Considered?

WSDOT acknowledges that effects of climate change may alter the function, sizing, and operations of its facilities. Therefore, in addition to mitigating GHG emissions, WSDOT must also ensure that its transportation facilities can adapt to the changing climate. To ensure that WSDOT's facilities can function as intended for their planned lifespan, they should be designed to perform under the variable conditions expected as a result of climate change. For example, drainage culverts may need to be resized to accommodate more intense rainfall events or increased flows due to more rapid glacial thawing.

The Pacific NW climate projections are available from the Climate Impacts Group at the University of Washington (http://cses.washington.edu/cig/fpt/ccscenarios.shtml). Washington State is likely to experience the following over the next 50 years:

- Increased temperature (extreme heat events, changes in air quality, glacial melting) changes in volume and timing of precipitation (reduced snowpack, increased erosion, flooding).
- Ecological effects of a changing climate (spread of disease, altered plant and animal habitats, negative impacts on human health and well-being).
- Sea-level rise, coastal erosion, saltwater intrusion.

The project team considered the information on climate change with regard to preliminary design as well as the potential for changes in the surrounding natural environment. As part of its standard design, this project has incorporated features that will provide greater resilience and function with the potential effects brought on by climate change.

The construction and operation of the Build Alternative would consume energy and emit GHGs into the atmosphere. Operation of the Build Alternative would not be measurably different from the No Build Alternative and thus would not contribute to a cumulative effect (WSDOT Olympic Region Planning Office 2023a). Construction of the Build Alternative would have temporary release of emissions. WSDOT has taken steps to minimize fuel use during construction to reduce GHG emissions by construction equipment by setting up construction areas, staging areas, and material transfer sites in ways that reduce equipment and vehicle idling. Considered with the effects of past, present, and reasonably foreseeable future actions, the Build Alternative would have a negligible contribution to cumulative effects on energy and GHG emissions. WSDOT is active in the statewide and regional efforts to reduce vehicle miles traveled and GHG emissions.

CHAPTER 6: AGENCY, TRIBAL, AND PUBLIC COORDINATION

6.1 Why Does WSDOT Coordinate with the Agencies, Tribes, and the Public?

Public involvement, including opportunities to participate and comment in transportation decision making, is a basic tenet of the NEPA process. According to FHWA policy, public involvement and agency coordination are essential to the development process for the proposed action. In the spirit of WSDOT's management principle to be accountable to the people of Washington, elected officials and other transportation partners, WSDOT coordinates with agencies, tribes, and the public to communicate information about possible project environmental impacts. Through this interactive process, WSDOT raises public awareness and helps ensure that the public is involved with the decision process. This also helps the project team to improve the design and find ways to avoid, minimize, and appropriately mitigate adverse environmental impacts.

6.2 What Is the Background of Coordination Regarding the SR 3 Freight Corridor – New Alignment Project?

WSDOT has been working with the local jurisdictions and the public for many years, starting with the 2001 environmental assessment (prepared for Mason County when the project was known as the Belfair Bypass). It generated a great deal of public involvement efforts, including open houses, newsletters, public presentations, media information and public displays. In 2006, a new proposal for further study included additional public outreach.

As described in Section 1.3, there have been delays in the project, mostly due to funding constraints. Although work has progressed on the Build Alternative, the design of the SR 3 Freight Corridor has not significantly changed. Minor shifts in the roadway alignment were made to avoid impacts. The public involvement activities since 2006 are shown in Table 6.2-1.

Table 6.2-1 Public Involvement Activities

Date	Description
October to December 2006	Meetings were organized with individuals and groups
January 2007	Open House at the Theler Center in downtown Belfair
April 2007	Open House at the North Mason High School Gym
October 2007	Open House at the North Mason High School Gym
2007	WSDOT met with individuals and groups (Kiwanis, Belwood Community, Alta Vista Community, North Mason Chamber of Commerce, and Kitsap County Chamber of Commerce)
2008	WSDOT began informing property owners along the Freight Corridor alignment of upcoming activities, such as surveying
2010	Town hall meeting (March 17, 2010) at the North Mason High School gymnasium; survey; information posted to project website
August 2011	Notices mailed to selected property owners to inform them about the field survey activities needed for environmental studies
December 2012	Open House and Environmental Hearing for Draft EA
October 2019	Open House was held to present information about the modified Freight Corridor project
October 2020	Public meeting was held in the Alta-Brook Neighborhood for comment on the Value Engineering report
November 2020	Briefing with Mason County Commissioners which was placed on YouTube for public viewing; public comments were solicited

6.3 What Feedback Was Received and How Was It Incorporated Into the Build Alternative?

The project team received feedback from members of the public during the various outreach activities. The comments included these general themes:

- Additional capacity and route needed for safe freight travel.
- Connecting to Romance Hill would be unsafe due to the steep grades.
- Additional improvements needed along the existing SR 3 route.
- Concern about potential property acquisition.
- Preference for roundabouts at connection points instead of stoplights.
- Concern over location of south connection point.

As a result of public input, additional analysis, and development within the study area over the years, WSDOT has refined the project design. For example, the north and south connections to the existing SR 3 were revised to include roundabouts instead of signalized intersections. Other shifts in the alignment were made to avoid impacts to residences, minimizing the number of property acquisitions needed, and to be compatible with commercial growth.

6.4 How Has WSDOT Involved Agencies in the Currently Proposed Project?

WSDOT coordinates with agencies that are responsible for issuing environmental permits and who have special expertise in project-related environmental fields. This coordination is accomplished through emails, meetings, verbal contacts, and official letters. For this project, coordination is ongoing between WSDOT/FHWA, and the USFWS, NMFS, EPA, U.S. Army Corps of Engineers, Ecology, WDFW, DAHP, FAA, Mason County, Kitsap County, City of Bremerton, Mason and Kitsap County Transit Systems, and the North Mason and Kitsap County School Districts.

In addition to these meetings there is a Stakeholder Advisory Group comprising a large group of agencies which held several meetings between the summer of 2019 and the spring of 2020. Most agencies only asked to be informed of ongoing status as the project moved through design. The comments topics discussed during the meetings included the following:

- Connection points to the existing SR 3.
- Effects on traffic circulation in the immediate vicinity and in the region.
- Potential relocations of residents due to property acquisition.
- Road capacity and future population growth.
- Future road connections.
- Traffic safety and emergency response.
- Effects on North Mason High School.
- Other design considerations.

6.5 How Has WSDOT Involved Tribes with the Currently Proposed Project?

WSDOT and FHWA are committed to government-to-government consultation with interested tribes in the project area. The consultation process under Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) is followed to make sure tribal issues are considered in the design of projects. To comply with the NEPA environmental review and Section 106 processes, WSDOT follows the Model Comprehensive Tribal Consultation Process for the NEPA (available on the WSDOT website) when coordinating with tribes. This model provides a consistent method of tribal consultation and opens a channel of communication between WSDOT and tribes whose area of interest is within the project boundaries.

Seven tribes were informed about the project and were given opportunity to comment on the project's APE as part of the Section 106 process: Jamestown S'Klallam, Port Gamble S'Klallam, Puyallup, Skokomish, Squaxin Island, Suquamish, and the Lower Elwha Klallam. The APE is the project area (as outlined in Figure 4.13-1) that may include impacts due to ground-disturbing activity for the roadway widening. The tribes were also contacted for input during the cultural resources survey. The survey reports were sent to the tribes for comment before sending to DAHP. No comments were received from any of the tribes.

WSDOT will continue to keep the tribes informed of project activities with regular updates through letters and through the project website.

6.6 How Has WSDOT Involved the Public with the Currently Proposed Project?

Project development was put on hold after 2012 while awaiting funding. Recent public outreach opportunities have included:

- October 2019: After a hiatus in project development while awaiting funding, an Open House was held to present information about the modified Freight Corridor project.
- October 2020: A public meeting was held in the Alta-Brook Neighborhood for comment on the Value Engineering report.
- November 2020: A briefing was held with Mason County Commissioners which was placed on YouTube for public viewing. Public comments were solicited.

Additional community outreach is planned as part of the NEPA process, including an in-person and virtual public open house to be held concurrent with the release of the SEA on February 13, 2024. The virtual open house and comment forms are available at https://engage.wsdot.wa.gov/sr-3-freight-corridor.

All presentation materials will be available via the project website as well at https://wsdot.wa.gov/construction-planning/search-projects/sr-3-freight-corridor-new-alignment. This SEA will be sent to agencies and tribes, and available to the public for review and comment. WSDOT will continue to meet with regulatory agencies and interested parties and respond to issues and concerns. The project website will be updated to highlight progress on the project.

CHAPTER 7: LIST OF PREPARERS

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