FINAL ENVIRONMENTAL ASSESSMENT

Nisqually Indian Tribe Quiemuth Village Mixed Use Development and Fee-to-Trust Project (Non-Gaming)

City of Lacey, Washington | July 2025

NEPA # EA-24-22

Lead Agency:
Bureau of Indian Affairs
Northwest Regional Office
911 Northeast 11th Avenue
Portland, OR 97232-4169

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Appendices which have been revised or added since the August 2024 EA are underlined below.

Section 1 | Introduction

1.1 SUMMARY OF THE PROPOSED ACTION AND ENVIRONMENTAL REVIEW PROCESS

This Environmental Assessment (EA) has been prepared to assess the anticipated environmental effects resulting from the acquisition by the U.S. Bureau of Indian Affairs (BIA) of a 174-acre property into federal trust status for the benefit of the Nisqually Indian Tribe (Tribe) (Proposed Action) and the subsequent development of a mixed-use project by the Tribe (Proposed Project). The approximately 174-acre property is comprised of eight parcels and is referred to as the "Project Site" throughout this document. The Project Site is located within the City of Lacey (City), Thurston County (County), Washington (State). **Figure 1** and **Figure 2** show the regional location of the Project Site.

This document has been completed in accordance with the requirements set out in the National Environmental Protection Act (NEPA) of 1969 (42 United States Code [USC] Section 4321 et seq.); the Department of the Interior's (Department) Procedures for the Implementation of NEPA (43 CFR Part 46); and the BIA NEPA Handbook (59 Indian Affairs Manual 3-H)[1]. This document provides a detailed description of the Proposed Action and analysis of the potential environmental consequences associated with development of the Proposed Project. This document also includes a discussion of alternatives, impact avoidance, and mitigation measures. The BIA is the Lead Agency for NEPA compliance and will use this EA to determine if the Proposed Action would result in an adverse effect to the environment. A Notice of Availability (NOA) for the EA was published on September 18, 2024, and initiated a 30-day public review period that closed on October 18, 2024[2]. The NOA was published in the local newspaper (the Olympian), mailed and emailed to relevant agencies, and posted on the project website (http://www.nisquallyea.com). A copy of the NOA and associated newspaper publications are provided in **Appendix M**. Copies of comment letters received during the comment period, as well as responses to substantive comments, are included in **Appendix N.** Comments will be considered by the BIA, and either a Finding of No Significant Impact will be prepared, or additional environmental analysis will be conducted in the form of an Environmental Impact Statement. After the NEPA process is complete, the BIA may issue a determination on the Proposed Action.

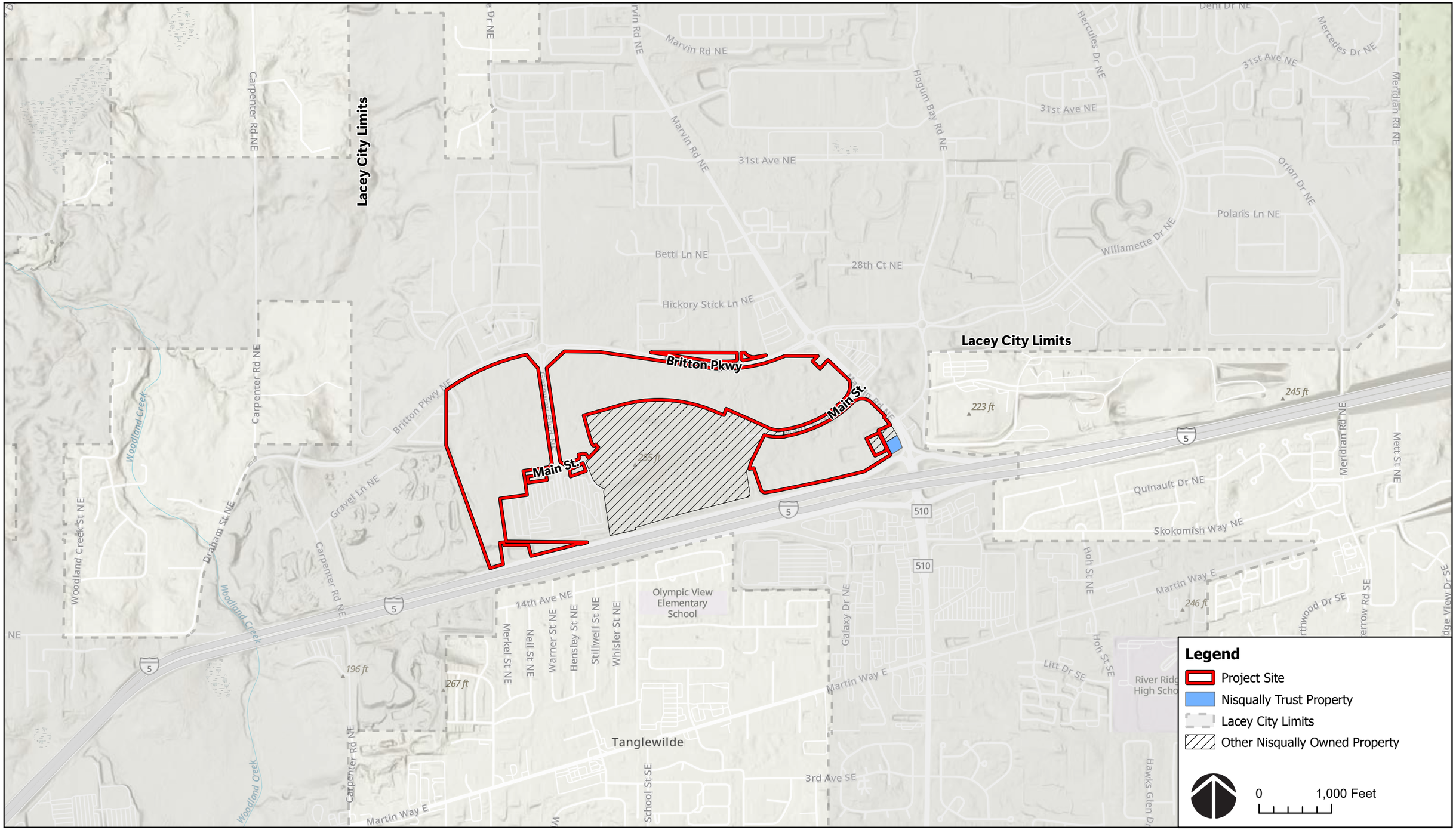
[1] Compliance with NEPA and the Department's NEPA procedures has been completed in accord with Executive Order 14154, Unleashing American Energy (Jan. 20, 2025), and a Presidential Memorandum, Ending Illegal Discrimination and Restoring Merit-Based Opportunity (Jan. 21, 2025). This Order and Memorandum require the Department to strictly adhere to NEPA, 42 USC §§ 4321, et seq., and repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023), making compliance with such orders a legal impossibility. This document also has been prepared consistent with the CEQ Interim Final Rule, 90 Fed. Reg. 10611 (Feb. 25, 2025).

[2] Since publication of the August 2024 EA, CEQ has rescinded its NEPA implementing regulations at 40 C.F.R. parts 1500–1508. CEQ has directed that agencies should consider voluntarily relying on those regulations in completing ongoing NEPA reviews or defending against challenges to reviews completed while those regulations were in effect. Consistent with this direction, the BIA is voluntarily considering the CEQ 2020 NEPA regulations, including where a page "means 500 words and does not include explanatory maps, diagrams, graphs, tables, and other means of graphically displaying quantitative or geospatial information."

Source: ESRI, USGS, NOAA

FIGURE 1

REGIONAL LOCATION



SOURCE: Esri Community Maps Contributors, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA,

FIGURE 2

SITE AND VICINITY

1.2 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of the Proposed Action is to facilitate tribal self-sufficiency, self-determination, and economic development, thus satisfying both the Department of the Interior's (Department) land acquisition policy as articulated in the Department's trust land regulations at 25 CFR Part 151. The need for the Department to act on the Tribe's application is established by the Department's regulations at 25 CFR Section 151.10(h) and 151.12.

1.3 BACKGROUND

The Tribe is a federally recognized Indian tribe with approximately 834 enrolled members. The Nisqually Indian Reservation (Reservation) is located on the Nisqually River in rural Thurston County, approximately 15 miles east of Olympia, Washington and 4 miles southeast of the Project Site. In 1854, the Tribe signed the Medicine Creek Treaty that ceded all rights and title of the Tribe's Usual and Accustomed (U&A) 2.2-million-acre homeland, including the Project Site, to the United States (U.S.) government in exchange for federal recognition and all fiduciary duties associated with recognition, as well as the right to hunt, fish, and gather resources in the U&A territories. The Tribe's U&A territories encompassed parts of three Washington counties—Thurston, Pierce, and Lewis. Their 4,717-acre Reservation has been enormously diminished through allotment, and, more significantly, through the condemnation of 3,353 acres in 1917 for the Department of War (now the Department of Defense) as part of the creation of the Ft. Lewis military base. As with many other self-governance tribes, the income needed to fund the tribal government services, including healthcare, natural resource management, and others, is entirely derived from economic enterprises operated by the Tribe, and grant funding, which the Tribe would prefer to minimize its dependance on. The Tribe needs a secure, long-term revenue stream to meet the unmet needs of the tribal community now and into the future, including housing for tribal members, community facilities and tribal programs to meet member needs.

1.4 LOCATION AND SETTING

1.4.1 Project Site Location

The approximately 174-acre Project Site is currently owned in fee by the Tribe and is located within the boundaries of the City of Lacey, in Thurston County, Washington (**Figure 1** and **Figure 2**) directly north of Interstate 5 (I-5), and west of the Marvin Road / I-5 interchange. The Project Site is located adjacent to a 1-acre parcel currently in federal trust for the Tribe and developed with the Nisqually Markets Tobacco Outlet store. The parcels that make up the Project Site are listed in **Table 1.4-1** and shown in **Figure 3**. The Project Site is located within Sections 10 and 11, Township 18 North, Range 1 West, Willamette Meridian, Lacey, Washington.

Regional access to the Project Site is provided by I-5, which runs in an east-west direction immediately south of the Project Site, from the existing I-5/State Route (SR) 510/Marvin Road interchange. Local access to the Project Site is currently provided through Marvin Road Northeast (NE) via Main Street NE east of the Project Site, and Britton Parkway NE via Gateway Boulevard NE west of the Project Site. A frontage road with right-in-right-out ramps for southbound traffic on I-5 has been constructed adjacent to the southeast corner of the Project Site; however, the ramps are not currently open to traffic.

FIGURE 3

AERIAL PHOTOGRAPH

Table 1.4-1: Project Site Parcels

Assessor Parcel Number (APN)	Approximate Acreage
11811210200	16.63
11810101101	53.54
11810101103	5.90
11810101000	62.34
11811201000	2.41
11811210402	7.96
11811210400	19.40
11811210404	5.89
Total	**174.07 Acres**

1.4.2 Land Use Planning and Previous Environmental Review

The Project Site has been identified as a high priority area for retail, commercial and mixed-use development in the City's Comprehensive Plan for more than 20 years. Currently, it is designated as part of the *Hawks Prairie Business District Element* in the City's 2016 Comprehensive Plan and is a part of the Hawks Prairie Planning Area, and Northeast Area Subarea Plan adopted by the City in 1992. The Project Site is zoned a combination of Hawks Prairie Business District – Business/Commercial (HPBD-BC) and Hawks Prairie Business District – Commercial (HPBD-C). The Project Site is within an approximately 250-acre potential commercial development node of the Comprehensive Plan identified as the "Lacey Gateway Town Center," which is recognized as having a high potential for economic development due to the proximity to I-5 and the availability of infrastructure and utilities, including sewer and water. The Gateway Town Center, including the Project Site, was envisioned to consist of both a destination retail center and an intensely developed mixed-use district with commercial, retail, and up to 500 residential units (City of Lacey, 2016a). Utilities were extended to the area after the Northeast Planning Area Plan was completed and transportation corridors throughout the area have been primarily completed, including Britton Parkway and Gateway Boulevard which provide direct access around and into the Project Site (City of Lacey, 2016b).

On January 26, 2010, the City issued the Lacey Gateway Town Center Final Supplemental Environmental Impact Statement (2010 FSEIS) (City of Lacey, 2010) in accordance with the State Environmental Policy Act (SEPA) to analyze the environmental consequences of future development of the Lacey Gateway Town Center, including the Project Site, and surrounding areas. The 2010 FSEIS supplemented the SEPA Environmental Impact Statement originally prepared for the City and Lacey Urban Growth Area Comprehensive Plan in 1994. The 2010 FSEIS was intended to assess the impacts from Phase I of the Lacey Gateway Town Center site because future phases of the project were uncertain at the time of the writing of the document. Components of the Phase I, Future Phases, and total build out for the 2010 FSEIS are included in **Table 1.4-2**. The 2010 FSEIS included numerous environmental studies in the following

environmental topic areas: geology and soils, grading and erosion control, reclaimed water, stormwater, plants and animals, cultural resources, transportation, and sanitary and sewer[3].

Examples of specific studies prepared for the development include *Lacey Gateway Transportation Analysis* by Shea, Carr & Jewell, Inc. (April 2009); *Cultural Resource Assessment of the Proposed Lacey Gateway Project* by Historical Research Associates (August 31, 2006), and the *Geotechnical Report Lacey Gateway Project* by Shannon & Wilson (April 10, 2007) (City of Lacey, 2010). After the publication of the 2010 FSEIS, a series of EAs[4] and studies were completed that included various parts of the Project Site and surrounding areas. However, construction of Phase I of the Lacey Gateway Town Center project that was analyzed in the 2010 FSEIS was ultimately not initiated, and the parcels remain undeveloped.

Table 1.4-2: Lacey Town Gateway Center Plan Components

Land Use Component	Phase I	Future Phases	Total Build-Out
Retail & Commercial	983,000 square feet (sf)	809,000 sf	1,792,000 sf
Gaming	0 sf	0 sf	0 sf
Office Space	100,000 sf	900,000 sf	1,000,000 sf
Housing Units	500 units	2,000 units	2,500 units
Hotel	270 rooms	375 rooms	645 rooms
Civic Uses	30,000 sf	50,000 sf	80,000 sf
Open-Space and Recreation	13.5 acres	14.5 acres	28.0 acres
Parking	6,430 spaces	11,440 spaces	17,870 spaces

1.4.3 Adjacent Land Uses

Land uses immediately surrounding the Project Site consist of mixed residential uses along Britton Parkway and south of I-5, commercial uses along Marvin Road and Britton Parkway, a gravel mining operation to the west, and a Cabela's sporting goods store south of the Project Site and north of I-5. As shown in **Figure 2**, the Tribe owns property contiguous to the south-central border of the Project Site and intends to submit a separate fee-to-trust application for a future gaming development in this area. Additional discussion of this separate and independent project is provided in **Section 3.1.1**, Cumulative Setting.

[3] Examples of specific studies prepared for the development include *Lacey Gateway Transportation Analysis* by Shea, Carr & Jewell, Inc. (April 2009); *Cultural Resource Assessment of the Proposed Lacey Gateway Project* by Historical Research Associates (August 31, 2006), and the *Geotechnical Report Lacey Gateway Project* by Shannon & Wilson (April 10, 2007) (City of Lacey, 2010).

[4] This included preliminary grading assessments, a preliminary tree protection report, biological and cultural resource assessments, wetland reports, and hazardous materials assessments cleanup/remediation reports, and a Phase I Environmental Site Assessments (Phase I ESA).

1.5 AGREEMENTS

1.5.1 Cooperation Agreement between Tribe and City of Lacey

On September 21, 2023, the Tribe and the City of Lacey entered into cooperation with respect to the Tribe's development of the Project Site and adjacent land owned by the Tribe, and mitigation of potential impacts that are caused by future development of the Tribe's properties (**Appendix A**). Among other items, the Agreement outlines that the City and Tribe will consult and cooperate on 1) the provision of emergency services to the development, including future discussions on mutual aid, 2) creating interlocal agreement(s) for the actual cost of City services, such as law enforcement, prosecution, public defense, court administration, jail services, etc., 2) possible connections to City utilities and infrastructure, to include water, wastewater, and sewer, 3) mitigation of transportation impacts and any other governmental issues pertaining to the development of the Tribe's.

1.5.2 Tribe and Lacey Fire District #3 Agreement

On January 19, 2017, the Tribe and the Lacey Fire District #3 executed a Memorandum of Agreement regarding the provision of fire protection and related medical services on the Tribe's land located within Lacey Fire District #3's service area excluding the Red Wind Casino and facilities. On July 24, 2019, the agreement was amended and extended to cover the Red Wind Casino and facilities. The agreement obligates Lacey Fire District #3 (Lacey FD#3) to provide fire and emergency medical services to the Reservation and Tribal trust lands, including visitors and employees on those lands that are within their service area. In exchange, the Tribe is obligated to pay compensation to Lacey FD#3 per incident responded to at a rate of $1,025 per incident and call, which is paid quarterly. The Tribe and Lacey FD#3 have the right to review conditions of this agreement annually. In addition, both parties can review the rate paid per incident every two years and adjust accordingly through mutual agreement. In a letter dated November 21, 2022, included in **Appendix A**, Lacey FD#3 indicated that the existing agreement has been effective and could serve as a model for a future agreement between the Tribe and Lacey FD#3 for the provision of fire protection services to the Project Site. Lacey FD#3 indicated its ability and willingness to provide the necessary fire, rescue, and emergency medical services to the Proposed Project pending the execution of a mutually acceptable intergovernmental agreement. The Tribe intends to meet with Lacey FD#3 per the conditions of the agreement to address the Proposed Project.

1.6 REGULATORY REQUIREMENTS AND APPROVALS

The Proposed Action and alternatives, as described in **Section 2.0**, may require the federal, State, and local permits and approvals, as identified in **Table 1.6-1**.

Table 1.6-1: Potential Permits and Approvals Required

Agency	Permit or Approval	Alternatives
Federal		
Bureau of Indian Affairs	Transfer of the 174-acre Project Site into federal trust status for the Tribe	1, 2
	Potential approval of timber cutting permits for the clearing of trees.	1, 2
U.S. Environmental Protection Agency (USEPA)	Verification of project coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit for Stormwater Discharges from Construction Activities, as required by the Clean Water Act (CWA), following the submission of a Notice of Intent for discharge authorization to the EPA at least 14 days prior to the commencement of construction activities	1, 2
	Potential issuance of a Minor New Source Review (NSR) Permit for boilers and emergency generators that may be required in accordance with new regulations under the federal Clean Air Act (CAA)	1, 2
	If an on-site wastewater treatment option is implemented (Option 2), registration of the sub-surface drainage system with the Underground Injection Control (UIC) program as a Class V injection well	1, 2: Wastewater Option 2
U.S. Fish and Wildlife Service (USFWS)	Informal consultation under Section 7 of the federal Endangered Species Act regarding the potential for effects to endangered species.	1, 2
National Oceanic and Atmosphere Administration (NOAA) Fisheries Service	Informal consultation under Section 7 of the federal Endangered Species Act regarding the potential for effects to endangered aquatic species, and under the Magnuson-Stevens Fishery Conservation and Management Act for effects to Essential Fish Habitat.	1, 2
State		
Washington State Department of Transportation (WSDOT)	Approval of off-site road commercial access improvements, mitigation, and issuance of encroachment permits.	1, 2
Local		
Thurston County	Approval of off-site road improvements/mitigations.	1, 2
City of Lacey	If an off-site water and wastewater treatment option is implemented (Option 1), approval of water and sewer connections.	1, 2: Water and Wastewater Option 1
	Issuance of encroachment permits for frontage and access improvements, and traffic mitigations.	1, 2
Lacey, Olympia, Tumwater, Thurston (LOTT) Clean Water Alliance	If an off-site wastewater treatment option is implemented (Option 1), approval of wastewater connection.	1, 2: Wastewater Option 1

Section 2 | Proposed Project and Alternatives

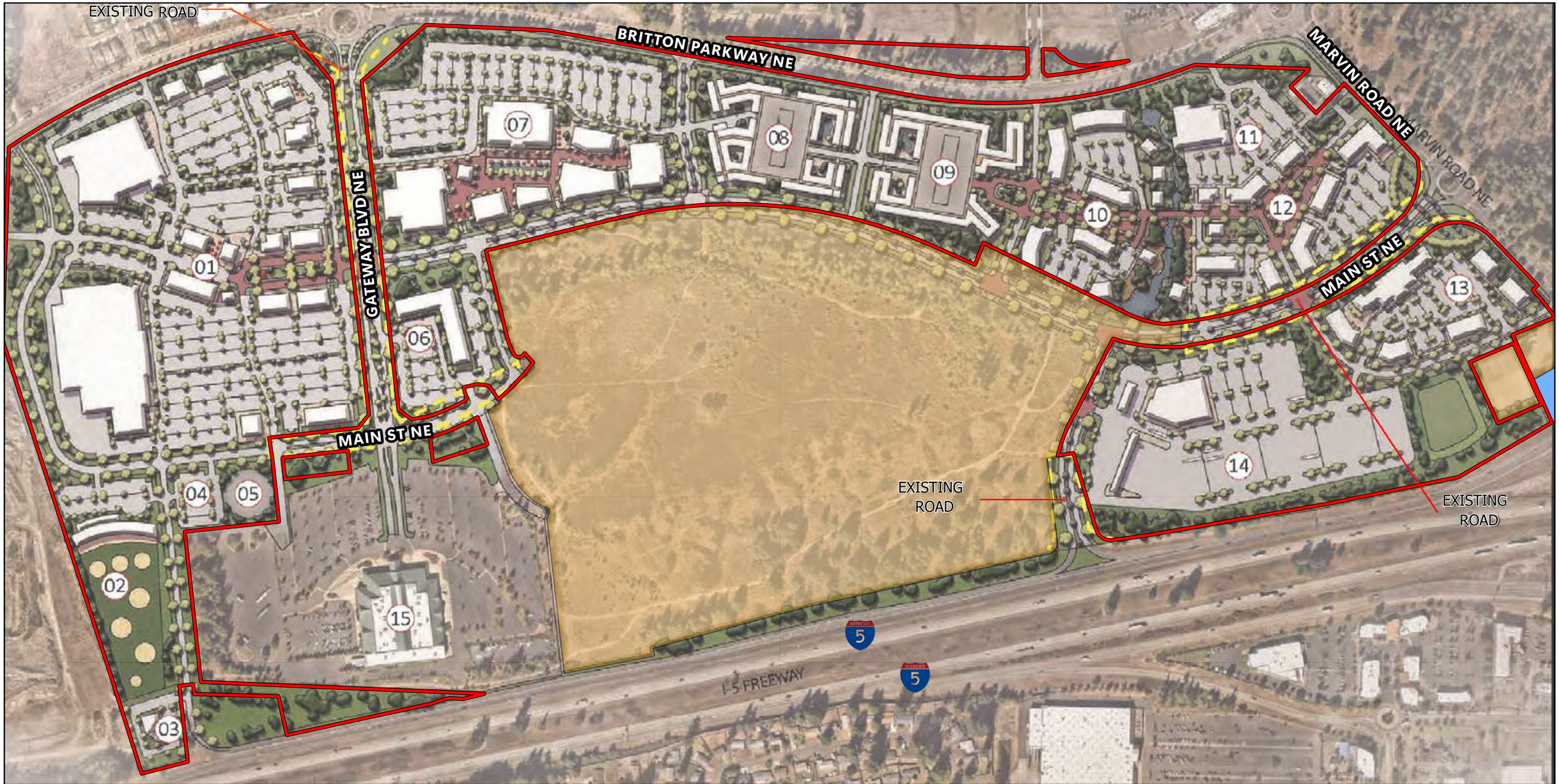
This section describes the alternatives that are analyzed within this EA. A reasonable range of alternatives has been selected based on consideration of the purpose and need of the Proposed Action and opportunities for potentially reducing environmental effects. These alternatives include: a commercial-heavy mixed-use development (Alternative 1); a recreation-heavy mixed-use development (Alternative 2), and the No Action Alternative (Alternative 3). These alternatives are described briefly below, and a full description is provided in **Appendix B**. **Section 3** summarizes and compares the potential environmental consequences, benefits, and/or detriments of the project alternatives.

The timing for development of the Subject Property will be subject to future market conditions and other factors, such as the cost and availability of building materials; therefore, it is important to note the conceptual nature of the alternative site plans. The configuration of land uses, heights, alignment, and relative mixes of uses could vary somewhat within the limits analyzed in this EA. Within the site boundaries, limits of overall square footage and types of land uses addressed within the EA, specific internal road alignments, utility infrastructure, development mix, and building height and bulk for specific buildings could vary from what is shown on the site plans; however, connection points to the adjacent public rights-of-way and utilities are expected to be fixed.

2.1 ALTERNATIVE 1 – COMMERCIAL-HEAVY MIXED-USE DEVELOPMENT

2.1.1 Proposed Land Uses

Proposed land uses under Alternative 1 consist of a mix of over 900,000 sf of commercial uses and 320 residential units and are outlined in **Table 2.1-1**. A breakdown of the building components and square footage of the proposed land uses under Alternative 1 is provided in **Table 2.1-2** and **Table 2.1-3**. An example of how buildings could be arranged within the Project Site is illustrated in **Figure 4**. During operation, Alternative 1 would provide approximately 2,466 new full-time equivalent jobs. Alternative 1 would be constructed per the Nisqually Building Code, which is generally consistent with the 2018 International Building Code (IBC) (Nisqually Tribal Code Section 54.01.200). An architectural rendering of Alternative 1 facing west near the intersection of Marvin Road and Main Street is included as **Figure 5**. The exterior lighting of Alternative 1 would be integrated into components of the architecture and would be strategically positioned to minimize off-site lighting and any direct sight lines to the public.



01. GENERAL COMMERCIAL RETAIL
02. GOLF ENTERTAINMENT FACILITY
03. CAR DEALERSHIP
04. PARKING
05. WELL SITE
06. HOTEL (LIMITED SERVICE)
07. FAMILY ENTERTAINMENT
08. MULTI-FAMILY RESIDENTIAL
09. MULTI-FAMILY RESIDENTIAL
10. CULTURAL VILLAGE
11. UPSCALE GROCERY
12. NEIGHBORHOOD RETAIL
13. NEIGHBORHOOD RETAIL
14. TRAVEL CENTER
15. EXISTING CABELA'S N.I.S.

PROJECT AREA
NISQUALLY TRUST PROPERTY
OTHER NISQUALLY OWNED PROPERTY
EXISTING ROAD

0 500 Feet

FIGURE 4

ALTERNATIVE 1 - COMMERCIAL-HEAVY MIXED USE DEVELOPMENT PROJECT STIE PLAN

FIGURE 5
ALTERNATIVE 1 RENDERING

Table 2.1-1: Land Use Summary – Alternative 1

Land Use	Total Development
Commercial and Retail	929,500 square feet (SF)
Recreational Facilities	7.4 acres
Lodging Facilities	200 rooms
Housing	320 units
Fuel Pumps	10 diesel / 16 gasoline
Total Parking	4,655 spaces

Source: HBG, 2022

Table 2.1-2: Summary of Development – Alternative 1

Project Use	Description of Use
Commercial	Commercial areas within the Project Site would include: ▪ Upscale grocery and neighborhood serving retail uses along Marvin Road. ▪ Family Entertainment complex, including movie theater, bowling alley, adult arcade, restaurants, brewery/bar, and a golf entertainment facility. ▪ General commercial/retail uses, including big box store, grocery, and retail/dining facilities in the northwest quadrant of the site. ▪ 200-room hotel. ▪ Car dealership.
Multi-family Residential	High-density, multi-family apartment buildings with up to 300 units are proposed along Britton Parkway, adjacent to the family entertainment and complex and near the grocery and neighborhood serving retail areas.
Cultural Village	The Cultural Village would be a live-work neighborhood with retail space, art studio space, office space, and 20 live/work housing units.
Travel Center	The proposed Travel Center would include full-convenience retail, food, and beverage space; a carwash; a travel lounge with shower and laundry facilities; tobacco outlet; 16 gasoline fuel pumps; 10 diesel fuel pumps; EV charging stations; and a service center.
Parking	There would be approximately 4,655 parking spaces provided by several surface parking areas within the Project Site.

Source: HBG, 2022

Table 2.1-3: Project Components – Alternative 1

Master Plan Area #	Development Components	Lot Area	Proposed Development Area or Units	Parking Spaces
01	General Commercial/Retail	40.5 acres	395,000 SF	2,000
	Big Box Store	-	*185,000 SF*	-
	Large Grocer	-	*100,000 SF*	-
	Retail and Dining	-	*110,000 SF*	-
02 & 04	Golf Entertainment Facility	7.4 acres	93 stations	160
03	Car Dealership	2.0 acres	30,000 SF	10
06	Hotel (4-Story)	5.0 acres	200 rooms	207
07	Family Entertainment	19.5 acres	179,000 SF	720
	Theater and Dining	-	*45,000 SF*	-
	Bowling Alley	-	*40,000 SF*	-
	Adult Arcade Facility	-	*27,000 SF*	-
	Food, Beverage, and Retail	-	*47,000 SF*	-
	Brewery	-	*20,000 SF*	-
08 & 09	High Density Multi-Family Apartments	14.6 acres	300 units	450
10	Cultural Village - Live-Work	8.2 acres	110,000 SF	185
	Retail and Studios	-	*80,000 SF*	-
	Office	-	*30,000 SF*	-
	Live/Work (Housing)	-	*20 units*	-
11	Upscale Grocery	4.8 acres	30,000 SF	210
12 & 13	Neighborhood Retail	17.2 acres	149,500 SF	488
14	Travel Center	28.0 acres	36,000 SF	75 car/150 truck
	Convenience Center	-	*36,000 SF*	-
	Diesel Pumps for Trucks	-	*10 pumps*	-
	Gasoline Pumps	-	*16 pumps*	-

Source: HBG, 2022

2.1.2 Water Supply

A Water Supply and Wastewater Feasibility Study was prepared and is attached as **Appendix C** and the estimated average daily water demand for Alternative 1 is shown in **Table 2.1-4**. On-site water distribution would be provided through a network of 8-inch to 16-inch diameter pipes as needed to serve the proposed development. Water supply under Alternative 1 would be provided via connections to the City's water distribution system (Water Supply Option 1) or through the development of on-site wells and treatment facilities (Water Supply Option 2). Existing water lines and proposed connections are shown in **Figure 6** and outlined in **Table 2.1-5**. These options, including the potential use of reclaimed water, are described in more detail in the expanded description of the project alternatives in **Appendix B**.

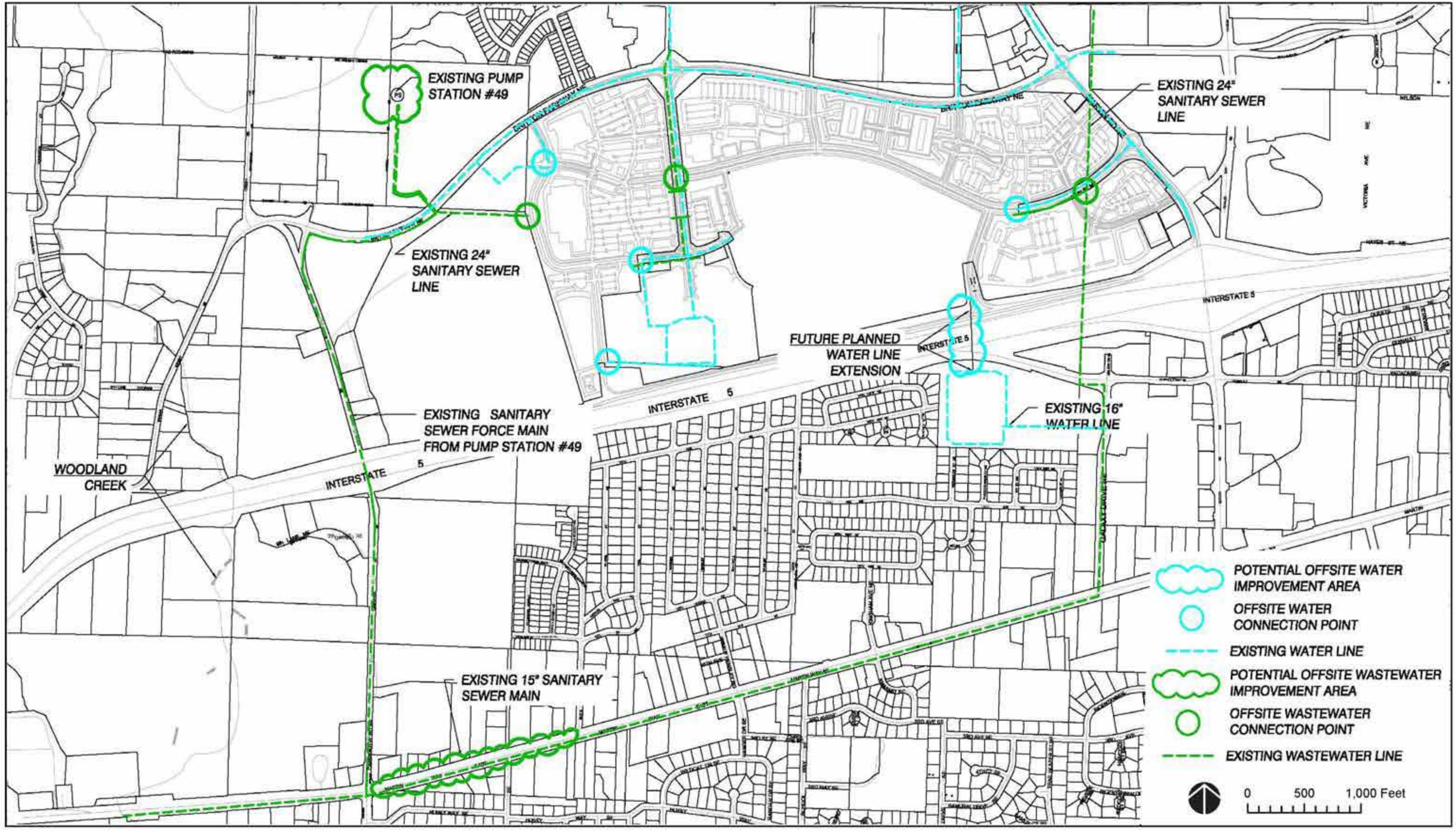


FIGURE 6

OFF SITE WATER AND WASTEWATER OPTION

Table 2.1-4: Estimated Average Water Usage – Alternative 1

Facility	Units	Demand per Unit (gpd)	Quantity	Average Daily Water Usage (gpd)
Apartments	Apt	150	300	45,000
Theater	SF	0.12	41,200	4,944
Entertainment Center	SF	0.08	17,500	1,400
Retail	SF	0.011	541,740	5,959
Grocery	SF	0.022	130,000	2,860
Retail Parking Factor	Spot	2	3,430	6,860
Office	SF	0.021	30,000	630
Hotel	Room	73	200	14,600
Golf Entertainment Facility	SF	0.08	55,500	4,440
Car Dealership	SF	0.011	30,000	330
Travel Center	SF	0.016	31,000	496
Restaurants	SF	1	87,060	87,060
Bowling Alley	SF	0.16	30,500	4,880
Live/Work Units	EA	200	20	4,000
Heating, Ventilation, and Air Conditioning (HVAC)	Ton	30	1,989	59,670
Landscape Irrigation	Acre	4,000	30	120,000
			Total	**363,129**

Source: **Appendix C**
Note: gpd = gallons per day

Table 2.1-5: Proposed Connections to Existing Water Lines

Onsite Facilities	
Proposed Connection	**Connection Site**
16-inch water lines	Gateway Boulevard NE
16-inch water line	Main Street NE
12-inch water line	Western Parkway NE on the western portion of the Project Site
14-inch water line	Main Street NE on the eastern portion of the Project Site
Off-site Facilities	
Proposed Connection	**Connection Site**
16-inch water lines	Britton Parkway NE to the north
14-inch water lines	Marvin Road NE to the east

2.1.3 Wastewater Treatment

Appendix C includes an assessment of the wastewater flow generated under Alternative 1 and feasible options for treatment and disposal. **Table 2.1-6** shows the average daily and peak wastewater generation for Alternative 1, both with and without the use of recycled water. Wastewater treatment under Alternative 1 would be provided via connections to the City's wastewater collection system (Wastewater Treatment Option 1) or through the development of on-site wastewater treatment facilities (Wastewater Treatment Option 2). These options are described in more detail in the expanded description of the project alternatives in **Appendix B**.

Potential off-site wastewater utility improvements are shown in **Figure 6** and on-site improvements are shown in **Figure 7**. As described in more detail in **Section 3.13**, upgrades already planned by the City would be made to Pump Station #49 during construction of Alternative 1 to increase its capacity to accommodate wastewater generated by Alternative 1. For the sewer line that intersects the eastern portion of the Project Site, downstream sewer lines along Martin Way East (south of the Project Site) may require upgrades depending on the timing of other development projects in the area. These potential improvements and associated impacts are discussed in further detail in **Section 3.13** and **Section 3.15.2**.

Table 2.1-6: Estimated Wastewater Flow and Discharge – Alternative 1

Facility	Average Daily Wastewater Flow (gpd)	Peak Wastewater Flow (gpd)	Average Daily Flow Wastewater Discharge with Reclaimed Water Usage (gpd)	Peak Flow Wastewater Discharge with Reclaimed Water Usage (gpd)
Apartments	45,000	91,350	40,500	82,215
Theater	4,944	10,036	3,708	7,527
Entertainment Center	1,400	2,824	1,050	2,132
Retail	5,959	12,097	4,469	9,072
Grocery	2,860	5,806	2,517	5,110
Retail Parking Factor	6,860	13,926	5,145	10,444
Office	630	1,279	472	958
Hotel	14,600	29,638	10,950	22,229
Golf Entertainment Facility	4,440	9,013	3,330	6,760
Car Dealership	330	670	247	501
Travel Center	496	1,007	372	755
Restaurants	87,060	176,732	87,060	176,732
Bowling Alley	4,880	9,906	3,660	7,430
Live/Work Units	4,000	8,120	3,600	7,308
HVAC	29,835	60,565	29,385	60,565
Landscape Irrigation	0	0	(120,000)	(120,000)
Total	**213,294**	**432,987**	**76,915**	**279,737**
Sludge Retained	**1,800**	**3,650**	**1,800**	**3,650**
Net Discharge	**211,494**	**429,337**	**75,115**	**276,087**

Source: **Appendix C**

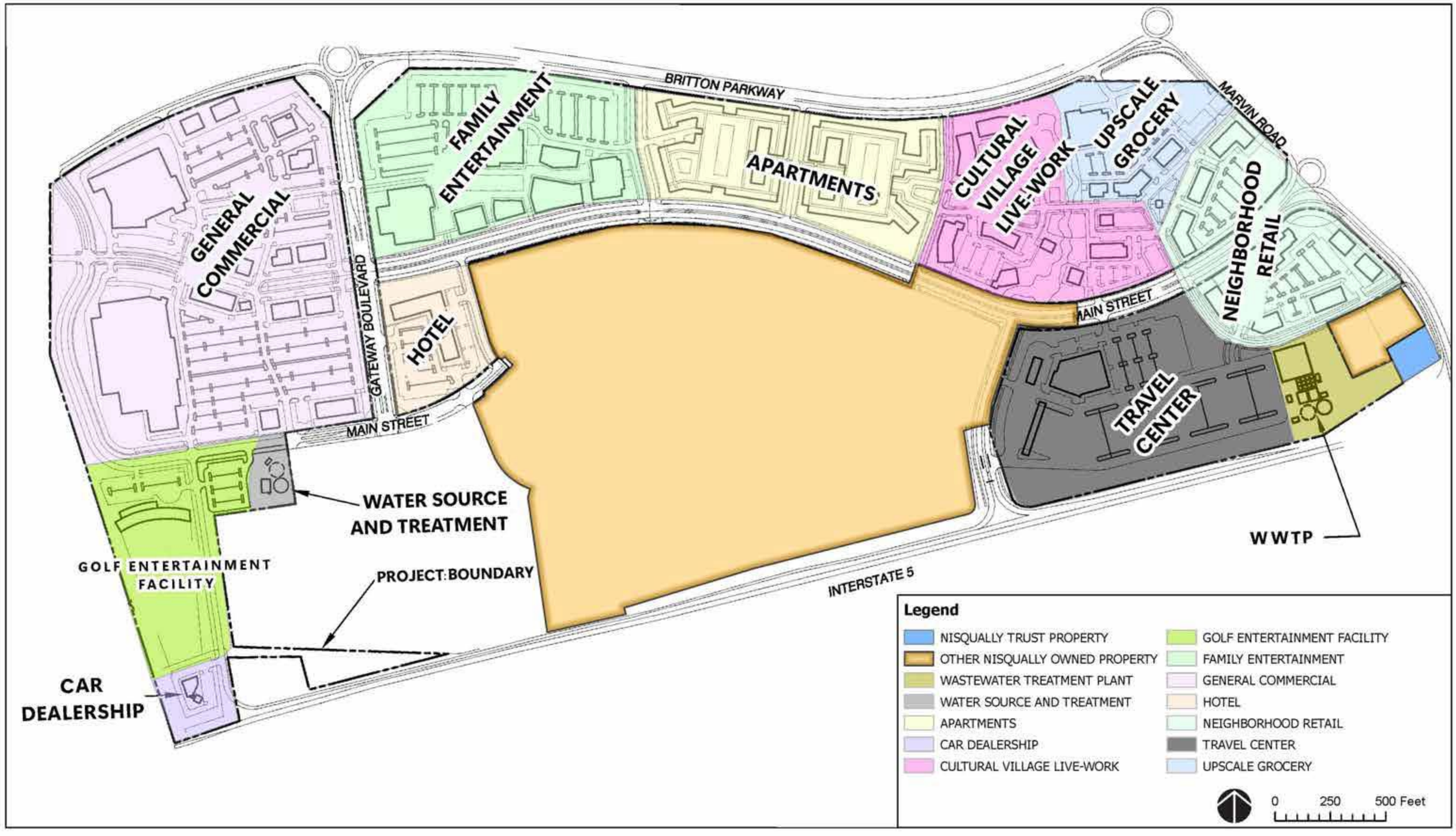


FIGURE 7

ALTERNATIVE 1 - ON SITE WATER AND WASTEWATER OPTION

2.1.4 Law Enforcement, Fire Protection, and Emergency Medical Services

The Lacey Police Department (LPD) provides law enforcement services to the City and is currently the primary agency responsible for law enforcement within the Project Site. The Tribe operates its own justice system, which includes a comprehensive Public Safety Department composed of three major divisions – Police, Corrections, and Fish and Wildlife. The Nisqually Police Department is responsible for enforcing the law on the Reservation. Following the acquisition of the Project Site into trust, the Tribe intends to hire new Tribal Police officers to provide law enforcement services to accommodate Alternative 1, and Tribe-managed security cameras would provide surveillance of proposed structures, parking areas, and ancillary facilities. The Tribe intends to enter into an agreement with the City for the coordination of law enforcement, prosecution, and court administration, which will identify the scenarios when cases would be referred to the City and address the payment of actual costs for investigation, prosecution, and court administration.

The Project Site is within the service area of Lacey FD#3, which provides fire protection and emergency services in the vicinity of the Project Site. In a letter dated November 21, 2022 (**Appendix A**), Lacey FD#3 expressed its ability and willingness to provide services to Alternative 1 and indicated that the existing agreement (see **Section 1.5.2**) has been effective and could serve as a model for a future agreement between the Tribe and Lacey FD#3 for the provision of fire protection and emergency services to the Project Site. The Tribe intends to meet with Lacey Fire District #3 per the conditions of the agreement to address development on the Project Site.

2.1.5 Electricity and Natural Gas

Puget Sound Energy (PSE) provides electricity and natural gas to the County and City, including the Project Site. The nearest electricity transmission line to the Project Site, a 345-volt transmission line, is approximately 0.65 miles west, along with an electric substation (Energy Information Administration, 2023). While no natural gas lines are near the Project Site, a high-pressure gas line and gate station are proposed near the closest electrical transmission line and electric substation to the Project Site (City of Lacey, 2016b). For wastewater treatment Option 2, there would be one 250kW diesel generator for emergency uses at the wastewater treatment plant (WWTP). The emergency back-up generator is estimated to operate up to 84 hours per year.

2.1.6 Grading and Drainage

Site Preparation and Grading

Site preparation will be conducted in compliance with the Cleanup Action Plan (**Appendix E**) approved by the WDOE for soil contamination associated with the Tacoma Smelter Plume (known regionally as the TSP) that has contaminated the region with aerially deposited lead and arsenic (refer to **Section 3.6.2** for additional discussion). As described in more detail in the Cleanup Action Plan, soil testing within the Project Site was conducted in 2012 and confirmed that while most of the site has not been impacted by the TSP, there are slightly elevated levels of arsenic and lead in the surficial duff layer on the western portion of the Project Site and a southern strip along I-5 (**Figure 8**). The WDOE-approved clean-up procedure consists of diluting lead and arsenic concentrations by blending the shallow surficial soils with the underlying native soils in impacted areas during the grading and site preparation process. Refer to the expanded description of site preparation and grading activities in **Appendix B**.

FIGURE 8

ALTERNATIVE 1 - PRELIMINARY GRADING

The ground surface at the Project Site is gently to moderately sloping with localized small hills, ridges, and depressions. Construction would involve grading and excavation for building pads and parking lots on the Project Site. The slopes and low areas associated with the valley in the northwestern portion of the Project Site will require extensive grading to enable the proposed uses to be constructed. A preliminary grading plan for Alternative 1 is shown in **Figure 8**. Approximately 370,000 cubic yards (cy) of material would be excavated and subsequently used as fill within the Project Site, resulting in balanced cut and fill (**Appendix D**). Therefore, no import or export of fill material is anticipated.

Drainage

As described further in **Section 3.7.2**, all stormwater within the Project Site currently infiltrates into the ground and no stormwater currently leaves the Project Site. Under Alternative 1, runoff from roads, sidewalks, roofs, and landscape areas will be collected and routed to different water quality and/or flow control facilities depending on the surface type or use and infiltrated into the ground. Like the existing conditions, no stormwater runoff will leave the Project Site.

The Project Site has been divided into nine different catchment areas for stormwater retention, treatment, and infiltration (see **Figure 9**). Runoff from approximately 118.32 acres of hard surfaces with the potential for pollutants that could contaminate stormwater, such as roads and parking areas, and from approximately 26.10 acres of adjacent landscaping that will be collected and routed to a bioretention treatment facility prior to an infiltration facility. The size of the bioretention areas for each catchment area can be seen in **Table 2.1-7**. Additional details regarding stormwater treatment and infiltration facilities are provided in **Appendix B** and **Appendix D.** As part of the stormwater treatment system, the Tribe intends to create an interactive display of how the on-site stormwater is being treated to protect salmon and other stream life. This will include, but not be limited to, descriptions of the best management practices (BMPs), what they remove from the runoff, how they operate, the path of the runoff from the sky to the streams, and descriptions of plants and other fauna being used to enhance the natural environment.

Table 2.1-7: Alternative 1 Bioretention and Infiltration Areas

Catchment Number	Catchment Area (acre)	Impervious Area (acre)*	Landscape Area (acre)	Bioretention Area Required (sf)	Infiltration Area Required (sf)
C101	22.60	19.21	3.39	25,700	35,800
C102	22.98	19.53	3.45	26,100	36,400
C103	18.53	15.75	2.78	21,100	29,400
C104	32.42	27.56	4.86	36,800	51,400
C105	8.61	7.32	1.29	9,800	13,700
C106	28.47	24.20	4.27	32,300	45,100
C107	6.51	5.53	0.98	7,400	10,300
C108	24.92	21.18	3.74	28,300	39,500
C109	8.96	7.62	1.34	10,200	14,200
Totals	**174.00**	**147.90**	**26.10**	**197,700**	**275,800**

Source: **Appendix D**

* Includes 29.58 acres of roof areas in addition to 118.32 acres of paved area, but roof areas do not require treatment and would be routed directly to the infiltration facilities.

Catchment #	Total Catchment Area (Acres)	Paved Area (SF)	Roof Area (SF)	Landscape Area (SF)	Bioretention Area Required (SF)
C101	18.75	15.31	3.29		26,700
C102	19.07	15.63	3.45		26,100
C103	15.38	12.60	2.78		21,100
C104	26.90	22.05	4.85		36,600
C105	7.14	5.85	1.29		9,800
C106	23.62	19.36	4.27		32,300
C107	5.40	4.43	0.98		7,400
C108	20.08	16.46	3.74		28,300
C109	7.43	6.09	1.34		10,200

Table 5.1: Alternative 1 - Bioretention Treatment Area Required (total)

Catchment #	Total Area (Acres)	Paved Area (SF)	Roof Area (SF)	Landscape Area (SF)	Infiltration Trench Area Required (SF)
C101	22.90	15.36	3.64	3.39	33,800
C102	22.98	15.62	3.90	3.45	36,400
C103	18.53	12.60	3.15	2.78	29,400
C104	32.43	22.04	5.51	4.86	51,400
C105	8.61	5.85	1.46	1.29	13,700
C106	28.47	19.35	4.83	4.27	45,100
C107	6.51	4.43	1.10	0.98	10,300
C108	24.92	16.94	4.23	3.74	39,500
C109	8.95	6.09	1.52	1.34	14,200

FIGURE 9

ALTERNATIVE 1 - PRELIMINARY DRAINAGE

2.1.7 Roadway Access, Network, and Parking

The Project Site currently has nine access points and two more would be constructed as part of Alternative 1, for a total of 11 access points. These proposed and existing access points can be seen in **Figure 10** and are listed and described in **Table 2.1-8**. Currently, the I-5 frontage road and its associated access points are closed by WSDOT. To gain WSDOT approval of the I-5 frontage road access point, the Tribe will comply with conditions specified in the 2018 Memorandum of Understanding between the City and WSDOT, which will include establishing local roadway network conditions to Access Locations 1 and 2 (**Figure 10**), completion of a traffic analysis, and the installation of signage[5] The indirect effects of these off-site improvements and the others described in **Table 2.1-8** are discussed in detail in **Section 3.15.1**.

Table 2.1-8: Proposed Access Points for Alternative 1

Access Point Name	Location	Proposed Access Improvement
Access 1	Existing I-5 frontage road right-in that is located on the southwestern boundary of the Project Site.	Extension of a tribally owned public access roadway to the frontage road.
Access 2	Existing I-5 frontage road right-in/right-out that is located on the southeastern boundary of the Project Site.	Extension of a tribally owned public access roadway to the right-in right-out along the frontage road.
Access 3	Existing limited access right-in/right-out entrance located at the intersection of Marvin Road NE and Nisqually Markets Tobacco Outlet and on the southeastern corner of the Project Site.	New tribally owned limited access right-in/right-out side street stop-controlled intersection driveway directly adjacent to the existing Nisqually Markets Tobacco Outlet entrance on its norther boundary.
Access 4	Existing entrance located at the Marvin Way NE and Main Street NE roundabout and on the eastern portion of the Project Site.	Extension of Main Street NE from its current termination on the eastern portion of the Project Site to connect with a new on-site intersection near Gateway Boulevard NE.
Access 5	Existing limited access right-in/right-out entrance located at Britton Parkway NE and 7-Eleven entrance intersection that is immediately west of the Britton Parkway NE and Marvin Road NE roundabout and adjacent to the northern boundary of the Project Site.	No additional access required. Only minor maintenance required (e.g., repaving).
Access 6	Existing full-access entrance located on Britton Parkway NE and Eastern Parkway NE (Twin Oak Road NE) that is immediately west of Access 5 and on the northern boundary of Project Site.	Extension of a tribally owned access road to the existing driveway. The right-turn to access the driveway for west-bound traffic is already present.
Access 7	Proposed limited access right-in/right-out side street stop-controlled intersection entrance located on Britton Parkway NE that is immediately west of Access 6 and on the northern boundary of the Project Site.	New tribally owned right-in right-out side street stop-controlled intersection on Britton Parkway NE.

[5] For additional information regarding the 2018 Memorandum of Understanding and associated requirements, see **Section 3.12.2**

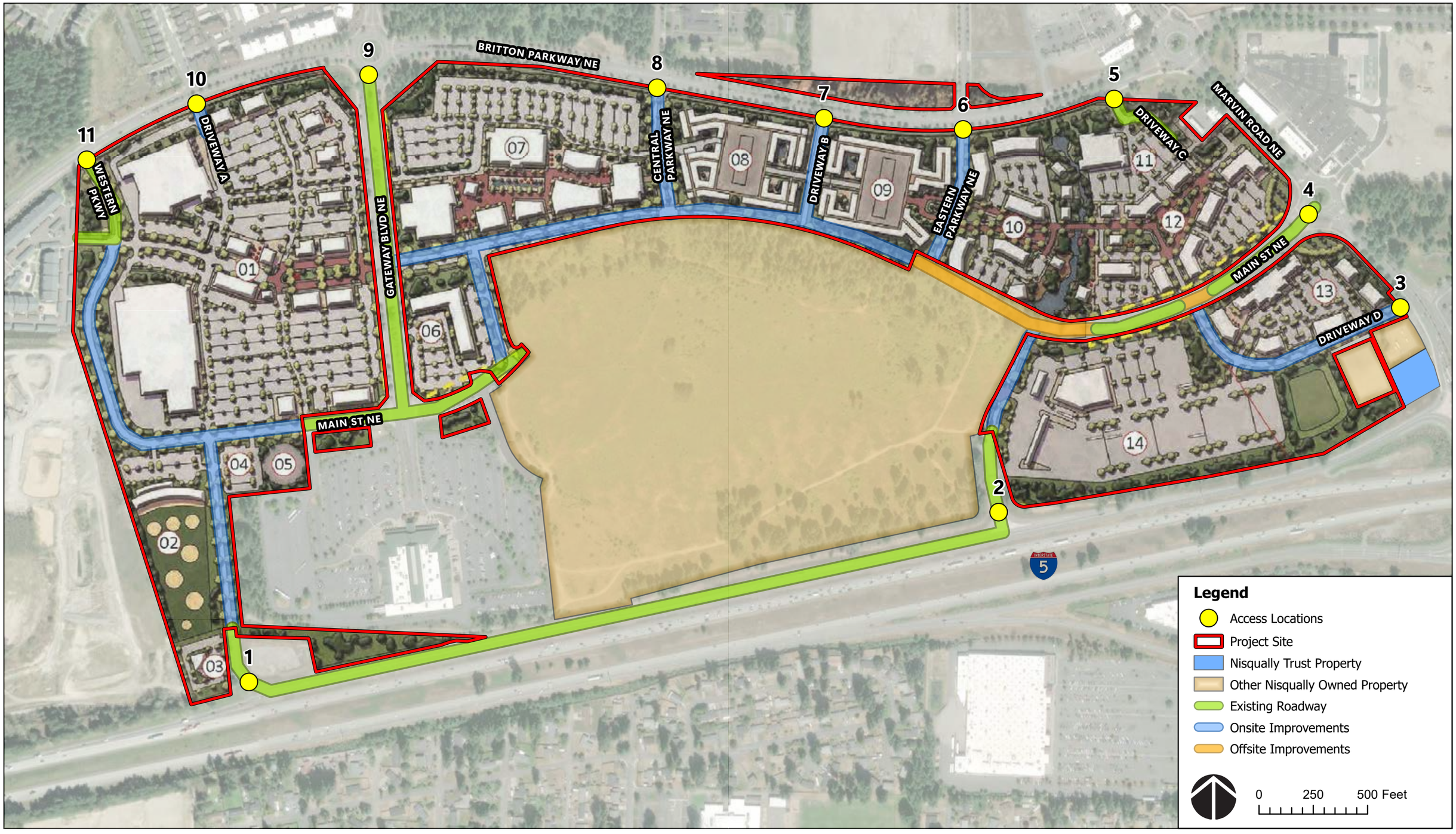
Access Point Name	Location	Proposed Access Improvement
Access 8	Existing full access with the exception of northbound left-turns entrance located on Britton Parkway NE and Central Parkway NE (Callison Road NE) that is immediately west of Access 7, east of the Britton Parkway NE and Gateway Boulevard roundabout, and on the northern boundary of the Project Site.	Extension of a tribally owned access road to the existing driveway. The right-turn to access the driveway for west-bound traffic is already present.
Access 9	Existing entrance located at the Britton Parkway NE and Gateway Boulevard roundabout and on the northern boundary of the Project Site.	No improvement proposed due to access exists.
Access 10	Proposed limited access right-in/right-out side street stop-controlled intersection entrance located immediately west of the Britton Parkway NE and Gateway Boulevard roundabout and on the northern boundary of the Project Site.	Creation of a new right-in right-out side street stop-controlled intersection entrance on Britton Parkway and extension of a tribally owned public access road.
Access 11	Existing limited access right-in/right-out entrance located at the Britton Parkway NE and Western Parkway intersection and the northern boundary of the Project Site.	A tribally owned access road would be extended from the current termination of Western Parkway.

As shown in **Figure 10**, Alternative 1 would construct an internal road network to connect the proposed access points to each other and to the various proposed land uses and parking lots. The proposed roadway network would extend Main Street NE west through the Project Site and other tribally owned lands to Gateway Boulevard NE; extend Western Parkway south then east to connect to the existing Main Street NE road segment south of Gateway Boulevard; and would connect the two access points to the existing I-5 frontage road to Main Street NE. Other internal roadways would be constructed from the various access points to Main Street NE or parking lots. Under Alternative 1, bicycle and sidewalk facilities would be extended from existing facilities along the surrounding road network to allow for pedestrian access to and through the Project Site.

Parking for the Alternative 1 would be provided through 4,655 surface parking spaces located in surface parking lots throughout the Project Site (**Table 2.1-2** and **Figure 4**).

2.1.8 Construction

Construction activities associated with Alternative 1 are anticipated to commence in 2026. Although buildout of the site will likely take place over a time span of three to eight years, depending on market conditions and other factors, this EA conservatively assumes construction of the site will occur over a period of 24 months. Over the course of construction, Alternative 1 would directly employ approximately 2,090 workers locally. Construction employee parking and staging areas for equipment and materials will occur within the Project Site boundaries. The proposed facilities would conform to applicable Nisqually Tribal Building Codes, which are generally consistent with the IBC and related codes, including fire, electrical, energy, mechanical, plumbing, and safety. Indoor sprinkler systems would be installed to provide fire protection.



Source: ESRI World Imagery

FIGURE 10

ALTERNATIVE 1 - PROPOSED ACCESS IMPROVEMENTS

2.1.9 Protective Measures and Best Management Practices

Protective measures and BMPs, including regulatory requirements and voluntary measures that would be implemented by the Tribe, have been incorporated into the design of Alternative 1. Where applicable, these measures would be incorporated into any design or construction contracts to eliminate or substantially reduce environmental consequences from Alternative 1. These measures are discussed below in **Table 2.1-9**.

Table 2.1-9: Alternative 1 Protective Measures and Best Management Practices

Resource Area	Protective Measures and Best Management Practices
Air Quality	The following dust suppression measures shall be implemented during construction to control the production of fugitive dust (particulate matter 10 microns in size [PM_{10}]) and prevent wind erosion of bare and stockpiled soils. ▪ Exposed soil shall be sprayed with water or other suppressant twice a day or as needed to suppress dust. ▪ Non-toxic chemical or organic dust suppressants shall be used on unpaved roads and traffic areas. ▪ Dust emissions during transport of fill material or soil shall be minimized by wetting truckloads of soil, ensuring adequate freeboard (space from the top of the material to the top of the truck bed) on trucks, cleaning the interior of cargo compartments on emptied haul trucks before leaving a site, and/or covering loads. ▪ Spills of transported fill material on public roads shall be promptly cleaned. ▪ Traffic speeds on the Project Site shall be restricted to 15 miles per hour to reduce soil disturbance. ▪ Wheel washers shall be provided to remove soil that would otherwise be carried offsite by vehicles to decrease deposition of soil on area roadways. ▪ Dirt, gravel, and debris piles shall be covered as needed to reduce dust and wind-blown debris. The following measures shall be implemented to reduce emissions of criteria air pollutants (CAP), greenhouse gases (GHG), and diesel particulate matter (DPM) from construction. ▪ The Tribe shall control criteria pollutants and GHG emissions from the facility by requiring all diesel-powered equipment be properly maintained and minimize idling time to five minutes when construction equipment is not in use, unless per engine manufacturer's specifications or for safety reasons more time is required. Since these emissions would be generated primarily by construction equipment, machinery engines shall be kept in good mechanical condition to minimize exhaust emissions. The Tribe shall employ periodic and unscheduled inspections on site to accomplish the above measures. ▪ All construction equipment with a power rating of greater than 50 horsepower shall be equipped with diesel particulate filters, which would reduce approximately 85% of DPM. ▪ The use of low reactive organic gases (150 grams per liter or less) shall be required for architectural coatings to the extent practicable. ▪ Environmentally preferable materials, including recycled materials, shall be used to the extent readily available and economically practicable for construction of facilities. The Tribe shall reduce emissions of CAPs, hazardous air pollutants (HAPs), and GHGs during operation through the following actions.

Resource Area	Protective Measures and Best Management Practices
	▪ The Tribe shall use clean fuel vehicles in the vehicle fleet where practicable, which would reduce CAPs and GHG emissions. ▪ The Tribe shall provide preferential parking for employee vanpools, carpools, and or other rideshare vehicles which would reduce CAPs and GHGs. ▪ Shuttle service to and from population centers shall be provided as feasible, which would reduce CAPs and GHGs. ▪ Water consumption shall be reduced through low-flow appliances, drought resistant landscaping, and the incorporation of "Save Water" signs near water faucets throughout the development. ▪ The Tribe shall control CAPs, GHG, and DPM emissions during operation by requiring that all diesel-powered vehicles and equipment be properly maintained and minimizing idling time to five minutes at loading docks when loading or unloading food, merchandise, etc. or when diesel-powered vehicles or equipment are not in use, unless per engine manufacturer's specifications or for safety reasons more time is required. ▪ The Tribe shall use energy efficient lighting and appliances, which would reduce energy usage, thus, reducing indirect CAP and GHG emissions from the project. ▪ The Tribe shall install recycling bins throughout the facility for glass, cans, and paper products. Trash and recycling receptacles shall be placed strategically outside to encourage people to recycle. In addition, the Tribe shall promote the use of non-polystyrene take-out containers and encourage food waste composting programs at all restaurants that serve more than 100 meals per day. The Tribe shall reduce the solid waste stream of the facility by at least 50%. ▪ The Tribe shall prohibit buses from idling for extended periods. ▪ Adequate ingress and egress at entrances shall be provided to minimize vehicle idling and traffic congestion.
Geology and Soils	▪ A registered design professional shall prepare a project-specific design-level geotechnical report conducted in accordance with standards no less stringent than the IBC, including for seismic shaking. The Tribe shall adhere to the recommended measures within the report.
Hazardous Materials	The following measures shall be followed for the design and construction of the Travel Center: ▪ Underground storage tanks (USTs), piping, and fuel dispensers shall be designed, built, installed, tested, and certified to prevent fuel leaks, as required by 40 CFR Part 280. Leak prevention measures required under 40 CFR Part 280 include corrosion resistant and double walled tanks and piping, inclusion of spill and overflow prevention equipment, and use of leak detection equipment. Personnel shall follow BMPs for filling and servicing construction equipment and vehicles. BMPs that are designed to reduce the potential for incidents/spills involving hazardous materials include the following. ▪ Fuel, oil, and hydraulic fluids shall be transferred directly from a service truck to construction equipment to reduce the potential for accidental release. ▪ Catch-pans shall be placed under equipment to catch potential spills during servicing. Servicing should take place off site when practical. ▪ Refueling shall be conducted only with approved pumps, hoses, and nozzles. ▪ All disconnected hoses shall be placed in containers to collect residual fuel from the hose. ▪ Vehicle engines shall be shut down during refueling. ▪ No smoking, open flames, or welding shall be allowed in refueling or service areas.

Resource Area	Protective Measures and Best Management Practices
	▪ Service trucks shall be provided with fire extinguishers and spill containment equipment, such as absorbents. ▪ Should a spill contaminate soil, the impacted soil shall be segregated, covered, and/or placed into containers not exposed to rainwater, the containers shall be disposed of in accordance with local, State, and federal regulations. All containers used to store hazardous materials shall be stored/equipped with secondary containment pans or structures capable of fully containing a potential lead and inspected at least once per week for signs of leaking or failure. Personnel shall implement the following BMPs to reduce the potential for fires during construction: ▪ Construction equipment shall contain spark arrestors, as provided by the manufacturer. ▪ Staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. ▪ Prior to initiating excavation at the work site, the Tribe shall contact the Utility Notification Center to notify the utility service providers to mark or stake the horizontal path of underground utilities, provide information about the utilities, and/or give clearance to dig. ▪ The site shall be cleaned daily of trash and debris to the maximum extent practicable. The Tribe shall implement the following BMPs consistent with federal guidelines to ensure worker safety related to exposure to existing arsenic and lead in the soil: ▪ During onsite work with the potential for dermal exposure to arsenic and lead contaminated soil, workers will be provided with and required to use chemical protective clothing, gloves, and other appropriate protective clothing necessary to prevent skin contact with inorganic arsenic. ▪ Clothing which is contaminated with inorganic arsenic will be removed immediately and placed in sealed containers for storage until it can be discarded or until provision is made for the removal of inorganic arsenic from the clothing. If the clothing is to be laundered or cleaned, the person performing the operation will be informed of inorganic arsenic's hazardous properties. Reusable clothing and equipment will be checked for residual contamination before reuse or storage. ▪ Workers who are exposed to inorganic arsenic will be required to wash their faces, hands, and forearms thoroughly with soap and water before eating, smoking, or using toilet facilities. ▪ If determined to be needed, respirators will be provided to workers in compliance with Occupational Safety and Health Administration (OSHA) Safety and Health Standards 29 CRF 1910.134. The following measures may be implemented by the Tribe for the areas of the Project Site to be remediated due to elevated levels of arsenic and lead: ▪ The Tribe may voluntarily consult with WDOE regarding the development of lot-specific cleanup plans for areas affected by the Tacoma Smelter Plume. This consultation may include review of soil sampling results and remediation approaches to ensure continued consistency with the approved TSP Cleanup Action Plan and the 2019 Tacoma Smelter Plume Guidance. WDOE's technical feedback may be considered in the implementation of site-specific cleanup actions, as appropriate.

Resource Area	Protective Measures and Best Management Practices
Hydrology and Floodplain	For construction site runoff on the Project Site prior to the start of construction activities, the Tribe shall apply for coverage under the NPDES Construction General Permit from the USEPA under the CWA. A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared, implemented, and maintained throughout the construction phase of the development, consistent with Construction General Permit requirements. The SWPPP prepared for the Project Site would include, but would not be limited to, the following BMPs to minimize storm water effects to water quality during construction: ▪ To the extent feasible, grading activities shall be limited to the immediate area required for construction. ▪ Temporary erosion control measures (such as silt fences, fiber rolls, vegetated swales, a velocity dissipation structure, staked straw bales, temporary re-vegetation, rock bag dams, erosion control blankets, and sediment traps) shall be employed for disturbed areas. ▪ Construction activities shall be scheduled to minimize land disturbance during peak runoff periods. ▪ Disturbed areas shall be paved or re-vegetated following construction activities. ▪ Construction area entrances and exits shall be stabilized with large-diameter rock. ▪ A spill prevention control and countermeasure plan shall be developed which identifies proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used on site. ▪ Petroleum products shall be stored, handled, used, and disposed of properly in accordance with provisions of the CWA (33 USC Section 1251 to 1387). ▪ Construction materials, including topsoil and chemicals, shall be stored, covered, and isolated to prevent runoff losses and contamination of surface and groundwater. ▪ Fuel and vehicle maintenance areas shall be designed to control runoff. ▪ Sanitary facilities shall be provided for construction workers in accordance with OSHA Standard 1926.51 sanitation requirements for job sites. ▪ Disposal facilities shall be provided for soil wastes, including excess asphalt during construction. ▪ Solid waste storage containers will be stored in a roofed enclosure so that runoff cannot contact contents of waste storage containers. The storage area will be paved with the area's grading to prevent uncontaminated stormwater from flowing into the waste storage area. ▪ To minimize dust generation during construction, soil will be wetted down with water prior to ground disturbance. All generated waste must be properly disposed of. ▪ Loose aggregate chunks and dust will be swept or shoveled and collected (not hosed down a storm drain) for recycling or proper disposal. ▪ Wheel wash or rumble strips and sweeping of paved surfaces shall be used to remove all tracked soil. ▪ Low impact development (LID) methods (i.e., bioswales) shall be implemented that would help store, infiltrate, evaporate, and detain stormwater runoff. To be implemented if utilizing the Water Supply Option 2: ▪ The Tribe shall contract with a registered design professional/groundwater resource specialist to design a site-specific filtration and treatment system to ensure water quality meets the standards set forth in the Safe Drinking Water Act. This includes assessing the potential of chlorinated solvents entering the project's groundwater

Resource Area	Protective Measures and Best Management Practices
	supply. The system shall also be designed to prevent contamination from entering the groundwater table from the proposed on-site potable drinking water system. BMPs to be implemented during operation: ▪ To reduce water usage, low-flow toilets, faucets, and other water-using appliances shall be installed. BMPs to be implemented during operation of the truck stop to prevent runoff contamination: ▪ Source control BMPs related to service stations will be implemented, including but not limited to correcting illicit discharges to storm drains, formation of a pollution prevention team, preventive maintenance, spill prevention and cleanup, employee training, and record keeping.
Noise	BMPs to be implemented during construction for noise: ▪ Construction activities shall be limited to daytime hours between 7:00 a.m. and 10:00 p.m. ▪ All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and acoustical shields or shrouds in accordance with manufacturers' specifications. ▪ Haul trucks shall be operated in accordance with posted speed limits. ▪ Maintenance of construction equipment and machinery, including noise reducing components such as mufflers, silencers, covers, guards, vibration isolators, etc., shall be performed regularly to reduce excess noise. ▪ Construction equipment and machinery shall only be operated by trained and qualified personnel. BMPs to be implemented during operation: ▪ Heating, ventilation, and air conditioning equipment shall be shielded to reduce noise.
Public Services	BMPs to be implemented during operation: ▪ Parking areas shall be well lit and monitored by parking staff, and/or roving security guards at all times during operation. This will aid in the prevention of auto theft and other similar criminal activities. ▪ Facilities shall have "No Loitering" signs in place, be well lit, and be patrolled regularly by roving security guards. ▪ Security cameras would provide surveillance of Project Site to both lessen and apprehend criminal activity onsite.
Utilities	BMPs to be implemented during construction: ▪ The Tribe shall contact the Utility Notification Center to notify the utility service providers of excavation at the work site. In response, the utility service providers will mark or stake the horizontal path of underground utilities, provide information about the utilities, and/or give clearance prior to digging. ▪ The site shall be cleaned daily of trash and debris to the maximum extent practicable. BMPs to be implemented during construction and operation: ▪ A solid waste management plan shall be developed and adopted by the Tribe that addresses recycling and solid waste reduction and proper disposal onsite during construction and operation. These measures shall include, but not be limited to, the installation of a trash compactor for cardboard and paper products, the installation

Resource Area	Protective Measures and Best Management Practices
	of ample and visible trash bins to encourage proper disposal, recycling, and periodic waste stream audits.
Visual Resources	BMPs to be implemented during operation for exterior lighting across the Project Site: ▪ Exterior lighting on buildings shall be designed to not cast significant light or glare into the public right-of-way or any surrounding residential areas. ▪ Outdoor light fixtures shall be fully or partially shielded and filtered. ▪ The exterior lighting of the development would be integrated into components of the architecture and would be strategically positioned consistent with the International Dark-Sky Association's Model Lighting Ordinance to minimize light or glare off-site, and to minimize any direct site lines to the public. ▪ Lighting will consist of pole-mounted lights up to a maximum height of 25 feet and use high pressure sodium or light-emitting diodes (LEDs) with cut-off lenses and downcast illumination unless an alternative light configuration is needed for security or emergency purposes. Additionally, no strobe lights, spotlights, or flood lights will be used, and shielding will be used consistent with the International Dark-Sky Association's Model Lighting Ordinance. BMPs to be implemented during operation for structures visible from I-5: ▪ Follow BMPs in the Federal Highway Administration (FHWA) *Guidelines for the Visual Impact Assessment of Highway Projects* (2015) to minimize glare to motorists on I-5, which include but may not be limited to: o Structures will be constructed with low-sheen and non-reflective surface materials to reduce potential for glare. Unpainted metal surfaces will not be permitted. o At a minimum, finishes will be matte and roughened and concrete will be painted or will use concrete colored integrally with a shade that is two to three shades darker than the general surrounding area. Paints will be of a dull, flat, or satin finish only to reduce potential for glare, and the use of glossy paints for surfaces will be avoided.

2.2 ALTERNATIVE 2 – RECREATION-HEAVY MIXED-USE DEVELOPMENT

Alternative 2 is like Alternative 1 but would have less commercial development and more recreational facilities, plus the addition of a K-8 school and open space**. Table 2.2-1** through **Table 2.2-3** provide a breakdown of the building components and proposed land uses under Alternative 2. An example of how buildings could be arranged within the Project Site under Alternative 2 is illustrated in **Figure 11**. Approximately 1,594 direct employment opportunities would be generated during the construction of Alternative 2 and approximately 1,308 new full-time equivalent jobs would be generated during operation. Architecture, signage, lighting, and landscaping design, water supply (Options 1 and 2), wastewater treatment and disposal (Options 1 and 2), grading and drainage, roadway access and circulation, fire protection, law enforcement, emergency services, and electrical and natural gas utilities under Alternative 2 would be similar to those described for Alternative 1 (refer to **Appendix B** Section 1 for details) but designed to meet the demand for services described below. The construction methods, protective measures, and BMPs for Alternative 2 would be identical to those described for Alternative 1 (**Sections 2.1.8** and **2.1.9**).

Table 2.2-1: Land Use Summary – Alternative 2

Land Use	Total Development
Commercial, Retail, and Office	588,500 SF
Educational Facilities	30,000 SF
Recreational Facilities	53.1 acres
Lodging Facilities	200 rooms
Housing	320 units
Fuel Pumps	10 gasoline
Parking	3,186 spaces

A preliminary grading plan for Alternative 2 is shown in **Figure 12**. Approximately 362,000 cy of material would be excavated and subsequently used as fill within the Project Site, resulting in balanced cut and fill (**Appendix D**); therefore, no import or export of fill material is anticipated. Drainage facilities would be like Alternative 1 as shown in **Figure 13**. The size of the bioretention and infiltration facilities dimensions are shown in **Table 2.2-4**.

While water demand and wastewater generation for Alternative 2 would be more than Alternative 1, the facilities and required improvements would be similar for both on-site and off-site options. However, in Option 2 of Alternative 2 the location of the WWTP would be in the central portion of the Project Site in the open space area (see **Figure 14**). Alternative 2 would require approximately 493,667 gallons per day (gpd) of water on an average daily basis (see **Table 2.2-5**) with peak maximum water demand of approximately 1,002,144 gpd (see **Appendix B** Section 1.2, Water Supply Option 1 for City supply availability).

Daily average wastewater flows would be approximately 246,862 gpd while peak wastewater flow would be approximately 501,130 gpd. If reclaimed water is utilized, then the volume of wastewater discharge would decrease to approximately 640 gpd under average flow conditions and 227,899 gpd under peak wastewater flow conditions (see **Table 2.2-6**).

01. SCHOOL
02. BALL FIELDS
03. BALL FIELDS
04. GOLF ENTERTAINMENT FACILITY
05. CAR DEALERSHIP
06. PARKING
07. INDOOR RECREATION
08. HOTEL (LIMITED SERVICE)
09. CULTURAL VILLAGE
10. MULTI-FAMILY
11. MULTI-FAMILY
12. UPSCALE GROCERY
13. FAMILY ENTERTAINMENT
14. NEIGHBORHOOD RETAIL
15. CONVENIENCE STORE
16. UNDEVELOPED / PARK
17. EXISTING CABELLA'S N.I.S.

PROJECT SITE
NISQUALLY TRUST PROPERTY
OTHER NISQUALLY OWNED PROPERTY
EXISTING ROAD

0 500 Feet

FIGURE 11

ALTERNATIVE 2 - RECREATION-HEAVY MIXED USED DEVELOPMENT PROJECT SITE PLAN

Exhibit 12

ALTERNATIVE 2 - PRELIMINARY GRADING

BRITTON PARKWAY NE

MARVIN ROAD NE

GATEWAY BOULEVARD

MAIN STREET

MAIN STREET

INTERSTATE 5

CABELA'S

EXIST. STORMWATER FACILITY

BIORETENTION FACILITY (TOTAL AREA SHOWN) THIS WILL ULTIMATELY CONSIST OF MULTIPLE SMALLER FACILITIES DISPERSED THROUGHOUT THE SITE (TYP.)

INFILTRATION FACILITY (TOTAL AREA SHOWN) THIS MAY ULTIMATELY CONSIST OF MULTIPLE SMALLER FACILITIES DISPERSED THROUGHOUT THE SITE (TYP.)

C201 C202 C203 C204 C205 C206 C207 C208 C209

TOTAL INFILTRATION TRENCH AREA REQUIRED

TOTAL BIORETENTION CELL AREA REQUIRED

0 500 1,000 Feet

Catchment #	Total Treatment Area (Acres)	Paved Area (SF)	Landscape Area (SF)	Bioretention Area Required (SF)
C201	21.76	4.35	17.41	16,500
C202	19.07	15.62	3.45	27,900
C203	18.53	3.71	14.82	15,600
C204	26.90	22.04	4.86	39,400
C205	7.14	5.85	1.29	10,500
C206	23.82	19.35	4.27	34,600
C207	5.40	4.42	0.98	7,930
C208	24.92	4.98	19.94	21,200
C209	7.43	6.09	1.34	10,900

Table 5.2: Alternative 2 - Bioretention Treatment Area Required (total)

Catchment #	Total Area (Acres)	Paved Area (SF)	Roof Area (SF)	Landscape Area (SF)	Infiltration Trench Area Required (SF)
C201	22.00	4.35	0.04	17.41	25,900
C202	22.39	15.62	3.90	3.45	42,100
C203	18.53	3.71	0.00	14.82	29,000
C204	32.42	22.04	5.61	4.86	59,600
C205	8.61	5.85	1.46	1.29	15,900
C206	28.47	19.35	4.83	4.27	52,200
C207	6.51	4.42	1.10	0.98	12,000
C208	24.92	4.98	0.00	19.94	38,900
C209	8.96	6.09	1.52	1.34	16,400

Table 7.1: Alternative 2 - Stormwater Infiltration Facility Footprint Area

FIGURE 13

ALTERNATIVE 2 - PRELIMINARY DRAINAGE

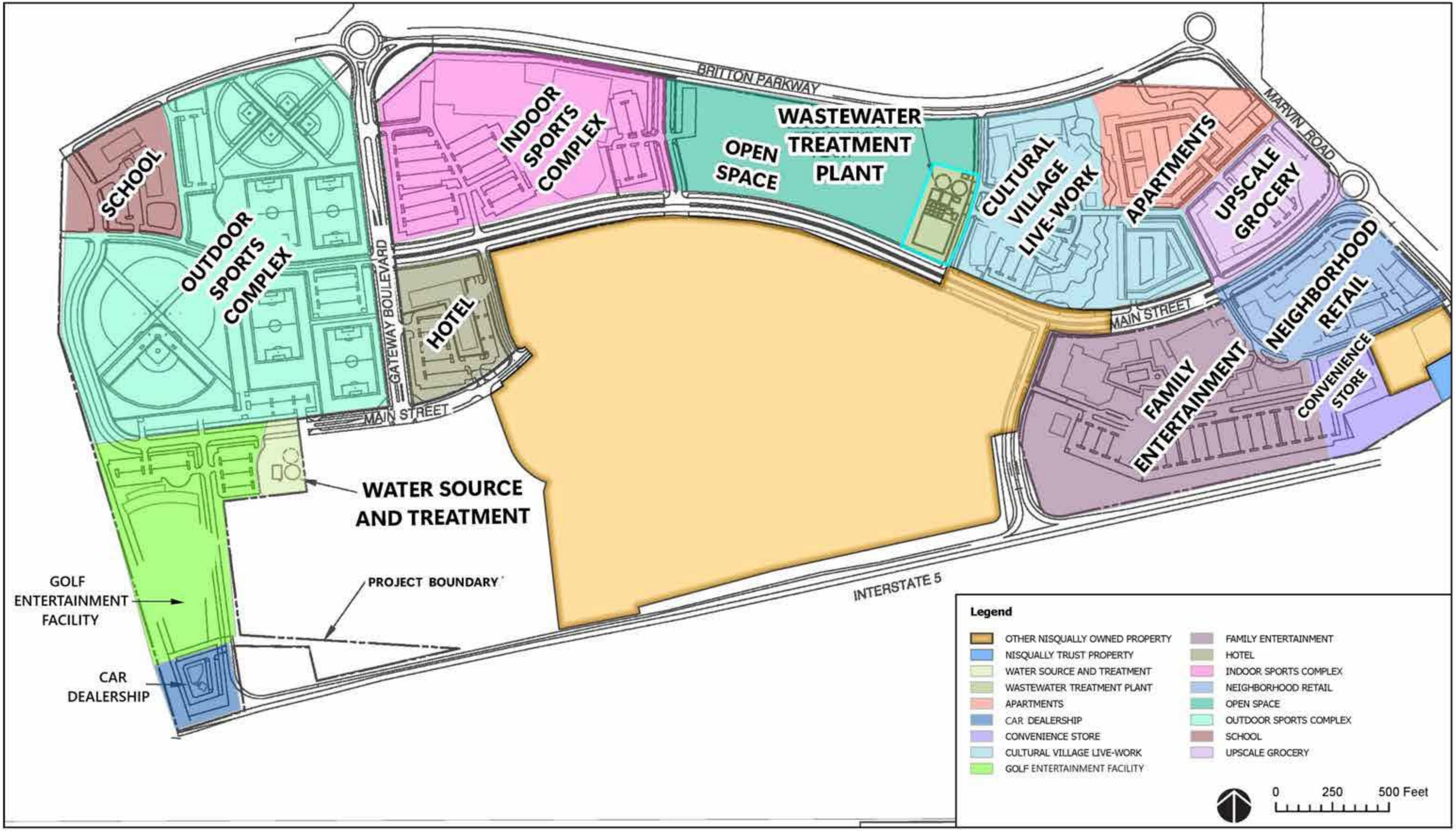


FIGURE 14

ALTERNATIVE 2 - ON-SITE WATER AND WASTEWATER OPTION

Table 2.2-2: Summary of Development - Alternative 2

Land Use	Approximate Size	Description of Uses
Commercial	550,000 sf	Includes a grocer, dining facilities, movie theater and bowling alley, artist studios and office, regional and neighborhood retail, four-story 200-room hotel, a car dealership, and a convenience store. The proposed convenience store would include 10 gasoline fuel pumps for passenger vehicles (no truck fueling stations are proposed), EV charging stations, and full-convenience retail, food, and beverage space.
Residential	320-units	Approximately 300 high-density multi-family units and 20 live/work units in the Cultural Village for a total of 320 housing units.
Educational facilities	30,000 sf	K-8 School with capacity for up to 200 students.
Golf Entertainment	7.4-acres	The facility will have 93 stations.
Open Space	14.6-acres	The northern boundary would remain as open space as this area of the Project Site contains the highest concentration of trees. Unpaved trails may be established within the open space area and a playground.
Indoor Recreation	200,000 sf	Used for flat-floor sports (e.g., volleyball, basketball, wrestling, track) and non-sporting events. Event projections are 93 annual events and 129 event days per year[6].
Athletic Complex	26.5-acres	Sport fields, including up to eight (8) softball and/or baseball fields and four soccer fields for use by the proposed school and other youth/adult recreational teams. The athletic complex on the eastern portion of the Project Site will have nighttime sports lighting to accommodate evening practices[7]. Evening events requiring sports lighting are not expected to regularly go past 10 p.m.

Table 2.2-3: Project Components – Alternative 2

Master Plan Area #	Development Components	Lot Area	Proposed Development Area or Units	Parking Spaces
01	School	4.0 acres	200 K-8 students; 30,000 sf	48
02 & 03	Athletic Complex	26.5 acres	12 fields	566
	Baseball/Softball	-	*8 fields*	-
	Soccer	-	*4 fields*	-
04 & 06	Golf Entertainment Facility	7.4 acres	93 stations	160
05	Car Dealership	2.0 acres	10,000 sf	10
07	Indoor Recreation	19.5 acres	200,000 sf	570
08	Hotel (4-Story)	5.0 acres	200 rooms	207
09	Cultural Village - Live-Work	8.2 acres	110,000 sf; 20 units	185

[6] Attendance at these events is anticipated to be approximately 125,000 per year (HBG, 2022).
[7] Sports lighting will be shielded, downcast, and directed away from Britton Parkway NE and surrounding residences.

Master Plan Area #	Development Components	Lot Area	Proposed Development Area or Units	Parking Spaces
	Retail and Studios	-	*80,000 sf*	-
	Office	-	*30,000 sf*	-
	Live/Work (Housing)	-	*20 units*	-
10 & 11	High Density Multi-Family Apartments	7.4 acres	300 units	450
12	Upscale Grocery	5.08 acres	40,000 sf	175
	Grocery Store	-	*30,000 sf*	-
	Retail	-	*10,000 sf*	-
13	Family Entertainment	20.0 acres	159,000 sf	492
	Theater and Dining	-	*54,000 sf*	-
	Bowling Alley	-	*37,000 sf*	-
	Adult Arcade Facility	-	*16,000 sf*	-
	Retail and Dining	-	*52,000 sf*	-
14	Neighborhood Retail	7.7 acres	59,500 sf	245
15	Convenience Store Gas Station	8.0 acres	10,000 sf; 10 pumps	54
16	Undeveloped/Passive Park	14.6 acres	14.6 acres	24
	Gravel Trails	-	*1 mile*	-
	Playground and Lawn	-	*23,000 sf*	-

Source: HBG, 2022

Table 2.2-4: Alternative 2 Bioretention and Infiltration Areas

Catchment Number	Total Catchment (acre)	Impervious Area (acre)*	Landscape Area (acre)	Bioretention Area Required (sf)	Infiltration Are Required (sf)
C201	22.6	5.19	17.41	18,500	35,900
C202	22.98	19.53	3.45	27,900	42,100
C203	18.53	3.71	14.82	15,800	29,000
C204	32.42	27.56	4.86	39,400	59,400
C205	8.61	7.32	1.29	10,500	15,800
C206	28.47	24.2	4.27	34,600	52,200
C207	6.51	5.53	0.98	7,900	12,000
C208	24.92	4.98	19.94	21,200	38,900
C209	8.96	7.62	1.34	10,900	16,400
Totals	**174.00**	**105.64**	**68.36**	**186,700**	**301,700**

Source: **Appendix D**

* Includes 19.16 acres of roof areas in addition to 86.41 acres of paved area, but roof areas do not require treatment and would be routed directly to the infiltration facilities.

Table 2.2-5: Estimated Average Water Usage – Alternative 2

Facility	Units	Demand per Unit (gpd)	Quantity	Average Daily Water Usage (gpd)
Apartments	Apt	150	300	45,000
Theater	SF	0.12	50,200	6,024
Entertainment Center	SF	0.08	10,375	830
Retail	SF	0.011	138,000	1,518
Grocery	SF	0.022	30,000	660
Retail Parking Factor	Spot	2	1,000	2,000
Office	SF	0.021	30,000	630
Hotel	Room	73	200	14,600
Golf Entertainment Facility	SF	0.08	55,500	4,440
Car Dealership	SF	0.011	10,000	110
Convenience Store	SF	0.016	10,000	1,600
Restaurants	SF	1	85,425	85,425
Athletic Complex	Restroom Stalls	250	24	6,000
Indoor Recreation	SF	0.1	200,000	20,000
School	SF	0.75	30,000	22,500
Bowling Alley	SF	0.16	29,500	4,720
Live/Work Units	EA	200	20	4,000
HVAC/Cooling	Ton	30	1,787	53,610
Landscape Irrigation	Acre	4,000	55	220,000
			Total	**493,667**

Source: **Appendix C**

Table 2.2-6: Estimated Wastewater Flow and Discharge – Alternative 2

Facility	Average Daily Wastewater Flow (gpd)	Peak Wastewater Flow (gpd)	Average Daily Flow Wastewater Discharge with Reclaimed Water Usage (gpd)	Peak Flow Wastewater Discharge with Reclaimed Water Usage (gpd)
Apartments	45,000	91,350	40,500	82,215
Theater	6,024	12,229	4,518	9,172
Entertainment Center	830	1,685	623	1,264
Retail	1,518	3,082	1,139	2,311
Grocery	660	1,340	581	1,179
Retail Parking Factor	2,000	4,060	1,500	3,045
Office	630	1,279	473	959
Hotel	14,600	29,638	10,950	22,229

Facility	Average Daily Wastewater Flow (gpd)	Peak Wastewater Flow (gpd)	Average Daily Flow Wastewater Discharge with Reclaimed Water Usage (gpd)	Peak Flow Wastewater Discharge with Reclaimed Water Usage (gpd)
Golf Entertainment Facility	4,440	9,013	3,330	6,760
Car Dealership	110	223	83	167
Convenience Store	1,600	3,248	1,200	2,436
Restaurants	85,425	173,413	85,425	173,413
Athletic Complex	6,000	12,180	4,500	9,135
Indoor Recreation	20,000	40,600	15,000	30,450
School	22,500	45,675	16,875	34,256
Bowling Alley	4,720	9,582	3,540	7,186
Live/Work Units	4,000	8,120	3,600	7,308
HVAC/Cooling	26,805	54,414	26,805	54,414
Landscape Irrigation	0	0	(220,000)	(220,000)
Total	**246,862**	**501,130**	**640**	**227,899**
Sludge Retained	**2,050**	**4,160**	**2,050**	**4,160**
Total Discharged	**244,812**	**496,970**	**(1,410)**	**223,739**

Source: **Appendix C**

2.3 ALTERNATIVE 3 – NO ACTION ALTERNATIVE

Under Alternative 3, neither of the development alternatives (Alternatives 1 and 2) would be implemented. No land would be placed in federal trust for the benefit of the Tribe. Alternative 3 assumes that the Project Site would continue to remain in its current undeveloped state for the foreseeable future.

2.4 COMPARISON OF THE ALTERNATIVES

A comparison of the land uses proposed under Alternatives 1 and 2 are provided in **Table 2.4-1**, while a comparison of the environmental effects of each alternative is provided below.

- **Alternative 1 – Commercial-Heavy Mixed-Use Development.** Among the project alternatives considered, Alternative 1, which is fully evaluated in **Section 3**, would provide the greatest socioeconomic benefit to the Tribe and surrounding community. Alternative 1 would generate more traffic and have greater potential impacts to public transportation systems but would result in less water demand and wastewater generation than Alternative 2. The social cost of greenhouse gas emissions would be higher for Alternative 1 due to the larger number of vehicle trips associated with the more intensive commercial development.
- **Alternative 2 – Recreation-Heavy Mixed-Use Development.** This alternative would result in similar effects to the environment as Alternative 1 but would provide the Tribe and the community with less economic benefit than Alternative 1. Most potential effects associated with most environmental issue areas would be less due to the smaller sized development that would be constructed under

Alternative 2, but the water demand would be higher due to the additional irrigation requirements. Impacts to natural communities would be lessened due to retaining some area as open space, but the lower density of Alternative 2 would be less consistent with the land uses long envisioned in local planning documents for the Gateway Town Center area. Alternative 2 would eliminate air quality and hazardous materials impacts associated with the diesel fueling stations in the convenience store area.

- **Alternative 3 – No Action Alternative.** Under Alternative 3, the Project Site would remain in its existing condition and would not be taken into trust. No environmental effects would occur. Under Alternative 3, the Tribe would not achieve any of the economic benefit that would be achieved with development of Alternative 1 or Alternative 2. Moreover, the Tribe would not be able to utilize its landholdings in a manner that would most benefit its members. This alternative would be less preferable than Alternative 1 and Alternative 2 since it would not meet the stated purpose and need of facilitating tribal self-sufficiency, self-determination, and economic development.

Table 2.4-1: Comparison of Land Uses

Land Use	Alternative 1 Development	Alternative 2 Development	Land Use Differences
Commercial and Retail	929,500 SF	588,500 SF	**341,000 SF**
Educational Facilities	–	30,000 SF	**30,000 SF**
Recreational Facilities	7.4 acres	53.1 acres	**45.7 acres**
Lodging Facilities	200 rooms	200 rooms	**0 rooms**
Housing	320 units	320 units	**0 units**
Fuel Pumps	10 diesel 16 gasoline	10 gasoline	**10 diesel** **6 gasoline**
Parking	4,655 spaces	3,186 spaces	**1,469 spaces**

2.5 ALTERNATIVES ELIMINATED FROM CONSIDERATION

The intent of the analysis of alternatives in the EA is to present to decision-makers and the public a reasonable range of alternatives that are both feasible and sufficiently different from each other in critical aspects. Prior to formally submitting an application requesting the Project Site be taken into trust, the Tribe considered a number of other sites in the State of Washington for the Proposed Project. These sites were evaluated based on size, proximity to transportation corridors, cost, availability for purchase, environmental constraints, revenue potential, proximity to competing tribal facilities, and location within traditional homelands. There are no other known available lands either owned by the Tribe or that can feasibly be purchased by the Tribe that would fulfill the Tribe's purpose and need for the Proposed Action, and that would provide substantial environmental advantages over the Project Site. Therefore, alternative locations for the trust acquisition are not evaluated within the EA.

Section 3 | Affected Environment and Environmental Consequences

3.1 INTRODUCTION

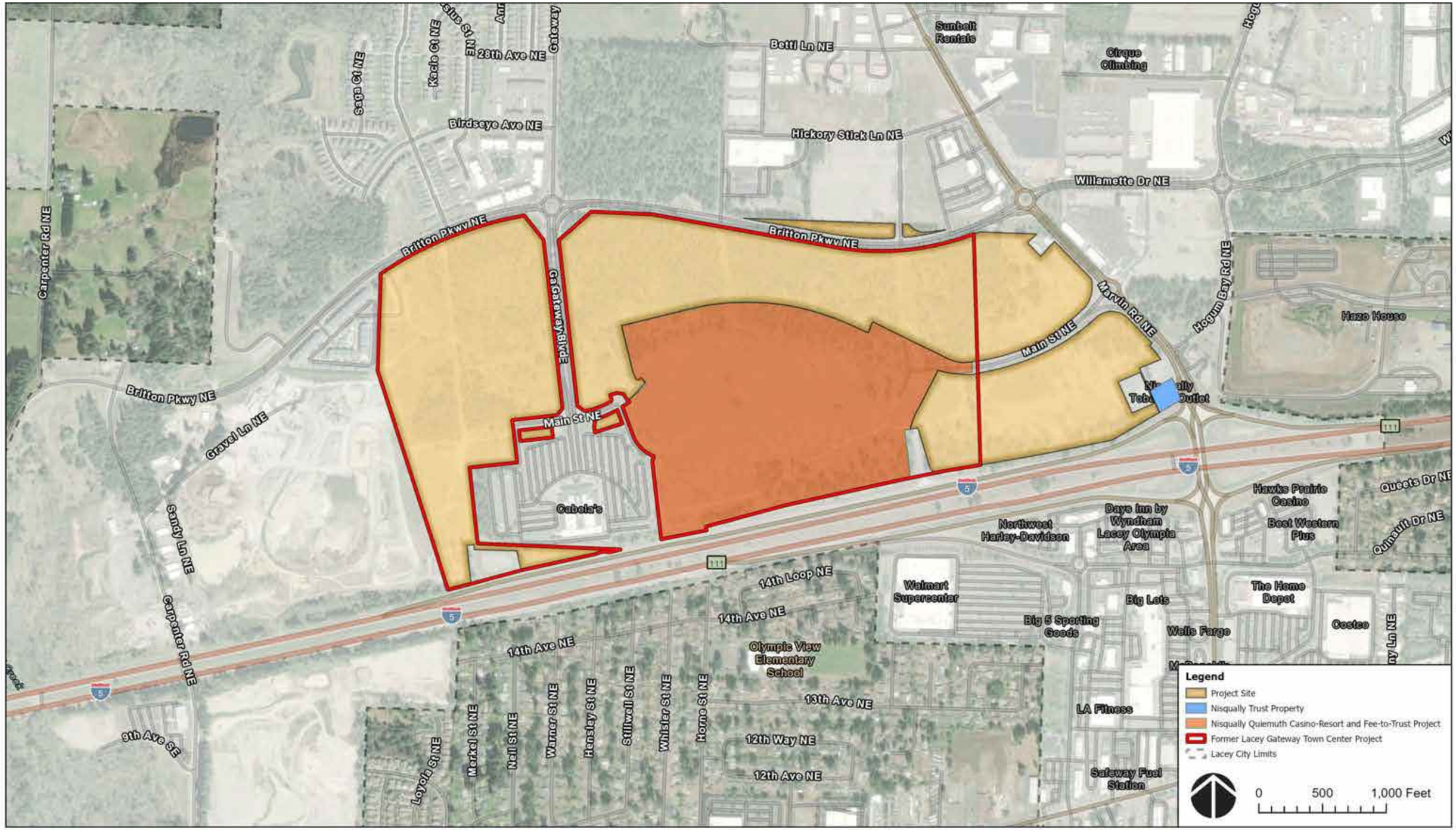
This section describes the existing environment of the area affected by the project alternatives as well as the environmental consequences for each project alternative. Additional details on the regulatory setting summarized below are included within **Appendix F**. Indirect and growth-inducing effects are identified in **Section 3.15**. Measures to mitigate for adverse impacts identified in this section are presented in **Section 4**. Note that the term "effects" is used synonymously with the term "impacts."

3.1.1 Reasonably Foreseeable Future Actions and Cumulative Effects

NEPA requires that agencies consider "any reasonably foreseeable environmental effects of the proposed agency action." NEPA Section 102(C)(i), 42 USC 4332(C)(i). Cumulative impacts are effects on the environment that result from the incremental effect of an action when added to other past, present, and reasonably foreseeable future actions. The Department's Procedures for the Implementation of NEPA define 'reasonably foreseeable future actions' as:

> …federal and non-federal activities not yet undertaken, but sufficiently likely to occur, that a Responsible Official of ordinary prudence would take such activities into account in reaching a decision. These federal and non-federal activities that must be taken into account in the analysis of cumulative impact include, but are not limited to, activities for which there are existing decisions, funding, or proposals identified by the bureau. Reasonably foreseeable future actions do not include those actions that are highly speculative or indefinite (43 CFR Part 46.30).

For the purposes of this analysis, reasonably foreseeable future actions include known development projects that are proposed, planned, and/or currently being constructed within two miles of the Project Site as shown in **Table 3.1-1** (Thurston County, 2023a and City of Lacey 2023a). This includes the proposed Nisqually Quiemuth Casino-Resort and Fee-to-Trust Project, for which the Tribe has submitted a separate application to the BIA for the acquisition of a 74-acre property into trust and subsequent development with a casino-resort, cultural center/museum, and associated facilities. **Table 3.1-1** outlines the proposed casino-resort facilities and fee-to-trust project elements.



Source: ESRI World Imagery

FIGURE 15

ADJACENT CULMULATIVE IMPACTS

Table 3.1-1: Proposed Cumulative Development Projects Within 2.0-Mile Radius

Project Name	Project Location	Approximate Distance to Project Site	Project Description	Project Status
Proposed Nisqually Quiemuth Casino-Resort and Fee-to-Trust Project	Adjacent to the Project Site (see Section 1.4.3 and Figure 15)	<100-feet from Project site	Proposed gaming development. Casino-Resort would include 58,200 sf gaming floor, 18-story hotel with 350 rooms, and event/multipurpose center. Cultural museum is also proposed. Approximately 3,040 parking spaces through surface lots and 7-level parking garage.	Under review by BIA. Separate NEPA process was initiated through Notice of Intent to prepare EIS.
Hickory Binding Site Plan	7770 Britton Parkway Northeast, City of Lacey	200-feet from Northeastern portion of Project site	Site plan for a 6-lot parcel	Application submitted
Hogum Bay Town Center	2420 Marvin Road Northeast, City of Lacey	400-feet from Eastern portion of Project site	Site plan to divide two existing parcels into 8 lots for a previously approved commercial and multifamily development.	Application submitted
Marriott Hotel at Britton Plaza	2565 Marvin Road Northeast, City of Lacey	300-feet from Northeastern portion of Project site	Construction of a 136-room hotel with associated parking	Application submitted
Quinault Self Storage	8324 Quinault Drive NE, City of Lacey	1,700-feet from Southeastern portion of Project site	Construction of a two-story self-storage facility on an approximately 3-acre parcel	Application submitted
The Landing at Hawks Prairie Retail Building	1120 Galaxy Drive NE, City of Lacey	2,700-feet from Southeastern portion of Project site	Construction of a shelled commercial retail building	Application submitted
2022 Carpenter Road Improvements	Carpenter Road at Diamond Drive, City of Lacey	2,000-feet from Western portion of Project site	Installation of water main and street reconstruction	Approved, pending construction
Ecology Hazardous Materials Storage	300 Desmond Drive Southeast, City of Lacey	1.25-miles from Southwestern portion of Project site	Site plan for the installation of a hazardous materials storage structure	Application submitted
Martin Way Park and Ride Improvements	5400 Martin Way East, City of Lacey	1.3-miles from Southwestern portion of Project sire	Site plan for facility improvements supporting Intercity Transit service at the Martin Way Park and Ride	Application submitted
Greg Cuoio Park Phase 1A	2720 Carpenter Road NE, City of Olympia	1-mile from Northwestern	First phase of the approved Greg Cuoio Park and Greenways Master Plan	Approved, pending construction

Project Name	Project Location	Approximate Distance to Project Site	Project Description	Project Status
		portion of Project site		
Bradley Park Subdivision	4200 6th Avenue NE, City of Lacey	2-miles from Western position of Project site	Subdivision of an approximately 16-acre parcel into 82 lots for single family residential development	Application submitted
15th Avenue Duplexes	4101 15th Avenue NE, City of Lacey	2-miles from Western position of Project site	Site plan for construction of four duplexes	Application submitted
At Home Woodland District Design Review	651 Sleater Kinney Road SE, City of Lacey	2.5-miles from Southwestern position of Project site	Building addition to the former Sears building at South Sound Center	Application submitted, review in progress
Hogum Bay Building Site Plan Review	8401 Hogum Bay Lane NE, City of Lacey	4,000-feet from Northeastern portion of Project site	Construction of a building for growing and processing marijuana	Application submitted
NC Machinery Site Amendment	8411 31st Avenue NE, City of Lacey	4,000-feet from Northeastern portion of Project site	An amendment to an existing site plan for the installation of an above-ground fueling tank and propane tank	Planning stages, application not yet submitted
Lift Station 19 Replacement	2631 Willamette Drive NE, City of Lacey	8,800-feet from Eastern portion of Project site	Decommissioning of an existing wet well/dry well wastewater lift station and construction of a new submersible wastewater lift station	Approved, pending construction
Tilden Apartments Short Subdivision	3200 Willamette Drive NE, City of Lacey	1.2-miles from Eastern portion of Project site	Division of an approximately 11.5-acre parcel into two neighborhood-commercial and one multifamily lot	Application submitted
Campus Springs Final Condominium	8808 Corona Street NE, City of Lacey	1.2-miles from Eastern portion of Project site	Construction of a 28-unit condominium complex	Preliminary approval issued, pending final approval
Monarch Children's Justice and Advocacy Center	3020 Willamette Drive NE, City of Lacey	1-mile from Eastern portion of Project site	Construction of an office space addition and pet therapy patio	Application submitted
Campus Reserve Final Condominium	3315 Juno Court NE, City of Lacey	1.2-miles from Eastern portion of Project site	Construction of a 39-unit condominium complex	Preliminary approval issued, pending final approval

Source: Thurston County, 2023a; City of Lacey, 2023a

3.2 AIR QUALITY

3.2.1 Regulatory Setting

The air quality regulatory setting is summarized in **Table 3.2-1,** and additional information on the regulatory setting can be found in **Appendix F**.

Table 3.2-1: Regulatory Policies and Plans Related to Air Quality

Clean Air Act of 1970	▪ The CAA created the National Ambient Air Quality Standards (NAAQS) for six CAPs: ozone, carbon monoxide, particulate matter, nitrogen dioxide, sulfur dioxide, and lead. ▪ To determine conformance with the National NAAQS, states are responsible for providing ambient air monitoring data to the USEPA. The USEPA then determines, using the violation criteria, if the results of the monitoring data indicate compliance with the NAAQS. The USEPA classifies areas in compliance with the NAAQS as being in "attainment". Areas that do not meet the NAAQS are classified as being in "nonattainment" by the USEPA. ▪ States are required to have State Implementation Plans for areas that are not achieving the NAAQS (nonattainment areas). ▪ General Conformity Rule requires demonstration that a proposed federal action will conform to the applicable State Implementation Plans. ▪ Prevention of Significant Deterioration (PSD) program protects Class I areas. ▪ Tribal minor new source review permits are required if emissions would exceed certain standards.
State Agency Climate Leadership Act	▪ Codifies GHG emission reduction goals for lands under State jurisdiction, including the reduction of GHG emissions 15% below 2005 baseline by 2020, 45% below 2005 by 2030, 75% below 2005 by 2040, and 95% below 2005 by 2050.
Climate Commitment Act	▪ Establishes a "cap and invest" program for lands under State jurisdiction that sets a limit on the amount of greenhouse gases that can be emitted and then auctions off allowances for companies and facilities that emit greenhouse gases until that cap is reached.
Thurston County Climate Mitigation Plan	▪ Provides strategies and actions for the County, and the Cities of Lacey, Olympia, and Tumwater to reduce greenhouse gas emissions. ▪ Identifies emission reduction targets of 45 percent by 2030 and 85 percent by 2050.
Thurston Climate Adaptation Plan	▪ Identifies actions to help the region prepare for and remain resilient to climate change.
Thurston County Comprehensive Plan	▪ Details policies and goals for zoning and development regulations in the unincorporated portions of the County. ▪ Includes objectives and policies to address climate change impacts.

3.2.2 Environmental Setting

The Project Site is currently within the jurisdictional area of the Olympic Region Clean Air Agency (ORCAA). The ORCAA regulates air pollutant emissions from stationary sources within the County. However, once

the Project Site is taken into trust, air quality would be under the jurisdiction of the USEPA with their technical assistance. As shown in **Table 3.2-2**, Thurston County meets the federal standards or is unclassifiable for all criteria air pollutants. The City is within a portion of the County which is designated by the USEPA as a maintenance area for PM_{10}. The USEPA approved the second 10-year PM_{10} maintenance plan in 2013 (USEPA, 2013).

Table 3.2-2: County NAAQS Attainment Status

Pollutant	NAAQS
Ozone (8-hour)	Attainment
PM_{10} (24-hour, annual)	Attainment (Maintenance)*
$PM_{2.5}$ (annual)	Attainment
Carbon Monoxide (8-hour, 1-hour)	Attainment
Nitrogen Dioxide (annual, 1-hour)	Attainment
Sulfur Dioxide (24-hour,1-hour)	Attainment
Lead (30-day average)	Attainment

Source: USEPA, 2000; USEPA, 2023a
PM_{10}: Particulate matter with diameters that are generally 10 micrometers and smaller.
$PM_{2.5}$: Particulate matter with diameters that are generally 2.5 micrometers and smaller.
*Maintenance status applies to the Cities of Olympia, Tumwater, and Lacey only.

The nearest air quality sensitive receptors in the Project Site vicinity include an apartment complex that abuts the western site boundary and apartment complexes and single-family houses to the northwest that are approximately 150 feet from the site boundary. There is also residential housing across I-5 to the south that is approximately 450 feet from the site boundary. The nearest school is approximately 1,300 feet to the south of the Project Site boundary.

3.2.3 Impacts

Assessment Criteria

Significant impacts to ambient air quality could result if either construction or operation would result in violations of the CAA provisions, or if emissions would impede the ability of the State to meet NAAQSs.

Methodology

Project emissions from construction and operation were estimated as follows:

- **Construction**: Construction emissions of CAPs from earth-moving, fine grading, and equipment due to diesel combustion and on-road vehicle operations were calculated using the USEPA MOVES3 model, assuming construction begins in 2026 and lasts 24 months. Details are in **Appendix G**.
- **Operation**: Operational emissions from vehicles driven by patrons, employees, and delivery drivers were estimated using trip generation estimates in the Traffic Memorandum (Transpo Group, **Appendix H**) and emission factors from the MOVES3 model, which accounts for stricter tailpipe emission standards. Site-specific input data and results are in **Appendix G**.

In addition, the categories detailed in **Table 3.2-3** were also analyzed.

Table 3.2-3: Additional Analysis Categories for Assessing Air Quality Effects

Analysis Category	Details
Hazardous Air Pollutants	Emissions of HAPs mainly come from gasoline pumps at the Travel Center (Alternative 1) or Convenience Store Gas Station (Alternative 2). Gasoline fueling stations release benzene, ethylbenzene, toluene, xylenes, and naphthalene during gasoline transfer, venting, and refueling. Gasoline vapor HAPs are quantified within the volatile organic compounds (VOCs) emission estimates for construction and operation. Other HAP sources include DPM emissions from trucks, generators, and construction equipment, quantified within $PM_{2.5}$ estimates.
Stationary Source Emissions	A diesel generator was assumed to provide emergency power for the on-site WWTP under Wastewater Option 2 to account for the worst-case scenario for potential emissions. It is assumed to require maintenance testing once per month for a runtime of 0.5 to 1 hours. natural gas will be used for space heating, water heaters, and cooking. Annual natural gas usage is based on similar commercial and residential developments. Emissions from natural gas combustion are calculated using AP-42 factors (USEPA, 1995). Stationary-source emissions are combined with mobile emissions for total operation emissions.
Federal General Conformity	Conformity regulations apply to federal actions causing CAP emissions above certain levels in nonattainment/maintenance areas. The Project Site is in attainment for all NAAQS but is in a maintenance area for PM_{10}, with a *de minimis* level of 100 tons/year. If emissions are below this level, no conformity analysis is needed.
Greenhouse Gas Emissions	GHG emissions were calculated using the MOVES3 model and AP-42, USEPA's *Compilation of Air Pollutant Emissions Factors*
Federal Class I Areas	Class 1 areas are significant natural spaces that include all international parks, national wilderness areas and national memorial parks larger than 5,000 acres, and national parks larger than 6,000 acres. Emissions exceeding the PSD threshold of 250 tons/year of any CAP from stationary sources require a best available control technology analysis. The Olympic National Park, Mount Rainier National Park, and Alpine Lakes Wilderness are all within the preconstruction review distance of the Project Site.
Tribal New Source Review	NSR is a preconstruction permitting program for stationary sources under the CAA. The Tribe would be required to apply for coverage under the NSR for the diesel backup generator and fueling stations. Stationary source operational emissions are quantified and compared to NSR thresholds in Table 3 of **Appendix F**.

Alternative 1 – Commercial-Heavy Mixed-Use Development

Construction Emissions

Construction of Alternative 1 would result in emissions of CAPs and HAPs (primarily in the form of DPM) from the use of construction equipment, tree removal/hauling, and grading activities. Neighboring areas

could be impacted by dust generated during construction and potentially other construction-related emissions if not properly managed. The nearest residential development, Britton Place, directly abuts the Project Site to the west. Construction is anticipated to begin in 2026 and last 24 months. The construction emission totals for Alternative 1 are shown in **Table 3.2-4**.

Emissions estimates assume the implementation of construction BMPs described in **Table 2.1-9.** Implementation of construction BMPs is expected to control the production of fugitive dust (PM_{10} and $PM_{2.5}$) and to reduce emissions of CAPs and DPM. This would reduce the overall quantity of these emissions and dust that could disperse off-site and negatively affect neighboring areas. As shown in **Table 3.2-4**, emissions of individual CAPs from the construction of Alternative 1 would not exceed applicable *de minimis* levels; therefore, a conformity determination is not required and construction would not result in significant adverse effects associated with the regional air quality environment.

Operation Emissions

Criteria Air Pollutants

Operation of Alternative 1 would result in the generation of mobile emissions from patron, employee, and delivery vehicles, as well as stationary-source emissions from combustion of natural gas in stoves, heating units, and other equipment. Estimated mobile and stationary emissions from operation of Alternative 1 are provided in **Table 3.2-5.** Detailed calculations of vehicle and area emissions are included in **Appendix G**.

Table 3.2-4: Construction Emissions of Criteria Pollutants – Alternative 1 (tons/year)

Construction Year	NOx	VOC	CO	SO_2	PM_{10}	$PM_{2.5}$
2026	7.98	0.75	5.50	0.01	3.66	0.93
2027	6.38	10.15	7.72	0.02	0.29	0.28
Total Emissions	**14.37**	**10.90**	**13.22**	**0.04**	**3.95**	**1.52**
De minimis Level	N/A	N/A	N/A	N/A	100	N/A

Source: **Appendix G**.

Notes: N/A = Not Applicable. *De minimis* levels are not applicable because the project area is in attainment, except for PM_{10}. Because the Project Site is in a PM_{10} maintenance area, the associated *de minimis* level is 100 tons per year.

Table 3.2-5: Operation Emissions of Criteria Pollutants – Alternative 1 (tons/year)

Sources	NOx	VOC	CO	SO_2	PM_{10}	$PM_{2.5}$
Stationary	0.54	7.12	0.39	0.05	0.18	0.09
Mobile	28.01	2.15	148.64	0.43	8.62	2.15
Total Emissions	**28.55**	**9.27**	**149.03**	**0.48**	**8.80**	**2.24**
De minimis Levels	N/A	N/A	N/A	N/A	100	N/A
Minor NSR Threshold	10	5	10	10	5	3

Source: **Appendix G**

Notes: N/A = Not Applicable. *De minimis* levels are not applicable because the project area is in attainment, except for PM_{10}. Because the Project Site is in a PM_{10} maintenance area, the associated *de minimis* level is 100 tons per year.
Minor NSR Thresholds only apply to stationary sources.

The Tribe would be required to apply for coverage under the NSR program for the operation of any stationary sources, including the Travel Center fueling stations. Compliance with the NSR program would require emission limitations and monitoring and reporting requirements. As shown in **Table 3.2-5**, the emissions of PM_{10} would not exceed the federal *de minimis* level; therefore, a conformity determination

is not required, and operational emissions do not have the potential to violate any air quality management plans. In addition, BMPs provided in **Table 2.1-9** would minimize CAP emissions resulting from operation of Alternative 1. Emissions of CAPs would be less than significant.

Hazardous Air Pollutants

Operation of Alternative 1 would generate HAPs associated with gasoline vapors from the proposed Travel Center and DPM emissions from mobile and stationary sources. Gasoline fueling stations release HAPs including benzene, ethylbenzene, toluene, xylenes, and naphthalene from gasoline vapors. These vapors are emitted during the transfer of gasoline from tanker trucks to underground storage tanks, venting of underground storage tanks, and refueling vehicles (including assumed/estimated spillage). VOC emissions from the proposed Travel Center were estimated at 6.9 tons per year using the USEPA's gasoline dispensing calculator[8] (**Appendix G**).

The gas pumps at the proposed Travel Center would be permitted by the USEPA under the minor NSR program. Compliance with this program will require the use of emissions control technology that controls emissions from underground storage tanks (Stage I). Vapors from vehicle refueling are addressed by onboard refueling vapor recovery systems, which have been required for gasoline motor vehicles since the late 1990s. In addition, minor NSR permits require gas stations to operate in a manner that minimizes vapor releases, conduct UST performance testing and inspections, maintain records, and meet reporting requirements. Compliance with vapor recovery requirements for vehicles and USTs would reduce potential impacts from VOC emissions to a less-than-significant level. Although there are no known federal or state policies related to distances between residential land uses and gas stations, the California Air Resources Board (CARB) has recommended in guidance documents that sensitive land uses should not be located within 300 feet of a large gasoline dispensing facility (CARB, 2005). The proposed Travel Center would be located over 500 feet from the closest on-site residence and over 1,000 feet from the closest off-site residence, which is south of I-5. These buffer distances exceed CARB's recommendations and would allow for the dispersal of the minor VOC emissions that are not already captured by the vapor recovery systems.

With implementation of BMPs and adherence to the NSR permitting program, Alternative 1 would not result in significant adverse impacts associated with the regional air quality environment. Operation of Alternative 1 would not affect public health and safety and it would be compliant with federal mandates for operational vehicle and area emissions.

Alternative 2 – Recreation-Heavy Mixed-Use Development

Construction emission totals for Alternative 2 would be less than the emissions resulting from Alternative 1 because less site infrastructure development is proposed. Additionally, BMPs are provided in **Table 2.1-9** to reduce project-related construction CAPs and DPM. Therefore, emissions of individual CAPs from construction of the Recreation-Heavy Mixed-Use Development would not exceed *de minimis* levels. A conformity determination is not required, and project-related emissions would be less than significant.

Buildout of Alternative 2 would result in the generation of operational emissions lower than Alternative 1 as less site development is proposed. The gas station proposed under Alternative 2 would have no diesel fueling stations and fewer gasoline fueling stations than the Travel Center proposed under Alternative 1

[8] This calculator uses worst-case "potential to emit" assumptions that are based on a maximum operation scenario rather than a typical operation scenario, so actual emissions are expected to be less than this reported amount.

and consequently fewer VOC emissions. BMPs provided in **Table 2.1-9** would minimize CAP, HAP, and DPM emissions resulting from operation of Alternative 2. With implementation of BMPs and adherence to the tribal NSR permitting program, impacts associated with the regional air quality environment would be less than significant under Alternative 2.

Alternative 3 – No Action Alternative

Under the No-Action Alternative, the Project Site would remain undeveloped and none of the construction or operational air quality impacts identified for Alternative 1 would occur.

Reasonably Foreseeable Cumulative Impacts

Greenhouse Gas Emissions

Development of Alternatives 1 and 2 would result in an increase in GHG emissions from construction, mobile sources (trips generated), stationary and area sources (components that directly emit GHG), and indirect sources related to energy production. **Table 3.2-7** shows the direct construction and stationary GHG emissions and annual indirect operation GHG emissions in metric tons (MT) of carbon dioxide equivalent (CO_2e) from the alternatives.

Table 3.2-6: Construction and Operational GHG Emissions (MT of CO2e)

Emission Source	Alternative 1	Alternative 2
Construction (Total)	**2,523**	**1,934**
Operation (Annual)		
Mobile	68,075	49,016
Energy	3,780	3,023
Stationary	2,700	2,214
Solid Waste	92	73
Water/Wastewater	84	67
Operation Total	**74,730**	**54,393**

Source: **Appendix G**

Notes: CO_2e = carbon dioxide equivalent; MT = metric tons

The calculation of the one-time loss of sequestered carbon is the product of the converted acreage value and the carbon content value for each land use type (vegetation community). The one-time reduction in sequestration capacity from the removal of trees associated with the development of Alternative 1 was calculated at 10,222 MT CO_2e, or 511 MT of CO_2e/year over a typical 20-year growing period, as shown in **Table 3.2-8**. By comparison, the removal of trees associated with the development of Alternative 2 was calculated at 8,668 MT CO_2e, or 433 MT of CO_2e/year.

Table 3.2-7: Vegetation Removal – Estimated Loss of Sequestered Carbon

			Alternative 1		Alternative 2	
Vegetation Land Use	Vegetation Sub-Type	CO_2 Emissions Factor (MT CO_2/acre)	Net Loss (acres)	Loss of Sequestered Carbon (MT CO_2)	Net Loss (acres)	Loss of Sequestered Carbon (MT CO_2)
Forest Land	Trees	111	92.09	10,222	78.09	8,668

Source: **Appendix G**

As shown in **Table 3.2-7**, approximately 90 percent of the operational GHG emissions from the alternatives would come from indirect mobile emissions from delivery, patron, and employee vehicles. The project includes design elements and BMPs (**Table 2.1-9)** that would reduce GHG emissions, including utilizing clean fuel vehicles for vehicle fleets (where practical), preferential parking (employee vanpools, carpools, and/or other rideshare vehicles), EV capable and equipped spaces, shuttle services as feasible, prohibiting buses from idling for extended periods, and providing adequate ingress and egress at entrances to minimize vehicle idling and traffic congestion. In addition, mitigation measures in **Section 4**, identified for transportation impacts, requires that the Tribe coordinate with local transit providers to ensure adequate transit service to the Project Site, and participate in the Regional Commute Trips Reduction programs already in place in Thurston County, including employee trip reductions programs, employee shuttles and other similar means of achieving commute trip reduction.

In addition to mobile sources, the alternatives would generate GHG emissions through stationary sources and area sources, such as water heaters, cooking appliances, and landscape equipment, and would contribute to indirect sources of GHG emissions through energy usage and solid waste. BMPs identified in **Table 2.1-9** would be implemented by the project alternatives to reduce and minimize GHG emissions from stationary, area, and indirect resources. Examples of those BMPs include utilizing electric boilers and appliances over gas and propane to the greatest extent practicable, reducing water flow through utilizing low-flow appliances, drought resistant landscaping, and incorporating "Save Water" signs throughout the development, utilizing energy efficient lighting and appliances, and placing recycling bins throughout the facility. Additionally, the implementation of project BMPs, including the provision of EV charging stations, installing energy efficient lighting, and promoting waste reduction, is consistent with State strategies to reduce GHG emissions. Therefore, Alternative 1 would not result in cumulatively considerable impacts associated with GHG emissions.

The project alternatives include components that would lessen their vulnerability to the impacts from GHG emissions. On-site heating and air conditioning will lessen the effects of increasing temperatures and frequency of extreme heat days or extreme weather conditions. The Project Site is not located near the sea and is therefore not susceptible to sea level rise risks or flooding. Emergency services sufficiently service the Project Site and surrounding area due to being in a developed region with paved roads. To address wildfire risk, the project alternatives have incorporated BMPs and mitigation measures to reduce their susceptibility to this risk (refer to **Section 3.6** for further discussion of wildfire risks).

3.3 BIOLOGICAL RESOURCES

3.3.1 Regulatory Setting

The regulatory setting for biological resources is summarized in **Table 3.3-1** and additional information on regulations can be found in **Appendix F**.

Table 3.3-1: Regulatory Policies and Plans Related to Biological Resources

Regulation	Description
Federal	
Federal Endangered Species Act (FESA)	▪ Enforced by the USFWS and the NOAA. USFWS generally manages land and freshwater species, and NOAA generally manages marine and anadromous species. ▪ Protects federally listed wildlife and their habitat from take through provisions. ▪ Requires consultation under Section 7 of the FESA for federal agencies if take of a listed species is necessary to complete an otherwise lawful activity.

	▪ Considers habitat loss an impact to the species. ▪ Defines Critical Habitat as specific geographic areas within a listed species range that contain features considered essential for the conservation of the listed species.
Migratory Bird Treaty Act (MBTA)	▪ Protects migratory birds and requires project-related disturbances to be reduced or eliminated during the nesting season.
Bald and Golden Eagle Protection Act	▪ Prohibits take, possession, and commerce of bald and golden eagles and associated parts, feathers, nests, or eggs with limited exceptions. ▪ The bald eagle was federally delisted under the FESA in 2007; however, provisions of the act remain in place for bald and golden eagles.
Magnuson-Stevens Fisheries Conservation and Management Act (MSFC)	▪ Mandates that the National Marine Fisheries Service (NMFS) must identify Essential Fish Habitat (EFH) for federally managed marine fish. ▪ Requires federal agencies to consult with NMFS on activities that may adversely affect EFH.
Clean Water Act Section 404 and 401	▪ Defines qualities of aquatic habitats considered "Waters of the United States" subject to jurisdiction of the U.S. Army Corps of Engineers (USACE). ▪ Affords for the regulation of filling or dredging of Waters of the U.S. under the authority of Section 404 of the CWA by USACE or the USEPA. ▪ Projects requiring a 404 permit under the CWA also require a Section 401 certification from the USEPA.
Washington Administrative Code 220-610-110	▪ Provisions protect wildlife species designated by the Washington Department of Fish and Wildlife (WDFW) as endangered, threatened, or candidate, as well as their habitat.
Washington Wildlife Commission Permanent Rules	▪ Provide for the protection of fish and wildlife resources on land under State jurisdiction. ▪ The rules become part of the WAC.
Washington State Wetland Rating Systems for Western Washington	▪ Designed to help agencies make decisions about standards for protecting wetlands. ▪ Categorize wetlands based on rarity, sensitivity to disturbance, and functionality. ▪ There are two wetland rating systems: one for the west side of the state and one for east of the Cascade Range.
Washington State Growth Management Act	▪ Requires the state to identify urban growth boundaries and to classify and conserve natural resource land outside of urban growth boundaries. ▪ Requires local regulations to protect "Critical Areas," which includes wetlands and fish and wildlife conservation areas. ▪ Requires counties within the state to designate natural resource land, such as timberland, agricultural land, and mining land, and identify measures to protect such resources.
Chapter 14.32 of the City's Municipal Code	▪ Serves as the Tree and Vegetation Protection and Preservation requirements in the City. ▪ Requires a land clearing permit for land clearing activities on private land. ▪ Sets vegetation standards for commercial and land division developments.
Chapter 14.28 of the City's Municipal Code	▪ Defines the City's wetland preservation and protection policies. ▪ Sets development buffer areas surrounding wetland habitats. ▪ Provides standards for avoiding, minimizing, and mitigating wetland impacts.
Thurston County Habitat Conservation	▪ The County's response to the federal FESA listing of animals in Thurston County. ▪ It saves building permit applicants the extra step of getting federal permits in addition

Regulation	Description
Plan	to county permits if their building project impacts listed species.

3.3.2 Environmental Setting

This section summarizes findings from the following: 1) A Biological Assessment (BA) prepared to facilitate consultation with the USFWS pursuant to Section 7 of the federal FESA (**Appendix I-1**); 2) A BA and EFH Assessment for the NOAA Fisheries Service addressing federally listed anadromous fish, Critical Habitat designated by NOAA Fisheries Service, and EFH protected by the MSFC (**Appendix I-2**); 3) A Technical Memorandum addressing the potential for species protected under Washington State law to be present on the Project Site (**Appendix I-3**).

Habitat Types

Two terrestrial habitat types were identified within the Project Site: ruderal/disturbed (approximately 82.11 acre) and mixed conifer – hardwood forest (approximately 92.09 acres) (**Figure 16**). The majority of the Project Site is heavily disturbed because of historical logging and timber thinning, but the majority of the site is forested. Ruderal/disturbed areas are a mixture of barren gravelly soils, shrubs, and weedy herbaceous cover, usually in areas heavily impacted by human habitation, industry, and commerce. Trees and shrubs within the Project Site may provide habitat for migratory birds during the general nesting season (February 15 through September 15), but no nesting birds were observed during the biological surveys. Onsite species observed are listed in **Appendix I-1**. Background review of the National Wetland Inventory (NWI) database did not indicate the presence of wetlands, Waters of the U.S. (WOTUS), or other aquatic features in the Project Site (**Appendix I**). No aquatic features were observed during the biological surveys. For additional water feature information, refer to **Section 3.7.2** with **Figure 20** showing surface water features.

Critical Habitat

There is no designated critical habitat for federally listed species within the Project Site. Critical habitat located near the Project Site is summarized in **Table 3.3-2**. Killer whales, pelagic fish, and groundfish were dismissed from study due to the distance and lack of connectivity to Puget Sound and Nisqually Reach from the Project Site (Attachment E of **Appendix I-1**), the unlikelihood of the species to travel downstream into Woodland Creek or McAllister Creek, and the need for deeper waters.

Table 3.3-2: Nearby Critical Habitat

Critical Habitat	Species Name	Distance from Project Site
Woodland Creek	Steelhead (*Oncorhynchus mykiss*)	0.66 miles west
Nisqually Reach, within Puget Sound	bull trout (*Salvelinus confluentus*)	2.6 miles east
McAllister Creek	Chinook Salmon (*Oncorhynchus tshawytscha*), Steelhead (*Oncorhynchus mykiss*), and the Killer Whale (*Orcinus orca*).	1.7 miles east

Source: **Appendix I-1**

Essential Fish Habitat

The Project Site does not contain aquatic features and thus does not contain EFH; however, it is identified as within a watershed which affects EFH for coho/Puget Sound steelhead, and pink salmon species. Puget Sound and Nisqually Reach are designated EFH for Chinook, coho, Puget Sound pink salmon, groundfish, and coastal pelagic species. A map of designated EFH in the project is provided as Figure 10 of **Appendix I-2**.

Federally Listed Species

For the purposes of this assessment, "federally listed species" has been defined to include those species that are listed as Endangered or Threatened under FESA or formally proposed candidates for listing. A BA for terrestrial species (**Appendix I-1**) and a BA/EFH Assessment for fish species (**Appendix I-2**) were prepared to assess the potential for federally listed species to occur in the project area. Based on the analysis within the BA (see Section 3.6 of **Appendix I-1**), the federally listed wildlife species in **Table 3.3-3** have the potential to occur within the Project Site. The Project Site contains marginal habitat to support these species. Pertinent data and information such as habitat preference and distribution of each species in the Project Site are briefly summarized in **Appendix I-1**.

Based on the analysis presented in the BA/EFH Assessment (see Section 3.5 of **Appendix I-2**), the federally listed fish species in **Table 3.3-3** have the potential to occur within the Project Site watershed. Furthermore, Puget Sound pink salmon (*Oncorhynchus gorbuscha*) are not federally listed; however, this species is considered due to the presence of EFH. Pertinent data and information such as habitat preference and distribution of each species in the Project Site are briefly summarized in **Appendix I-2**.

State-Listed Special Status Species

A Biological Memorandum was prepared to assess the potential for state-listed special status species to occur in the project area and is included in **Appendix I-3**. Based on in the analysis presented in the Biological Memorandum (see Table 1 of **Appendix I-3**), the state special-status species listed in **Table 3.3-3** have the potential to occur within the Project Site. Pertinent data and information such as habitat preference and distribution of each species in the Project Site are briefly summarized in **Appendix I-3**.

Source: ESRI World Imagery

FIGURE 16

HABITAT TYPES

Table 3.3-3: Potentially Occurring Federal and State Special-Status Species

Category	Species Name
Federal Special-Status Species	
Animal Species	▪ Yelm Pocket Gopher (*Thomomys mazama yelmensis*)
Bird Species	▪ Marbled Murrelet (*Brachyramphus marmoratus*) ▪ Streaked Horned Lark (*Eremophila alpestris strigata*)
Aquatic Species (within broader watershed)	▪ Bull Trout (*Salvelinus confluentus*) ▪ Chinook Salmon (*Oncorhynchus tshawytscha*) ▪ Steelhead (*Oncorhynchus mykiss*) ▪ Coho Salmon (*Oncorhynchus kisutch*) ▪ Groundfish ▪ Coastal Pelagic Species ▪ Killer Whales (*Orcinus orca*) ▪ Puget Sound Pink Salmon (*Oncorhynchus gorbuscha*)[1]
State Special-Status Species	
Plant Species	▪ Tall bugbane (*Actaea elata var. elata*) ▪ Tall agoseris (*Agoseris elata*) ▪ Western wahoo (*Euonymus occidentalis var. occidentalis*) ▪ Large St. Johns'wort (*Hypericum majus*) ▪ Pacific peavine (*Lathyrus vestitus var. ochropetalus*) ▪ Puget groundsel (*Packera macounii*) ▪ Salmon Jacob's-ladder (*Polemonium carneum*) ▪ Scouler's catchfly (*Silene scouleri ssp. scouleri*) ▪ Small-flowered trillium (*Trillium albidum ssp. parviflorum*) ▪ Whipplevine (*Whipplea modesta*) ▪ Narrow-leaf mule's-ears (*Wyethia angustifolia*)
Bird Species	▪ Streaked horned lark (*Eremophila alpestris strigata*) ▪ Oregon vesper sparrow (*Pooecetes gramineus affinis*)
Animal Species	▪ Yelm pocket gopher (*Thomomys mazama yelmensis*) ▪ Western gray squirrel (*Sciurus griseus*).

Source: **Appendix I-3**

[1]Not federally listed but considered due to the presence of EFH.

3.3.1 Impacts

Alternative 1 – Commercial-Heavy Mixed-Use Development

Habitats

The terrestrial habitats of ruderal/disturbed areas and mixed conifer-hardwood forests are not considered priority habitats by WDFW and lack federal protection, rendering them non-sensitive. Ruderal/disturbed habitat, previously altered by activities like logging, offers little wildlife value due to its modified state. Mixed conifer-hardwood forests are scattered throughout the Project Site, with the densest areas in the north and along Britton Parkway NE. These forests consist of hardwood stands interspersed with relatively young conifers, fragmented by past logging and development. No old-growth stands are present. As a result, Alternative 1 would not impact sensitive habitats, as none are present within the Project Site.

Wetlands/Waters of the US

Background review of the NWI database and biological surveys conducted in 2021 (**Appendix I-1**) did not indicate the presence of wetlands, WOTUS., or other aquatic features in the Project Site, therefore there would be no impact to wetlands/waters of the US.

Nesting Migratory Birds

The Project Site and vicinity provides potential nesting habitat for migratory birds and other birds of prey including, but not limited to, the special status species identified in **Section 3.3.2**. The federally listed threatened and state listed endangered marbled murrelet is not likely to nest within the Project Site due to the lack of old growth trees (**Appendix I-1**) . However the federally listed threatened and state listed endangered streaked horned lark and the state listed endangered Oregon vesper sparrow may occur in the open grassy areas of the Project Site, primarily in ruderal habitat. Grasses are short and there are areas of bare and sparsely vegetated ground suitable for nesting. The forest in the Project Site is even-aged young forest that was previously harvested old growth. Overall, habitat quality for these species is marginal due to site disturbance, limited native vegetation, and ongoing human activity. There would be no effect on marbled murrelets. If nesting migratory birds were to be present in the area impact area at the time of construction of the Alternative 1, construction-related activities have the potential to cause mortality or nest abandonment. Potentially occurring nesting migratory birds (including streaked horned lark and Oregon vesper sparrow) within 500 feet of the Project Site could be affected if vegetation removal or loud noise-producing activities associated with construction occur during the general nesting season (February 15 - September 15). This is a potentially significant impact. Potential adverse effects would be avoided or minimized to less-than-significant levels with the implementation of mitigation measures identified in **Section 4**. With the implementation of these measures, Alternative 1 would have a less-than-significant impact on nesting migratory birds or any migratory birds protected under the MBTA.

Critical Habitat

The nearest critical habitat to the Project Site is described in **Section 3.3.2**. As described in **Table 2.1-9**, the Tribe would obtain coverage under the NPDES Construction General Permit, requiring a SWPPP and BMPs during construction to prevent contaminated runoff from entering off-site waters, thereby preventing indirect impacts to critical habitat during construction. Currently, all stormwater within the Project Site infiltrates into the ground, with none leaving the site. Alternative 1 will increase impervious surfaces on the Project Site; however, as described in **Appendix B** Section 1.6, Alternative 1 includes a stormwater system that will collect, treat, detain, and convey runoff to ensure no runoff leaves the Project Site. Alternative 1 also includes the installation of an oil/water separation device, dead-end sumps, and double-walled tanks. As described in **Appendix B** Section 1.6, these devices will meet City of Lacey and WDOE requirements, with extensive subsurface monitoring and BMPs implemented. These project components would prevent indirect impacts to critical habitat during operation.

The Project Site is within the Woodland Creek Watershed, where groundwater-fed springs maintain base flow in Woodard and Woodland Creeks. If Water Supply Option 2 is selected, groundwater pumping could impact Woodland Creek. Mitigation and conservation measures in Section 4 will ensure the groundwater well development does not adversely affect Woodland Creek's flow. With these measures and the inclusion of bioretention and infiltration facilities, Alternative 1 will have a less-than-significant impact on critical habitat.

The NOAA BA assessed the potential for Alternative 1 to result in impacts to critical habitat for species under NOAA jurisdiction. A concurrence letter was received from NOAA, which concurred that Alternative

1 is not likely to adversely affect critical habitat for those species under NOAA's jurisdiction (**Appendix I-4**). The USFWS BA determined that there would be no impact to critical habitat for species under USFWS jurisdiction. While USFWS does not provide concurrence with no effect determinations and does not require consultation for no effect determinations, the USFWS BA was provided to USFWS to document these findings and to provide USFWS the opportunity to review the information contained therein. USFWS reviewed the USFWS BA and concurred that Alternative A may affect, but is not likely to adversely affect federally-protected species and requested that the no effects determination on critical habitat be maintained in the project's environmental analysis documentation (**Appendix I-4**). With the implementation of mitigation and conservation measures listed in **Section 4** and bioretention and infiltration facilities incorporated into project design, Alternative 1 would have a less-than-significant impact on critical habitat.

Essential Fish Habitat

The Project Site does not contain aquatic features and thus does not contain EFH; however, it is identified as within a watershed which affects EFH for coho/Puget Sound steelhead and pink salmon species. As there are no surface waters or aquatic features within the Project Site to provide connectivity to Puget Sound, no impacts to related aquatic threatened or endangered species are anticipated as a result of Alternative 1 (Attachment E of **Appendix I-1**). This analysis was provided to NOAA in the NOAA BA. NOAA determined that Alternative 1 would not adversely affect EHF and that further consultation was not necessary (**Appendix I-4**). Indirect effects to water supply and quality within aquatic habitat for these species are discussed in **Appendix I-2** and **Section 3.7.3** and would be less than significant with the implementation of BMPs (listed in **Table 2.1-9)** and mitigation measures (listed in **Section 4)**.

Federally Listed Species

Three federally listed wildlife species have the potential to occur within the Project Site based on habitat requirements (**Appendix I-1**): Yelm pocket gopher, marbled murrelet, and streaked horned lark. Potential impacts to marbled murrelet and streaked horned lark are discussed above under nesting migratory birds. With the implementation of mitigation measures in **Section 4**, Alternative 1 would have a less than significant impact on federally listed species.

The USFWS BA determined that Alternative 1 may affect, but is not likely to adversely affect Yelm pocket gopher and streaked horned lark and would have no effect on marbled murrelet. A concurrence letter was received from USFWS that concurred that Alternative 1 may affect, but is not likely to adversely affect Yelm pocket gopher and streaked horned lark and to maintain documentation of the no effect determination of marbled murrelet (**Appendix I-4**). Concurrence was also received from NOAA that Alternative 1 may affect, but is unlikely to adversely affect federally listed species under NOAA jurisdiction (**Appendix I-4**).

Yelm Pocket Gopher

The federally listed threatened Yelm pocket gopher is one of four listed subspecies of the Mazama pocket gopher in the State of Washington that are known to occur on federal, State, and private lands east of the Black River and south of I-5 on soils that support the burrowing of the Mazama pocket gopher (Thurston County, 2022a). Thurston County has a Habitat Conservation Plan (HCP) as a response to the federal FESA listing of several species in the County. It was federally approved in 2022 and will be implemented in 2023. The HCP states there are no known soils that support the Mazama pocket gopher in the region of the County north of I-5, which includes the Project Site. While some gopher soils are present in this region of the County, and mound surveys have occurred, there have not been documented gopher detections in

this area as of the time of the HCP development. Future natural recolonization of the area of the Mazama pocket gopher subspecies is unlikely due to the barrier presented by I-5 (Thurston County, 2022a). With the implementation of mitigation measures listed in **Section 4,** Alternative 1 would have a less-than-significant impact on Yelm pocket gopher.

Aquatic Species

Suitable habitat for protected fish species does not occur within the Project Site as it lacks aquatic features, but federally listed bull trout, Chinook salmon, steelhead, coho salmon, and pink salmon have the potential to occur in Woodland Creek, Nisqually Reach, and/or Puget Sound. As described in **Appendix I-2, Section 3.3.2**, and **Section 3.7.2**, the Alternative 1 could result in indirect effects to off-site water quality and quantity in Woodland Creek due to the use of groundwater. With the mitigation and conservation measures listed in **Section 4**, and bioretention and infiltration facilities incorporated into project design will reduce water quality impacts, and Alternative 1 would have a less-than-significant impact on federally listed fish species.

State Listed Species

State listed species are generally not afforded specific protection on trust land; however, they are considered in this NEPA document to the extent that potential impacts can be minimized. State special-status species listed in **Table 3.3-4** have the potential to occur within the Project Site. State listed plants with the potential to occur on the Project Site were not observed during several biological surveys and are likely absent from the Project Site. Potential impacts to the streaked horned lark and Oregon vesper sparrow are discussed above under nesting migratory birds. Although Oregon vesper sparrow is not afforded protection on trust land, measures taken to avoid impacts to streaked horned lark and nesting migratory birds would protect Oregon vesper sparrow as well. The remaining species with potential to occur on the project site are discussed in **Table 3.3-4**.

Table 3.3-4: State-Listed Species with the Potential to Occur in the Project Site

Species	Habitat Preference	Potential to Occur	Impact Discussion
Yelm Pocket Gopher	Prefers well-drained soils that support burrowing (Mazama pocket gopher) in grasslands and open habitats (Thurston County, 2022a).	Unlikely; no suitable soils that support the Mazama pocket gopher were identified in the Project Site, which is located in an area north of I-5 lacking known habitats for this subspecies; no pocket gophers were observed on-site.	Impacts would be reduced through mitigation measures identified in **Section 4**, which will include habitat assessments and protective protocols. Impacts would be less than significant with mitigation.
Western Gray Squirrel	Inhabits mixed conifer-hardwood forests and oak woodlands for nesting, foraging, and food sources.	Possible; not observed during the survey but could inhabit the mixed conifer-hardwood forests of the Project Site; the nearest population is approximately 14 miles away in Pierce County. WDFW Priority Habitats and Species reports occasional sightings outside this range in Thurston County's oak woodlands and conifer forests.	Impacts would be reduced through mitigation measures in **Section 4**. Factors such as urbanization, high-volume roadways acting as barriers to wildlife movement, and the low quality of habitat within the Project Site limit the likelihood of occurrence. Impacts would be less than significant with mitigation.

Note: The impacts to streaked horned lark and Oregon vesper sparrow are discussed under the section "Nesting Migratory Birds" in **Section 3.3.1.**

Alternative 2 – Recreation-Heavy Mixed-Use Development

Alternative 2 would have similar impacts on biological resources as Alternative 1, but its greater open-space acreage would preserve more habitat for nesting birds and wildlife and thus reduce impacts proportionally to these. The development footprint and general design standards would be unchanged from Alternative 1 with the exception of the increases open-space. Therefore, impacted habitats and the potential for construction to impact nesting migratory birds or the federally listed pocket gophers under Alternative 2 is similar Alternative 1 but proportionally reduced due to the increased open space. With implementation of the mitigation measures identified in **Section 4**, potential adverse effects to biological resources would be reduced to a less-than- significant level.

Alternative 3 – No-Action Alternative

Under Alternative 3, no development would occur on the Project Site; therefore, no biological impacts would occur.

Reasonably Foreseeable Cumulative Effects Analysis

As described above, the project alternatives are expected to result in a less-than-significant impacts to biological resources with the incorporation of mitigation identified in **Section 4**. Similar to the Project Site, the adjacent land owned by the Tribe proposed for development under the proposed Nisqually Quiemuth Casino-Resort Project (Casino-Resort Project) does not contain sensitive habitat, critical habitat or aquatic habitats, therefore the project alternatives would not contribute to cumulative impacts to these resources. The Project Site and adjacent proposed Nisqually Quiemuth Casino-Resort site (Casino-Resort Property) both contain soils identified by WDFW and USFWS as some of the most common soil types for Yelm pocket gopher; however, both projects occur north of I-5, and thus are out of the known range for this species. Although the project alternatives and adjacent proposed Casino-Resort Project both have the potential to impact nesting birds protected under the MBTA, Yelm pocket gopher, streaked horned lark, Oregon vesper sparrow, and Western gray squirrel, project specific potential impacts would be reduced to a less-than significant-level through mitigation (**Section 4**). Further, compliance with the NPDES program, implementation of a stormwater plan including LID features such as bioretention cells followed by infiltration, and extensive subsurface monitoring and implementation of BMPs will prevent cumulative indirect impacts to water quality in EFH areas. Other development projects in the region, including the adjacent proposed Casino-Resort Project, would be required to implement similar mitigation measures to protect sensitive biological resources. Cumulative impacts to biological resources would be less than significant.

3.4 CULTURAL RESOURCES

3.4.1 Regulatory Setting

The cultural resources regulatory setting information is summarized in **Table 3.4-1** and additional information on regulations can be found in **Appendix F**.

Table 3.4-1: Regulatory Policies and Plans Related to Cultural Resources

Regulation	Description
Federal	
Section 106 of the National Historic Preservation Act	▪ Federal agencies must identify cultural resources that may be affected by actions involving federal lands, funds, or permitting actions. ▪ Significance of the resources must be evaluated for National Register of Historic Places (NRHP) eligibility. ▪ If an NRHP-eligible resource will be adversely affected, measures to avoid or reduce adverse effects must be taken.
Archaeological Resources Protection Act	▪ Archaeological resources and sites on public and Indian lands are protected resources.
Native American Graves Protection and Repatriation Act	▪ Includes provisions governing the repatriation of Native American remains and cultural items under the control of federal agencies and institutions that receive federal funding ("museums"), as well as the ownership or control of cultural items and human remains discovered on federal or tribal lands.
Paleontological Resources Preservation Act	▪ Paleontological resources on federal lands are protected resources.
State	
Washington State Environmental Policy Act, Revised Code of Washington	▪ Archaeological, historical, human remains, and paleontological resources are protected resources on lands under State jurisdiction.

3.4.2 Environmental Setting

In 2006, Historical Research Associates (HRA) completed background research and a survey of the Project Site, with the exception of a 2.4-acre parcel which was later added to the Project Site. HRA's survey utilized pedestrian survey transects and shovel test pits. HRA observed that large portions of the Project Site had been disturbed by historic logging, and recreational use (Appendix B of **Confidential Appendix J-1**). In May 2021, Analytical Environmental Services (AES) completed additional background research and a field survey of the entire Project Site with members of the Nisqually Tribal Historic Preservation staff. This survey included a pedestrian survey and shovel testing of the 2.4-acre parcel, which was not included in the 2006 HRA study. No resources eligible for listing on the NRHP were found during the 2006 HRA survey or the 2021 AES survey (**Confidential Appendix J-1**). Additional details of the prehistoric, ethnographic, historical, and paleontological setting of the Project Site, as well as the findings of the records and literature search and field surveys are provided in **Appendix F.**

Native American Consultation

Brad Beach, the head of the Nisqually Cultural Resources Department, and Annette Bullchild, Tribal Historic Preservation Officer (THPO), were contacted for information regarding tribal cultural resources within the Project Site; the Tribe had no information regarding any cultural resources within the Area of Potential Effects (APE). AES then completed a combination shovel testing and pedestrian survey accompanied by members of the Nisqually Cultural Resources Department. AES completed a Cultural Resources Study for Alternative 1 (**Confidential Appendix J-1**) which was reviewed by the THPO. The THPO concurred with the Study's finding of No Historic Properties Affected (**Appendix J-2**). BIA has conducted consultation with regional Tribes in accordance with Section 106 of the NHPA (**Appendix J-2**).

3.4.3 Impacts

Alternative 1 – Commercial-Heavy Mixed-Use Development

It is assumed that any portion of the Project Site could be used for development, equipment, or supply staging, and therefore the entire 174 acres is considered to be the APE. It is further assumed that construction impacts may go up to eight feet below ground surface.

Archaeological Resources

A literature review, records search, Native American consultation, pedestrian surveys, and a limited shovel testing program were completed as part of the cultural resources study. No historic properties were identified as a result of those efforts. Therefore, development of Alternative 1 would not result in impacts to known cultural resources.

Although the potential for buried archaeological deposits is low due to the distance to accessible water sources and lack of buried resources discovered during previous ground disturbing activities on the site, development may adversely affect previously unknown subsurface prehistoric or historic archaeological resources, including human remains. If archaeological features are discovered, this could be a potentially significant impact. Mitigation measures for the protection and treatment of unanticipated discoveries of archaeological resources and/or human remains are presented in **Section 4**. Implementation of these mitigation measures would reduce impacts on archaeological resources to a less-than-significant level.

Paleontological Resources

While indicators of paleontological resources within the Project Site are absent, resources have been identified nearby. Therefore, the potential for such resources to be uncovered is moderate. Mitigation measures are presented in **Section 4** for the protection and preservation of discoveries of paleontological resources. Implementation of these mitigation measures would reduce impacts on paleontological resources to a less-than-significant level.

Alternative 2 – Recreation-Heavy Mixed-Use Development

Alternative 2 would result in the same potential to impact cultural resources as Alternative 1, although slightly reduced due to the smaller footprint of grading. Refer to the discussion for Alternative 1.

Alternative 3 – No Action Alternative

Under Alternative 3, no development would occur within the Project Site. Therefore, there would be no impacts to cultural or paleontological resources.

Reasonably Foreseeable Cumulative Effects Analysis

No cultural or paleontological resources were identified within the Project Site, or within the adjacent proposed Casino-Resort Project footprint. Mitigation for impacts to unknown cultural and paleontological resources has been specified in **Section 4**, which would also minimize the potential for cumulative impacts. Implementation of these measures would ensure that no cumulatively considerable impacts result from construction.

3.5 GEOLOGY AND SOILS

3.5.1 Regulatory Setting

The geology and soils regulatory setting is summarized in **Table 3.5-1** and additional information on the regulatory setting can be found in **Appendix F**.

Table 3.5-1: Regulatory Policies and Plans Related to Geology and Soils

Regulation	Description
Federal	
Clean Water Act	▪ Prohibits sediment and erosion discharge into navigable waters of the United States and establishes water quality goals.
International Building Code	▪ Establishes minimum building design requirements to protect public health, safety, and general welfare on lands under federal jurisdiction.

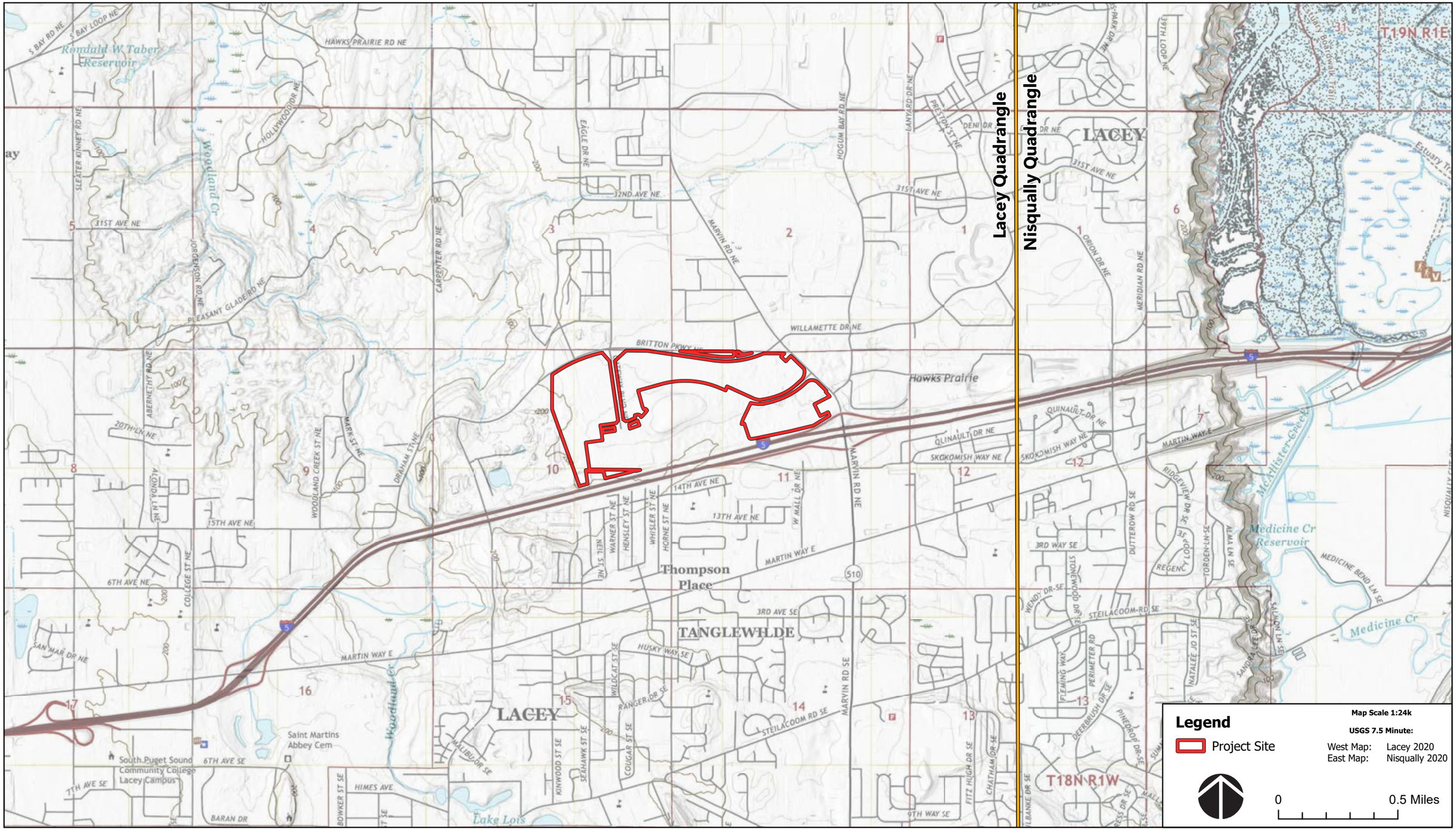
3.5.2 Environmental Setting

Geological Setting

The Project Site is located in Washington's Puget Lowland, marked by low-lying terrain between the Olympic Mountains and Cascade Range. There are five volcanoes within the Cascade Range that have been deemed high to very high threat potential with regards to erupting, the highest risk to the Project Site being Mount Rainier. Geological formations include glacial drifts, volcanic rocks, and marine and nonmarine sediments. The Project Site and surrounding area are mapped with Quaternary glacial deposits like Vashon Stade till, advance outwash, and recessional outwash, with surficial soils typically sandy gravel or gravelly sand. For additional geological setting information, please refer to **Appendix F** and Appendix E of **Appendix D.**

Topography

The topography of the Project Site is gently to moderately sloping with localized small hills, ridges, and depressions (see **Figure 17**). The Project Site has a topographic high of 235 feet above mean sea level (amsl) near its center with low areas (up to 180 feet amsl) in the southwest, northwest, and southeast corners. From the low area in the southeast corner, the Project Site gently slopes up to the north and northwest. From the center of the Project Site, a small depression (former gravel pit) is present to the west just south of Britton Parkway, which becomes more pronounced moving to the west (**Appendix D**).



Source: ESRI World Imagery

FIGURE 17

SITE TOPOGRAPHY

Soil Types and Characteristics

The Project Site is comprised of the four soil types listed in **Table 3.5-2** and shown on **Figure 18**.

Table 3.5-2: Soil Types of the Project Site

Soil Name	Linear Extensibility	Drainage Class	Depth to Water Table	Ksat*	K Factor	Corrosion of Steel	Corrosion of Concrete
Alderwood gravelly sandy loam	Low	Moderately well drained	About 18 to 37 inches	Very low to moderately low (0.00 to 0.06 in/hr)	0.10	High	Moderate
Everett very gravelly sandy	Not rated or not available	Somewhat excessively drained	More than 80 inches	High (1.98 to 5.95 in/hr)	Not rated or not available	Moderate	High
Indianola loamy sand	Not rated or not available	Somewhat excessively drained	More than 80 inches	High to very high (5.95 to 99.90 in/hr)	Not rated or not available	Moderate	Moderate
Spanaway gravelly sandy loam	Low	Somewhat excessively drained	More than 80 inches	High (1.98 to 5.95 in/hr)	0.05	High	Moderate

*Capacity of the most limiting layer to transmit water.
Source: National Resources Conservation Service (NRCS), 2023

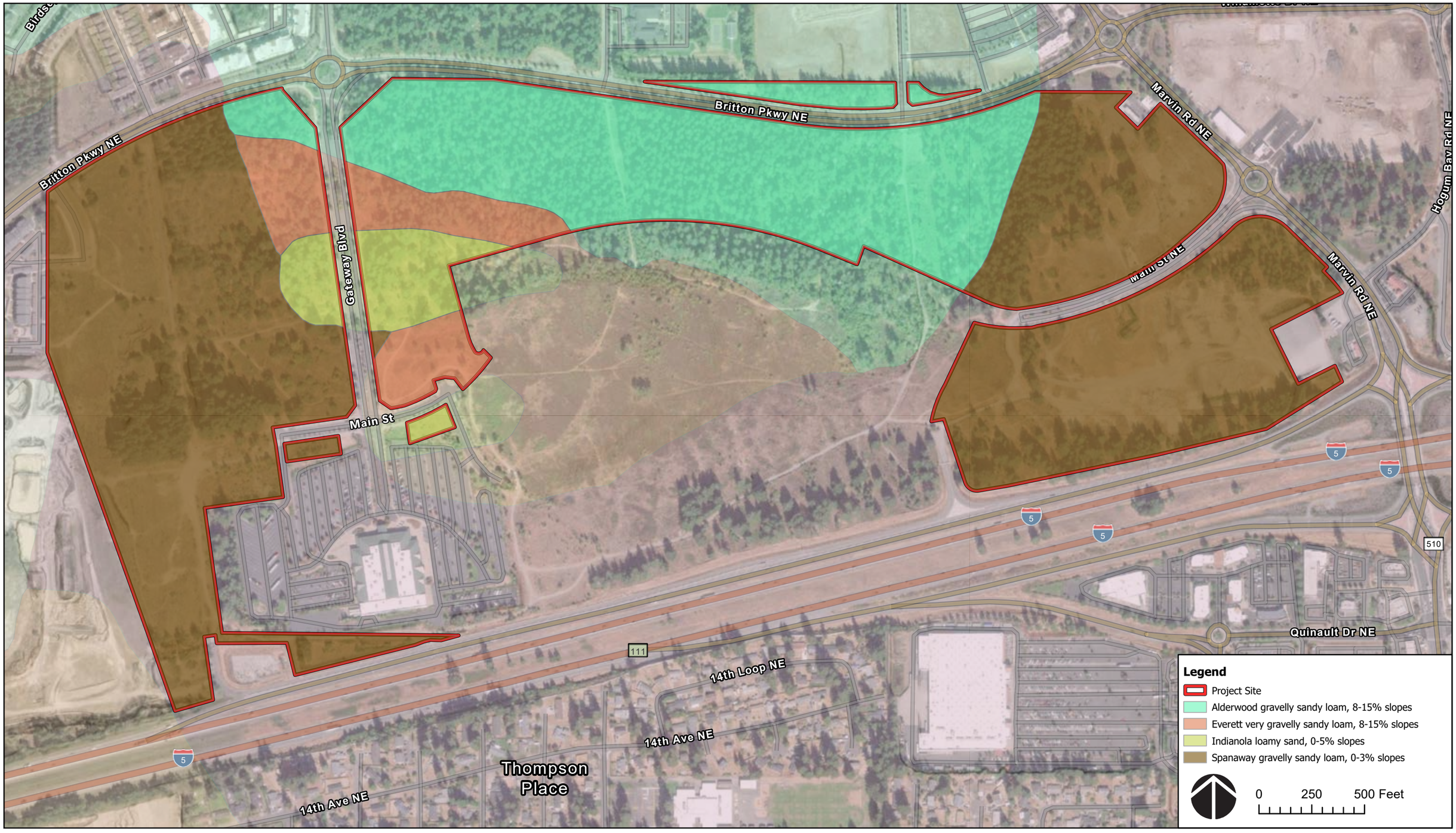
Seismic Conditions

The Project Site is in a seismically active area (Thurston County, 2004). As shown on **Figure 19**, the nearest mapped faults include the Olympia Structure faults located approximately 4 miles west of the Project Site. In Thurston County, the Seismic Design Category is D2 unless United States Geological Survey Seismic Design Maps demonstrate that a site has an S_{ds}[9] that is less than or equal to 0.83g (Thurston County, 2023b; see **Appendix F** regarding Seismic Design Categories). Potential seismic shaking at the Project Site was estimated using American Society of Civil Engineers 7-16 as part of the Preliminary Geotechnical Report, and it anticipated 0.64g for the site (for additional information, see Appendix E of **Appendix D**). For additional information regarding the seismic conditions in the vicinity of the Project Site, please refer to **Appendix F**.

Soil Hazards

A summary of potential soil hazards on the Project Site can be found in **Table 3.5-3** with detailed information available in **Appendix F**.

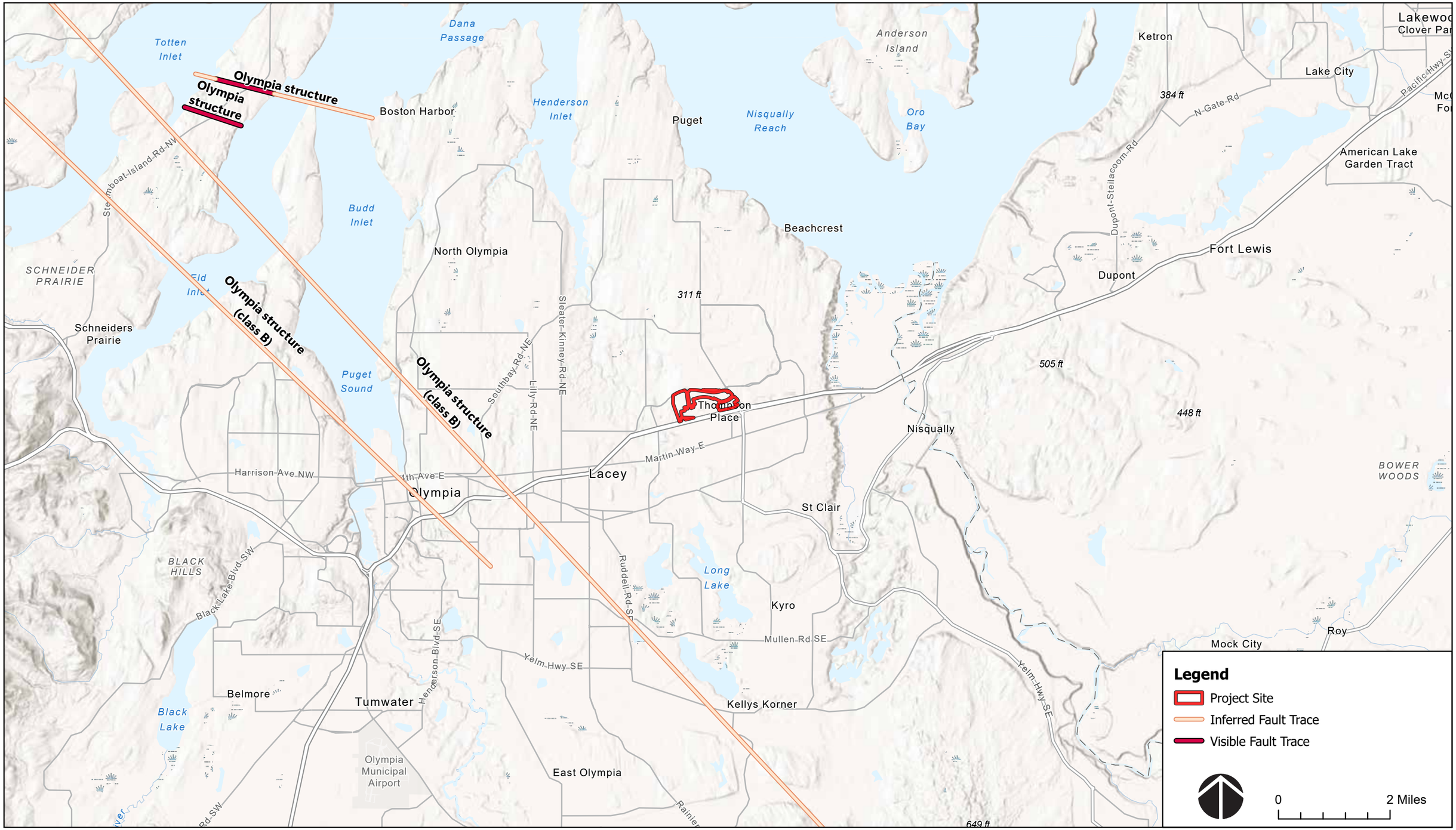
[9] spectral response acceleration parameter at short periods



Source: ESRI World Imagery

FIGURE 18

SOIL MAP



Source: ESRI World Imagery

FIGURE 19

FAULTS

Table 3.5-3: Soil Hazard Information Summary

Hazard Type	Description	Susceptibility at Project Site
Soil Erosion[1]	Erosion factor (K Factor[10]) indicates susceptibility to sheet and rill erosion by water.	Slight erosion susceptibility.
Corrosion[1]	Corrosivity to steel and concrete due to potential soil-induced electrochemical or chemical action.	Moderate to high risk for steel; mostly moderate risk for concrete.
Linear Extensibility[1]	Indicates shrink-swell potential when subjected to wet and dry conditions, related to clay content.	Low linear extensibility rating; values not reported for two soil types.
Liquefaction [2, 3, 4]	Temporary transformation of water-saturated, non-cohesive material to a liquefied condition due to shaking.	Very low susceptibility to liquefaction.
Landslides[4]	Weak soils on sloping terrain susceptible to landslides due to heavy rains or strong seismic shaking.	No historic landslides reported, and based on relatively level ground surface topography, no landslides are anticipated.

Sources: [1] NRCS, 2023; [2] Washington Department of Natural Resources (WDNR), 2012; [3] Johansson, 2000; [4] WDNR, 2019

Mineral Resources

The Project Site does not contain County Designated Mineral Resource Land and is therefore not considered a source of mineral resources (Thurston County, 2020). Furthermore, a search of the United States Geological Survey (USGS) Mineral Resources Data System found no known mineral resources within the Project Site. There are several former mining sites for sand and gravel in the vicinity of the Project Site with only the Lacey Pit labeled as a none-past producer to the west of the Project Site (USGS, 2023). There is also the Miles Sand & Gravel pit located on the western border of the Project Site.

3.5.3 Impacts

Alternative 1 – Commercial-Heavy Mixed-Use Development

Topography

The preliminary site grading (**Figure 8**) shows the slopes and low areas associated with the valley in the northwestern portion of the Project Site that would be graded under Alternative 1. Permanent cut slopes on the Project Site would be no steeper than a 3:1 ratio, and fill slopes would be no greater than a 2:1 ratio; if any fill slopes exceeded a 4:1 ratio, benches would be required. Most of the excavated native soil anticipated to be reused along the northern side of the Project Site consists of sandy gravel with trace amounts of silt and would be reused as structural fill to raise grades along the southern side of the site. Overall, the grading concept would be balanced with no import or export of material. In addition, on-site

[10] K Factor is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate (in tons per acre per year) of soil loss by sheet and rill erosion. K Factor estimates are based primarily on percentage of silt, sand, and organic matter, on soil structure, and saturated hydraulic conductivity (Ksat). K Factor estimates range from approximately 0.02 to approximately 0.69. Other factors being equal, the higher the K Factor, the more susceptible the soil is to sheet and rill erosion by water (NRCS, 2023).

grading would be designed to convey stormwater toward the proposed drainage system (see **Section 2.1.6** for additional details). The changes in topography due to the grading activities would not equate to a major change to the existing topography and thus would be less than significant.

Seismic Conditions

As described in **Section 3.5.2**, the Project Site could potentially be exposed to future seismic shaking and therefore prone to seismic induced hazards due to the active faults in the region. However, in the seismic modeling completed for the Project Site (Appendix E of **Appendix D**), no significant adverse effects regarding potential seismic risk were found. The most probable instance of the Project Site experiencing seismic shaking would be from a Magnitude 7.1 quake with an epicenter located at the Cascade Subduction Zone. As described in **Section 2.1.8**, Alternative 1 would adhere to Tribal Building Codes that are generally consistent to the IBC, which includes standards regarding seismic protection. Use of these standards would allow ground shaking-related hazards to be managed from a geologic, geotechnical, and structural standpoint such that risks to the health or safety of workers or members of the public would be reduced. Furthermore, as a BMP in **Table 2.1-9**, a geotechnical professional would assess the Project Site prior to construction using no less stringent standards than the IBC, which would include assessing seismic shaking. This would further ensure that development on the Project Site would include design measures for reducing seismic shaking risk. Therefore, impacts from potential seismic conditions and induced hazards would be less than significant.

Soil Characteristics

Land clearing and grading activities during construction would result in exposure of soil, increasing the risk of erosion and associated hazards. The addition of impervious surfaces to the Project Site would increase stormwater runoff volumes and the potential for associated operational erosion to occur. As shown in **Table 3.5-2**, the on-site soils vary in their susceptibility to erosion and, as slopes increase, the risk of erosion increases as well. Construction of Alternative 1 would disturb more than one acre of land; therefore, the Tribe is required by the CWA to obtain coverage under, and comply with the terms of, the NPDES Construction General Permit for construction activities. As part of the NPDES Construction General Permit, a SWPPP must be prepared and implemented. The SWPPP must make provisions for (1) erosion prevention and sediment control and (2) control of other potential pollutants. The NPDES Construction General Permit requirements would reduce any potential impacts to less-than-significant levels. With adherence to regulatory requirements and BMPs described in **Table 2.1-9**, erosion impacts from implementation of Alternative 1 would be minimal and, therefore, less than significant.

Mineral Resources

As stated in **Section 3.5.2**, there are no known mineral resources within the Project Site, and it is not a current source of mineral resources or the location of any active mining operations. The nearest gravel extraction facility is the Miles Sand & Gravel pit directly adjacent to the western border of the Project Site; the development and operation of Alternative 1 would not significantly impact this off-site resource. Therefore, Alternative 1 would have no impact on mineral resources.

Alternative 2 – Recreation-Heavy Mixed-Use Development

Alternative 2 would have similar impacts as Alternative 1; however, in comparison to Alternative 1, Alternative 2 would disturb less of the site and have reduced impacts, due to the reduced development footprint (see **Figures 8** and **12**). The potential impacts associated with topography, seismic conditions,

soil characteristics, and mineral resources would be comparable but less than Alternative 1 and less than significant with adherence to regulatory requirements and BMPs described **Table 2.1-9**.

Alternative 3 – No Action Alternative

Under Alternative 3, the land would not be taken into trust and the use of the Project Site as undeveloped land would continue into the foreseeable future. No significant alterations to surface topography or soils would occur and thus there would be no impacts related to geology and soils.

Reasonably Foreseeable Cumulative Effects Analysis

Approved developments would be required to follow applicable permitting procedures and development codes. Local permitting requirements for construction would address regional geotechnical and topographic conflicts, seismic hazards, and resource extraction availability. In addition, the project alternatives and all other developments that disturb one acre or more, must comply with the requirements of the NPDES Construction General Permit. Adherence to this would lessen the probability of significant erosion occurring from the development of cumulative projects. The adjacent proposed Casino-Resort Project would be required to adhere to federal laws and regulations, including the requirements of the NPDES Construction General Permit for mitigating adverse erosion effects and developing a project-specific SWPPP with BMPs for stormwater and erosion to lessen its potential impacts to the area. Therefore, implementation of the project alternatives would not result in significant cumulative impacts to geology and soils.

3.6 HAZARDOUS MATERIALS

3.6.1 Regulatory Setting

The hazardous materials regulatory setting is summarized in **Table 3.6-1**, and additional information on the regulatory setting can be found in **Appendix F.**

Table 3.6-1: Regulatory Policies and Plans Related to Hazardous Materials

Regulation	Description
Federal	
Resource Conservation and Recovery Act	▪ Grants the USEPA the authority to manage hazardous waste throughout its life cycle, including storage, treatment, transportation, production, and disposal. ▪ Establishes a management framework for non-hazardous solid wastes. ▪ Authorizes the USEPA to respond to environmental problems related to underground hazardous substance storage tanks, including petroleum.
Federal Food, Drug, and Cosmetic Act	▪ Enables the USEPA to determine the maximum pesticide residue amount on food. Maximum limits are based on findings that the maximum limit will be reasonably safe in terms of accumulated exposure to the pesticide residue. For pesticides without a set maximum residue limit, the USEPA has the authority to seize these commodities.
Federal Insecticide, Fungicide, and Rodenticide Act	▪ Mandates that all pesticides sold or distributed be licensed with the USEPA; a pesticide cannot be licensed until it is proven that the pesticide will not generally cause unreasonable adverse effects on the environment if utilized in accordance with its specifications.
Hazard Communication Standard	▪ Ensures that information about chemical and toxic substance hazards in the workplace and associated protective measures are disseminated to workers

Regulation	Description
	exposed to hazardous chemicals, including labels, safety data sheets, and proper handling training for hazardous chemicals. ▪ Chemical manufacturers and importers that produce and import chemicals are required to assess their products for hazards; safety data sheets and labels must be created with information that outlines the dangers of the products.
Federal Hazardous Substances Act	▪ Necessitates that hazardous household products have precautionary labeling to alert consumers of hazards, proper storage, and immediate first aid steps in case of an accident. ▪ Enables the Consumer Product Safety Commission to prohibit severely dangerous products and products with hazards that cannot be labeled accordingly to Hazardous Substances Act standards.
Toxic Substance Control Act	▪ Authorizes the USEPA with the authority to require record keeping, reporting, test requirements, and restrictions associated with certain chemical substances and/or mixtures. ▪ Addresses the production, importation, use, and disposal of certain chemicals (e.g., lead paint).
Emergency Planning and Community Right-to-Know Act	▪ Requires industry to report on the use, storage, and release of hazardous substances to federal, state, and local governments. ▪ Requires Indian tribes and state and local governments to utilize this information to prepare their communities for potential risks.

3.6.2 Environmental Setting

Hazardous Materials

A Phase I Environmental Site Assessment (ESA) was prepared on July 20, 2022, by Natural Investigations Company using ASTM E1527-21 to ascertain if hazardous material risks are present on the Project Site (report attached as **Appendix K**). The Phase I ESA identified one current recognized environmental condition (REC) (lead and arsenic soil contamination from the TSP) and one historical REC within the Project Site. RECs are defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to a release to the environment, conditions indicative of a release, or a material threat of a release. A summary of the findings of the Phase I ESA is provided in **Table 3.6-2** while a more detailed discussion can be found in **Appendix F**.

Table 3.6-2: Phase I ESA Summary of Findings

Issue Area	Details
RECs and historic REC (HREC)	**1. Evergreen Sportsman Club**: Located off-site, this area had lead and polycyclic aromatic hydrocarbon contamination due to trap shooting activities. A remedial action plan was implemented, which involved concentrating the impacted soils into a raised pad that was subsequently paved. An environmental covenant was placed upon the pad. In 2015, the WDOE issued a No Further Action letter, indicating that the site met remediation standards and no further action was required. This case is considered a HREC because it is an environmental issue that has been resolved and is no longer a concern. **2. Tacoma Smelter Plume**: Off-site contamination from the former Asarco copper smelter in Tacoma (located approximately 20 miles north of the Project Site in the

Issue Area	Details
	City of Tacoma), which operated for about 100 years and caused widespread lead and arsenic contamination in soils across several counties, including Thurston County. The Project Site is affected by this contamination, with elevated levels of arsenic and lead found in the western and southern portions of the site due to aerial deposition. This is considered a current REC because the contamination is still present and may impact the Project Site, requiring ongoing monitoring and remediation efforts.
Documentation Provided by Landowner	Extensive documentation of past land uses and contamination/remedial activities provided by previous landowner, Wig Properties, LLC. No environmental liens or value reductions were identified. No evidence of heavy industrial uses was found from the title review.
Environmental Databases	The Project Site was not listed in environmental databases but was included in case files from the county and WDOE.
Other Findings	Illegal dumping of household waste on-site. This condition is minor and does not present significant risks to human health or the environment, thus not requiring extensive remediation beyond standard site management practices. It is a de minimis condition.

Source: **Appendix K**

With regards to the onsite REC (TSP that covers 1,000-square-miles), a TSP Cleanup Action Plan/Phase II ESA (TSP CAP; **Appendix E**) was prepared by Terra Associates, Inc., and approved by WDOE in 2012. The mean levels of arsenic and lead from samples taken onsite as part of this assessment were 12.8 ppm and 24.8 ppm, respectively. The maximum sample value for arsenic and lead was 37 ppm and 280 ppm, respectively. The TSP CAP recommended mixing the upper soil and duff layers to reduce lead and arsenic concentrations to acceptable levels, as outlined in the WDOE Tacoma Smelter Plume-Interim Action Plan. Other procedures stipulated by the TSP CAP include testing imported soils and implementation of a dust control plan and a construction Health and Safety Plan (HSP). The WDOE approved this approach and indicated that no further remedial action would likely be needed upon completion. In 2019, WDOE published updated remediation guidance, and a 2022 memo from Terra Associates, Inc confirmed that the 2012 plan remains appropriate, with additional specific procedures now approved by WDOE. Soil testing conducted in July 2022 for an 8.92-acre area in the northeastern quadrant confirmed that no further remedial measures are required for that portion of the site.

The Phase I ESA determined that following successful implementation of the TSP CAP, the REC will be considered an historical environmental condition and requires no further environmental evaluation or action, such as further site investigations (**Appendix K**). For additional information on the TSP CAP, refer to **Appendix F**.

Wildfire History

No wildfires have been reported on or in the immediate vicinity of the Project Site. For additional information on the wildfire setting, please refer to **Appendix F**.

3.6.3 Impacts

Alternative 1 – Commercial-Heavy Mixed-Use Development

Hazardous Materials

Elevated Levels of Lead and Arsenic from TSP

Based on the Phase I ESA, the Project Site is within the TSP contamination plume, and soil sampling confirmed that there are levels of lead and arsenic that exceed their respective State cleanup levels of 20 mg/kg and 250 mg/kg from the TSP in the western and southern portions of the Project Site (**Figure 8**; **Appendices E** and **K**). These levels were as high as 37 ppm and 280 ppm for arsenic and lead, respectfully. No other contaminants of concern were found. As described in **Section 2.1.6**, site preparation will be conducted in compliance with the TSP CAP approved by WDOE in 2012 and generally consistent with 2019 WDOE Remediation Guidance (**Appendix E**; WDOE, 2019). The remedial procedures identified in the Cleanup Plan are common to most development sites within the impacted areas of the TSP and are implemented in conjunction with site grading activities.

Extended exposure of construction personnel to arsenic and lead during earth-moving activities could cause health concerns. However, the BMPs listed in **Table 2.1-9** would minimize the possible hazards associated with existing contamination to less-than-significant levels.

Hazardous Materials Handling During Construction

Hazardous materials used during construction may include gasoline, diesel fuel, motor oil, hydraulic fluid, solvents, cleaners, sealants, welding flux, various lubricants, paint, paint thinner, and other products. BMPs that are designed to reduce the potential for incidents/spills involving hazardous materials are included in **Table 2.1-9**. With the implementation of these BMPs and compliance with federal laws relating to the handling of hazardous materials, no adverse effects associated with the accidental release would occur during construction.

Operation

Alternative 1 would utilize hazardous materials in varying quantities, and the U.S. Department of Labor's OSHA regulations require documentation of potential risks associated with the handling, use, and storage of flammable and toxic substances under the Hazard Communication Standard. OSHA regulations codified in 29 CFR Part 1910 are applicable to the Project Site.

Diesel fuel storage tanks would be located on-site associated with emergency back-up generators for Alternative 1. These storage tanks would comply with the National Fire Protection Association standards for aboveground storage tanks and have secondary containments systems. Materials used for the emergency generators would be handled, stored, and disposed of according to federal and manufacturer's guidelines. They would not require uncommon storage, handling, or disposal that would induce issues, and the transportation of the diesel would be infrequent and would not create a potential hazard to the public.

The Travel Center gas station component would be equipped with USTs filled with petroleum products that would include gasoline and diesel fuel, and 10 diesel pumps and 16 gasoline pumps for distributing these fuels to customers. As stated in **Table 2.1-9**, the fuel storage tanks would comply with the provisions of 40 CFR Part 280, including Part 280.20 Performance Standards for new UST systems, which includes requirements for secondary containment for tanks and associated piping, tank design, the installation and maintenance of leak detection and prevention systems, and spill and overfill controls to minimize the risk

of release of petroleum into the environment. The standards are protective of both public health and the environment (including soil and groundwater) through the prevention of accidental release which could lead to soil and groundwater contamination. Additional discussion regarding the potential for water quality impacts is included in **Section 3.7.** Air quality emissions from USTs on tribal lands are regulated by USEPA to minimize the release of volatile organic compounds and other hazardous vapors through vapor recovery and leak detection systems that are required to be USEPA-certified and verified through testing and reporting.

Alternative 1 would involve various hazardous materials for the operation and maintenance of the commercial, retail, office, housing, and recreational areas. This includes pesticides and fertilizers for onsite landscaping and other hazardous materials, such as motor oil, hydraulic fluid, solvents, cleaners, lubricants, paint, and paint thinner that will be used for general site maintenance and ancillary infrastructure. Additionally, if Wastewater Treatment Option 2 is selected, an on-site WWTP would require a limited quantity of chemicals to function, which could include liquid chlorine and liquid muriatic acid or dry granular sodium bisulfate. All hazardous materials and waste will be managed according to federal regulations with hazardous materials also being handled according to manufacturer's guidelines to minimize risks. With appropriate handling practices and adherence to guidelines, Alternative 1 would not result in significant adverse effects related to hazardous materials or waste production.

Wildfire Risk

During construction and operation of Alternative 1, the probability of igniting a fire onsite is very low as on-site fuel loads would be minimal. BMPs in **Table 2.1-9** include measures to prevent fuel being spilled during construction and require spark arresters on equipment with the potential to create sparks. With adherence to BMPs, the potential for fire ignition during construction is less than significant.

As described in **Section 2.1.8**, Alternative 1 would be designed to meet applicable Nisqually Tribal Building Codes, which are generally consistent with the IBC, including measures related to fire and structural safety. An indoor sprinkler system would be installed in all proposed facilities to provide fire protection. Furthermore, the Tribe would continue to take all necessary steps to reasonably ensure the ongoing availability of sufficient and qualified fire suppression services to the Project Site after implementation of Alternative 1. These measures would reduce the risk of a large structure fire commencing on or spreading off the Project Site. Therefore, impacts associated with exposing people or structures to a significant risk of loss, injury, or death involving ignition of wildland fires during operation of Alternative 1 are less than significant.

Alternative 2 – Recreation-Heavy Mixed-Use Development

Similar to Alternative 1, site preparation under Alternative 2 would be conducted in compliance with the TSP CAP (**Appendix E**), which would reduce potential impacts related to existing lead and arsenic contamination to less-than-significant levels. Alternative 2 would have similar hazardous material and fire ignition risks as Alternative 1 during construction and operation, but the risks would be reduced due to the smaller building scale of the project and elimination of the diesel truck fueling stations. BMPs in **Table 2.1-9** would reduce these potential risks to less than significant. Therefore, impacts associated with exposing people or structures to a hazardous materials or wildfire risks under Alternative 2 are less than significant.

Alternative 3 – No Action Alternative

No development would occur under Alternative 3, and the Project Site would remain in its undeveloped state. No hazardous material impacts would occur under Alternative 3.

Reasonably Foreseeable Cumulative Effects Analysis

New developments would be required to adhere to appropriate and applicable regulations regarding the delivery, handling, and storage of hazardous materials, thereby reducing the risk to the public's health and welfare due to accidental exposure. This includes cumulative projects affected by the TSP performing sampling and cleanup of arsenic and lead contaminated soils in compliance with federal and local regulations and WDOE Remediation Guidance (WDOE, 2019). Therefore, there are no significant cumulative hazardous materials or wildfire impacts associated with the alternatives during construction and operation.

3.7 HYDROLOGY AND FLOODPLAIN

3.7.1 Regulatory Setting

The water resources regulatory setting is summarized in **Table 3.7-1**, and additional information on the regulatory setting can be found in **Appendix F.**

Table 3.7-1: Regulatory Policies and Plans Related to Hydrology and Floodplains

Regulation	Description
Federal	
Disaster Relief Act	▪ The Federal Emergency Management Agency (FEMA) is responsible for the preparation of Flood Insurance Rate Maps for the National Flood Insurance Program.
Executive Order 11988	▪ Requires federal agencies to evaluate the potential effects of any actions they may take in a floodplain; floodplain is defined as an area that has a 1 % or greater chance of flooding in any given year. ▪ Requires agencies proposing that an action be allowed in a floodplain to consider alternatives to avoid adverse effects; if the only practicable alternative action requires siting in a floodplain, EO 11988 requires the agency to minimize potential harm to or within the floodplain.
Clean Water Act	▪ Establishes national water quality goals. ▪ Regulates point and non-point sources of pollution through the NPDES. ▪ Requires an NPDES permit be obtained to discharge pollutants into Waters of the U.S. ▪ Requires states to establish water quality standards for waters in their jurisdiction and to periodically prepare a list of surface waters where beneficial uses are impaired by pollutants.
Safe Drinking Water Act	▪ The USEPA sets National Primary Drinking Water Regulations to protect public health (primary standards) that apply to public water systems and also defines National Secondary Drinking Water Regulations (secondary standards) for contaminants that cause cosmetic and aesthetic effects, but not health effects.
State	

Regulation	Description
Municipal Water Law	▪ Governs public water systems (e.g., utilities) on lands under State jurisdiction to ensure they supply safe and reliable drinking water to the public that is consistent with existing water law. ▪ Municipal water supplies can maintain water rights that are not being exercised, but they must conserve water.
Chapter 173-201A Washington Administrative Code	▪ Establishes surface water quality standards on lands under State jurisdiction that are consistent with public leisure and health and the preservation wildlife, shellfish, and fish.
State Water Resources Inventory Area (WRIA) Watershed and Restoration and Enhancement Plan	▪ Establishes a plan to mitigate the potential impacts of new permit exempt domestic groundwater withdrawals on instream flows while simultaneously providing a net ecological benefit to the watershed.
Local	
Woodland Woodard Creek Drainage Basin Plan	▪ Contains policies and recommendations for addressing existing and preventing future water quality and flooding problems, and preservation of habitat in the Woodland Woodard Drainage Basin (Thurston County, 1995). It also contains actions to correct existing problems in the basin.

3.7.2 Environmental Setting

Regional Watersheds and Hydrology

The nearest flowing water features to the Project Site are an unnamed stream system approximately 0.41 miles northwest, Woodland Creek approximately 0.76 miles west, and McAllister Creek approximately 1.74 miles east of the Project Site. McAllister Creek, which is in a different WRIA and drainage basin from the Project Site, flows into the nearby Nisqually Flats that are part of the Billy Frank Jr. Nisqually National Wildlife Refuge. The Nisqually River is approximately 2.9 miles east of the Project Site and also terminates into the Nisqually Flats, which eventually drains into the Puget Sound. There are no surface water features on the Project Site itself. Surface water features in close proximity to the Project Site can be seen in **Figure 20**. For additional information on regional watersheds and hydrology, see **Appendix F**.

Drainage

As shown in **Table 3.5-2**, Spanaway gravelly sandy loam in the western and eastern portions of the Project Site is characterized as “somewhat excessively drained” while Alderwood gravelly sandy loam in the central portion is characterized as “moderately well drained”. In general, the Project Site slopes away from Britton Parkway and Marvin Road, with a high point near the center of the Project Site. The western portion drains towards a central drainage way and then to a depression near the western property line, with no standing water or evidence of runoff leaving the site due to the pervious soil. The eastern portion also drains into the central drainage way, which slopes east and curves south, dispersing into the southern slope. Small depressions south of Main Street NE further prevent runoff from exiting the site. There are no man-made stormwater facilities on the Project Site. Overall, the site showed no signs of runoff within the treed areas, less vegetated western area, or disturbed eastern area. The assessment concluded that no runoff leaves the Project Site. For additional information on onsite drainage, refer to **Appendix F**.

Flooding

As shown in **Figure 21**, the FEMA Flood Insurance Rate Maps for the region indicates that the Project Site is located outside of the 100-year floodplain in Zone X5 (500 Year Floodplain), indicating the area has a minimal flood hazard (FEMA, 2018).

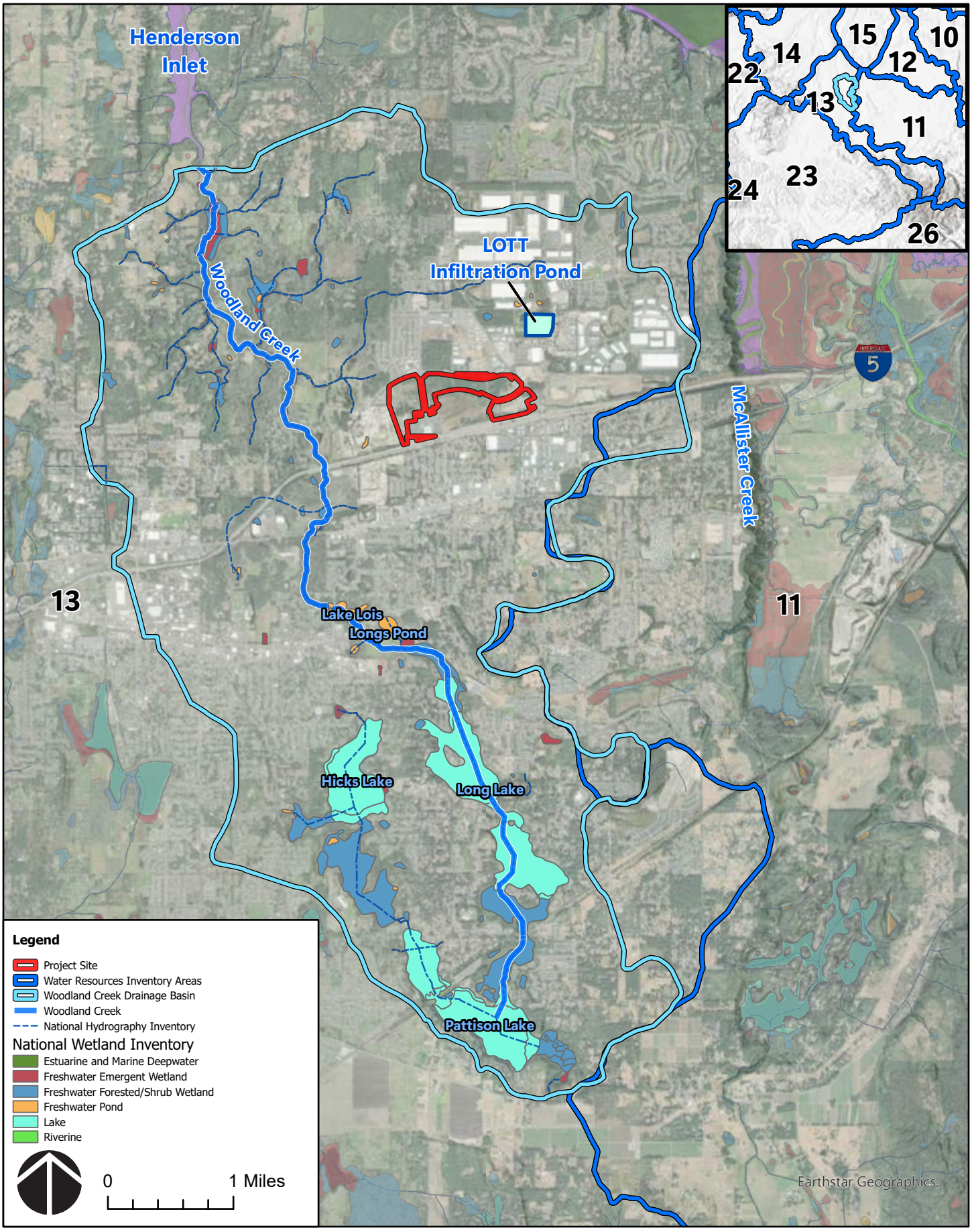
Groundwater

Approximately 232 square miles of northern Thurston County has been designated a groundwater management area with the goal of protecting the groundwater system within the hydrogeological boundaries. Groundwater in this management area is hydraulically isolated and is primarily recharged through local water surface features with rainwater providing most of the recharge. There are three principal aquifers that the City obtains its drinking water from: Vashon Advance Outwash (Qga/Qva), "Sea Level Aquifer" (Qpg/Qc), and permeable strata within older undifferentiated strata(Qpg/TQu). Groundwater flow underneath the Project Site and in the immediately surrounding area differs depending on the aquifer, and additional information about this can be found in Appendix B of **Appendix C**. Aquifer properties beneath the Project Site are listed in **Table 3.7-2**. For additional information on groundwater, refer to **Appendix F**.

Table 3.7-2: Hydrostratigraphy Beneath the Project Site

Stratum	Map Symbol	Characteristics	Approximate Water Level (amsl)	Thickness	Approximate Depth to Water Below Ground Surface (bgs)
Recessional Outwash	Qgo/ Qvr	Limited presence as an outlier in the west end of the project site, and probably thin. Sand. Contains perched water table above the underlying till. Aquifer but not practical for water supply because it is thin, shallow, and susceptible to contamination.	~200	~0–100 ft	<20 ft
Till	Qgt/ Qvt	Covers most of the Project Site. Clayey sand and gravel. Low permeability aquitard.	Not an aquifer	0–60 ft	Not an aquifer
Advance Outwash	Qga/ Qva	Aquifer. Continuously present under the project site. Sand and gravel aquifer.	80–100 ft	10–100 ft	120 ft
Fine-grained non-glacial sediments	Qpf (Qk)/ Qf	Fine materials (e.g., silt). An	Not an aquifer	0–150 ft	Not an aquifer
Pre-Vashon Gravel/Sea Level Aquifer*	Qpg/ Qc	Aquifer.	60–90 ft	15–150 ft	130 ft
Undifferentiated sediments*	Qpg/ TQu	Not well-characterized. Glacial & non-glacial deposits. Contains aquifer and aquitard zones.	50–70 ft	>200 ft	150 ft

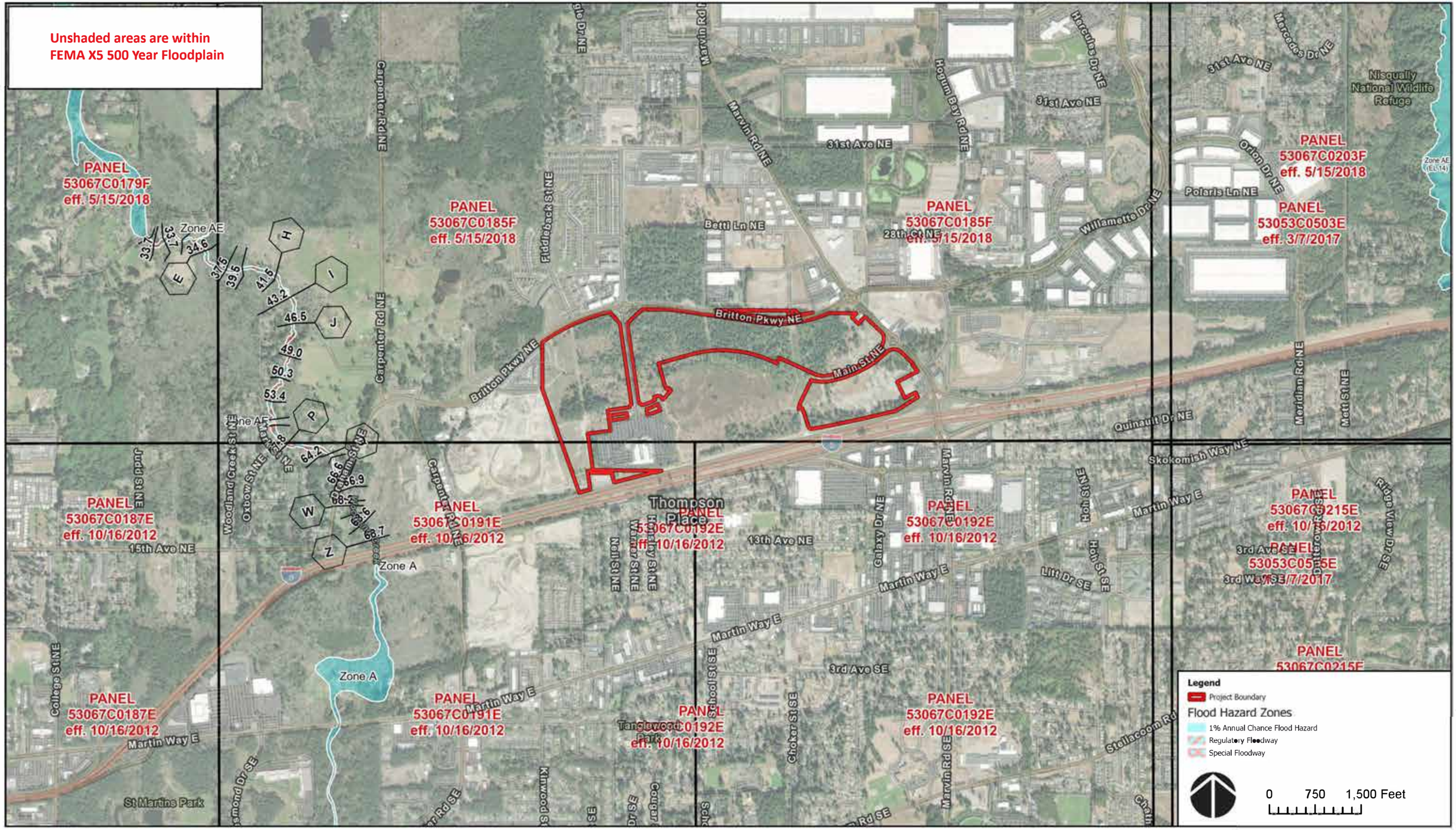
Source: Appendix B of **Appendix C**



Source: ESRI World Imagery

FIGURE 20

SURFACE WATER FEATURES



Source: ESRI World Imagery

FIGURE 21

FEMA FLOOD ZONES

Water Quality

Surface Water Quality

The Project Site is located within WRIA 13, which has Category 5 listings for exceedance of water temperature, dissolved oxygen, pH, bacteria, and total phosphorus water quality standards. Four Total Maximum Daily Load (TMDLs) have been completed in WRIA 13 to address water quality impairments. Woodland Creek, the nearest major water feature to the Project Site, is classified as Category 5 for dissolved oxygen, pH, temperature, and fecal coliform in addition to benthic macroinvertebrates bioassessments. Woodland Creek is under the Henderson Inlet Watershed Multiparameter TMDL to improve water quality (WDOE, 2023b). For additional information on water quality, refer to **Appendix F**.

Groundwater Water Quality

While groundwater is isolated in the management area that the Project Site is in, it is susceptible to contamination (City of Lacey, 2016b). There are areas of the County that have experienced groundwater contamination, including fertilizers, petroleum products, and inadequately treated waste (Thurston County, 2012). While the Project Site itself has no reported groundwater quality problems (Appendix B of **Appendix C**), there are groundwater quality issues in the surrounding area that can potentially occur in the aquifers beneath the Project Site. **Table 3.7-3** provides a summary of groundwater quality issues on the Project Site and in the vicinity while detailed information can be found in **Appendix F**.

Table 3.7-3: Summary of Groundwater Water Quality Issues

Area	Contaminant	Source	Issue	Remediation
Project Site	None reported	N/A	N/A	N/A
Localized areas, including to the south and Hawk Prairie wells	Elevated nitrates, iron, manganese	Not specified	Iron and manganese Exceed USEPA's secondary maximum contaminant levels. All contaminants can lead to nuisance staining and odor issues, but neither State nor USEPA considers these hazardous.	None specified, but water systems can be designed to treat them.
7131-7239 Martin Way E (Lacey Urban Center)	Halogenated solvents	Former dry cleaner	Potential water quality issue. They are difficult to remediate because they descend through groundwater and are persistent.	Enrolled in the Department of Ecology's Voluntary Cleanup Program
Hawks Prairie Reclaimed Water Ponds	Perfluoropentanoic acid (PFPeA), N-Nitrosodimethylamine (NDMA)	Reclaimed Water Infiltration Study by LOTT Alliance	Leaching into the aquifer, persistent in the environment, associated with an increased risk of cancer in laboratory testing.	Addition of a granular activated carbon filter, biological activated carbon, and ozone processes

Source: City of Lacey, 2016b; Thurston County, 2012; Appendix B of **Appendix C**; Thurston County, 2021; WDOE, 2023c; Appendix A of **Appendix C**

3.7.3 Impacts

Alternative 1 – Commercial-Heavy Mixed-Use Development

Stormwater, Drainage, and Flooding

The building components of Alternative 1 will be constructed inside the FEMA-designated 500-year flood plain (**Figure 21**). As shown in **Figure 8** and described in Section 1.6 in **Appendix B**, the Project Site would be graded and vegetation and trees would be completely removed within the development areas, thus altering soil retention. As described in **Section 2.1.6** and **Appendix D**, Alternative 1 includes a stormwater system that will be installed to collect, treat, detain, and convey runoff throughout the Project Site that would also prevent flooding and other adverse effects related with runoff. This stormwater system was designed to be consistent with the standards in the City of Lacey Stormwater Design Standards Manual based on Section 5.03 and Volume V of the Stormwater Management Manuel for Western Washington and will consist of a series of bioretention facilities and infiltration facilities throughout the Project Site to manage the new runoff generated by the development. By detaining runoff in the infiltration areas after treatment in the bioretention facilities, stormwater would infiltrate into the ground and no runoff would leave the Project Site. Therefore, with the implementation of the grading and drainage plan in **Appendix D**, impacts related to stormwater run-off quality and rates as well as flooding would be less than significant.

Surface Water and Groundwater Resource Availability

Option 1 – Off-site Water Supply and Wastewater Treatment

As described in **Appendix B** Section 1.2, under Water Supply Option 1 off-site domestic water supply would be provided to the Project Site by extending the City's existing water main. Potential impacts to the City's water supply and system associated with Water Supply Option 1 are addressed in **Section 3.13.3**. As described therein, the City has sufficient water rights granted by the State to accommodate Alternative 1 while still having excess water rights that are currently unutilized. As described above, Alternative 1 includes a stormwater system that would detain all runoff in infiltration areas where treated stormwater would infiltrate into the ground, recharging groundwater aquifers similar to existing conditions. Additionally, if wastewater generated by Alternative 1 is treated at one of the LOTT reclamation plants, treated effluent would be discharged to the Hawks Prairie Ponds or Woodland Creek Groundwater Recharge Facility, thereby further increasing regional groundwater recharge. Therefore, Alternative 1 would have a less-than-significant impact on groundwater and surface water supplies under Option 1 for both water supply and wastewater.

Option 2 – On-site Water Supply and Wastewater Treatment

As described in **Appendix B** Section 1.2, Water Supply Option 2 would include development of an on-site water treatment plant and two 928-gpm groundwater wells, with one well serving as the primary well and the second one providing redundancy. Under Wastewater Option 2, reclaimed water produced by the WWTP would be used to offset the potable water demands of the project, resulting in a water demand of 226,750 gpd. The proposed wells would be constructed with a 100-foot sanitary control area to be consistent with Washington Department of Health guidelines (Washington Administrative Code [WAC] 246-290-135). The ability of the local aquifers to provide an adequate water supply has been assessed in a hydrogeological report included as Appendix B of **Appendix C**. Based on information from surrounding wells in the aquifer, the hydrogeologic report determined that the undifferentiated sediments (TQu) aquifer would be able to support the 928-gpm needed to supply the water demands of Alternative 1.

While sufficient supply is available, groundwater pumping under Alternative 1 could impact nearby groundwater users. The hydrogeologic report (Appendix B of **Appendix C**) assessed potential impacts to existing nearby wells from operation of the proposed mixed-use development. To be conservative, the report assessed the impacts from Alternative 2 without the use of recycled water, the alternative with the largest water demand (493,667 gpd), to determine the worst-case scenario. This section uses this analysis to conservatively estimate the impacts of Alternative 1 despite the lesser water demand of Alternative 1 compared to Alternative 2. The potential for the proposed well to impact existing wells was determined based on whether pumping could preclude other groundwater users from accessing their water supply. The threshold for drawdown to impact existing wells is greater than 3 feet for users of the TQu Aquifer. As shown in Figure 7 and Figure 8 of Appendix B of **Appendix C**, negative impacts to existing groundwater wells could occur within approximately 2,700 ft of the proposed wells, known as the zone of impairment. While a proposed well location is shown on **Figures 4** and **7**, the ultimate location of the two wells would be determined based on design level hydrogeologic investigation and test wells; therefore, this analysis conservatively evaluates the potential to impact any wells located within 2,700 feet of the Project Site. There are three wells that are both potentially deep enough to draw groundwater from the TQu Aquifer and within the zone of impairment generated by Alternative 1. However, two wells were not considered further due to either having no documented water right associated with it or being associated with a development that no longer exists. The remaining potentially impacted well, the City's Betti Well, is located approximately 2,475 feet from the Project Site and could experience a drawdown effect of up to 3.5 feet if a well is developed on the Project Site within 2,700 feet of the Betti Well. While this exceeds the threshold of 3 ft., the Betti Well is estimated to have an available drawdown of 120 ft and to have a drawdown effect of up to 65 ft. when pumping. While the pumping from Alternative 1 could reduce the available water to the Betti Well if a well is developed on the Project Site within 2,700 feet of the Betti Well, the Betti Well could still have access to water. To ensure that the Betti Well would still have access to water and not experience a significant impact, Mitigation Measure WR-1 has been included in **Section 4** that would restrict the development of a well on the Project Site within 2,700 feet of the Betti Well. Therefore, groundwater pumping to meet the water requirements from Alternative 1 is not anticipated to adversely affect the water supply of other groundwater wells in the vicinity of the Project Site.

Groundwater-fed springs maintain year-round base flow in Woodland Creek (WDOE, 2022b), and groundwater pumping on the Project Site could impact Woodland Creek and its tributaries, resulting in a potentially significantly impact. Some of this impact would be offset by the discharge of surplus treated wastewater produced by the on-site WWTP to on-site ponds and infiltration basins or groundwater injection well. The resulting average net impact to groundwater supplies would be approximately 151,635 gpd (226,750 gpd of water demand less 75,115 gpd of treated wastewater discharge). Mitigation measures are presented in **Section 4** to develop a test well on the Project Site to provide site specific data for a hydrogeologic study to evaluate the hydraulic connectivity with Woodland Creek. If the hydrogeologic study determines that the streamflow of Woodland Creek and/or its tributaries would be impaired or depleted by use of a groundwater well on the Project Site, a mitigation program shall be implemented to offset any associated losses in the streamflow of Woodland Creek and/or its tributaries. Implementation of these mitigation measures would reduce impacts to water resources to a less-than-significant level. A BMP in **Table 2.1-9** would ensure Alternative 1 utilizes low-flow water appliances, faucets, and toilets to reduce the demand for groundwater. As described above, Alternative 1 includes a stormwater system that would detain all runoff in infiltration areas where treated stormwater would infiltrate into the ground, recharging groundwater aquifers similar to existing conditions. The impact to groundwater and associated surface water features would be less than significant with mitigation.

Water Quality

Construction

Regulated construction activities occurring on more than one acre, like Alternative 1, are required to apply for coverage under the NPDES Construction General Permit. The provisions of this permit include preparation of a SWPPP and implementation of BMPs to reduce potential surface water contamination during storm events. BMPs would include, but not be limited to, those presented in **Table 2.1-9**. The BMPs within the SWPPP would minimize adverse impacts to the local and regional watershed from construction activities associated with Alternative 1 by reducing erosion, reducing the risk of soil contamination from construction materials, or by preventing sediment discharge into waterways. In addition to these BMPs that would be part of the adopted SWPPP, dust suppression BMPs identified to protect air quality would further prevent fugitive dust or loose soil from dispersing offsite. With implementation of the SWPPP and BMPs identified in **Table 2.1-9**, impacts to surface water quality from construction activities would be less than significant.

Groundwater Pumping

No special concerns were identified for groundwater in **Section 3.7.2** aside from nearby contamination with nitrates and potentially the chlorinated solvents, but this would not impede development itself. As described in **Appendix B** Section 1.2, under Water Supply Option 2, existing groundwater quality will be tested for potential contaminants (including chlorinated solvents, PFPeA, and NDMA) to ensure the water treatment plant is designed to achieve the standards set forth in the Safe Drinking Water Act.

Wastewater Treatment and Disposal

Wastewater Treatment Option 1 – Off-site Wastewater Treatment

Wastewater generated under Alternative 1 would be transported to the LOTT wastewater treatment system to be treated and disposed of. Therefore, Wastewater Treatment Option 1 under Alternative 1 would not affect surface or groundwater quality. For additional information on the potential impacts of Wastewater Treatment Option 1 on existing utility systems, refer to **Section 3.13.3**.

Wastewater Treatment Option 2 – On-site Wastewater Treatment

Under Wastewater Treatment Option 2, wastewater produced by Alternative 1 would be treated onsite through a wastewater treatment system. As described in **Appendix B** Section 1.3 and **Appendix C**, this system would treat wastewater to Class A reclaimed water standards and the treated effluent would be discharged either via on-site ponds and infiltration basins or a groundwater injection well. As effluent would meet Class A standards, potential impacts to groundwater quality would be minimized but cannot be ruled out without site-specific analysis.. Disposal of treated effluent in a groundwater injection well would require authorization under the USEPA's UIC program as a Class V injection well. The UIC program is authorized under the Federal Safe Drinking Water Act and prohibits any injection that may cause a violation of any primary drinking water regulation. Compliance with the federal regulations and guidelines for Class V injection wells would help ensure potential impacts to surface water and groundwater resources from wastewater treatment and disposal activities associated with Alternative 1 remain less than significant. To further protect groundwater quality, Mitigation Measure WR-2 would be implemented to require groundwater monitoring, site-specific hydrogeologic analysis, and adaptive treatment measures as needed. With implementation of these measures, potential groundwater quality impacts under Wastewater Treatment Option 2 would be reduced to a less than significant level..

Stormwater

As described above, an on-site stormwater system would have a series of bioretention facilities and infiltration facilities throughout the Project Site to manage the new runoff generated as a result of the development. These features are described in **Section 2.1.6**. The bioretention facilities would provide treatment and filtration for pollution generating hard-surfaces and the adjacent landscape before being discharged into an infiltration facility. Multiple types of pollutants would be treated from this stormwater, including 6PPD-Quinone (6PPD)[11]. Regarding the travel center, **Table 2.1-9** includes source control BMPs related to service stations, including but not limited to, correcting illicit discharges to storm drains, formation of a pollution prevention team, preventive maintenance, spill prevention and cleanup, employee training, and record keeping. Stormwater from all low pollution generating areas, such as rooftops, would be discharged directly into the infiltration facilities. These design features would reduce the potential for pollutants to enter the environment during operation. With development of the on-site stormwater treatment, detention, and infiltration system described in **Appendix D**, potential impacts to water quality would be less than significant.

Alternative 2 – Recreation-Heavy Mixed-Use Development

Alternative 2 would result in similar impacts to water resources as Alternative 1. **Table 3.7-4** below compares the potential for Alternative 2 to impact water resources with Alternative 1 and discusses impact level and applicable mitigation.

Table 3.7-4: Summary of Alternative 2 Impacts

Impact	Comparison to Alternative 1	Impact Discussion
Stormwater, Drainage, and Flooding	Alternative 2, with a smaller development footprint than Alternative 1, would have similar but reduced construction and operational impacts.	Alternative 2 would be in the FEMA-designated 500-year flood plains (**Figure 21**) and would increase impervious surfaces due to construction. However, it would have a stormwater treatment system similar to Alternative 1 with all stormwaters being collected, treated, and infiltrated onsite, causing less-than-significant effects on stormwater runoff quality, rates, and flooding.
Surface Water and Groundwater Resources Off-Site Water Supply and Wastewater Treatment	Alternative 2 has a greater water demand and, therefore, would have a similar but greater impact.	Alternative 2 has the potential to impact surface water and groundwater through the use of approximately 493,667 gpd of water for the proposed development. With the use of reclaimed water, this could be reduced by approximately 50% to approximately 247,447 gpd. As described in **Section 2.2**, off-site domestic water supply could be provided to the Project Site by extending the City's existing water main. As described therein, the City has sufficient water rights granted by the State to accommodate Alternative 2 while still having excess water rights that are currently unutilized. Potential impacts to the City's water system

[11] 6PPD is a component that is used to reduce the rate or deterioration of tires and when 6PPD reacts with ozone, it transforms into multiple chemicals that includes 6PPDQuinone, a toxic chemical responsible for salmon mortality

Impact	Comparison to Alternative 1	Impact Discussion
		associated with Water Supply Option 1 are addressed in **Section 3.13.3**.
Surface Water and Groundwater Resources Off-Site Water Supply and Wastewater Treatment	Alternative 2 has a greater water demand and, therefore, would have a similar but greater impact.	If the on-site option (Water Supply Option 2) is selected for the water supply, then two wells would be installed under Alternative 2 that would draw water from TQu Aquifer. With the usage of reclaimed water from the on-site WWTP, the net impact to the groundwater supplies would be approximately 275,057 gpd (247,447 gpd of water demand plus 27,628 gpd to supplement recycled water demands). However, to provide a conservative analysis, the hydrogeologic study (Appendix B of **Appendix C**) assumed the water demand of Alternative 2 without use of recycled water (493,667 gpd). As mentioned above, Alternative 1 utilized the groundwater analysis of Alternative 2 to be conservative, and consequently, the discussion under Alternative 1 is applicable to Alternative 2. As described therein, Alternative 2 could have potentially significant impacts on Woodland Creek flows and the groundwater supply available to the Betti Well. Mitigation measures are presented in **Section 4** to ensure that the development of a groundwater well at the Project Site would not adversely impact the flow of the Woodland Creek and its tributaries or the water supply of neighboring wells. In addition, **Table 2.1-9** includes measures to reduce the impact of Alternative 2 on water supply. As described above, Alternative 2 includes a stormwater system that would detain all runoff in infiltration areas where treated stormwater would infiltrate into the ground, recharging groundwater aquifers similar to existing conditions. Additionally, similar to Alternative 1, the majority of treated wastewater generated by Alternative 2 would be used for ground water recharge through either municipal system (Wastewater Treatment Option 1), or for onsite disposal (Wastewater Treatment Option 2) if available. The impact to groundwater and associated surface water features would be less than significant with mitigation.
Water Quality	Alternative 2, with a smaller development footprint than Alternative 1, would have similar but reduced	Like Alternative 1, surface and potentially groundwater quality would be adversely affected if pollutants entered the environment during construction or operation of Alternative 2. During construction, the Tribe would comply with the

Impact	Comparison to Alternative 1	Impact Discussion
	construction and operational stormwater impacts.	terms of the USEPA Construction General NPDES permit, including the preparation and implementation of a site-specific SWPPP and associated stormwater BMPs, which are included in **Table 2.1-9**. This would reduce the potential for water quality impacts during construction. As described in **Section 2.2**, under Wastewater Treatment Option 2, wastewater produced by Alternative 2 would be treated onsite through a wastewater treatment system that would treat wastewater to Class A reclaimed water standards and would be discharged either via on-site ponds and infiltration basins or a groundwater injection well. As with Alternative 1, compliance with the federal regulations and guidelines for Class V injection wells would ensure potential impacts to surface water and groundwater resources from wastewater treatment and disposal activities associated with Alternative 2 would be less than significant. As with Alternative 1, Alternative 2 will have a series of bioretention facilities and infiltration facilities throughout the Project Site to manage and filter the new stormwater runoff before being discharged into the environment. This would reduce potential water pollution during operation. With the development of an on-site stormwater system, potential impacts to water quality would be less than significant.

Alternative 3 – No Action Alternative

Under Alternative 3, no change in land use would occur, and the Project Site would remain in its current state. The land would be subject to federal, State, and local regulations protective of water resources and thus no new significant impacts would occur.

Reasonably Foreseeable Cumulative Effects Analysis

Stormwater, Drainage and Flooding

The federal and State water resources regulations discussed in **Section 3.7.1** would require that other cumulative projects have similar precautionary features incorporated into their design as the alternatives. This would include the proposed Casino-Resort Project that is directly adjacent to the Project Site. This project would be required to mitigate its own stormwater effects, including building a separate

stormwater system. Therefore, development on the Project Site in combination with other cumulative development would not result in significant cumulative effects to surface water and flooding.

Water Quality

Cumulative developments, including the adjacent proposed Casino-Resort Project, would be required to apply for coverage under a Construction General Permit, if applicable, and develop site-specific SWPPPs. Similar to the project alternatives, the proposed Casino-Resort Project in addition to other cumulative developments would be required to adhere to applicable local, State, and federal regulations with regards to wastewater treatment and disposal. Therefore, the project alternatives in combination with the cumulative projects listed in **Section 3.1.1** would not result in significant adverse cumulative effects to water quality.

Surface Water and Groundwater Resources

Option 1 – Off-site Water Supply and Wastewater Treatment

The highest combined average water demand between the proposed Casino-Resort Project alternatives (Alternative A) and the Quiemuth Village Mixed-Use Project alternatives (Alternative 2) would be approximately 729,197 gpd. As the Project Site and the proposed Quiemuth Casino-Resort Site are currently within the City's water system boundary, the development of these sites has been anticipated in the City's water system plan. The estimated number of connections used in the City's plan for the full buildout of the Project Site and Quiemuth Village Property is greater than the project estimates for the project alternatives and the proposed Casino-Resort Project; therefore, the project alternatives in combination with the Quiemuth Village Mixed Development is fully covered under the City's plan and no additional infrastructure needs are triggered by the proposed developments (**Appendix C**). Furthermore, the City still has approximately 6 million gallons per day (MGD) of undeveloped water rights for future growth in the area. Therefore, the City has capacity to serve additional cumulative development with existing water rights. The City would review any cumulative projects to confirm that they could be supplied with water without exceeding the City's existing water rights. Therefore, the project alternatives in combination with the cumulative projects listed in **Section 3.1.1** that would be served by the City would not result in significant adverse cumulative effects to groundwater supplies. Cumulative impacts from the City's groundwater pumping in addition to other groundwater pumping and current and proposed groundwater recharge projects are addressed below under Option 2.

Option 2 – On-site Water Supply and Wastewater Treatment

As described above, under Option 2 for Water Supply, the development alternatives would draw water from the wells drilled to into the TQu Aquifer. The proposed Casino-Resort Project would either drill into the Qc Aquifer or the deeper TQu Aquifer. To be conservative, this analysis assumes that both the project alternatives and proposed Casino-Resort Project would draw from the TQu Aquifer. The highest combined average water demand from the proposed Casino-Resort Project alternatives (Alternative A) and the project alternatives (Alternative 2) would be approximately 729,197 gpd. To satisfy the maximum water demands, two projects are estimated to require 1,279 gpm. Based on information from surrounding wells in the aquifer, the hydrogeologic report determined the water supply needs of both the alternatives and proposed Casino-Resort Project could be satisfied with wells drilled into the TQu Aquifer. However, the larger demand may result in increased impacts on Woodland Creek and its tributaries and a larger radius of potential impairment, a radius of approximately 3,200 ft. (**Appendix C**). While these impacts could be adverse, the alternatives would include BMPs from **Table 2.1-9** and mitigation from **Section 4** to ensure that they would reduce their potential adverse impacts to neighboring water uses and Woodland Creek and its tributaries due to drawdown effects. Other future demands on the groundwater basin from

cumulative development using private wells would primarily be controlled by local authorities as well as State regulations. As described in **Section 3.13.2**, the City primarily utilizes groundwater for its municipal water supply and has not fully utilized its full water rights of 34 MGD. The City is currently under-utilizing its groundwater supply by 6 MGD, which means this amount could be available for future developments. In addition to having excess groundwater rights, LOTT is expanding its recycled water capacity and distribution in the region by 2035 (**Appendix C**). This could help to reduce cumulative groundwater withdrawal if recycled water is available to offset potable water demands. As demonstrated in **Appendix B** Table 6, the water demands of Alternative 1 could be reduced by 37.5% with recycled water usage. Further, the WRIA 13 Watershed and Restoration and Enhancement Plan (see **Appendix F**) includes the following groundwater offset projects within the Woodland Creek Subbasin: the Hicks Lake Stormwater Retrofit and Managed Aquifer Recharge Project. These projects are anticipated to offset approximately 296 acre-feet per year (AFY), which is sufficient to cover the projected 28 AFY increase in future consumptive use from permit exempt projects and create a surplus offset of 268 AFY. While the proposed Casino-Resort Project would not be subject to local or State regulations like other cumulative projects, it would be required to mitigate its own adverse effects and develop a sustainable water supply to prevent over drafting the groundwater basin. Cumulative projects would be required to restrict or mitigate any significant impacts to groundwater. Therefore, with implementation of BMPs in **Table 2.1-9** and mitigation in **Section 4,** it is anticipated that the cumulative impacts to the regional groundwater basin would be less than significant.

3.8 LAND USE

3.8.1 Regulatory Setting

The land use regulatory setting is summarized in **Table 3.8-1**, and additional information on the regulatory setting can be found in **Appendix F**.

Table 3.8-1: Regulatory Policies and Plans Related to Land Use

Regulation	Description
Federal	
Farmland Protection Policy Act (FPPA)	▪ Intended to minimize the impact that federal programs have on unnecessary and irreversible conversion of farmland to non-agricultural uses. ▪ Assures that federal programs are administered in a manner that is compatible with state and local units of government, private programs, and policies to protect farmland. ▪ Excludes land identified as “urbanized area” on the Census Bureau Map from the definition of “farmland.”
Coastal Zone Management Act	▪ Calls for the effective management, beneficial use, protection, and development of the nation’s coastal zone. ▪ Coastal zone for the State is defined by Chapter 90.58.030 of the Revised Code of Washington, known as the Shoreline Management Act. The Project Site is located over 200 feet from shorelines subject to the Washington State Shoreline Management Act and, therefore, is not within a coastal zone.
State	
Washington State Growth Management Act (GMA)	▪ Adopted in 1990 by the Washington State Legislature. Chapter 36.70A of the Revised Code of Washington. The GMA contains a comprehensive framework

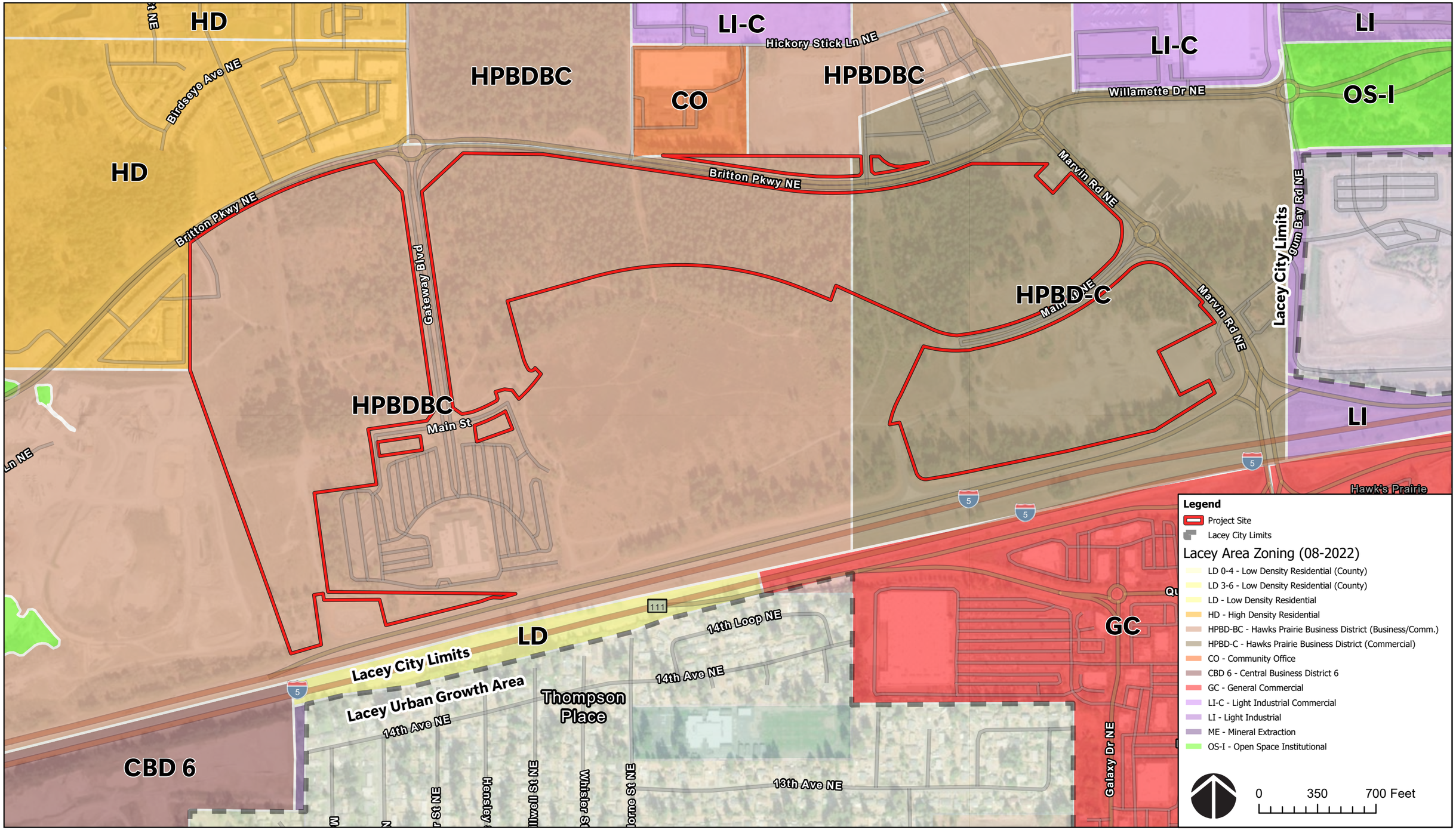
Regulation	Description
	for managing growth and coordinating land use with infrastructure on lands under State jurisdiction.
Washington State Shoreline Management Act	▪ Defines shorelands as those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high-water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the Department of Ecology. The Project Site is located over 200 feet from shorelines subject to the Washington State Shoreline Management Act and, therefore, is not within a coastal zone
Local	
City of Lacey Comprehensive Plan	▪ The 2016 City of Lacey Comprehensive Plan was prepared in compliance with the GMA and is intended to present a clear vision for future growth within the City over a twenty-year planning horizon.
City of Lacey Municipal Code	▪ The City's Municipal Code includes the ordinances which govern the City, including ordinances regarding land use. The City's Zoning Ordinance is intended to facilitate orderly growth and development of the Lacey urban growth area, consistent with the policies, goals, and objectives of the Lacey Comprehensive Plan.

3.8.2 Environmental Setting

Land Use and Zoning

The Project Site is primarily undeveloped but has been previously disturbed by historic logging and grading activities related to the adjacent Cabela's development. The only development includes paved and gravel roadways constructed in anticipation of future development (see **Figure 10**). Vegetation and surface water features are detailed in **Sections 3.2.2** and **3.7.2**. Both the Comprehensive Plan and Zoning Code designate the eastern third of the Project Site as HPBD-C and the remaining land as HPBD-BC. City planning for dense and mixed-use growth in the Hawks Prairie area began in the 1980s, with significant traffic and public utility improvements continuing since the 2000s (City of Lacey, 2010). The Lacey Gateway Town Center, as described **in Section 1.4.2** and outlined in **Figure 15**, was intended to be a major commercial development spanning approximately 250 acres (see additional details in). However, the Lacey Gateway Town Center was never constructed, leaving the area largely undeveloped except for the Cabela's sporting goods store and a partial extension of Main Street built before the 2010 FSEIS.

Surrounding land uses include commercial development such as the Cabela's sporting goods store, residential and commercial properties to the south across I-5, a gravel extraction facility to the west, and high-density residential housing to the northwest. Zoning can be seen in **Figure 22**. The Tribe owns undeveloped land directly south of the site (additional details can be found in **Section 3.1.1**). Information regarding roadways can be seen in **Section 3.12.2**. There are no airports within five miles; the nearest is Hoskins Fields, approximately 9.5 miles to the south. Detailed descriptions of surrounding land uses and zoning can be found in **Appendix F**.



Source: ESRI World Imagery

FIGURE 22

CITY OF LACEY ZONING

Agriculture

The United States Department of Agriculture (USDA) NRCS characterizes the majority of the soils on the Project Site as "Prime Farmland if irrigated" (NRCS, 2023). However, the Project Site is within the Olympia-Lacey Urbanized Area designated by the Census Bureau (U.S. Census Bureau, 2023); therefore, the Project Site is not considered "farmland" under the FPPA. Additionally, the Project Site is zoned for development and there are no historic or current farming operations or infrastructure on the site that would support land cultivation.

3.8.3 Impacts

Alternative 1 – Commercial-Heavy Mixed-Use Development

Land Use Compatibility

Alternative 1 would result in the transfer of the Project Site from fee to federal trust status and the subsequent construction and operation of a mixed-use development, including a variety of commercial uses and supporting residential development. These uses are more fully described in **Section 2.1.1**.

Although City land use and zoning designations would not apply to the Project Site once the land is taken into trust, land uses proposed under Alternative 1 are generally consistent with the City's underlying land use and zoning designations of the Project Site. Specifically, Alternative 1 proposes the following uses which are allowed under the HPBD-C and HPBD-BC zoning: general commercial/retail, auto sales, food stores, eating and drinking establishments (i.e., restaurants and bars), cinemas, bowling alleys, and offices. The HPBD-C and HPBD-BC zoning allow for service stations with up to eight fueling stations and residential development within mixed-use buildings; however, the zoning also allows for similar and related uses with further review. The proposed travel center under Alternative 1 would include 16 gasoline and 10 diesel fuel pumps which is larger than what is typically allowed but consistent with the needs of the area and traffic along the I-5 corridor. The travel center is proposed along the frontage of the I-5 corridor, more than 1,000 feet from the nearest off-site residential housing. The proposed 320 multi-family residential units under Alternative 1 would be less than the number of units proposed under Lacey Gateway Town Center Project, which included approximately 500 residential units in Phase I and up to 2,000 units in future phases (see **Table 3.8-2**).

Alternative 1 is consistent with the intent of the City zoning to provide a large mixed-use commercial district with supporting housing, recreation, and entertainment opportunities. Therefore, development of Alternative 1 would not impede or interfere with the objectives of local land use plans and policies. Alternative 1 would be compatible and consistent with the existing and planned commercial and business development along the I-5 corridor.

Alternative 1 would not physically disrupt neighboring land uses or prohibit access to neighboring parcels. Development of the Project Site could result in conflicts with nearby sensitive land uses, including nearby residential areas; potential conflicts may include air quality and noise impacts from construction and operational activities (**Section 3.2** and **Section 3.9** respectively), an increase in traffic (**Section 3.12**), visual effects and an increase in lighting (**Section 3.14**). These would be similar to impacts that would be experienced from development of the previously proposed Lacey Gateway Town Center or other large-scale commercial mixed-use development under the HPBD-C and HPBD-BC zoning. Implementation of protective measures and BMPs identified in **Table 2.1-9** and mitigation measures identified in **Section 4** for traffic, would reduce potential adverse impacts to sensitive receptors to less-than-significant levels.

Table 3.8-2: Proposed Tribal Developments vs. Former Lacey Gateway Town Center Project

Land Use Component	Lacey Gateway Town Center			Nisqually Tribe Projects			Net Increase/Decrease with Nisqually Tribe Projects
	Phase I[1]	Future Phases[1]	Total Build-Out[1]	Quiemuth Village Mixed Use Project (Alternative 1)[2]	Quiemuth Casino-Resort Fee-to-Trust Project	Total Combined Projects	
Retail & Commercial	983,000 sf	809,000 sf	1,792,000 sf	929,500 sf	158,150 sf[3]	1,087,650 sf	-704,350 sf
Gaming	0 sf	0 sf	0 sf	0 sf	155,250 sf	155,250 sf	155,250 sf
Office Space	100,000 sf	900,000 sf	1,000,000 sf	30,000 sf	0 sf	30,000 sf	-970,000 sf
Housing Units	500 units	2,000 units	2,500 units	320 units	0 units	320 units	-2,180 units
Hotel	270 rooms	375 rooms	645 rooms	200 rooms	350 rooms	550 rooms	-95 rooms
Civic Uses	30,000 sf	50,000 sf	80,000 sf	0 sf	20,000 sf	20,000 sf	-60,000 sf
Open-Space & Recreation	13.5 acres	14.5 acres	28.0 acres	7.4 acres	0.0 acres	7.4 acres	-20.6 acres
Parking	6,430 spaces	11,440 spaces	17,870 spaces	4,655 spaces	3,040 spaces	7,695 spaces	-10,175 spaces

Notes: 1 - 2010 FSEIS, pg. 3-2 and 1-7 (City of Lacey, 2010); 2 – **Table 2.1-3**; 3 – For the purposes of comparison the food and beverage and event/multiple-purpose center is considered retail/commercial.

Alternative 2 – Recreation-Heavy Mixed-Use Development

Alternative 2 is similar to Alternative 1 but would have less commercial development (approximately 40% less than Alternative 1) and more recreational facilities (approximately 45.7 acres more than Alternative 1), plus the addition of a school and open space. Specifically, Alternative 2 proposes the following uses which are allowed under the HPBD-C and HPBD-BC zoning: general commercial/retail, auto sales, food stores, eating and drinking establishments (i.e., restaurants and bars), cinemas, bowling alleys, offices, and athletic facilities.

The HPBD-C and HPBD-BC zoning allow for service stations with up to eight fueling stations, residential development within mixed-use buildings and public services; however, the zoning also allows for similar and related uses with further review. The proposed travel center under Alternative 2 would include 10 gasoline fuel pumps which is slightly larger than what is typically allowed but consistent with the needs of the areas and traffic along the I-5 corridor. The 320 multi-family residential uses under Alternative 2 would be less than the units proposed under Lacey Gateway Town Center Project, which included approximately 500 residential units in Phase I and up to 2,000 units in future phases (see **Table 3.8-2**).

While Alternative 2 includes a mixture of commercial, retail, multi-family residential, and recreational opportunities similar to Alternative 1, the inclusion of the school and ballfields west of Gateway Boulevard makes it less consistent with the previous land use planning for the site due to the lower density of uses. However, the Tribe has identified a need for recreational opportunities with the community, and these uses would be compatible with residential uses adjacent to and near the Project Site.

Similar to Alternative 1, Alternative 2 would not physically disrupt neighboring land uses or prohibit access to neighboring parcels. Development of the Project Site could result in conflicts with nearby sensitive land uses, including nearby residential areas, but to a lesser extent than Alternative 1, due to the reduced overall development and levels of traffic under Alternative 2. As described above for Alternative 1, land use conflicts would be less than significant with the implementation of BMPs in **Table 2.1-9** and mitigation measures in **Section 4**.

Alternative 3 – No Action Alternative

Under Alternative 3, the Project Site would remain under City jurisdiction and no development would occur on the Project Site. The No Action Alternative would not introduce development that would be inconsistent or incompatible with adopted land use plans or surrounding development, and thus impacts would be less than significant. However, the No Action Alternative would not meet the City's long-standing goals of developing the Project Site with a mixed-use development focused on commercial uses

Reasonably Foreseeable Cumulative Effects Analysis

If taken into federal trust, the Project Site would not be subject to local jurisdiction regarding land uses. Similarly, the proposed Casino-Resort Project, described in **Section 3.1.1**, would result in the acquisition of land adjacent to the Project Site into federal trust, removing local land use controls and regulations. The land uses proposed as part of these projects are generally consistent with the City's underlying land use and zoning designations. Specifically, the proposed Casino-Resort Project is generally consistent with the following permitted uses within HPBD-C and HPBD-BC: commercial; hotels; convention centers and conference facilities; restaurants; and entertainment and recreation (including museums).

The City of Lacey 2016 Comprehensive Plan assumed development of the Lacey Gateway Town Center as part of the Hawks Prairie Business District Element. Consequently, utilities and transportation corridors

have been designed and constructed to accommodate growth. **Table 3.8-2** provides a comparison of the Tribe's proposed developments and the former Lacey Gateway Town Center Project that was analyzed in the 2010 FSEIS. A shown therein, the Tribe's proposed developments (Alternative 1 and Proposed Casino-Resort Project) are generally consistent with the types of uses planned as part of the former Lacey Gateway Town Center Project previously planned for most of the Project Site and the Casino-Resort Property. Furthermore, Alternative 1 is located adjacent to the proposed Casino-Resort Project, and the two developments are anticipated to be complementary in use and infrastructure. In particular, the extension of utilities and roadways to serve Alternative 1 could also facilitate development of the adjacent Casino-Resort Project. However, such growth is consistent with local planning assumptions for the area, and both projects fall within the buildout envelope anticipated in the City's long-term planning documents. Overall, the Tribe's proposed developments would be reduced in the floor area of proposed uses in comparison to the Lacey Gateway Town Center Project; however, the City's overall goal to develop a mixed-use development focused on commercial uses would be achieved. Because the developments do not exceed the scale of previously planned land uses and would not introduce new land use types to the area, they would not induce unplanned growth inconsistent with adopted plans or policies. Any future non-Tribal development in the vicinity would be subject to City land use regulations and approval. Therefore, cumulative impacts to land use would be less than significant.

3.9 NOISE

3.9.1 Regulatory Setting

The noise regulatory setting is summarized in **Table 3.9-1**, and additional information on the regulatory setting can be found in **Appendix F**.

Table 3.9-1: Regulatory Policies and Plans Related to Noise

Regulation	Description
Federal	
Federal Highway Administration Construction Noise Thresholds	▪ Noise sensitive locations: (Daytime: 7 a.m. to 6 p.m.) 72 A-weighted decibels (dBA) equivalent sound level (L_{eq}) or Baseline + 5 (whichever is louder). ▪ Commercial areas: (Daytime) 77 dBA L_{eq} or Baseline + 5 (whichever is louder).
Noise Abatement Criteria (NAC)	▪ Applicable to traffic and other project-related noise sources. ▪ Park and residential areas threshold: 67 dBA L_{eq}. ▪ Developed areas threshold: 72 dBA L_{eq}.
Vibration Standards	▪ Peak particle velocity (PPV) is the maximum instantaneous peak (inches per second) of the vibration signal. ▪ The Federal Transit Administration's (FTA) guideline vibration damage criteria for structures is 0.5 PPV and 0.1 PPV for annoyance of people.
State	
Chapter 173-60 WAC	▪ Establishes maximum noise levels permissible in identified environments and provides use standards relating to the reception of noise within such environments.
Local	
Thurston County Municipal Code, Chapter	▪ Minimizes the exposure of citizens to the physiological and psychological dangers of excessive noise and to protect, promote and preserve the health, safety, and welfare of the general public.

Regulation	Description
10.36 – Public Disturbance Noise	▪ Noise limits are set for motorized vehicles (other than a public highway), operation of any device designed for sound production or reproduction, operation of either a gas- or diesel-powered generator, or items related to the before mentioned that exceeds 55 dBA between the hours of 7:00 a.m. and 10:00 p.m. and 45 dBA between the hours of 10:00 p.m. and 7:00 a.m. measured at the property line of the adjacent property or public rights-of-way.
City of Lacey Municipal Code Chapter 16.57.030 – Noise	▪ Establishes minimum standards for the control of environmental pollution, and minimizes the adverse effects which may result from the use of land by any activity or person. ▪ The maximum allowable noise levels as measured at the property line of noise impacted uses or activities shall be those set forth in Chapter 173-60 WAC.

3.9.2 Environmental Setting

For the fundamentals of sounds, effects of noise on people, and characteristics of vibrations, please refer to **Appendix F**.

Existing Noise Sources and Ambient Noise Levels

The dominant noise source in the vicinity of the Project Site is the traffic on I-5 along the southern boundary of the Project Site. The U.S. Department of Transportation (USDOT) develops national transportation noise maps [12]using a 24-hr equivalent A-weighted sound level noise metric. Because traffic on I-5 is the dominant source of noise in the vicinity of the Project Site, the USDOT noise contour map for I-5 was utilized to estimate the ambient noise environment. According to the USDOT national transportation noise map for I-5, ambient noise levels along the southernmost boundary of the Project Site adjacent to I-5 are approximately 60 dBA L_{eq} over a 24-hour period (USDOT, 2023). Other noise sources in the area include vehicles and activities at the adjacent Cabela's property to the south, traffic along local roadways, including Britton Parkway NE and Marvin Road NE, and adjacent gravel mining operations to the west.

Sensitive Receptors

The nearest sensitive receptors[13] in the Project Site vicinity include an apartment complex that borders the western boundary and apartment complexes and single-family houses to the northwest that are approximately 150 feet from the site boundary. There is also residential housing across I-5 to the south that is approximately 470 feet from the site boundary. The nearest school is approximately 1,300 feet to the south of the Project Site boundary.

[12] The sound contours on these maps represent the approximate average noise energy due to transportation noise sources over a 24-hour period at the receptor locations where noise is computed.

[13] Some land uses are considered more sensitive to noise than others due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, and parks and other outdoor recreation areas generally are more sensitive to noise than commercial or industrial land uses.

3.9.3 Impacts

Methodology

The assessment of project effects is based on federal NAC standards used by the FHWA, and on FTA thresholds for perceptible vibration. The noise standards of the State and City are also considered. Specifically, adverse noise and vibration effects are identified at existing sensitive receptor locations if the following were to occur as a result of the project:

- Project construction noise levels exceed the FHWA construction noise thresholds for noise-sensitive locations (see Table 7 of **Appendix F**): 90 L_{max} between 7 a.m. – 6 p.m, and 80 L_{max} between 10 p.m. – 7 a.m.
- Project construction vibration levels exceed 65 vibration decibels (VdB) (FTA threshold of perception).
- The 23 CFR 772 NAC provides an operational noise threshold of 67 dBA, L_{eq} for traffic induced noise for residential land uses.
- On-site noise sources associated with ongoing project operations exceed the standards set forth in Chapter 173-60 WAC (**Appendix F**).
- On-site noise sources associated with ongoing project operations exceed the standards set forth in City of Lacey Municipal Code Chapter 16.57 - Environmental Performance Standards (**Appendix F**).

Alternative 1 – Commercial-Heavy Mixed-Use Development

Construction Noise

Construction would temporarily elevate noise levels due to traffic and equipment. Approximately 600 to 900 daily worker and vendor truck trips, plus material hauls occurring, would occur and trucks are conservatively estimated to be ten times louder than cars. To achieve a noticeable noise difference in the ambient noise environment, approximately 3.0 dBA, a doubling of existing traffic volume would be required (see **Appendix F** for additional details on fundamentals of noise). Current traffic near the Project Site ranges from 628 to 4,229 vehicles during PM peak hours (see Figure 4 of **Appendix H**), hence the additional construction traffic would not double existing volumes. Furthermore, construction traffic would be temporary and would not occur at nighttime hours. Thus, this would minimize noise impact and sleep disturbance. Consequently, noise from construction traffic would be less than significant.

Stationary noise generation would vary depending on duration and type of equipment used, but would typically generate maximum noise levels up to 92 dBA at a distance of 50 feet, as indicated in **Table 3.9-2**.

Table 3.9-2: Typical Construction Noise Levels

Construction Equipment	Maximum Noise Level at 50 ft (dBA)	Construction Equipment	Maximum Noise Level at 50 ft (dBA)
Crane (mobile or stationary)	89	Tractor	84
Dozer	86	Generator (more than 25 kilo-volt-amperes)	73
Excavator	87	Backhoe	84
Grader	79	Compressor (air)	68

Construction Equipment	Maximum Noise Level at 50 ft (dBA)	Construction Equipment	Maximum Noise Level at 50 ft (dBA)
Paver	82–91	Front end loader	71–81
Scraper	92	Pickup truck	75
Concrete pump truck	89	Dump truck	73–91

Source: WSDOT, 2020

Table 3.9-3 shows the anticipated noise levels at the nearest sensitive receptors due to stationary sources, ranging from 68.5 dBA to 96 dBA. All of these would not exceed the FHWA construction thresholds with the exception of the nearest sensitive receptor. While the FHWA construction noise thresholds for noise-sensitive locations would be exceeded, Chapter 173-60-050 WAC expects construction activities to implement the best sound reduction measures to the extent economically feasible. With these measures, construction noise is exempted from maximum permissible environmental noise levels between the hours of 7 a.m. and 10 p.m. (**Appendix F**). Construction noise BMPs identified in **Table 2.1-9** would reduce noise during construction activities and would limit construction to waking hours to reduce the potential for nighttime sleep disturbance, which is consistent with the County's Noise Ordinance. To further reduce this potentially significant impact, mitigation measures in **Section 4** include appointing a disturbance coordinator during construction to address noise complaints of nearby sensitive receptors and locating stationary construction equipment the furthest extent possible from sensitive receptors. Therefore, implementation of the mitigation measures in addition to the BMPs would reduce construction noise levels to the extent feasible, consistent with Chapter 173-60-050 WAC. Therefore, the construction noise impact to sensitive receptors would be less than significant with mitigation.

Table 3.9-3: Noise Levels at Sensory Receptors Adjacent to Project Site

Sensory Receptor	Highest Noise Level[1,3]	FHWA construction noise threshold exceeded?
Nearest receptor on western boarder	96 dBA	Yes, greater than 90 dBA
115-feet northwest	89 dBA	No, less than 90 dBA
470-feet south	68.5 dBA[2]	No, less than 90 dBA

[1] Assuming that up to three of the loudest pieces of equipment are operating at the same time. [2] There is a noise barrier between the nearest sensitive receptors and the Project Site, assumed to have a 8 dBA reduction factor (FHWA, 2001). [3] An attenuation (reduction) of 6 dBA per doubling of distance was used given the relatively flat topography and hard surfaces between the Project Site and the nearest sensitive receptors (WSDOT, 2020)

Construction Vibration

The vibration levels of typical construction equipment at 25 feet are shown in **Table 3.9-4**. Most construction vibrations would be below the structural damage threshold (90 VdB) at this distance or greater. However, all equipment listed exceeds the human annoyance threshold (65 VdB) at 25 feet (FTA, 2018). The nearest residential receptor is adjacent to the Project Site on the western side. Vibration can be an issue when high-vibration equipment (compactors or large dozers) is used within 25 to 100 feet of a structure. Construction activities within 100 feet of the nearest residential structure could cause potential structural damage and annoyance, which is a significant impact. Mitigation measures in **Section 4** include using equipment with vibrations at or below 90 VdB within 100 feet of buildings or employing setbacks or buffers, and appointing a disturbance coordinator to address noise and vibration complaints. For the adjacent Cabela's property, while vibrations might affect parking lots, they would not impact the

building itself, avoiding structural damage. Therefore, with mitigation, vibrations from construction under Alternative 1 would be less than significant.

Table 3.9-4: Vibration Levels For Construction Equipment

Vibration Source	Approximate Vibration Level (VdB) at 25 ft
Vibratory Roller	94
Large Bulldozers	87
Loaded Trucks	86
Jackhammer	79

Source: FTA, 2018

Operation Noise

During operation of Alternative 1, increased traffic would be the largest contributor of new noise to the existing environment. The level of traffic noise is dependent on three variables: (1) volume of traffic, (2) speed of traffic, and (3) number of trucks in the flow of traffic. Traffic speed or the mix of trucks in the area would not significantly change during the operational phase; however, implementation of Alternative 1 would increase traffic volumes. As discussed in **Section 3.9.2**, the primary source of environmental noise in the vicinity of the Project Site is the traffic-generated noise that occurs along I-5, estimated at 60 dBA L_{eq}. **Table 3.9-5** outlines the anticipated traffic and noise increases from Alternative 1, compared to 2027 projections without development. It includes thresholds for significant noise impacts—either an increase of 3 dBA, noticeable by humans, or exceeding the 67 dBA ambient noise level as per 23 CFR 772. Traffic from Alternative 1 would need to double at study intersections/roundabouts to cause a 3 dBA increase (see **Appendix F** for additional information on the fundamentals of sound). The anticipated increases will not double traffic, keeping the projected noise rise under 3 dBA, except for one intersection: Western Parkway NE/Britton Parkway NE. Noise would increase approximately 3.32 dBA at this intersection, a noticeable difference, and there is an apartment complex located adjacent to this intersection. However, the noise increase at this intersection would not exceed the 67 dBA exterior threshold for residences. Thus, Alternative 1 is not expected to cause significant adverse traffic noise effects.

Table 3.9-5: Alternative 1 Traffic Noise Increases

Roadway	Future PM Peak Traffic (2027)	Alternative 1 + Future (2027) Generated PM Peak Traffic	Anticipated Increase in Noise*	Perceivable Difference (3 dBA)	Exceeds 23 CFR 772 67 dBA Threshold?
Marvin Road NE/Hawks Prairie Road NE	1,609	1,609	1,709	0.26	No
Marvin Road NE/Britton Parkway NE/Willamette Drive NE	3,770	3,770	4,210	0.48	No
Marvin Road NE/Main Street NE	3,453	3,453	4,086	0.73	No
Marvin Road NE/I-5 Southbound (SB) Ramps	5,120	5,120	6,277	0.88	No
Marvin Road NE/I-5 Northbound (NB) Ramps	4,200	4,200	5,251	0.97	No
Marvin Road NE/Quinault Drive NE	3,730	3,730	4,373	0.69	No
Marvin Road NE/Lacey Marketplace	2,880	2,880	3,144	0.38	No
Marvin Road NE/Martin Way East €	4,730	4,730	5,217	0.43	No

Roadway	Future PM Peak Traffic (2027)	Alternative 1 + Future (2027) Generated PM Peak Traffic	Anticipated Increase in Noise*	Perceivable Difference (3 dBA)	Exceeds 23 CFR 772 67 dBA Threshold?
Marvin Road Southeast (SE)/Steilacoom Road SE	3,030	3,030	3,360	0.45	No
Marvin Road SE/Pacific Avenue SE	2,907	2,907	3,194	0.41	No
Willamette Drive NE/31st Avenue NE	1,159	1,159	1,230	0.26	No
Hogum Bay Road NE/Willamette Drive NE	1,825	1,825	2,010	0.42	No
Eastern Parkway NE & Britton Parkway NE	1,115	1,115	1,626	1.64	No
Central Parkway NE/Britton Parkway NE	1,077	1,077	1,562	1.61	No
Gateway Boulevard NE/Britton Parkway NE	1,280	1,280	2,426	2.78	No
Western Parkway NE/Britton Parkway NE	1,092	1,092	2,348	3.32	Yes
I5 RIRO Ramp/I5 CD Road	NA	NA	853	NA	NA
I5 CD Road & Western Pkwy NE	NA	NA	528	NA	NA
Hawks Prairie Road NE/Carpenter Road NE	640	640	683	0.28	No
Carpenter Road NE & Britton Parkway NE	1,387	1,387	2,562	2.67	No
Carpenter Road/Marin Way E	3,790	3,790	4,491	0.74	No
Carpenter Road SE/Pacific Avenue SE	3,275	3,275	3,561	0.36	No
Desmond Drive SE/Martin Way E	2,646	2,646	3,038	0.60	No
Regal Cinema/Martin Way E	2,695	2,695	3,038	0.52	No
I-5 NB Ramps/Martin Way E	3,210	3,210	3,581	0.47	No
I-5 SB Ramps/Martin Way E	3,621	3,621	3,867	0.29	No
College Street SE/Martin Way E	4,125	4,125	4,370	0.25	No
Homann Drive SE/Lacey Street SE & Pacific Avenue SE/Lacey Boulevard SE	2,607	2,607	2,807	0.32	No
Sleater Kinney Road NE/South (S) Bay Road NE	777	777	836	0.32	No
Sleater Kinney Road NE/15th Avenue NE	1,255	1,255	1,426	0.55	No
Sleater Kinney Road/Martin Way E	3,055	3,055	3,283	0.31	No
I-5 NB Ramps/Pacific Avenue SE	2,900	2,900	2,942	0.06	No
I-5 SB Ramps/Pacific Avenue SE	2,211	2,211	2,240	0.06	No
Driveway A/Britton Pkwy NE	NA	NA	2,049	NA	NA
Driveway B/Britton Pkwy NE	NA	NA	1,486	NA	NA
Driveway C/Britton Pkwy NE	NA	NA	1,520	NA	NA
Marvin Rd NE/Driveway D	NA	NA	4,348	NA	NA
Marvin Rd NE/Union Mills Rd SE	1,480	1,480	1,609	0.36	No
S Bay Rd NE/Hawks Prairie Rd NE	935	935	964	0.13	No

*The following equation was taken from Caltrans *Technical Noise Supplemental to the Traffic Noise Analysis Protocol*, September 2013, used to calculate the increase noise: $10\log_{10}$ (with-project traffic volumes/without-project traffic volumes)
Source: **Appendix H**

Commercial operations on the Project Site could raise ambient noise levels due to roof-mounted air handling units on buildings, along with noise from loading docks, parking lots, and driveways. These HVAC units, likely to be installed on roofs, would include noise shielding and other standard noise abatement measures. The noise from these HVAC systems typically measures about 55 dBA L_{eq} at 20 feet but can vary depending on the model and capacity (Berger et al., 2015). The closest proposed commercial building under Alternative 1 is an off-site apartment complex to the west, approximately 480 feet away. Assuming a noise attenuation factor of 6 dBA per distance doubling, HVAC noise at the nearest residential receptors would be around 27 dBA, well below established noise thresholds. Consequently, noise impacts from HVAC equipment are expected to be less than significant.

Idling trucks at loading docks can generate noise levels up to 100 dBA (Berger et al., 2015). During the operation of Alternative 1, delivery trucks will service various developments such as commercial retail buildings, grocery stores, and the Travel Center. Additionally, trucks not delivering goods are expected to use the Travel Center, increasing large truck trips to the Project Site. Although idling trucks can be significant noise sources, idling typically lasts less than 5 minutes, and deliveries occur periodically, not frequently, aligning with the temporary exceedance permitted per hour in both Chapter 173-60 WAC and City Chapter 16.57 (see **Appendix F** for additional information). The Travel Center, shown as land use 14 on **Figure 4**, is strategically located in the southeast corner of the Project Site, adjacent to I-5 and existing commercial uses, to minimize potential noise impacts from off-site sensitive receptors. Furthermore, the Project Site's landscaping and buildings would help dampen potential noise sources, ensuring that the intermittent presence of delivery trucks does not significantly increase ambient noise levels at sensitive receptors or violate City and State regulations.

Increases in ambient noise levels from paved surface parking lots and driveways under Alternative 1 would primarily come from slow-moving and idling vehicles, door operations, and patron conversations. The noise level in these areas is generally around 60.0 dBA, dominated by vehicle movements (Illingworth & Rodkin, Inc., 2014), which is below the 67.0 dBA threshold set by 23 CFR 772 for traffic-related noise. Consequently, miscellaneous noise from on-site vehicles and HVAC equipment would not cause significant adverse effects on the off-site ambient noise environment.

Operation Vibration

Commercial uses do not include sources of perceptible vibration. Therefore, Alternative 1 would not result in vibration and noise levels at nearby sensitive receptors and would not exceed the federal noise abatement criteria; therefore, no significant adverse effects would occur.

Alternative 2 – Recreation-Heavy Mixed-Use Development

Alternative 2 would result in similar construction and operational noise and vibrations impacts as Alternative 1, although at lower levels due to the smaller scale of the development. Construction noise and vibration would be temporary for Alternative 2. However, similar to Alternative 1, the construction generated noise and vibration would have a significant impact on sensitive receptors in the west and northwest of the Project Site. With implementation of same mitigation measures for Alternative 1 in **Section 4**, in addition to the BMPs specified in **Table 2.1-9**, the noise and vibration impacts during construction of Alternative 2 would be reduced to less than significant levels.

During operation, the proposed school and athletic complex in the northwestern portion of the Project Site would create noise typical of schools and parks (e.g., children playing, fans cheering, and potentially the use of public address systems). The proposed school and athletic complex are located adjacent to the apartment complex on the western boundary and approximately 150 feet from the housing to the northwest. While noise could be generated from these sources that could reach the adjacent sensitive receptors, the noise is anticipated not to be significant. The school could enroll a maximum of 200 students, and therefore any school activities would be small in nature. The sports fields that constitute the athletic complex would not be designed to hold large spectator events, but rather small social events. Small events such as these would produce moderate noise levels. For example, small soccer events with up to 40 spectators could produce up to 60 L_{eq} at 15 ft (Placeworks, 2023), and 100 children using an elementary playground can produce approximately 60 dB at a distance of 100 feet (AECOM, 2022). Noise levels of 60 L_{eq} would attenuate to less-than-significant levels at the adjacent apartment complex and would not significantly contribute to the ambient noise environment. If several small events were occurring at the same time, these could cumulate into a more significant impact to the ambient noise environment. The athletic complex would have 12 different fields, and the worst-case scenario would be for all the fields to be utilized at once. Assuming approximately 60 dBA is generated from each field, this would equate to approximately 70 dBA at 15 ft. With a noise attenuation of approximately 6 dBA per doubling of distance and the nearest sports field being approximately 350 feet west of the apartment complex, the adjacent apartment complex could be expected to experience 42.6 dBA. This would not be significant enough to make a noticeable difference in the ambient noise environment or exceed any regulatory standards in place. Therefore, this impact is less than significant.

The increase in non-traffic induced noise sources during operation would be similar to Alternative 1 during operation, but decreased due to the smaller development footprint. Traffic noise impacts would also be similar to Alternative 1, although Alternative 2 would overall have slightly lower traffic volumes; traffic-induced noise can be seen in **Table 3.9-6**. As shown in **Table 3.9-6**, Alternative 2 would not increase noise by 3 dBA or more and would not exceed the 67 dBA threshold set in 23 CFR 772. Therefore, Alternative 2 would have a less than significant impact associated with traffic noise.

Table 3.9-6: Alternative 2 Traffic Noise Increases

Roadway	Future (2027) PM Peak Traffic	Alternative 2 + Future (2027) Generated PM Peak Traffic	Anticipated Increase in Noise*	Noticeable Difference (3 dBA)	Exceeds 23 CFR 772 67 dBA Threshold?
Marvin Road NE/Hawks Prairie Road NE	1,609	1,683	0.20	No	No
Marvin Road NE/Britton Parkway NE/Willamette Drive NE	3,770	4,055	0.32	No	No
Marvin Road NE/Main Street NE	3,453	3,796	0.41	No	No
Marvin Road NE/I-5 SB Ramps	5,120	5,781	0.53	No	No
Marvin Road NE/I-5 NB Ramps	4,200	4,861	0.63	No	No
Marvin Road NE/Quinault Drive NE	3,730	4,203	0.52	No	No
Marvin Road NE/Lacey Marketplace	2,880	4,044	1.47	No	No
Marvin Road NE/Martin Way E	4,730	5,087	0.32	No	No
Marvin Road SE/Steilacoom Road SE	3,030	3,272	0.33	No	No
Marvin Road SE/Pacific Avenue SE	2,907	3,117	0.30	No	No

Roadway	Future (2027) PM Peak Traffic	Alternative 2 + Future (2027) Generated PM Peak Traffic	Anticipated Increase in Noise*	Noticeable Difference (3 dBA)	Exceeds 23 CFR 772 67 dBA Threshold?
Willamette Drive NE/31st Avenue NE	1,159	1,212	0.19	No	No
Hogum Bay Road NE/Willamette Drive NE	1,825	1,963	0.32	No	No
Eastern Parkway NE & Britton Parkway NE	1,115	1,462	1.18	No	No
Central Parkway NE/Britton Parkway NE	1,077	1,398	1.13	No	No
Gateway Boulevard NE/Britton Parkway NE	1,280	1,882	1.67	No	No
Western Parkway NE/Britton Parkway NE	1,092	2,013	2.66	No	No
I5 RIRO Ramp/I5 CD Road	NA	555	NA	No	No
I5 CD Road & Western Pkwy NE	NA	391	NA	No	No
Hawks Prairie Road NE/Carpenter Road NE	640	672	0.21	No	No
Carpenter Road NE & Britton Parkway NE	1,387	2,272	2.14	No	No
Carpenter Road/Marin Way E	3,790	4,304	0.55	No	No
Carpenter Road SE/Pacific Avenue SE	3,275	3,484	0.27	No	No
Desmond Drive SE/Martin Way E	2,646	2,944	0.46	No	No
Regal Cinema/Martin Way E	2,695	2,947	0.39	No	No
I-5 NB Ramps/Martin Way E	3,210	3,483	0.35	No	No
I-5 SB Ramps/Martin Way E	3,621	3,797	0.21	No	No
College Street SE/Martin Way E	4,125	4,303	0.18	No	No
Homann Drive SE/Lacey Street SE & Pacific Avenue SE/Lacey Boulevard SE	2,607	2,754	0.24	No	No
Sleater Kinney Road NE/S Bay Road NE	777	828	0.28	No	No
Sleater Kinney Road NE/15th Avenue NE	1,255	1,381	0.42	No	No
Sleater Kinney Road/Martin Way E	3,055	3,223	0.23	No	No
I-5 NB Ramps/Pacific Avenue SE	2,900	2,932	0.05	No	No
I-5 SB Ramps/Pacific Avenue SE	2,211	2,232	0.04	No	No
Driveway A/Britton Pkwy NE	NA	1,763	NA	NA	NA
Driveway B/Britton Pkwy NE	NA	1,291	NA	NA	NA
Driveway C/Britton Pkwy NE	NA	1,395	NA	NA	NA
Marvin Rd NE/Driveway D	NA	4,030	NA	NA	NA
Marvin Rd NE/Union Mills Rd SE	1,480	1,574	0.27	No	No
S Bay Rd NE/Hawks Prairie Rd NE	935	956	0.10	No	No

*The following equation was taken from Caltrans *Technical Noise Supplemental to the Traffic Noise Analysis Protocol*, September 2013, used to calculate the increase noise: $10\log_{10}$(with-project traffic volumes/without-project traffic volumes)
Source: **Appendix H**

Alternative 3 – No Action Alternative

Under Alternative 3, the Project Site would remain undeveloped and would not be a source of construction or operational noise. No noise impacts would occur under Alternative 3.

Reasonably Foreseeable Cumulative Effects Analysis

Approved projects in the vicinity of the Project Site would be required to comply with applicable noise regulations during construction and operation. This would include the proposed Casino-Resort Project that is directly adjacent to the Project Site. This project would be required to complete an environmental analysis, including development on the Project Site in the analysis baseline, and would be required to mitigate its own noise and vibration impacts. Therefore, the alternatives would not contribute towards adverse cumulative impacts associated with traffic noise levels.

3.10 PUBLIC SERVICES

3.10.1 Regulatory Setting

The public services regulatory setting is summarized in **Table 3.10-1**, and additional information on the regulatory setting can be found in **Appendix F**.

3.10.2 Environmental Setting

Fire Protection and Emergency Medical Services

Lacey Fire District #3 services an approximately 70-square mile area that encompasses the Project Site, City, northern Thurston County, and the Reservation, including the Red Wind Casino and facilities, per the amended Memorandum of Agreement between the Tribe and District described in **Section 1.5.2** and included in **Appendix A**. Two of the five Lacey Fire District 3 stations (Stations 34 and 35) are located near the Project Site. In 2022, Lacey Fire District #3 received 16,822 calls for service; at a population of approximately 105,650 people within the Fire District boundaries, this equates to a call rate of approximately 0.16 calls per person (Lacey Fire District #3, 2023). For additional information on fire protection and emergency medical services, see **Appendix F**.

Table 3.10-1: Regulatory Policies and Plans Related to Public Services and Utilities

Regulation	Description
Federal	
Public Law 280	▪ Changed criminal jurisdiction from the federal government to certain states, including Washington, for offenses involving tribal members in Indian Country.
State	
Washington State Growth Management Act	▪ The GMA contains a comprehensive framework for managing and providing public services and outlines the minimal public services that cities and counties are required to provide in urban areas.

Law Enforcement Services

The City is served by the LPD which is currently the primary agency responsible for law enforcement within the Project Site. This police department has a service agreement with the Thurston County Sheriff's Department (City of Lacey, 2016a)

The Tribe maintains a comprehensive Public Safety Department composed of its own police department (the Nisqually Police Department), Department of Corrections, and Fish and Wildlife program. The Nisqually Police Department is responsible for enforcing the law on the Reservation. In total, the Tribe's Public Safety Department employs over 92 full-time equivalent employees. In addition to the Public Safety Department, the Tribe maintains its own Emergency Management Services program. The Emergency Management Services program employs nearly 24 full-time equivalent employees.

Schools

The Project Site is located within the North Thurston Public School District (NTPSD). NTPSD currently provides educational services through three high schools, four middle schools, 13 elementary schools, and four alternative schools (NTPSD, 2022). NTPSD provides education to over 14,000 students (NTPSD, 2022). The nearest school to the Project Site is Olympic View Elementary School, located approximately 1,200 feet south of the Project Site, across I-5.

Parks and Recreation

The City contains over 1,200 acres of parkland and open space, miles of walking and biking trails, a regional athletic complex, three indoor public pools and several community buildings (City of Lacey, 2023b). The Project Site is located within 2 miles of several parks, including, but not limited to, Pleasant Glade Park, Lake Lois Park, Woodland Creek Community Park, and the Regional Athletic Complex.

3.10.3 Impacts

Alternative 1 – Commercial-Heavy Mixed-Use Development

Fire Protection and Emergency Medical Services

The increased risks of fire during construction of Alternative 1 would be similar to that found at other construction sites. Additionally, construction related BMPs in **Table 2.1-9** would further reduce the fire risk and thus the probability of needing services from Lacey Fire District #3. Thus, potentially adverse impacts to Lacey Fire District #3 during construction would be less than significant.

Operation of Alternative 1 would create additional demand for fire protection and emergency services from Lacey Fire District #3. While the potential increase in fire protection services is not anticipated to trigger the need to construct new facilities, the increase in demand would nonetheless constitute a potentially significant impact. Alternative 1 is estimated to generate approximately 2,180 new calls for service (see Table 27 of **Appendix L**), which represents approximately 13% of the total call volume received by Lacey Fire District in 2022. As described in **Section 1.5.2**, there is an existing agreement between Lacey Fire District #3 and the Tribe that obligates Lacey Fire District #3 to provide fire and emergency medical services to the Reservation and Tribal trust lands that are within their service area. In exchange, the Tribe is obligated to pay compensation to Lacey Fire District #3 per incident. In a letter dated November 21, 2022 (**Appendix A**), Lacey Fire District #3 indicated that the existing agreement has been effective and could serve as a model for a future agreement between the Tribe and Lacey Fire District #3 for the provision of fire protection services to the Project Site. Lacey Fire District #3 indicated its ability and willingness to provide the necessary fire, rescue, and emergency medical services to the Project Site pending the execution of mutually acceptable intergovernmental agreement. The Tribe intends to meet with Lacey Fire District #3 per the conditions of the agreement to address the Tribe's future development on the Project Site. The mitigation measure described in **Section 4** would ensure the Tribe negotiates a service agreement with Lacey Fire District #3 to compensate for the increased service calls that would

result from development on the Project Site. This mitigation measure would reduce potential impacts to fire protection and emergency medical services to less than significant.

Law Enforcement

Operation of Alternative 1 would create additional demand for law enforcement services. Following the acquisition of the Project Site into trust, the Tribe intends to hire new Nisqually Tribal Police officers to provide law enforcement services to Alternative 1, and Tribe-managed security personnel and security cameras would provide surveillance of proposed structures, parking areas, and ancillary facilities. Therefore, the Tribe will be assuming the bulk of the law enforcement responsibilities on the Project Site, which will minimize potential impacts to LPD. Regardless, the Nisqually Tribal Police will still need to coordinate with the City and County for law enforcement, prosecution, and court administration, which could result in an increased burden to the LPD, particularly with the new off-site residents discussed above. The Tribe intends to enter into an agreement with the City for the coordination of law enforcement, prosecution, and court administration, which will identify the scenarios when cases would be referred to the City, and associated compensation. In the absence of such an agreement, the County sheriff department would have jurisdiction over major crimes on the Project Site under Public Law 280. While the minimal increase in law enforcement services is not anticipated to trigger the need to construct new facilities, the increase in demand would nonetheless constitute a potentially significant impact. The mitigation measure described in **Section 4** would ensure that the Tribe negotiate a service agreement with the City and/or County to compensate for actual costs due to increases in investigation, prosecution, and court administration that result from development on the Project Site. Furthermore, additional tax revenues that would accrue to local governments from Alternative 1 are estimated at $12.1 million (Table 41 and Table 43 of **Appendix L**). This increase in local tax revenue would partially offset increases in municipal services expenses. Additionally, BMPs have been incorporated into the project design to further enhance security on the Project Site during operation, including the inclusion of security cameras for proposed developments (see BMPs in **Table 2.1-9** and mitigation measures in **Section 4** would ensure impacts to law enforcement services are less than significant.

Public Schools

There is the potential for an increase of 266 school-aged children, or 0.64% increase in school-aged students in Thurston County school districts (Table 67 of **Appendix L**), from the development of Alternative 1. This conservatively assumes that all new residential units built under Alternative 1 are occupied by new families moving into the area and not relocated from elsewhere within the school districts. Given the size of the County districts, the additional students are expected to be absorbed within the existing capacity and distributed across all grade levels. The total enrollment within all eight school districts for the 2022-2023 school year was below the highest year enrollment (2019-2020) and the additional 266 school-aged students would still be well below the highest capacity year (Thurston Regional Planning Council, 2023). Hence, any new students that may enroll in area school districts as a result of Alternative 1 would be considered a nominal impact. Furthermore, if Alternative 1 were to result in the relocation of any families to the area, the schools would likely collect additional tax revenue from the families of new students and would use these taxes to hire additional teachers to meet additional demand if necessary. Therefore, any potential increased enrollment would have a nominal effect on the ability of regional schools to provide education services at existing levels. Alternative 1 would not result in significant adverse impacts to schools.

Parks and Recreation

An estimated 1,389 people would permanently move into the City due to operation of Alternative 1, which represents an approximately 2.5% increase in the population when compared to the 2021 population (see Table 22 of **Appendix L**). This conservatively assumes that all new employees relocating to the area to fill employment positions within the Project Site and persons living at the Project Site will be new residents moving to the City. The increase in population could result in increased visitation to parks and other recreational areas within the City and County, but this increase of 2.5% is not expected to be significant enough to require the expansion of park or recreational facilities. Therefore, a less-than-significant impact to parks and recreational facilities would occur.

Alternative 2 – Recreation-Heavy Mixed-Use Development

Alternative 2 would have similar impacts to police and fire protection services as to Alternative 1, but any potential impacts would be lessened due to the smaller scale of the development. In total, Alternative 2 is estimated to generate 1,090 new residents (see Table 22 of **Appendix L**), which is approximately 20% fewer new residents in comparison to Alternative 1. Therefore, it is anticipated that the increase in demand on police and fire protection services are similarly expected to be approximately 20% less than what may occur under Alternative 1. BMPs in **Table 2.1-9** and mitigation measures in **Section 4** would ensure impacts to police and fire services are less than significant.

Similar to Alternative 1, Alternative 2 would not significantly increase the population to the point where the usage of public schools, parks, or other recreational facilities would require new facilities or expansion of existing ones. Furthermore, Alternative 2 includes more recreational and park land uses, like ball fields (land uses 2 – 3 on **Figure 11**), indoor recreation (land use 7), and passive open space (land use 16), so Alternative 2 would have a beneficial impact on the availability of parks and recreational opportunities on the Project Site and in the surrounding vicinity. Of the 302 individuals projected to move into the area as a result of Alternative 2, only 58 of them are estimated to be school-aged children (**Appendix L**), and the same number of school-aged children (152) as Alternative 1 could move onto the Project Site. In addition, Alternative 2 includes a proposed school in the northwest corner of the Project Site (land use 1), nearest to the existing off-site high-density residential land uses. Although the increased demand on regional schools would be less-than-significant for Alternative 1 and even further reduced for the lower population density anticipated in Alternative 2, this Alternative includes the construction of a new school which would have a beneficial impact to the availability of schools in the area. Therefore, a less-than-significant impact would occur.

Alternative 3 – No Action Alternative

Alternative 3 would not increase demands on public services and no impacts would occur.

Reasonably Foreseeable Cumulative Effects Analysis

New development, including the cumulative non-Tribal projects listed above, would fund public services in part through development fees and property tax. Therefore, development on the Project Site in combination with other non-Tribal cumulative development would not result in significant cumulative effects to public services.

The proposed Casino-Resort Project would involve the acquisition of an approximately 74-acre site adjacent to the Project Site to the south into federal trust, removing the property from State and local property taxes. As with the project alternatives, fire protection and emergency medical services would be

provided by Lacey Fire District #3 and law enforcement services would be provided by the Nisqually Tribal Police, with the City and/or the County providing prosecution and court administration services. As with the development alternatives, the proposed Casino-Resort Project would be required to mitigate any public services impacts, including negotiating a service agreement or equivalent to compensate for increased public services. The proposed Casino-Resort Project would result in approximately up to 155 new households[14] moving to Thurston County, and an increase in school enrollment of 74 students. These off-site residents could result in increased demands for police, fire, and emergency services in Thurston County. Using the same call rates, 389 new residents could generate 62 fire service calls as a result of the new population moving to the area to work at the proposed Casino-Resort Project, for a total of 2,242 new fire service calls (13.3% of the total current call volume) when combined with the on-site and off-site calls that could be generated by Alternative 1. To maintain the current level of police service (1.1 officers per 1,000 residents), the additional 991 off-site residents[15] would still require the addition of less than one officer to the LPD force to maintain the same ratio of law enforcement personnel to population, which is not anticipated to be a significant cumulative impact. The increase in school enrollment for both projects is 340 new students[16], which represents 0.81% of the total enrollment in the school district and does not exceed the highest year enrollment capacity (2019-2020 school year). Furthermore, as described in **Section 3.10.3**, regional schools would collect additional tax revenue from families of new students and would use these taxes to hire additional teachers to meet additional demand if necessary. Accordingly, the project alternatives when considered in combination with the proposed adjacent Casino-Resort Project would not result in a significant contribution toward cumulative effects related to public services.

3.11 SOCIOECONOMIC CONDITIONS

3.11.1 Environmental Setting

Economy and Employment

In 2022, the unemployment rate was 5.2% for the County and 4.5% statewide (Employment Security Department, 2022a and U.S. Bureau of Labor Statistics, 2022). The largest industries in the County are State and local government; trade, transportation, warehousing, and utilities; professional and business services; leisure and hospitality; mining, logging, and construction; and manufacturing (Employment Security Department, 2022b).

According to U.S. Census data, the annual mean household income in 2021 dollars between 2017 and 2021 was $75,059 in the City and $81,501 in the County, compared with $82,400 in the State as a whole (U.S. Census Bureau, 2022a and 2022b). During the same time period, the average household size in the City, County, and State was 2.46 people, 2.51 people, and 2.55 people, respectively (U.S. Census Bureau, 2022a and 2022b). According to the U.S. Department of Health and Human Services, the 2022 poverty guideline is $18,310 for a household of two persons and $23,030 for a household of three persons (Office of the Assistant Secretary for Planning and Evaluation, 2022). The City, County, and the State's mean household income are all well above the poverty threshold.

[14] approximately 389 people assuming the average household size of 2.51
[15] 389 persons for the proposed Casino-Resort Project and 602 persons for Alternative 1
[16] 74 students for the Casino-Resort Project and 266 on- and off-site students from Alternative 1

Demographics and Population

Demographic data for the City, County, and State is presented in **Table 3.11-2**. The U.S. Census Bureau estimates the 2021 population of the City, County, and State to be 54,461 people, 297,977 people, and 7,738,692 people, respectively. Between 2010 and 2020, the City, County, and State experienced a population increase of 20.80%, 14.43%, and 12.73%, respectively (U.S. Census Bureau, 2022a and 2022b).

Table 3.11-1: Socioeconomic Data

Census Data	City of Lacey	Thurston County	Washington State
Demographics			
Population April 1, 2010[1]	42,393	252,264	6,724,540
Population April 1, 2020[1]	53,526	294,793	7,705,281
Population estimate July 1, 2021[1]	54,461	297,977	7,740,745
Median household income (2021 dollars), 2017-2021[1]	$75,059	$81,501	$82,400
Persons in poverty[1]	9.6%	9.9%	9.9%
Employment			
Employment Nov. 2022 (seasonally adjusted)[3]	–	–	3,556,200
Unemployment Rate Nov. 2022 (seasonally adjusted)[3]	–	–	4.0%
Housing			
Housing units, July 1, 2021	-	123,026	3,257,185
Owner-occupied housing unit rate, 2017-2021	57.3%	66.8%	63.6%

1. U.S. Census Bureau, 2022a and 2022b. 2. Calculated as 100% minus the *White alone, not Hispanic or Latino* percentage. 3. U.S. Bureau of Labor Statistics, 2022.

The Project Site is located in Census Tract 122.21 as designated by the U.S. Census Bureau (U.S. Census Bureau, 2020a). **Table 3.11-3** presents mean household income levels and household sizes for Census Tract 122.21 and adjacent census tracts.

Table 3.11-2: Household Income – Project Site and Nearby Census Tracts

Census Tract or Location	Mean Household Income[2,3,4]	Average Household Size[1,5]	Poverty Threshold[6]
Project Site			
122.21	$128,277	2.62	$23,030
Vicinity			
122.24	$97,360	2.24	$23,030
112	$55,391	1.86	$23,030
115	$84,949	2.59	$23,030
123.30	$82,228	2.54	$23,030

Census Tract or Location	Mean Household Income[2,3,4]	Average Household Size[1,5]	Poverty Threshold[6]
122.26	$100,044	2.71	$23,030
122.25	$122,175	2.50	$23,030
122.11	$118, 740	2.92	$23,030
Thurston County	$99,075	2.51	$23,030
Washington State	$116,349	2.51	$23,030

1. Source: U.S. Census Bureau, 2020c; 2. Source: U.S. Census Bureau, 2020d. Mean Household Income is the past 12 months (in 2021 inflation-adjusted dollars); 3. Source: U.S. Census Bureau, 2020e. Mean Household Income is the past 12 months (in 2021 inflation-adjusted dollars); 4. Source: U.S. Census Bureau, 2020f Mean Household income is the past 12 months (in 2021 inflation-adjusted dollars); 5. Source: U.S. Census Bureau, 2020g; 6. Source: U.S. Department of Health and Human Services, 2022 Poverty threshold for a family of 3.

Property Taxes

Table 3.11-4 below illustrates the 2023 Thurston County property tax payments for the Project Site parcels. As shown therein, the 2023 property taxes for the Project Site parcels totaled $314,115.23. In fiscal year (FY) 2023, Thurston County billed approximately $568,155,963 in property taxes (Thurston County, 2023c). Consequently, the property taxes collected on the parcels comprise approximately 0.05% of the Thurston County property tax collections for FY 2023.

Table 3.11-3: Subject Property Tax

Lot #	Thurston County APN	Acreage within Subject Property	Approximate 2023 Property Tax Payment
3	118-11-210200	16.63	$33,665.42
3	118-10-101101	53.54	$94,401.16
4	118-10-101103	5.90	$10,404.36
5	118-10-101000	62.35	$108,661.26
6	118-11-201000	2.41	$1,188.85
8	118-11-210402	7.96	$16,113.62
9	118-11-210400	19.40	$39,294.41
9	118-11-210404	5.89	$10,386.15
Total		**174.08**	**$314,115.23**

Notes: Thurston County, 2023d. Thurston County Treasurer lists APN 118-10-101000 as 62.35 acres; this parcel is 62.34 acres per Boundary Line Adjustment No. BLA 22-0001LA, recorded June 6, 2022, under Recording No. 4934969.

Housing

According to the U.S. Census Bureau, the State was estimated to have approximately 3,257,185 housing units in 2021, of which approximately 7.6% were vacant (U.S. Census Bureau 2022c). The County had approximately 123,026 housing units in 2021, of which approximately 2.5% were vacant (U.S. Census Bureau, 2022a and 2022b).

3.11.2 Impacts

Alternative 1 – Commercial-Heavy Mixed-Use Development

Economy and Employment

As described in the Economic Impact Analysis study developed by The Innovation Group (**Appendix L**), Alternative 1 would result in a variety of benefits to the regional economy, including residents of the City, County, and Nisqually Reservation. These effects include increases in overall economic output and employment opportunities. As described in Table 20 of **Appendix L**, construction and operation of Alternative 1 would generate substantial temporary and ongoing employment opportunities and wages that would be primarily (approximately 90%) filled by the available labor force in the region. The remaining 10.7% of workers are estimated to represent new residents moving into the area. It is estimated that approximately 28% of the new employment positions created (704 positions) would be filled by County residents currently commuting outside of the County for work, potentially reducing commute times and associated vehicle miles traveled.

New one-time employment opportunities would be generated during the construction phase of the project. These include an estimated 2,090 direct jobs, 585 indirect jobs, and 838 induced jobs, for a total of 3,514 jobs that would accrue to the residents of the region (Table 12 of **Appendix L**). Operation of Alternative 1 would directly employ approximately 2,466 people plus an additional 380 indirect and 436 induced job positions that would be created in the region and state (Table 38 of **Appendix L**). Total labor income is estimated to exceed $127.3 million annually during operation. Employment opportunities generated by Alternative 1 would include entry-level, mid-level, and management positions. Average salaries offered are expected to be consistent with other opportunities in the local labor market.

The anticipated increase in employment opportunities throughout the County could result in employment and wages for persons previously unemployed that would increase the ability of the population to obtain health and safety services and would contribute to the alleviation of poverty among lower income households. Alternative 1 is anticipated to reduce future estimates of unemployed persons in the region by approximately 6% (Table 20 of **Appendix L**).

Alternative 1 would also result in increased economic activity, which would benefit the residents of the region and the Tribe. Construction of Alternative 1 is anticipated to stimulate approximately $339.9 million in total economic impact, most of which would accrue to the residents, businesses, and governments of Thurston County (Table 12 of **Appendix L**). These effects would be one-time in nature. Operation of Alternative 1 is anticipated to generate approximately $211.2 million in annual economic impact (Table 1 of **Appendix L**).

Increased tax revenues that would accrue to local governments from Alternative 1 are estimated at $12.1 million (Table 41 and Table 43 of **Appendix L**). This increased local tax revenue would partially offset increases in municipal services expenses (discussed further in **Section 3.10**).

Fiscal Impacts

The Tribe has a Tax Sharing Compact with the State of Washington pursuant to Substitute House Bill 2803. The Tribe will retain 100% of the retail sales tax amounts for retail sales generated by tribal owned and operated businesses. For businesses that are leased on Tribal land, the Tribe will be directly reimbursed $500,000 of collected state sales tax and will split the remaining state tax revenue with the state receiving 40% and the Tribe receiving the remaining 60%. The Compact does not affect the portion of taxes collected

on behalf of local governments, meaning that 100% of the local sales tax from the leased development components are to be dispersed to local governments. Potential effects on state and federal tax revenues resulting from the operation of Alternative 1 are expected to be positive as a result of increased local, state, and federal tax revenues resulting from construction and operation of Alternative 1. Tax revenues would be generated for local, state, and federal governments from activities including secondary economic activity generated by tribal mixed-use operations (i.e., the indirect and induced effects of the economic impact analysis) (**Appendix L**).

The taxes on secondary economic activity include business taxes (including indirect and induced sales taxes), payroll taxes, property taxes, and other relevant taxes both locally and statewide. Based on the forecasted operations of Alternative 1, it is estimated that $12.1 million in tax revenue would accrue to local governments (Table 41 and Table 43 of **Appendix L**), $13.5 million in tax revenue would accrue to the State government (Table 41 and Table 44 of **Appendix L**), and $29.3 million in tax revenue would accrue to the federal government (Table 45 of **Appendix L**). The property tax owed to the County by the Tribe was approximately 0.05% of the County's projected property tax revenue during FY 2023. As described above, this 0.05% reduction in secured property tax revenue ($314,115.23) that would result from removal of the proposed trust parcels from the County's jurisdiction would be partially offset by an estimated $12.1 million increase in taxes, including an estimated $2.2 million in increased local property taxes on secondary (indirect and induced) economic activity (**Appendix L**, Table 43).

In addition, as described in **Section 3.10**, the mitigation measures listed in **Section 4** would ensure that the Tribe negotiate service agreements with Lacey Fire District #3, the City and/or County to compensate for actual costs due to increases in the provision of services that result from Alternative 1. For these reasons, the fiscal impacts of Alternative 1 would be less than significant with mitigation.

Housing

Alternative 1, as described above, is projected to directly generate 2,466 new jobs, plus an additional 380 indirect and 436 induced job positions. It is estimated that the existing area workforce will account for the majority of employment, with approximately 10.7% of the workers representing new residents moving into the area. Assuming approximately 1.1 workers per household, the total number of new households moving to the area under Alternative 1 is estimated to be 240. According to Table 24 in **Appendix L**, there were approximately 7,235 vacant housing units in the County in 2020. The addition of 240 new households as a result of Alternative 1 would absorb 3.3% of the vacant housing stock in the County and has the potential to support current and planned housing development throughout the County without overwhelming existing infrastructure. Furthermore, there are 320 housing units proposed under Alternative 1. Some of these new workers may move into the new on-site housing, and the new on-site housing will provide additional housing stock within the City and County. Impacts associated with housing would be less than significant.

Schools

Based on the number of new households (240 off-site households from employment and 320 households within the Project Site) generated by Alternative 1 and Thurston County household metrics, the increase to school enrollment is estimated to be approximately 266 school-aged students, which would be a 0.64% increase in enrollment in Thurston County school districts (Table 67 of **Appendix L**). This conservatively assumes that all new residential units built under Alternative 1 are occupied by new families moving into the area and not relocated from elsewhere within the school districts. The total enrollment within all eight school districts for the 2022-2023 school year was below the highest year enrollment (2019-2020) and the

additional 266 school-aged students would still be well below the highest capacity year (Thurston Regional Planning Council, 2023). Therefore, Alternative 1 is not expected to require additional schools to be developed or to result in overburdening of existing schools.

Social Effects

Alternative 1 would result in an increased number of patrons and employees traveling/commuting into the community on a daily basis. As a result criminal incidents may increase in the vicinity of the Project Site under Alternative 1, as with any other development of this size. **Appendix L** evaluated the criminal incident rate within the City and estimated that Alternative 1 will generate approximately 499 calls for law enforcement annually. For the City, this represents an increase of 13.9% over forecasted 2026 volumes (**Appendix L**).

The Project Site has long been zoned for dense mixed-use and commercial land uses, and therefore is considered compatible with surrounding existing residential areas even with the potential for additional crime or calls for law enforcement to the Project Site. See **Section 3.10** for an analysis of effects to law enforcement services. As described therein, Alternative 1 would contribute to an increased level of law enforcement services that would address the anticipated increase in calls for service. Therefore, Alternative 1 would not result in significant adverse socioeconomic effects associated with crime.

Alternative 2 – Recreation-Heavy Mixed-Use Development

As described in **Section 2.2**, in comparison to Alternative 1, Alternative 2 would have less commercial and retail development with an increase in recreational space. Construction of Alternative 2 would directly employ approximately 1,594 people plus an additional 446 indirect and 639 induced job positions, resulting in approximately 24% fewer new construction jobs in comparison to Alternative 1 (Table 13 of **Appendix L**). Operation of Alternative 2 would directly employ approximately 1,308 people plus an additional 218 indirect and 238 induced job positions, resulting in approximately 46% fewer new operational jobs in comparison to Alternative 1 (Table 39 of **Appendix L**). Total labor income is estimated to exceed $70.1 million annually during operation.

Based on the number of new households (121 off-site households from employment and 320 households within the Project Site) generated by Alternative 2 and Thurston County household metrics, the increase in school enrollment is estimated to be approximately 210 school-aged students, which would be a 0.50% increase in enrollment in Thurston County school districts (Table 67 of **Appendix L**). Unlike Alternative 1, Alternative 2 proposes the development of an on-site school, which would off-set the increase in school enrollment.

Alternative 2 would generate less revenue, and less off-site tax revenue than Alternative 1. Based on the forecasted operations of the Alternative 2, it is estimated that $5.9 million in tax revenue would accrue to local governments (Table 42 and Table 46 of **Appendix L**), $6.8 million in tax revenue would accrue to the State government (Table 42 and Table 47 of **Appendix L**), and $16.4 million in tax revenue would accrue to the federal government (Table 48 of **Appendix L**). Due to the positive net fiscal impacts of Alternative 2 and the mitigation measures specified in **Section 4** that would off-set the effects to public services, the net fiscal impacts of Alternative 2 would be less than significant.

Alternative 3 – No Action Alternative

Under Alternative 3, the Tribe would not receive any of the benefits associated with development on the Project Site. The Project Site would not be brought into trust and would remain on the County's property

tax rolls. No development would occur on the Project Site; therefore, no socioeconomic impacts would occur.

Reasonably Foreseeable Cumulative Effects Analysis

As described above, the alternatives are not anticipated to result in significant adverse impacts related to socioeconomic conditions. Development on the Project Site, when considered in combination with the proposed adjacent proposed Casino-Resort Project, as described in **Section 3.1.1**, would provide a beneficial impact to the socioeconomic condition of the Tribe by generating revenue to fund various tribal social service programs.

The proposed Casino-Resort Project is estimated to result in up to 254 new workers relocating to the project area, which would result in up to 155 new households and an increase in school enrollment of approximately 74 students. Accordingly, Alternative 1 when considered in combination with the proposed adjacent proposed Casino-Resort Project would result in a total of up to 518 new workers relocating to the County, up to 395 new households and an increase in school enrollment of approximately 188 students, in addition to the 320 new on-site units that could include up to 152 potential new students (total cumulative increase of 340 students).

The anticipated increase in employment opportunities throughout the County could result in employment and wages for persons previously unemployed, that would increase the ability of the population to obtain health and safety services and would contribute to the alleviation of poverty among lower income households. The projects are anticipated to reduce future estimates of unemployed persons in the region by approximately 10% (Table 64 of **Appendix L**). According to Table 24 in **Appendix L**, there were approximately 7,235 vacant housing units in the County in 2020. The addition of 395 new households as a result of the cumulative projects would absorb 5.5% of the vacant housing stock in the County and has the potential to support current and planned housing development throughout the County without overwhelming existing infrastructure. Alternative 1 would also include the development of 320 residential units on-site, which may partially offset the potential impact to housing stock in the County. Therefore, cumulative impacts associated with housing would be less than significant. The new school enrollments of approximately 340 students cumulatively represent a minimal increase (0.77%) over 2021 enrollment in the County (Table 23 of **Appendix L**). Therefore, the projects are not expected to require the development of additional schools or to result in the overburdening of existing schools.

Cumulatively both projects would result in an increased number of patrons and employees traveling/commuting into the community on a daily basis. As a result, criminal incidents may increase in the vicinity of the Project Sites, as with any other developments of this size. An economic impact analysis was prepared for both projects that included an evaluation of the criminal incident rate at seven casinos across the US, including the Red Wind Casino. Based on this data, it is estimated that cumulatively the projects will generate approximately 1,203 calls for law enforcement annually (499 for Alternative 1 and 704 for the Casino-Resort Project). This represents an increase of 33.4% over forecasted 2026 volumes to Lacey Police Department, but the Nisqually Tribal Police Department will be the primary responder for all Project-related calls and will handle minor incidents (Table 71 in Innovation Group, 2022). Cumulatively these projects would contribute to an increased level of law enforcement services, and increased calls for service due to crimes and medical services. These would not result in significant adverse socioeconomic effects associated with crime, particularly with the Nisqually Tribal Police Department as the primary responder to new calls. There will be a positive impact on hotels and local businesses with an increase in patrons to the casino and mixed-use areas. These projects would provide important economic and social benefits to the Tribe by generating the revenues needed to fund tribal services.

Each development alternative would increase jobs and generate economic benefits in different capacities, as discussed in **Section 3.11.3**. Any future non-tribal development in the vicinity would be subject to City review and approval. Each alternative, when considered in combination with other projects, would not lead to a significant adverse cumulative impact to socioeconomic conditions.

3.12 TRANSPORTATION AND CIRCULATION

3.12.1 Regulatory Setting

The regulatory setting associated with transportation and circulation is summarized in **Table 3.12-1**, and additional information on the regulatory setting can be found in **Appendix F**.

Table 3.12-1: Regulatory Policies and Plans Related to Transportation and Circulation

Regulation	Description
State	
Commute Trip Reduction Law	▪ To reduce carbon emissions and traffic congestion on the state's busiest commute routes. ▪ Affects worksites in the nine most populous counties with 100 or more full-time employees who begin their shift between 6:00 a.m. to 9 a.m. on weekdays.
Local	
City of Lacey 2030 Transportation Plan	▪ The plan aims to enhance roadway geometry, install roundabouts and traffic signals, and improve signage to facilitate smoother and safer traffic flow. ▪ Focuses on creating a safer and more visually appealing street network through traffic calming measures, speed studies, and improved street lighting.

3.12.2 Environmental Setting

Transportation and Roadway Networks

As shown in **Figure 10**, the roadways surrounding the Project Site include I-5 to the south, Marvin Road NE to the east, and Britton Parkway NE to the north. Gateway Boulevard NE intersects the western portion of the Project Site in a north-south direction to provide access to the existing Cabela's and an existing segment of Main Street NE. Main Street NE intersects the eastern portion of the Project Site in an east-west direction.

Regional access to the Project Site is provided by I-5, which runs in an east-west direction immediately south of the Project Site, from the existing I-5/SR 510 (Marvin Road NE) interchange. Local access to the Project Site is currently provided by Gateway Boulevard NE and Western Parkway in the western portion of the site, and Main Street NE in the eastern portion of the site. Right-in, right-out ramps for access to southbound I-5 have been constructed in the southern portion of the Project Site, but the ramps are not currently open to traffic (see below for additional information on this). There are existing non-motorized (e.g., bicycle or pedestrian) facilities in the vicinity of the Project Site, which are discussed in further detail below.

Table 3.12-2 shows a summary of the existing conditions of the roadways near the Project Site.

Table 3.12-2: Summary of Existing Roadway Characteristics

Roadway	Street Classification	Speed Limit	Number of Lanes	Pedestrian Facilities	Bicycle Facilities
Marvin Road NE (SR 510)	Arterial	35	2-6	Sidewalks[2]	Bicycle Lanes
Martin Way E	Arterial	40	5/6	Intermittent	Intermittent
Britton Parkway	Boulevard	40	2/4	Intermittent	Intermittent
Hogum Bay Road NE	Arterial[3]	35	2/3	Sidewalks	Bicycle Lanes
Willamette Drive NE	Boulevard	35	4	Sidewalks	Bicycle Lanes
Gateway Boulevard NE	Collector	25/30	3/4	Sidewalks	None
Carpenter Road NE	Arterial	35/50	2	None	None
Pacific Avenue SE	Arterial	35	5	Sidewalks	Bicycle Lanes
Sleater Kinney Road NE	Arterial	25/30	3/4/5	Sidewalks	Bicycle Lanes
College Street SE	Collector/Arterial	35	4/5	Sidewalks	None
Steilacoom Road SE	Collector	35	2	Intermittent	Intermittent
Quinault Drive NE	Collector	30	3	Sidewalks	None
Hawks Prairie Road NE	Collector	35	2	Sidewalks	Bicycle Lanes

Source: **Appendix H**

Intersections and Existing Traffic Volumes

Traffic counts were collected for the existing weekday PM peak period (4:00 – 6:00 PM) in January and February 2023, and March 2025. The PM peak hour is the hour with the highest traffic volumes within the PM peak period. A summary of the PM peak hour traffic volumes is provided in **Table 3.12-3**. In addition, the existing PM peak hour traffic volumes and distribution are shown on Figure 4 of **Appendix H**, rounded to the nearest 5 vehicles, and detailed traffic counts are provided in Appendix B of **Appendix H**.

Traffic Safety

The five most recent years of collision records (January 1, 2017, to December 31, 2021) provided by WSDOT were reviewed within the vicinity of the Project Site to identify any existing traffic safety issues at the study intersections. A summary of the collision records is provided in Table 4 of **Appendix H**. As shown in the table, the highest number of annual average collisions within the vicinity of the Project Site occurred along Marvin Road at the following three study intersections: Britton Parkway NE (30 collisions), Martin Way E (19 collisions), and at Pacific Road SE (18 collisions). Additional detail is summarized in **Appendix F**.

Existing Bicycle, Pedestrian, and Transit System

Existing bicycle and pedestrian facilities in the vicinity of the Project Site are summarized in **Table 3.12-2**. Signalized crossings are provided at all of the intersections along Marvin Road NE and at the intersection of Carpenter Road NE/Martin Way E. Transit within the City is provided by Intercity Transit. The closest stops to the Project Site are located at Britton Parkway NE at Marvin Road NE that is adjacent to the northwestern portion of the Project Site, Britton Parkway NE/Marvin Road NE. Additional information about the transit system and capacity is available in **Appendix F**.

Table 3.12-3: Existing Traffic Volumes

#*	Existing Intersections	PM Peak Hour Traffic Volumes
1	Marvin Road NE/Hawks Prairie Road NE	1,361
2	Marvin Road NE/Britton Parkway NE (Willamette Drive NE)	2,840
3	Marvin Road NE/Main Street NE	2,548
4	Marvin Road NE/I-5 SB Ramp	4,074
5	Marvin Road NE/I-5 NB Ramp	3,496
6	Marvin Road NE (SR 510)/Quinault Drive NE	3,358
7	Marvin Road NE (SR 510)/Lacey Marketplace	2,562
8	Marvin Road NE (SR 510)/Martin Way E	4,229
9	Marvin Road SE (SR 510)/Steilacoom Road SE	2,624
10	Marvin Road SE (SR 510)/Pacific Road SE	2,278
11	Willamette Drive NE/31st Avenue NE	946
12	Hogum Bay Road NE/Willamette Drive NE	1,368
13	Eastern Parkway NE (Twin Oak Road NE)/Britton Parkway NE	892
14	Central Parkway NE (Callison Road NE)/Britton Parkway NE	896
15	Gateway Boulevard NE/Britton Parkway NE	1,091
16	Britton Parkway NE/Western Parkway NE	851
19	Hawks Prairie Road NE/Carpenter Road NE	628
20	Carpenter Road NE/Britton Parkway NE	997
21	Carpenter Road NE/Martin Way E	3,519
22	Pacific Avenue SE/Carpenter Road SE	3,102
23	Martin Way E/Desmond Drive	2,603
24	Martin Way E/Regal Cinemas	2,569
25	Martin Way E/I-5 NB Ramps	3,115
26	Martin Way E/I-5 SB Ramps	3,508
27	Martin Way E/College Street	3,926
28	Pacific Avenue SE/Lacey Boulevard SE	2,554
29	Sleater Kinney Road NE/South Bay Road NE	795
30	Sleater Kinney Road NE/15th Avenue NE	1,093
31	Martin Way E/Sleater Kinney Road	2,863
32	Pacific Avenue SE/I-5 NB Ramps	2,839
33	Pacific Avenue SE/I-5 SB Ramps	2,163

*Numbering corresponds to the numbering assigned to the intersections within **Appendix H**.
Source: **Appendix H**

Transportation Infrastructure Planning

The City began planning for significant industrial, commercial, and residential growth in the Hawks Prairie Planning area, including the Project Site, in the early 1980s. The Marvin Road corridor and the I-5/Marvin Road interchange system were envisioned to serve this anticipated growth. The City's Northeast Area Plan detailed the vision for the area, and its Comprehensive Plan set the land use designations of the Northeast Area and identified the needed transportation facilities for the region. At that time, the population and employment projections for the area predicted that significant growth would occur and that the transportation facilities in place would not be able to adequately serve the new growth. The City and the Washington State Department of Transportation (WSDOT) have completed numerous improvements to help accommodate the anticipated growth, including widening Marvin Road to a four-lane boulevard between I-5 and Willamette Drive (including installation of two multi-lane roundabout intersections), constructing Britton Parkway (a new east-west arterial between Marvin Road and Carpenter Road), and rebuilding and widening I-5/Marvin Road interchange to create a diverging diamond interchange (DDI). Additional discussion regarding the I-5/SR 510 (Marvin Road) Interchange Project and associated Memorandum of Understanding between WSDOT and City of Lacey is included in **Appendix F**.

The 2030 Transportation Plan is the City's long-range plan for developing its transportation system into the future. As described within the 2030 Transportation Plan, the Project Site is within the Hawks Prairie Planning Area and the Hawks Prairie Business District. The Hawks Prairie Business District, specifically the Lacey Gateway Town Center Site (see **Figure 15**), is anticipated to include high density, multistory mixed-use development with both residential and commercial components. The City has designated certain segments of roadway as "strategy corridors." As described in **Appendix F**, it is acceptable for strategy corridors to exceed acceptable level of service (LOS), but the 2030 Transportation Plan stresses that these roadways may require strategies tailored to their specific needs. The strategies should include a mix of those outlined in **Table 3.12-4**. Designated strategy corridors in the vicinity of the Project Site are listed in **Table 3.12-4** and can be seen in Figure 1 of **Appendix H.**

Previous Traffic Analysis

As discussed in **Section 1.4.2**, the Lacey Gateway Transportation Analysis by Shea, Carr & Jewell, Inc. (2009 Traffic Report, April 2009) was prepared in support of the 2010 FSEIS, which addressed development of the Project Site and surrounding areas under Phase 1 of the Lacey Gateway Town Center development. Of the intersections and roundabouts studied, Phase 1 of the Lacey Gateway Town Center project traffic only caused two of the existing study intersections to drop below the acceptable City designed LOS. Recommended off-site infrastructure measures included, but were not limited to, several improvements to the I-5 interchange that have been addressed through the recently constructed I-5/SR 510 (Marvin Road) Interchange Project. Additional discussion of the 2009 Traffic Report is included in **Appendix F**.

3.12.3 Impacts

Table 3.12-4: Suggested and Implemented Strategy Corridors

2030 Transportation Plan Suggested Strategies
▪ High quality and fully integrated bike, pedestrian, carpool, vanpool, and transit facilities and services;
▪ Complete and connected street grids;

2030 Transportation Plan Suggested Strategies
▪ Transportation technology measures that improve overall system operating efficiency and safety;
▪ Access management;
▪ Parking management; and
▪ Aggressive travel demand management strategies.
▪ Land use intensification; consideration of more compact high density and mixed-use alternatives;
▪ Improvements to adjacent pedestrian connections and consideration of specialized improvements to key pedestrian intersections designed to encourage pedestrian use.
Strategy Corridors in the Vicinity of the Project Site
▪ Willamette Drive NE between Marvin Road NE and 31st Avenue NE.
▪ Marvin Road between Willamette Drive NE and the south city limit line.
▪ Martin Way from the west city limit line to Carpenter Road.
▪ Martin Way from Galaxy Drive NE to Marvin Road.
▪ College Street between Martin Way and Yelm Highway SE.
▪ Pacific Avenue SE from the west city limit line to east city limit line.
▪ Lacey Boulevard SE from Golf Club Road SE to Homann Drive SE.
▪ Sleater-Kinney Road SE from I-5 to Pacific Avenue SE.

Methodology

TranspoGroup prepared a traffic impact analysis (TIA) that identifies potential transportation-related impacts associated with the development of the project alternatives. The scope of the analysis included a review of Existing (2023) and Future (2027 and 2050) without-Project conditions in the vicinity of the Project Site under weekday PM peak hour conditions. The horizon year of 2027 was identified consistent with the anticipated buildout of the site, and the year 2050 was used because it is the future horizon year for the Thurston Regional Planning Council's (TRPC's) travel demand model. The potential impacts on the surrounding transportation system were identified by comparing the Future (2027) with-Project scenario to the Future (2027) without-Project scenario and determining if any intersections fall below agency standards. Mitigation measures are identified for all locations operating below agency standards as a result of the project alternatives.

In addition, the Casino-Resort Project is being proposed adjacent to the Project Site under a separate application. Although it is being processed under a separate application, the proposed Casino-Resort Project will utilize the Gateway Boulevard NE, I-5 frontage road right-in/right-out, and Main Street NE (both west and east) access points proposed for the alternatives. As such, a combined analysis with both Alternative A (the alternative that would generate the highest number of trips) of the proposed Casino-Resort Project and Alternative 1 was conducted under the Combined Development scenario. Alternative 1 was selected for this analysis due to the higher traffic volumes it would generate compared to Alternative 2, and thus it presents the scenario with the largest potential impacts.

Future Projects

The County's 2025-2028 Transportation Improvement Plan and the City's 2023-2028 Transportation Improvement Plan were reviewed as well as discussions with City staff through the scoping of the alternatives to determine planned improvements in the vicinity of the Project Site. **Table 3.12-5** outlines the projects that are anticipated to be funded and in place by 2027 and thus were assumed in the analysis.

Table 3.12-5: Planned Future Projects assumed under 2027 and 2050 Traffic Conditions

Project Name	Description
Sleater Kinney Road NE/15th Avenue NE	Installation of a traffic signal at the existing stop-controlled intersection. The channelization will include a northbound through and right turn lane, southbound through and left turn lanes, and a westbound left and right turn lane.
Carpenter Road NE/Britton Parkway NE	Installation of a roundabout at the existing stop-controlled intersection. The roundabout was completed in July 2024, after counts were collected, so is not reflected in the Existing Conditions analysis.
Carpenter Road Pedestrian Improvement – Regional Transition Center	An American Disability Act-compliant sidewalk will be built from the Martin Way bus stop next to Carpenter Road to the location of the future Regional Transition Center, north on Carpenter, as part of this project.
Johnson Point Road NE/Hawks Prairie Road NE/South Bay Road NE	Installation of roundabout at the existing stop-controlled intersection.

In addition to the above projects, the projects in **Table 3.12-6** were also identified in the vicinity of the Project Site; however, the projects are not fully funded and/or the timing is currently unknown and were therefore not included in the analysis.

Study Intersections

The intersections listed in **Table 3.12-7** were selected and approved for analysis and include both existing intersections and proposed intersections that will exist in the opening year of 2027 if Alternative 1 or 2 is built.

Trip Generation and Distribution

Trip generation estimates for the alternatives were based on trip rates using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition (2021) as available. The TRPC travel demand model was utilized to identify trip distribution patterns in the vicinity of the Project Site. To calculate 2027 with-Project scenario traffic volumes, PM peak hour project trips were added to the 2027 without-Project traffic volumes, and 2050 with-Project scenario traffic volumes were similarly calculated by adding the PM peak hour project trips to the 2050 without-Project traffic volumes.

Table 3.12-6: Potential Future Projects Not Included in 2027 Analysis

Project Name	Description
Martin Way East Roadway Improvements	Access management, bike lanes, sidewalks, and other urban amenities from Galaxy Drive to River Ridge Drive.
Carpenter Road Capacity and Safety Improvements	Widening roadway to taper from 5-lane section to 3-lane section from Pacific Avenue SE to Shady Lane with bike lanes and sidewalks realigned at 14th Avenue.

Project Name	Description
Marvin Road from Britton Parkway to Columbia Drive:	Widening Marvin Road from two lanes to five lanes to Hawks Prairie Road, then transition to 3-lane section with bike lanes and sidewalks.
Martin Way / I-5 Interchange Improvements	Interchange improvements at Exit 109 between milepost 108 and 113.
Carpenter Road Widening from Martin Way to Britton Parkway	Widening roadway to five lanes with auxiliary turn lanes, bike lanes, sidewalks, and other urban amenities.
Britton Parkway - Phase 2	Widening the remaining portion of Britton Parkway to a 4-lane boulevard.
I-5 Corridor Improvements from Marvin Road to Mounts Road	Widening I-5 to accommodate a high-occupancy vehicle (HOV) lane.
Marvin Road Upgrade - Phase 3	Marvin Road reconstruction between Union Mills Road and Pacific Avenue to include 2 to 3 lanes of travel, bike lanes, pedestrian refuge areas, medians, and sidewalks.

Table 3.12-7: Study Intersections

#	Existing Intersections	#	Existing Intersections
1	Marvin Road NE/Hawks Prairie Road NE	19	Hawks Prairie Road NE/Carpenter Road NE
2	Marvin Road NE/Britton Parkway NE	20	Carpenter Road NE/Britton Parkway NE
3	Marvin Road NE/Main Street NE[11]	21	Carpenter Road NE/Martin Way E
4	Marvin Road NE/I-5 SB Ramp	22	Pacific Avenue SE/Carpenter Road SE
5	Marvin Road NE/I-5 NB Ramp	23	Martin Way E/Desmond Drive
6	Marvin Road NE (SR 510)/Quinault Drive NE	24	Martin Way E/Regal Cinemas
7	Marvin Road NE (SR 510)/Lacey Marketplace	25	Martin Way E/I-5 NB Ramps
8	Marvin Road NE (SR 510)/Martin Way E	26	Martin Way E/I-5 SB Ramps
9	Marvin Road SE (SR 510)/Steilacoom Road SE	27	Martin Way E/College Street
10	Marvin Road SE (SR 510)/Pacific Road SE	28	Pacific Avenue SE/Lacey Boulevard SE
11	Willamette Drive NE/31st Avenue NE	29	Sleater Kinney Road NE/South Bay Road NE
12	Hogum Bay Road NE/Willamette Drive NE	30	Sleater Kinney Road NE/15th Avenue NE
13	Eastern Parkway NE (Twin Oak Road NE)/Britton Parkway NE[7]	31	Martin Way E/Sleater Kinney Road
14	Central Parkway NE (Callison Road NE)/Britton Parkway NE[8]	32	Pacific Avenue SE/I-5 NB Ramps
15	Gateway Boulevard NE/Britton Parkway NE[10]	33	Pacific Avenue SE/I-5 SB Ramps
16	Britton Parkway NE/Western Parkway NE	38	Marvin Road SE/Union Mills Road SE
		39	Johnson Point Road NE/S Bay Road NE/Hawks Prairie Road NE

#	Future Intersections (2027)	#	Future Intersections (2027)
17	I-5 RIRO Ramp/I-5 CD Road[9]	35	Dwy B[3]/Britton Parkway NE[1, 2]
18	I-5 CD Road/Western Parkway NE[12]	36	Dwy C[4]/Britton Parkway NE[2]
34	Dwy A[6]/Britton Parkway NE[2]	37	Marvin Road NE/Dwy D[2, 5]

Source: **Appendix H**

1 Dwy B (Access 7) is not proposed under Alternative 2
2 This driveway is limited access RIRO side street stop-controlled intersections.
3 Dwy B corresponds to Access 7 from **Table 2.1-8.**
4 Dwy C corresponds to Access 5 from **Table 29.**
5 Dwy D corresponds to Access 3 from **Table 2.1-8.**
6 Dwy A corresponds to Access 10 from **Table 2.1-8.**
7 This intersection corresponds to Access 6 from **Table 2.1-8.**
8 This intersection corresponds to Access 8 from **Table 2.1-8.**
9 This intersection corresponds to Access 2 from **Table 2.1-8.**
10 This intersection corresponds to Access 9 from **Table 2.1-8.**
11 This intersection corresponds to Access 4 from **Table 2.1-8.**
12 This intersection corresponds to Access 1 from **Table 2.1-8.**

Combined Development Project Trip Generation

The Combined Development scenario includes trips generated from Alternative 1 and Alternative A of the proposed Casino-Resort Project. Note, there are two other alternatives (B and C) for the proposed Casino-Resort Project, but both generate fewer trips than Alternative A. Alternative 1 and Alternative A for the proposed Casino-Resort Project each reflect the highest density development conditions for each project, and thus provide a worst-case scenario for the Combined Development review. Trip generation estimates for Alternative 1 under this scenario utilized similar land uses and methodology as described above with additional reductions for internal capture associated with the adjacent proposed Casino-Resort Project. To calculate 2027 Combined Development traffic volumes, PM peak hour project trips were added to the 2027 without-Project traffic volumes with the proposed Casino-Resort Project as a pipeline project. 2050 Combined Development traffic volumes were similarly calculated by adding the PM peak hour project trips to the 2050 without-Project traffic volumes.

Traffic Operations

The operational characteristics of an intersection are determined by calculating the intersection LOS. Appendix D of **Appendix H** contains a detailed explanation of LOS criteria and definitions, with LOS A indicating free-flowing traffic and LOS F indicating extreme congestion and long vehicle delays. LOS standards of the respective jurisdictions in the study area are included in **Table 3.12-8** below.

Alternative 1 – Commercial-Heavy Mixed-Use Development

Construction Traffic

Construction of Alternative 1 would require truck trips for delivery of equipment and material, and daily construction worker trips. Traffic impacts resulting from the construction of Alternative 1 would be temporary and intermittent in nature and would generally occur during off-peak traffic hours (5 a.m. to 6 a.m. and 10 a.m. to 4 p.m.). Construction activity impacts would be concentrated on I-5, Marvin Road, Britton Parkway, and Gateway Boulevard in the immediate vicinity of the Project Site, and it may cause temporary traffic delays due to slower moving construction trucks and increase in worker vehicles on area roadways.

Table 3.12-8: LOS Standards for Jurisdictions in Study Area

Jurisdiction	LOS Standard
Lacey	The City has adopted an LOS D standard, except for the core area[17], where LOS E is acceptable and along strategy corridors where the LOS may exceed standards. The strategy corridors are shown on Figure 1 of **Appendix H.**
Olympia	Urban corridors (which include Martin Way and Pacific Avenue) have an adopted LOS E standard as defined in the City of Olympia Transportation Plan and shown in the Transportation Corridors map.
WSDOT	WSDOT has adopted an LOS D standard at the I-5 ramp and SR 510 intersections within the study area.

Based on review of estimates generated for similar projects, daily construction trips are likely to range from between 600 to 900 trips per day, most of which would occur outside of peak traffic hours. Daily construction trips would include worker commute trips, material delivery, and equipment delivery. Daily traffic generated by construction of Alternative 1 would be less than operational traffic, and thus have less significant impacts. Furthermore, traffic due to construction would be temporary, intermittent, and would generally occur outside the peak hour. Because construction traffic would be temporary, significantly less than operational traffic, and would occur outside of the peak hour, significant adverse effects are not anticipated to occur.

Operational Traffic

Trip Generation – without-Project and with-Project Scenarios

Table 3.12-9 summarizes the resulting weekday daily AM and PM peak hour vehicle trip generation for Alternative 1. The detailed trip generation calculations, including reductions for pass-by, diverted, and internal trips, are provided in Appendix G of **Appendix H**. The project trip distribution and assignment can be seen in Figure 7 and 8 of **Appendix H**. The Future (2027) with-Project volumes are displayed in Figure 9 of **Appendix H** while the Future (2027) without-Project weekday peak hour traffic volumes are shown in Figure 5 of **Appendix H**. As shown in **Table 3.12-9**, Alternative 1 is anticipated to generate 2,676 trips during the PM peak hour. addition to the project generated trips, **Table 3.12-9** shows the estimated trip generation for the project analyzed in the 2010 FSEIS. When compared to the trips generated under Alternative 1, Alternative 1 would overall generate 198 fewer trips than the 2010 FSEIS Project. Note that the methodologies used to calculate pass-by, diverted, and internal trips vary between Alternative 1 and the project analyzed in the 2010 FSEIS; the total trip generation presented here is meant to provide an overall comparison of the trip generation for two distinct projects and is not intended to compare vehicle trip generation at specific study intersections.

Trip Generation – Combined Development Scenario

Under the Combined Development, both the proposed Casino-Resort Project and Alternative 1 would be operational in the year 2027. **Table 3.12-10** summarizes the resulting weekday daily AM and PM peak hour vehicle trip generation for only Alternative 1 under the Combined Development scenario. Detailed trip generation calculations, including reductions for pass-by, diverted, and internal trips, are provided in Appendix G of **Appendix H**. The project trip distribution and assignment alone without environmental

[17] The Lacey Core Area is defined as the area bounded by the northerly right-of-way line of Martin Way on the north, the southerly right-of-way line of Lacey Boulevard on the south, the westerly city limit line on the west and the easterly right-of-way line of Carpenter Road on the east.

traffic volumes can be seen in Figure 16 of **Appendix H** while Alternative 1 trips in addition to the environmental trips are displayed in Figure 17 of **Appendix H**.

Table 3.12-9: Alternative 1 Estimated Weekday Vehicle Trip Generation

Land Use	Daily	AM Peak			PM Peak		
		In	Out	Total	In	Out	Total
Retail/Office Commercial	24,294	361	198	559	1,050	1,147	2,197
Hotel	1,396	52	33	85	48	49	97
Residential	1,068	26	89	115	37	25	62
General Office	230	27	4	31	2	22	24
Travel Center	1,456	40	47	87	63	38	101
Car Dealership	812	40	15	55	28	42	70
Golf Entertainment Facility*	1,340	32	4	36	67	58	125
Total	**30,596**	**578**	**390**	**968**	**1,295**	**1,381**	**2,676**
2010 FSEIS TIA Trip Generation**					**1,211**	**1,663**	**2,874**

Source: **Appendix H**

*Trip generation rates for the golf entertainment facility were determined based on a TIA completed by TranspoGroup in 2019 for a golf entertainment facility in Renton, WA.

**The Thurston County Travel Demand Model was used to produce site-generated traffic volumes, and the results were also validated using the ITE Trip Generation Manual. The land use assumptions in the travel demand model for Phase 1 of the Lacey Gateway Site were: 1,026,000 sf of shopping center, 100,000 sf General Office, 30,000 sf Civic (Library), 119 Hotel rooms with Conference Center, and 500 Residential Townhouses. The FSEIS itself examined slightly different land use sizes than what was studied in the TIA.

As shown in **Table 3.12-10**, Alternative 1 is anticipated to generate 30,338 daily, 968 AM peak hour, and 2,632 PM peak hour weekday trips under the Future (2027) Combined Development scenario. This trip generation is slightly lower than the standalone Alternative 1 due to the internal capture between Alternative 1 and the proposed Casino-Resort Project. In addition to the project generated trips, **Table 3.12-10** shows the estimated trip generation for the project analyzed in the 2010 FSEIS. When compared to the trips generated under Alternative 1 under the Combined Development scenario, Alternative 1 would still generate approximately 242 fewer trips than the 2010 FSEIS Project. See previous note in the Alternative 1 discussion regarding the variation in methodologies used to calculate pass-by, diverted, and internal trips.

Intersection Level of Service

Future (2027) with-Project

Table 7 of **Appendix H** displays the LOS calculated for each study intersection under the Future (2027) without-Project and Future (2027) with-Project. The six intersections expected to operate below standard

during the weekday PM peak hour for the Future (2027) with-Project scenario are either a site access or located on a strategy corridor. Each intersection forecasted to operate below the respective standards is discussed below in **Table 3.12-11**.

Table 3.12-10: Alternative 1 Combined Development Estimated Weekday Vehicle Trip Generation

Land Use	Daily	AM Peak			PM Peak		
		In	Out	Total	In	Out	Total
Retail/Office Commercial	23,966	361	198	559	1,019	1,118	2,137
Hotel	1,396	52	33	85	48	49	97
Residential	1,068	26	89	115	37	25	62
General Office	230	27	4	31	2	22	24
Travel Center	1,456	40	47	87	63	38	101
Car Dealership	800	40	15	55	27	41	68
Golf Entertainment Facility*	1,422	32	4	36	76	67	143
Total	**30,338**	**578**	**390**	**968**	**1,272**	**1,360**	**2,632**
2010 FSEIS TIA Trip Generation**	–	–	–	–	**1,211**	**1,663**	**2,874**

Source: **Appendix H**

*Trip generation rates for the golf entertainment facility were determined based on a TIA completed by TranspoGroup in 2019 for a golf entertainment facility in Renton, WA.

** The Thurston County Travel Demand Model was used to produce site-generated traffic volumes, and the results were also validated using the ITE Trip Generation Manual. The Land use assumptions in the travel demand model for Phase 1 of the Lacey Gateway Site were: 1,026,000 sf of shopping center, 100,000 sf General Office, 30,000 sf Civic (Library), 119 Hotel rooms with Conference Center, and 500 Residential Townhouses. The FSEIS itself examined slightly different land use sizes than what was studied in the TIA.

Mitigation measures have been identified in **Section 4** that would reduce Alternative 1 impacts at all study intersections to a less-than-significant level. It should be noted that at Driveway D/Marvin Road NE, the LOS deficiency is not considered a significant impact because the only LOS impacts would occur on the Project Site as cars queue to leave, and no off-site decline in LOS is anticipated. These measures include targeted physical improvements at specific intersections; improving transit access to/from the Project Site; and implementing transportation demand management (TDM) strategies to reduce the overall level of project-related traffic during peak hour conditions., With implementation of these mitigation measures, the impact to these intersections would be reduced to less than significant, as seen in Table 21 of **Appendix H**.

Table 3.12-11: Intersections to Operate Below Acceptable Standards (LOS) – Alternative 1

Intersections	Discussion of Operation
Eastern Parkway NE/Britton Parkway NE[1]	The southbound approach of this two-way stop-controlled intersection is forecast to operate at LOS F under Future (2027) with-Project scenario during the weekday PM peak hour, degrading from LOS C under without-Project scenario and exceeding the LOS D standard. While the southbound movement is forecast to have the greatest delay, it is the northbound approach that will serve as the site access.
Central Parkway NE/Britton Parkway NE[1]	The southbound approach of this two-way stop-controlled intersection is forecast to operate at LOS E under Future (2027) with-Project scenario during the weekday PM peak hour, degrading from LOS B under without-Project scenario and exceeding the LOS D standard. While the southbound movement is forecast to have the greatest delay, it is the northbound approach that will serve as the site access.
Britton Parkway NE/Western Parkway NE[1]	The southbound approach of this two-way stop-controlled intersection is forecast to operate at LOS F under Future (2027) with-Project scenario during the weekday PM peak hour, degrading from LOS C without-Project scenario and exceeding the LOS D standard. While the southbound movement is forecast to have the greatest delay, it is the northbound approach that will serve as the site access.
Driveway D (Access 3)/Marvin Road NE[1]	The eastbound right-turn movement at the proposed RIRO driveway is forecast to operate at LOS E with Alternative 1 with a 95th percentile queue of up to 2 vehicles outbound from the site. The delay is related to the high southbound through volumes along Marvin Road, but any delay would occur on the Project Site and would not result in off-site impacts.
Marvin Road SE (SR 510)/Steilacoom Road SE[2]	This signalized intersection is forecasted to degrade to LOS E during the PM peak hour scenario under the Future (2027) with-Project scenario.

Source: **Appendix H**
[1]Site accesses intersection
[2]Located within a Strategy Corridor

I-5 RIRO/CD Road Interchange Operations

As part of the Marvin Road Interchange Project, a collector-distributor road was constructed along the site frontage. As described in **Section 3.12.2**, a memorandum of understanding between the City of Lacey and WSDOT stipulated that in order to open the access points, a traffic analysis of the local network needs to demonstrate that additional capacity is needed and addressed by the access points from the frontage road. The Proposed Project will fully comply with the conditions set forth in the memorandum in order to open the access points on the frontage road. Consistent with the memorandum of understanding, the TIA conducted a traffic analysis demonstrating that the capacity provided by the collector-distributor road is warranted under the Proposed Project. The operational results of that analysis are provided in Table 14 of **Appendix H** and indicate that without the collector-distributor road connection, both the Marvin Road NE/Main Street NE and Eastern Parkway NE/Britton Parkway NE intersections would operate below standard.

Additionally, the TIA conducted a weaving analysis of the I-5 RIRO Ramp at the I-5 CD Road, and the weaving section for the anticipated future I-5 RIRO Ramp at the I-5 CD Road is shown in Figure 11 of **Appendix H**. Furthermore, Table 9 of **Appendix H** provides a summary of the weaving and ramp operations for the existing weekday AM and PM peak hours. As exemplified from the LOS levels discussed above for Marvin Road, capacity is needed because the Marvin Road corridor is heavily congested. If opened, as shown in Table 9 of **Appendix H**, the proposed ramp is forecast to operate acceptably at LOS

B during the weekday PM peak hour under both Future (2027) with-Project scenario. Therefore, the impact would be less than significant.

Combined Development Intersection LOS

The Future (2027) Combined Development LOS analysis was conducted for the weekday PM peak hour. All intersection parameters such as channelization, intersection control, and signal timing were consistent with those used in the evaluation of Future (2027) without-Project scenario. A comparison of 2027 without-Project, with-Project, and Combined Development weekday PM peak hour traffic operations is summarized in Table 16 of **Appendix H**. As shown in Table 16 of **Appendix H**, the intersections are forecasted to generally operate at the same LOS under the Combined Development scenario relative to the with-Project scenario with the same five study intersections forecasted to operate below the respective standard. Intersection impacts would occur at two additional study intersections under the Future (2027) Combined Development scenario: Pacific Avenue SE/Carpenter Road NE, where the level of service would degrade to LOS F, and Marvin Road NE/I-5 Southbound ramp, where the level of service would degrade to LOS E. Mitigation measures are included in **Section 4** that would implement intersection channelization and signal modifications at Pacific Avenue SE/Carpenter Road NE; and would adjust proposed land uses to reduce trip generation by at least 5 percent at Marvin Road NE/I-5 Southbound ramp. These mitigation measures would reduce the impacts to less-than-significant levels. In addition to the aforementioned mitigation measures, the mitigation measures proposed under the Future (2027) with-Project scenario would sufficiently mitigate the impacts under the Combined Development scenario to less than significant, as seen in Table 21 of **Appendix H**. Therefore, with implementation of these mitigation measures, no additional mitigation measures are required with the operation of both Alternative 1 and the proposed Casino-Resort Project. This impact would be less than significant.

Safety

As shown in **Section 3.12.2**, the greatest number of collisions within the vicinity of the Project Site occurred at the intersections along Marvin Road SE at Britton Parkway, and Martin Way and Pacific Road SE. Of the five existing intersections along the project frontages of Marvin Road SE and Britton Parkway, there were 32 total collisions reported or an annual average of three or fewer collisions per year with only five total collisions resulting in an injury (approximately 15%). With these low collisions rates, the TIA identified no existing safety concerns Alternative 1 could contribute to once operational. Hence, no adverse effect would occur to safety and this impact would be less than significant.

Transit, Bicycle and Pedestrian Facilities

As described in **Section 3.12.2**, there are sidewalks and bicycling facilities surrounding the Project Site. Under Alternative 1, these bicycle and sidewalk facilities would be extended to connect to the Project Site to allow for pedestrian access to and through the Project Site. It is not anticipated that the usage of pedestrian and bicycling facilities would increase enough to severely degrade or require a significant expansion of existing facilities, beyond what is proposed for internal circulation on the Project Site. Therefore, Alternative 1 would not result in significant adverse effects to pedestrian and bicycling facilities.

For transit services, Intercity Transit Route 65 offers public transportation to the Project Site that could be utilized by employees, residents, and patrons of Alternative 1 during operation. In 2019, prior to the onset of the COVID-19 pandemic that occurred in 2020, approximately 7.11% of people commuted by

public transport in the State (Bureau of Transportation Statistics, 2023).[18] To be conservative, in the opening year of 2027, it is assumed that approximately 7% of workers and residents in Alternative 1 will use the bus system[19]. Employees would be utilizing the bus systems throughout the day and week rather than at one given time because the proposed commercial development would require different work schedules to satisfy its needs. The timing of bus usage by new on-site residents would be similar to the employees because they would have different work schedules in addition to social obligations; therefore, their utilization of the public transport system would be dispersed throughout the day.[20] As described in **Appendix F**, approximately 20 passengers utilize Route 65 buses at any given time, meaning approximately 7–17 seats are not occupied, depending on the bus size. An increase of 8 passengers per hour would mean approximately 28 passengers at maximum on a given bus, exceeding the seating capacity of small buses but not of large buses, and would not exceed the standing capacity of either size bus.[21] Since there would still be capacity remaining on the buses, it is anticipated that the frequency of buses per hour would not need to increase to accommodate employees and resident commuter trips. While there would be sufficient bus capacity in the existing public transportation system to accommodate future commuter trips, there will be additional bus trips resulting from patrons to the onsite commercial and entertainment uses proposed under Alternative 1. The number of patron trips may fluctuate throughout the year, for instance an increase during the holiday shopping season, which may exceed the capacity of the existing bus system. While the BMPs included in **Table 2.1-9** could potentially reduce impacts on the buses through encouraging other means of transport such as bicycling, there could be potentially significant impacts to the Route 65 bus system. Mitigation has been included in **Section 4** to sufficiently reduce this impact. The mitigation specifies that the Tribe shall work with Intercity Transit to provide adequate and safe public transportation to and from the Project Site, which could include increasing Route 65 buses during peak times.

Alternative 2 – Recreation-Heavy Mixed-Use Development

Alternative 2 would have similar impacts on circulation and transportation as Alternative 1, but it would be reduced due to the overall smaller development size. The project trip distribution and assignment for Alternative 2 is displayed in Figure 12 and Figure 13 of **Appendix H**, respectively, while the Future (2027) with-Project volumes are displayed in Figure 14 of **Appendix H**. The anticipated trip generation for Alternative 2 is displayed in **Table 3.12-12.** As can be seen in the figures and table, Alternative 2 is anticipated to have similar trip distribution as Alternative 1, but it would generate fewer trips. Therefore, Alternative 2 would result in fewer impacts on the surrounding transportation network than Alternative 1.

[18] This bus ridership data focuses on workers commuting to their place of employment but does not capture bus ridership for non-commuters using the bus for shopping, entertainment, and other recreational uses, and therefore this analysis focuses on employee and residential commuter trips using the bus system.

[19] Alternative 1 is estimated to generate approximately 2,466 new employees and 787 new on-site residents (**Appendix L**). The quantity of new onsite residents was estimated using the 2017-2021 U.S. Census Data for the City of Lacey average household size, 2.46, times the 320 households generated under Alternative 1
Approximately 173 employees and 55 residents are estimated to use the bus system.

[20] If distributed throughout the bus operation schedule of approximately 14 hours, there would be approximately 16 new passengers per hour. Since there are two buses that run per hour for Route 65, an approximate increase of 8 passengers per bus would occur.

[21] There would be a remaining capacity of 59% and 70% for the small and large buses, respectively.

Future (2027) Alternative 2 Intersection LOS

A comparison of 2027 without-Project and with-Project weekday peak hour traffic operations is summarized in Table 11 of **Appendix H**. As shown in Table 11 of **Appendix** H and summarized in **Table 3.12-13**, Alternative 2 under Future (2027) with-Project scenario has two intersections forecasted to operate below the respective standards during the weekday PM peak hour. These intersections are also impacted under Alternative 1 and therefore the impacts are similar with all the impacted intersections being located along access points or strategy corridors.

Table 3.12-12: Alternative 2 Estimated Weekday Vehicle Trip Generation

Land Use	Daily	AM Peak			PM Peak		
		In	Out	Total	In	Out	Total
Shopping Center	9,560	145	80	225	402	438	840
Hotel	1,396	52	33	85	48	49	97
Multifamily Housing	1,068	26	89	115	37	25	62
General Office	230	27	4	31	2	22	24
Private School	822	113	89	202	24	28	52
Recreational Community Center	5,556	252	130	382	220	244	464
Athletic Complex	826	7	5	12	121	62	183
Convenience Store/Gas Station	816	36	39	75	32	29	61
Car Dealership	266	14	5	19	9	13	22
Golf Entertainment Facility*	1,490	32	4	36	85	73	158
Total	**22,030**	**704**	**478**	**1,182**	**980**	**983**	**1,963**
2010 FSEIS TIA Trip Generation**	–	–	–	–	**1,211**	**1,663**	**2,874**

Source: **Appendix H**

*Trip generation rates for the golf entertainment facility were determined based on a TIA completed by TranspoGroup in 2019 for a golf entertainment facility in Renton, WA.

**The Thurston County Travel Demand Model was used to produce site-generated traffic volumes, and the results were also validated using the ITE Trip Generation Manual. The Land use assumptions in the travel demand model for Phase 1 of the Lacey Gateway Center were: 1,026,000 sf of shopping center, 100,000 sf General Office, 30,000 sf Civic (Library), 119 Hotel rooms with Conference Center, and 500 Residential Townhouses. The FSEIS itself examined slightly different land use sizes than what was studied in the 2010 FSEIS TIA.

The impacted intersections under Alternative 2 would operate at the same level or better than under Alternative 1, but similar to Alternative 1 there would be significant impacts without mitigation under Alternative 2. To reduce these potential impacts, similar mitigation measures as Alternative 1 would be implemented for Marvin Road SE (SR 510)/Steilacoom Road SE and Britton Parkway NE/Western Parkway NE. These measures include targeted physical improvements at specific intersections; and implementing TDM strategies to reduce the overall level of project-related traffic during peak hour conditions. The improved LOS levels can be seen in Table 21 of **Appendix H**. As explained in more detail in **Appendix H**, with mitigation the impacts to the adversely affected intersections under Alternative 2 would be less than significant.

Table 3.12-13: Intersections to Operate Below Acceptable Standards (LOS) – Alternative 2

Intersections	Discussion of Operation
Britton Parkway NE/Western Parkway NE[1]	The southbound approach of this two-way stop-controlled intersection is forecasted to operate at LOS F under the Future (2027) with-Project scenario during the weekday PM peak hour.
Marvin Road SE (SR 510)/ Steilacoom Road SE[2]	Forecasted to operate at LOS E under the Future (2027) PM peak hour scenario under both the without-Project and with-Project scenario.

Source: **Appendix H**
[1]Site accesses intersection
[2]Located within a Strategy Corridor

I-5 RIRO/CD Road Interchange Operations

Similar to Alternative 1, the impacts to the weekday PM peak hour operational performance at the future I-5 RIRO Ramp at the I-5 CD Road was assessed for Alternative 2. Table 13 of **Appendix H** provides a summary of the weaving and ramp operations for the existing weekday AM and PM peak hours for Future (2027) with-Project scenarios. Similar to Alternative 1, the proposed ramp is forecast to operate acceptably at LOS B during the weekday PM peak hour. Hence, the impact under Alternative 2 would be less than significant because the LOS would remain at an acceptable level.

Safety

Since Alternative 2 would produce fewer trips than Alternative 1, the potential impacts to safety are anticipated to be less. As noted above, the impacts under Alternative 1 for safety were determined to be less than significant. Since the potential adverse impacts to safety are predicted to be reduced under Alternative 2 than Alternative 1, this impact is determined to be less than significant.

Transit, Bicycle and Pedestrian Facilities

Alternative 2 would generate similar impacts to pedestrian facilities and public transport on the surrounding network as Alternative 1, but on a smaller scale due to the decreased employee and visitation trips, as demonstrated by Alternative 2 generating fewer vehicle trips than Alternative 1. Pedestrian facilities would be extended to the Project Site from the surrounding area to ensure access, and the impact to Intercity Transit bus line Route 65 would be less than significant due to the buses still having capacity after implementation of Alternative 2.

The proposed school and athletic complex in the northwestern portion of the Project Site may increase the usage of pedestrian and bicycle facilities in this area along Britton Parkway NE and Gateway Boulevard NE, but it is not expected to exceed the capacity of available facilities. As stated in **Table 3.12-2**, Britton Parkway NE is noted as containing 'intermittent' bicycle and sidewalks due to one approximately 500-foot stretch at its westernmost terminus where the sidewalk and bicycle facilities end in an area zone light industrial commercial. The entire length of Britton Parkway NE from the residential area to the west, along the Project Site's northern boundary and connecting to Marvin Road NE on the eastern edge of the Project Site contains a continuous sidewalk and bicycle lanes. This would provide safe and uninterrupted pedestrian and bicycle opportunities from the adjacent and off-site residential areas to the proposed school and ball fields in the northwestern portion of the Project Site. Therefore, these impacts are less than significant.

Alternative 3 – No Action Alternative

Under Alternative 3, there would be no development constructed on the Project Site, and consequently no increase in vehicular traffic on roadways in the vicinity of the Project Site. There would be no change in pedestrian, bicycle, or transit circumstances. Therefore, no impacts would occur under Alternative 3.

Reasonably Foreseeable Cumulative Effects Analysis

Cumulative projects in the vicinity of the Project Site have the potential to impact local transportation networks in a way that could result in significant impacts when considered in combination with the project alternatives. In particular, traffic from the project alternatives in combination with the proposed Casino-Resort Project that is directly adjacent to the Project Site would contribute to increased traffic levels on local and regional roadways serving the project area. For the purposes of analyzing the potential impacts, the combined traffic volumes from Alternative A of the proposed Casino-Resort Project (the alternative that would generate the highest traffic) and Alternative 1 were assessed since the combination of these two would create the greatest impacts. Traffic volumes for the Future (2050) with-Project traffic volumes were calculated by adding the PM peak hour project trips to the Future (2050) without-Project traffic volumes. The volumes and distributions for the Future (2050) without-Project, with-Project, and Combined Development can be seen in Figure 6, 10, and 22 of **Appendix H**, respectively.

Intersection Level of Service

Table 8 in **Appendix H** shows the LOS under the Future (2050) without-Project and with-Project scenarios. 2050 without-Project traffic volumes were developed by applying the growth from the 2022 and 2050 TRPC model to the existing traffic volumes and therefore include cumulative development. In this table, LOS levels were calculated with the assumption that Future (2027) with-Project mitigation measures for Alternative 1 were not implemented. The development of Alternative 1 in the Future (2050) scenario is forecasted to result in four intersections operating below respective standards during the weekday PM peak hour. This is one fewer intersection impact compared to the Future (2027) with-Project Scenario, in which five intersections were forecasted to operate below standard.[22] This is due to the fact that different methodologies were used to forecast the 2027 and 2050 traffic volumes. The Future (2027) forecasts assume the application of a static growth rate and traffic associated with pipeline developments, which is the typical methodology used to develop near- term traffic volume forecasts. These forecasts typically overestimate near-term (i.e., 2027) conditions because they do not account for changes in travel patterns related to congestion and capacity constraints. The long-term (i.e., 2050) forecasts represent a more wholistic review of the future volumes due to land use changes, future infrastructure improvements, and increases in congestion throughout the region which result in shifts in travel patterns over time.

The four intersections operating below standard are either a Project Site access or located along a strategy corridor, and they would therefore experience similar impacts as under Future (2027) with-Project scenario.

However, these intersections would operate at or above acceptable standards if the mitigation measures in **Section 4** recommended under the Future (2027) with-Project scenario are implemented. These measures include targeted physical improvements at specific intersections; reducing the land use

[22] Total approach volumes at the two Marvin Road NE/I-5 ramp intersections under the Future (2050) with-Project scenario are below those identified in the IJR and, therefore, the impact at those locations would be less than significant.

intensity; improving transit access to/from the Project Site; and implementing TDM strategies to reduce the overall level of project-related traffic during peak hour conditions. Table 21 of **Appendix H** shows the LOS levels for Pacific Avenue SE/Carpenter Road SE, Eastern Parkway NE/Britton Parkway NE, Central Parkway NE/Britton Parkway NE, and Britton Parkway NE/Western Parkway NE if the mitigation measures were implemented. As shown in this table, the intersection LOS would be improved to conditions that either meet or are below the appropriate standard, thus reducing the impacts to less-than-significant levels. Therefore, with mitigation the impacts to the adversely affected intersections under the Future (2050) with-Project scenario would be less than significant. Additionally, **Section 4** includes a mitigation measure that applies to the Future (2050) with-Project scenario to pay the City traffic impact fees based on the City's 2024/2025 Transportation Improvement Mitigation List. This mitigation measure is intended to assign a fair-share financial responsibility for the Proposed Project's contribution to cumulative traffic generated by Alternative 1 on roadways that are included in planned transportation improvement projects.

A comparison of Future (2050) without-Project and Future (2050) Combined Development weekday PM peak hour traffic operations is summarized in Table 17 of **Appendix H** with the assumption that the mitigation measures under the Future (2027) with-Project scenario were not implemented. As shown in Table 17 of **Appendix H**, the intersections are forecasted to generally operate at the same LOS under the Future (2050) Combined Development scenario as the Future (2050) with-Project scenario. Furthermore, all of the intersections described above to operate below acceptable standards described under the Future (2050) with-Project scenario are also anticipated to operate below the respective standard under the Future (2050) Combined Development scenario. Similar to the Future (2050) with-Project scenario, these adverse impacts would be reduced to less than significant with implementation of the mitigation measures identified under the Future (2027) with-Project scenario, as well as the mitigation measure related to the payment of City traffic impact fees identified for the Future (2050) with-Project traffic scenario.

In addition to the intersections assessment above, the Future (2050) with-Project and Combined Development weekday PM peak hour operational performance at the future I-5 RIRO Ramp at the I-5 CD Road was determined. Table 18 of **Appendix H** provides a summary of the weaving and ramp operations for the existing weekday AM and PM peak hours. As shown in Table 18 of **Appendix H**, the proposed ramp is forecast to operate acceptably at LOS B under both the Future (2050) with-Project and Combined Development scenario during the weekday PM peak hour. Therefore, no mitigation is required to reduce the impacts from increased traffic volumes. This impact is less than significant.

Bicycle, Pedestrian, and Transit System

Alternatives 1 and 2 in combination with the proposed Casino-Resort Project and other cumulative projects could result in increased bicycling or transit rider activity due to increases in the local population. The proposed Casino-Resort Project under Alternative A could generate up to 1,480 new employment opportunities and have approximately 7,464 visitations per day. If approximately 7% of these new employees and visitors utilize the Route 65 bus system and were distributed throughout the route's operation schedule in a similar manner as described for Alternative 1, there would be an increase in ridership of approximately 23 passengers for every bus. Route 65 buses experience passenger loads of approximately 20 passengers at maximum. Alternative 1 and Alterative A combined could generate up to 31 new passengers per bus, not including the potential visitors to Alternative 1 as discussed above. This could exceed the seating capacity of the buses and surpass the standing capacity of 68 for small buses and may exceed the standing capacity for the larger buses. This could have a significant cumulative impact depending on the size of bus used. While the BMP in **Table 2.1-9** would reduce potential impacts to Route

65, the mitigation included in **Section 4** will sufficiently reduce this impact. The mitigation specifies that the Tribe shall work with Intercity Transit to provide adequate and safe public transportation to and from the Project Site, which could include increasing Route 65 buses during peak times. In a similar manner, the proposed Casino-Resort Project would be required to assess its impacts and provide mitigation if necessary for the adverse impacts it would cause to public transport. Therefore, cumulative effects would be reduced to less than significant with mitigation.

3.13 UTILITIES

3.13.1 Regulatory Setting

The utilities regulatory setting is summarized in **Table 3.13-1**, and additional information on the regulatory setting can be found in **Appendix F**.

Table 3.13-1: Regulatory Policies and Plans Related to Utilities

Regulation	Description
Federal	
Safe Drinking Water Act	▪ Establishes protective drinking water standards for protection of public health.
Clean Water Act	▪ Establishes environmental discharge requirements for wastewater treatment.
State	
HB 1799 – Organic Materials	▪ Requires local governments and businesses to manage organic material waste, such that organic materials are diverted from landfills for productive uses of organic waste; local governments are to consider state organic material management goals in their solid waste plans.
Washington Well Construction Act	▪ Governs the regulation and licensing of well contractors and operators and for the regulation of well design and construction on lands under State jurisdiction
Washington State Growth Management Act	▪ The GMA contains a comprehensive framework for managing and providing public services and utilities at the time growth occurs. ▪ Adopts the goal to ensure there are adequate public facilities and services necessary to support new development without decreasing current service levels below locally established minimum standards.

3.13.2 Environmental Setting

Water Supply

The Project Site is within the City's service area and there are multiple water lines either immediately adjacent to or within the Project Site as shown on **Figure 6**. Based on the City's water system plan update, dated April 2022, the peak reliable pumping capacity of the well system during maximum demand days is approximately 28 MGD or 19,500 gallons per minute (gpm). Undeveloped water rights currently held by the City would allow a total withdrawal of 34 MGD or 23,500 gpm. The City has two well construction projects (Well S04 and the Marvin Road Well) currently anticipated to be completed in 2030 that will increase its pumping capacity (City of Lacey, 2022; **Appendix C**). The City's water system includes seven water storage reservoirs with a total storage capacity of 13.0 million gallons (MG). An additional 2 MG is currently under construction and another 1.25 MG is in design. Refer to **Appendix F** for additional information.

Wastewater Service

The Project Site is within the City's service area and there are multiple wastewater lines either immediately adjacent to or within the Project Site as shown in **Figure 6**. Based on the City's sewer system plan update, dated April 2015, the City's wastewater system currently transports approximately 3 MG a day to LOTT treatment plants (**Appendix C**). The primary plants are the Budd Inlet Treatment Plant and the Martin Way Reclaimed Water Plant described in **Table 3.13-2**. Each facility was also constructed with the potential for future expansion in increments of 1 MGD to accommodate future growth in the area (LOTT, 2023). Refer to **Appendix F** for additional information.

Solid Waste

Solid waste from the Project Site vicinity is collected by LeMay Pacific Disposal and brought to the Waste and Recovery Center (WARC) Transfer Station which is operated by Thurston County in partnership with Republic Services. The peak operational capacity of the WARC is generally 159 tons per hour or 1,590 tons per day (based on a 10-hour day); however, compactor capacity is 870 tons per day and traffic capacity is 800 vehicles per day. Based on estimated per capita disposal rates and growth projections, the WARC is anticipated to receive 224,721 tons per year in 2025 and 263,196 tons per year in 2040. Solid waste from the WARC is transported to Roosevelt Regional Landfill in Klickitat County for disposal (Thurston County Public Works, 2019). Roosevelt Regional Landfill has a permitted capacity of 120 million tons over 40 years, and can accept construction and demolition debris and petroleum-contaminated soil (Republic Services, 2023). In 2017, the landfill received approximately 2.4 million tons of solid waste and was originally intended to receive up to 5 million tons per year. At this rate of solid waste acceptance, the landfill lifespan could be extended up to 85 years (DeMent, 2017). Refer to **Appendix F** for additional information.

Table 3.13-2: Wastewater Treatment Facilities

Descriptor	Budd Inlet Treatment Plant	Martin Way Reclaimed Water Plant
Treatment Capacity[1]	37.5 MGD	2 MGD
2021 Average Daily Flow[2]	12.4 MGD	1.4 MGD
Reclaimed Water Capacity[3]	1.5 MGD	1.5 MGD
2021 Recycled Water Production[2]	0.6 MGD	1.1 MGD

Source: 1 - LOTT, 2022; 2 - LOTT, 2021; 3 - LOTT, 2023

Electricity and Natural Gas

PSE provides electricity and natural gas to the County and City. The projections for PSE overall energy resources predict it can satisfy energy demands until 2031. With regards to natural gas demand, PSE projects its current supplies will be sufficient to meet demand until the winter of 2031/2032. The nearest electrical substation and high voltage transmission line (345 kilovolt) are approximately 0.7 miles west of the Project Site (Energy Information Administration, 2023). While no natural gas lines are located near the Project Site, a high pressure gas line and gate station are proposed approximately 0.7 miles west of the Project Site (City of Lacey, 2016b). Refer to **Appendix F** for additional information.

3.13.3 Impacts

Alternative 1 – Commercial-Heavy Mixed-Use Development

Construction

Before construction of the Alternative 1, the Tribe shall contact the State Utility Notification Center to notify the utility service providers of excavation at the work site to avoid unintentional disruption to existing utilities as specified in the BMPs described in **Table 2.1-9**.

Water Supply

As described in **Appendix B** Section 1.2 for Water Supply Option 1, the City has confirmed it has sufficient water supply and pressure to fully accommodate Alternative 1 after completion of its two groundwater projects. Furthermore, the City still has approximately 6 MGD of undeveloped water rights for future growth in the area. The City's well projects are anticipated to be completed in 2030. If the well projects are not completed prior to the opening of Alternative 1, on-site storage tanks with a total capacity of 1.3 MG and an associated booster pump would be required to ensure adequate fire flow volumes and maximum peak daily water demand are provided. As discussed in **Appendix B** Section 1.2, these water demands would be further reduced if reclaimed water is utilized . Reclaimed water could be utilized under Alternative 1 once the supply is sufficient in the anticipated year of 2035. Additional infrastructure would be required to connect with the 16-inch reclaimed water line in Main Street NE and/or Gateway Boulevard NE. Impacts associated with the off-site utility connections are discussed in **Section 3.15**. Mitigation recommended in **Section 4** includes the negotiation of a service agreement with the City to provide payment for water service and for any distribution infrastructure improvements necessary to provide service to the Project Site. This agreement is anticipated in the Cooperation Agreement discussed in **Section 1.5.1**. Impacts would be less than significant with mitigation.

As described in **Section 1.4.2**, the Project Site is within an approximately 250-acre potential commercial development node of the Comprehensive Plan identified as the "Lacey Gateway Town Center," which has been long planned for commercial development, including the provision of water and wastewater utilities. Any on-site water utilities proposed under Alternative 1 would be designed to only serve the proposed development and would not result in any off-site growth inducement. Consequently, anticipated growth inducement from extension of utilities is anticipated to be accommodated by the land use and growth management plans and policies for the area affected, and a less-than-significant effect would occur.

Under Water Supply Option 2 there would be no connection to a public water system and thus no direct impact. Potential impacts related to groundwater pumping are discussed in **Section 3.7.3**.

Wastewater

The City and LOTT wastewater collection system has the capacity to accept flows from Alternative 1 under Wastewater Treatment Option 1 with implementation of off-site improvements (**Appendix B** Section 2.1.3). The LOTT sewer line connection was built to accommodate 2040 wastewater flows, and therefore has capacity to accept flows from Alternative 1 in the opening year of 2028. While LOTT treatment plant capacity is more than sufficient to cover increased wastewater generation from Alternative 1, the LOTT sewer line on the eastern portion of the Project Site that flows south to Martin Way E contains a 15-inch section of sewer line may require upgrades prior to full buildout of the Project (**Appendix C**). The City sewer line on the western side of the Project Site conveys wastewater to Pump Station #49; this pump station could accommodate up to 100,000 gpd from Alternative 1, which is not sufficient to meet the total wastewater demand. As described in **Appendix B** Section 1.3, under the alternative connection scenario,

Pump Station #49 would be upgraded to increase its capacity to accommodate the full wastewater demands of Alternative 1. According to the City, the pump station was originally constructed with these upgrades in mind, and therefore would only require minimal improvements to pumps and electrical equipment. Connection to the LOTT and City lines would not require building new off-site sewer lines from the Project Site. Construction would only occur in public rights-of-way or on-site. Impacts associated with utility connections in the right-of-ways (ROWs) are discussed in **Section 3.15**. If reclaimed water is utilized, wastewater discharge could be reduced to 76,915 gpd. Additional off-site infrastructure would be required to connect with the 16-inch reclaimed water line in Main Street NE and/or Gateway Boulevard NE which is discussed further in **Section 3.15**. Mitigation recommended in **Section 4** includes the negotiation of a service agreement with the City and LOTT to provide payment for wastewater treatment service and for any distribution infrastructure improvements necessary to provide service to the Project Site. Impacts would be less than significant with mitigation. This agreement is anticipated in the Cooperation Agreement discussed in **Section 1.5.1**.

As with water service, any on-site wastewater utilities proposed under Alternative 1 would be designed to only serve the proposed development and would not result in any off-site growth inducement. The provision of wastewater service is consistent with long-standing land use planning for the Lacey Gateway Town Center area. Impacts would be less than significant with mitigation.

Under Wastewater Treatment Option 2 there would be no connection to a public wastewater treatment system and thus no direct impact. Potential impacts related to on-site wastewater disposal are discussed in **Section 3.7.3**.

Solid Waste Service

Solid waste from construction would be typical of other construction sites and would be brought to the WARC and transferred to the Roosevelt Regional Landfill. Solid waste generated from the construction of Alternative 1 would be temporary, and therefore would not impact Roosevelt Regional Landfill's long-term capacity to serve its current customers.

Solid waste would be generated from Alternative 1 once operation begins. The estimated solid waste generated by Alternative 1 during operation at full capacity is shown in **Table 3.13-3**. Alternative 1 would produce up to 14,063 lb. or 7.0 tons of solid waste per day. This would equate to approximately 2,567 tons per year or a 1.1% increase of the estimated annual tonnage for the City in 2025. This increase in the City's solid waste stream and, subsequently for Roosevelt Regional Landfill, would not exceed either facility's capacity. Furthermore, BMPs have been incorporated into Alternative 1 to reduce the solid wastes stream (see **Table 2.1-9**).

Table 3.13-3: Solid Waste Generation from Alternative 1

Waste Generation Source	Waste Generation Rate	Units	Alternative 1 Values	Alternative 1 Waste Generation (lb/day)*
Apartments	5.31	lb/unit/day	300	1,593
Theater	3.12	lb/100 sf/day	41,200	1,285
Entertainment Center	3.12	lb/100 sf/day	17,500	546
Retail	0.006	lb/sf/day	541,740	3,250
Grocery	0.006	lb/sf/day	130,000	780

Waste Generation Source	Waste Generation Rate	Units	Alternative 1 Values	Alternative 1 Waste Generation (lb/day)*
Office	0.006	lb/sf/day	30,000	180
Hotel*	2	lb/room/day	200	400
Golf Entertainment Facility	3.12	lb/100 sf/day	55,500	1,732
Car Dealership	0.9	lb/100 sf/day	30,000	270
Travel Center	0.9	lb/100 sf/day	31,000	279
Restaurants	3.12	lb/100 sf/day	87,060	2,716
Bowling Alley	3.12	lb/100 sf/day	30,500	952
Live/Work Units	4	lb/unit/day	20	80
			Total	**14,063**

Source: CalRecycle, 2019

* The solid waste numbers estimated predict the worst-case scenario because they assume maximum occupancy of the hotel.

If Wastewater Treatment Option 2 is selected, the on-site wastewater treatment plant would produce Class B biosolids that would require disposal approximately every two years. As shown in **Table 2.1-6**, approximately 1,800 gpd of sludge would be retained on average. After thickening and drying, approximately 193 gpd of biosolids would be produced that would require disposal. Since the biosolids would be treated to Class B standards, they can be disposed of at landfills without restrictions. The quantity of biosolids requiring disposal would be a minimal contribution to the existing solid waste stream at Roosevelt Regional Landfill. Therefore, construction and operation of Alternative 1 would not result in a significant adverse effect to solid waste services.

Electricity and Natural Gas

As described in **Section 2.1.8**, all buildings would be built to meet or exceed the standards set forth in the Nisqually Tribal Building Codes, which are generally consistent with the IBC and related codes, including electrical, energy, and safety. There is existing electrical infrastructure in the vicinity of the Project Site that can be extended to the Project Site. As described in **Section 2.1.5**, a high-pressure gas line and gate station are proposed near the Project Site. As indicated in **Table 2.1-9**, the Tribe will use electric boilers and appliances in lieu of natural gas or propane units to the greatest extent practicable. While this would reduce potential natural gas demands, some natural gas may still be needed during operation of Alternative 1; therefore, a service line extension to the Project Site may be needed. The Tribe would coordinate with PSE regarding the extension of electrical and natural gas services to the Project Site. The Tribe would pay the cost associated with extending services to the Project Site per PSE specifications and thus there would be a less-than-significant impact. Impacts associated with the off-site utility connections are discussed in **Section 3.15**.

Alternative 2 – Recreation-Heavy Mixed-Use Development

Alternative 2 would result in similar impacts to utilities as described for Alternative 1 above, but would vary somewhat due to different development components (e.g., less commercial development, more recreational facilities). The impacts of Alternative 2 on telecommunication, electrical, and gas services would be similar to Alternative 1 and less than significant. For water and wastewater services, no direct

impacts to public utilities would occur if the on-site options are implemented. Other potential impacts related to groundwater pumping and wastewater disposal are addressed in **Section 3.7.3**. If the off-site water and wastewater service options are selected, public utility impacts would be similar but greater than Alternative 1. As specified in **Appendix B** Section 2.2, the City has capacity to serve Alternative 2 for water supply and the City and LOTT can wastewater treatment service similar to Alternative 1. After implementation of the mitigation measures in **Section 4** that would require service agreements for water supply and wastewater treatment, Alternative 2 would have a less-than-significant impact.

Solid waste generated from construction of Alternative 2 would be similar to Alternative 1 and disposed of in a similar manner. Solid waste generated from the construction of Alternative 2 would be temporary, and therefore would not impact Roosevelt Regional Landfill's long-term capacity to serve its current customers. The estimated solid waste generated by operation of Alternative 2 is shown in **Table 3.13-4** and is approximately 11% lower than Alternative 1. Similar to Alternative 1, the increase in solid waste production would be negligible with BMPs in place to reduce solid waste; therefore, construction and operation of Alternative 2 would not result in a significant effect to the solid waste stream.

Alternative C – No Action Alternative

Alternative C would not increase demands on utilities and therefore no new utility extensions would be required.

Reasonably Foreseeable Cumulative Effects Analysis

As there would be no direct impacts to public water and wastewater utilities under the private on-site water supply and wastewater treatment options, the following discussion applies only to Option 1 Off-Site Water Supply and/or Off-site Wastewater Treatment.

Table 3.13-4: Solid Waste Generation from Alternative 2

Waste Generation Source	Waste Generation Rate	Units	Alternative 1 Values	Alternative 1 Waste Generation (lb/day)*
Apartments	5.31	lb/unit/day	300	1,593
Theater	3.12	lb/100 sf/day	50,200	1,566
Entertainment Center	3.12	lb/100 sf/day	10,375	324
Retail	0.006	lb/sf/day	138,000	828
Grocery	0.006	lb/sf/day	30,000	180
Office	0.006	lb/sf/day	30,000	180
Hotel[1]	200	lb/room/day	200	400
Golf Entertainment Facility	3.12	lb/100 sf/day	55,500	1,732
Car Dealership	0.9	lb/100 sf/day	10,000	90
Convenience Store	0.9	lb/100 sf/day	10,000	90
Restaurants	3.12	lb/100 sf/day	85,425	2,665
Indoor Recreation	0.007	lb/sf/day	200,000	1,400

Waste Generation Source	Waste Generation Rate	Units	Alternative 1 Values	Alternative 1 Waste Generation (lb/day)*
School/ Athletic Complex	0.007	lb/sf/day	30,000	420**
Bowling Alley	3.12	lb/100 sf/day	29,500	920
Live/Work Units	4	lb/unit/day	20	80
			Total	**12,468**

Source: CalRecycle, 2019

[1]The solid waste numbers estimated predict the worst-case scenario because they assume maximum occupancy of the hotel.

[2]To account for the participation at the athletics complex from the students and public, the solid waste generated by the school (210 lb/day) was doubled.

The estimated combined water supply and wastewater service demands for the project alternatives and the proposed Casino-Resort Project alternatives are shown in **Table 3.13-5** and **Table 3.13-6**, respectively. As the Project Site and Casino-Resort Property are within the City's water system boundary and corporate boundary, the development of these sites has been anticipated in the City's water system plan and general sewer plan. The project alternatives and Casino-Resort Project would generate an amount of solid waste similar to development of the sites envisioned under full buildout of the Lacey Gateway Town Center. Therefore, development on the Project Site in combination with other cumulative development would not result in significant cumulative effects to water, wastewater, or solid waste services.

Future development projects, such as the proposed Casino-Resort Project, would be required to mitigate their own utility impacts, including negotiating a service agreement or equivalent to compensate for utility services, such as electricity, gas, and telecommunications. Therefore, development on the Project Site in combination with other cumulative development would not result in significant cumulative effects to other public utilities.

Table 3.13-5: Total Cumulative Average Daily Water Demands (gpd)

Quiemuth Casino-Resort Project	Alternative 1	Alternative 2
Alternative A	598,659	729,197
Alternative B	541,589	672,127
Alternative C	521,119	651,657

Source: **Appendix C**

Note: All numbers in the above table assume year-round irrigation associated with reclaimed water use. Without year-round irrigation, average daily volumes are reduced by 102,200 gpd for the scenarios with Alternative 1 and 168,700 gpd for the scenarios with Alternative 2.

Table 3.13-6: Total Cumulative Average Daily Wastewater Flows (gpd)

Quiemuth Casino-Resort Project	Alternative 1	Alternative 2
Alternative A	363,544	397,112
Alternative B	321,579	355,147
Alternative C	307,904	341,472

Source: **Appendix C**

3.14 VISUAL RESOURCES

3.14.1 Regulatory Setting

The visual resources regulatory setting is summarized in **Table 3.14-1**, and additional information on the regulatory setting can be found in **Appendix F.**

Table 3.14-1: Regulatory Policies and Plans Related to Visual Resources

Regulation	Description
State	
Washington State Scenic Byway Designation Program	▪ Corridors within the scenic and recreational highway system that showcase the state's historic agricultural areas and promote the maintenance and enhancement of agricultural areas may be designated as agricultural scenic corridors.
Local	
City of Lacey Comprehensive Plan	▪ The 2016 City of Lacey Comprehensive Plan was prepared in compliance with the GMA and is intended to present a clear vision for future growth within the City over a twenty-year planning horizon. ▪ Designates the Project Site for commercial and business uses. ▪ Encourages a high-quality design aesthetic for new development within the City's jurisdiction.
City of Lacey Zoning Ordinance	▪ Section 16.37.070 of the City's Municipal Code includes development standards for the Project Site's zoning designations of HPBD-BC and HPBD-C.

3.14.2 Environmental Setting

The terrain of the Project Site is somewhat sloped in elevation reaching 235 feet amsl at its highest near the eastern Project Site boundary and sloping downward to its lowest near the western Project Site boundary at 165 feet amsl. The general topography of the Project Site can be seen in **Figure 17**.

The Project Site is visible from multiple vantage points along local roadways and I-5, which are generally represented by the viewpoints identified in **Figure 23** and described in **Table 3.14-2**.

The Project Site is visible from I-5 to the south, Britton Parkway NE to the north, Marvin Road NE to the east, and Gateway Boulevard NE and Marvin Road NE which bisect the Project Site. The Project Site is visible from residential and commercial areas to the south, north, and west, and light industrial areas to the east. Existing views of the Project Site from nearby sensitive residential receptors (notably the residential area to the northwest and apartment complex adjacent to the western Project Site boundary) are almost entirely obstructed by large trees. Views of the Project Site from the residential area south of I-5 are obscured by existing commercial uses and barriers along I-5.

Designated scenic highways and roadways do not occur within viewing range of the Project Site. Scenic resources that can be viewed from the Project Site include long-distance views of Mount Rainier and the Cascade Range. Views of the Project Site from the surrounding vicinity consist of either forested or deforested land, undeveloped property with sparse, weedy vegetation, surrounded by scattered commercial and industrial developments, roadways, and open space.

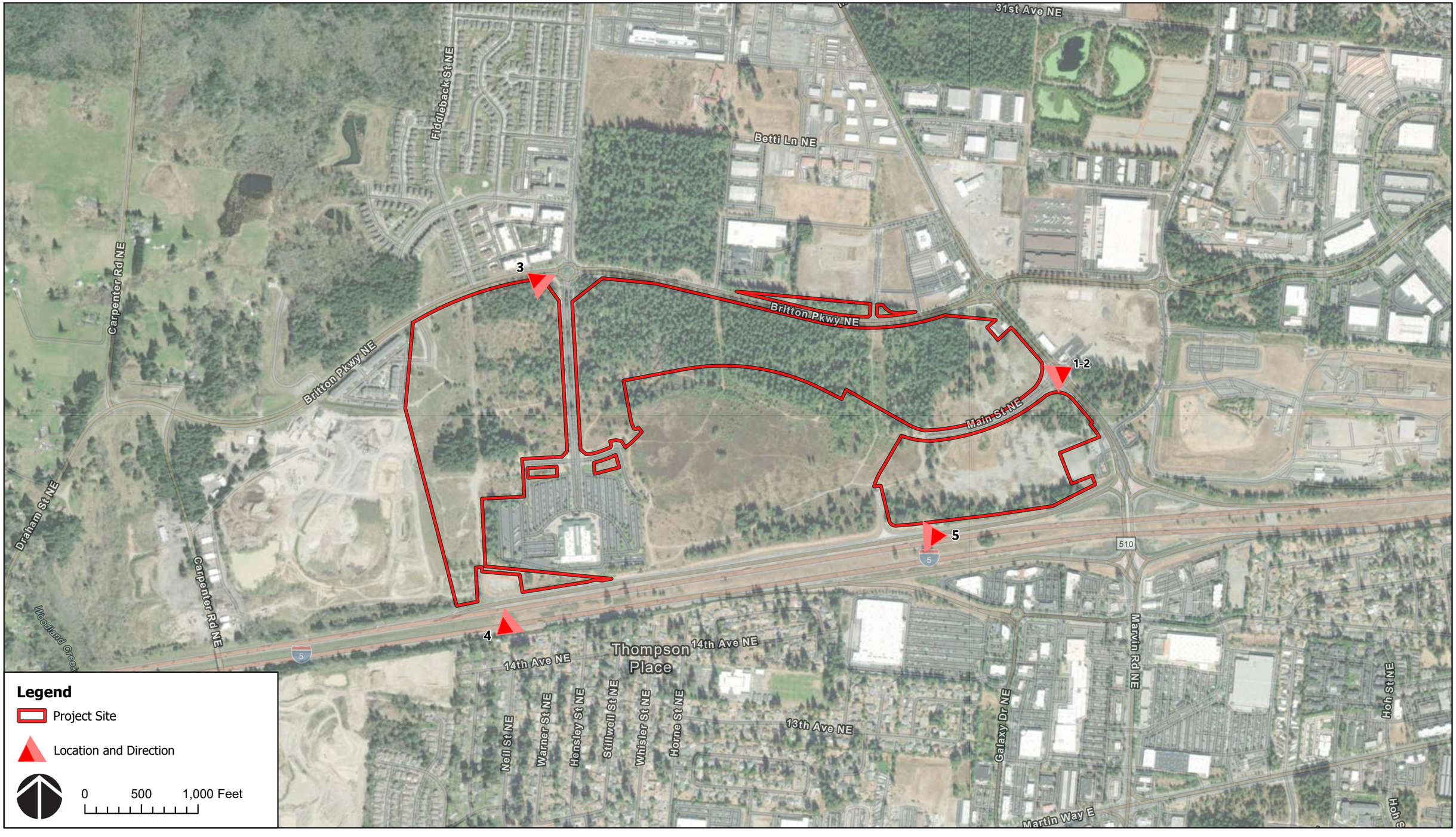


FIGURE 23

RENDERING LOCATION

Table 3.14-2: Vantage Points for Project Site

Vantage Point	Description of View from Vantage Point
Northeast View 1 Aerial	Aerial view experienced from Marvin Road near the intersection of Main Street NE, facing west toward the Project Site. Existing driveways with a landscaped median and a pedestrian sidewalk dominate the foreground, and mature trees and undeveloped land dominate the background. The existing Cabela's is visible in the background.
Northeast View 2	Ground view experienced from Marvin Road between Britton Parkway and I-5, facing west toward the Project Site. Road closure signs on Main Street NE, existing driveways with landscaped medians, and a pedestrian sidewalk dominate the foreground and mature trees with an open clearing dominate the background.
Northwest View 3	View experienced from Britton Parkway directly north of the existing Cabela's, facing southeast toward the Project Site. An existing traffic circle dominates the left side of the foreground, and a pedestrian sidewalk dominates the right side of the foreground. Landscaped areas exist between the roadway and sidewalk. Mature trees dominate the background.
Southwest View 4	View experienced from I-5 directly south of the existing Cabela's, facing northeast toward the Project Site. A multi-lane highway with a vegetated median dominates the foreground, and the existing Cabela's dominates the background. Mature trees are visible intermittently throughout the background.
Southeast View 5	View experienced from I-5 near the Marvin Road southbound freeway on-ramp, facing northwest toward the Project Site. A multi-lane highway and mature trees dominate the foreground and the background.

Due to the urban setting of the Project Site, sources of light in the vicinity are numerous. Light sources include traffic on I-5 and adjacent roadways, as well as surrounding development such as commercial and residential land uses.

3.14.3 Impacts

Alternative 1 – Commercial-Heavy Mixed-Use Development

Operational Impacts

The proposed facilities for Alternative 1 are described in **Section 2.1**, including architectural design, signage, lighting, and other visible features. Alternative 1 would substantially alter the visual character of the Project Site by converting a vacant disturbed site with forested areas and weedy vegetation to a mix of commercial, retail, office, housing, and recreational land uses in addition to ancillary infrastructure and facilities and decorative landscaping. The architecture would be contemporary with exterior colors that include warm tans and grays that are consistent with the other commercial development in the surrounding vicinity of the Project Site. Renderings of Alternative 1 compared to existing conditions are provided in **Figure 24** and **Figure 25**.

In general, views of the undeveloped Project Site adjacent to I-5 would change to views of more modern commercial development, which is consistent with the future uses of the Project Site and vicinity as identified in the City's Comprehensive Plan and zoning ordinance. Alternative 1 would not impede or obstruct scenic views because no scenic highways, roadways, or resources occur within viewing range of the Project Site. Development of Alternative 1 would complement existing and planned retail/commercial developments along the I-5 corridor.

FIGURE 24

CUMULATIVE RENDERINGS - ALTERNATIVE 1 ONLY

FIGURE 25

CUMULATIVE RENDERINGS - ALTERNATIVE 1 ONLY

There are several sensitive receptors in the vicinity that have direct views of the Project Site, including an apartment complex on the western boundary and high-density residential across Britton Parkway NE to the northwest. The configuration of the apartment complex on the western Project Site boundary has rows of surface parking as well as garages between the apartments and the site; the parking facilities in addition to the landscaping with trees would serve as a buffer to reduce visual impacts to the neighboring apartment complex. Similarly, vegetation within the Britton Parkway NE corridor as well as trees that would be part of the landscaping along the northern edge of the proposed development would shield views of the Project Site from the residential area to the north. Therefore, Alternative 1 would not result in adverse effects associated with visual resources.

Lighting, Shadow, and Glare

Alternative 1 would introduce new sources of light to the Project Site for aesthetic and security purposes at the facility, throughout the parking areas, and along the new internal streets. As described in **Section 2.1**, the exterior lighting of Alternative 1 would be integrated into components of the architecture and would be strategically positioned to minimize off-site lighting and any direct sight lines to the public. Illuminated signs would be designed to blend with the light levels and colors of the building and landscape. New streetlight along the internal roadways would be similarly designed to minimize off-site lighting and any direct sight lines to the public. The lighting associated with the Alternative 1 would constitute an increase over the existing ambient light levels on the Project Site; however, the lighting would be consistent with the surroundings, and Alternative 1 would include shielded and filtered lighting as described in the BMPs listed in **Table 2.1-9**. Impacts associated with lighting would be less-than-significant.

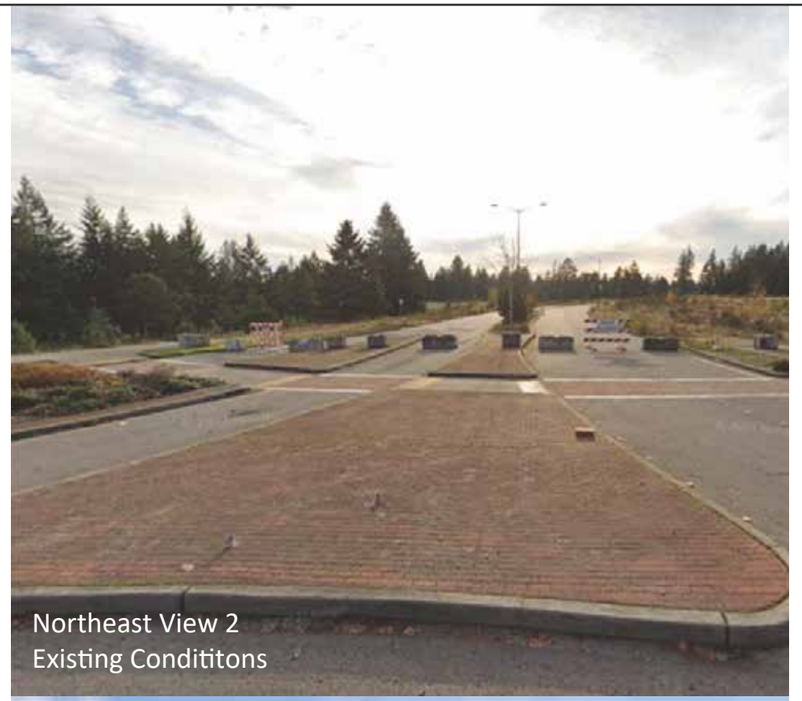
The materials used for the exterior façades of various project components along the I-5 corridor could cause glare that would be disruptive to vehicle traffic on I-5. The FHWA provides best practices regarding the design of structures built near highways, including the use of low-sheen and non-reflective surface materials, which have been incorporated into the project BMPs listed in **Table 2.1-9** for all structures visible from I-5. Therefore, impacts from glare would be less than significant.

Alternative 2 – Recreation-Heavy Mixed-Use Development

Effects on viewsheds surrounding the Project Site under Alternative 2 would be similar to those discussed under Alternative 1 but reduced due to the reduced size of the proposed development. Similar land uses along the I-5 corridor would require the BMPs listed in **Table 2.1-9** to minimize impacts due to the potential for glare to passing motorists. The increased recreational opportunities, parks, and open space along the western and northern boundaries of the Project Site would further minimize the potential for visual impacts to existing off-site residential developments. Alternative 2 would not interrupt or substantially alter local views and would not create any sources of glare with implementation of the BMPs listed in **Table 2.1-9**. As described in **Appendix B** Section 2, the athletic complex would have nighttime sporting lighting, but this lighting would be shielded, downcast, and directed away from Britton Parkway NE and surrounding residences. Furthermore, sporting events are not expected to regularly go past 10 p.m. For other sources of lighting on the Project Site, BMPs listed in **Table 2.1-9** would reduce their potential adverse nighttime illumination effects. Therefore, Alternative 2 is not expected to produce excessive nighttime illumination. Visual impacts would be less than significant.

Alternative 3 – No Action Alternative

Under Alternative 3, the Project Site would remain under City jurisdiction and no development would occur. Therefore, visual resource impacts would not occur under this alternative.



This rendering illustrates Alternative 1 and the Nisqually Quiemuth Casino-Resort and Fee-to-Trust Project. Please refer to Section 3.1 for more information about this cumulative project.

FIGURE 26

CUMULATIVE RENDERINGS - ALTERNATIVE 1 PLUS GAMING PROJECT

This rendering illustrates Alternative 1 and the Nisqually Quiemuth Casino-Resort and Fee-to-Trust Project. Please refer to Section 3.1 for more information about this cumulative project.

FIGURE 27

CUMULATIVE RENDERINGS - ALTERNATIVE 1 PLUS GAMING PROJECT

Reasonably Foreseeable Cumulative Effects Analysis

The proposed Casino-Resort Project that is directly adjacent to the Project Site in combination with the project alternatives would contribute to changes to the visual setting of the project area. Renderings of Alternative 1 in combination with the proposed Casino-Resort Project as compared to existing conditions are provided in **Figure 26** and **Figure 27**. As discussed above, the proposed land uses within the Project Site, as well as within the proposed Casino-Resort Property, are generally consistent with the scale of commercial development envisioned in local planning documents and visually cohesive with other developing uses in the vicinity. No significant cumulative impacts to scenic views or features would occur.

3.15 EFFECTS OF OFF-SITE IMPROVEMENTS

3.15.1 Improvements

Implementation of the project alternatives would involve the construction of off-site access improvements and traffic mitigation and may involve off-site improvements for the extension of water supply, wastewater collection and/or electrical and natural gas utilities to the Project Site. All off-site improvements would take place within land owned by the Tribe, or dedicated rights-of-way held by the City, WSDOT or County consisting of previously disturbed areas and roadways devoid of habitat for wildlife, fish, or native plants. Once construction is complete, the pipeline/utility corridors and infrastructure pads will be repaved and restored to pre-existing conditions. Adherence to federal and state environmental regulations during construction of the improvements would avoid any potentially significant indirect effects from off-site improvements. Access Improvements and Traffic Mitigation.

Off-site access improvements are described in **Section 2.1.7** and shown in **Figure 10**, and traffic mitigation is listed in **Section 4**. A brief description is as follows:

- **Off-Site Access Improvements:** 1) An extension of Main Street NE from its current termination point in the east to join a new onsite roadway that eventually connects to the existing Gateway Boulevard NE and Main Street NE in the west. Part of this new roadway connection would go through the adjacent Nisqually owned property; and 2) A new intersection on Main Street NE in the eastern part of the Project Site that would join Driveway D to connect to Access 3.
- **Traffic Mitigation**:
    - Access Intersection 6: Installation of a roundabout in place of the two-way stop-controlled existing traffic control at Eastern Parkway NE/Britton Parkway NE with the northbound approach serving as the Project Site access.
    - Access Intersection 11: Restrict the northbound and southbound left movements at the existing two-way stop-controlled intersection at Britton Parkway NE/Western Parkway NE with the northbound approach serving as Project Site access. For example, this could be achieved by adding hard channelization at the center of the Britton Parkway NE (e.g., raised median or c-curb) or by adding a half pork chop at the Western Parkway NE driveway to restrict left turns out of the driveway with signage also installed to convey “right turn” only at the driveway

Optional Off-site Water, Wastewater and Energy Infrastructure Improvements

Implementation of the project alternatives may involve improvements to off-site water supply, wastewater collection, and energy infrastructure. Detailed descriptions of potential off-site water supply

and wastewater improvements are provided in **Appendix B** Sections 1.2 and 1.3, respectively, and the locations of the potential improvements are shown in **Figure 6.**

3.15.2 Effects

Biological Resources

The proposed off-site access improvement areas, and anticipated traffic mitigation and utility improvements, would take place entirely within either 1) previously disturbed areas, including dirt roadways, paved roadways and road shoulders, or 2) land owned by the Tribe that has been included within the study area for biological resources addressed within the Biological Assessments and memorandum include in **Appendix I** (as such, these areas have been subject to recent surveys for biological resources, including special status species and wetlands). These areas do not contain sensitive habitat, Critical Habitat, EFH, or WOTUS. Once construction is complete, disturbed areas will be paved or revegetated to prevent erosion. Transportation improvements and utility improvements will result in no net loss of habitat and will not result in adverse impacts to biological resources. Impacts to sensitive biological resources would be less than significant.

Cultural Resources

As described in **Section 3.4.2**, background research, Tribal consultation and archaeological surveys of the off-site access improvement areas that would extend through property owned by the Tribe were conducted in 2006 and 2021; the cultural resources studies are bound under separate cover as **Confidential Appendix J-1**. These efforts failed to identify historic properties (i.e., resources eligible for listing on the NRHP. Additionally, it is anticipated that traffic mitigation and off-site utility improvements would occur within previously disturbed areas, and therefore the potential for encountering intact cultural resources would be low. It is possible that resources could be uncovered during construction of roadway improvements. For this reason, mitigation measures for the treatment of as-yet unidentified cultural resources have been included in **Section 4** and would reduce adverse effects on cultural resources to less-than-significant levels.

Hydrology, Water Quality, Geology and Soils

The increase of impervious surfaces and additional cut and fill embankments from off-site improvements could result in an increase in surface water runoff and erosion of soils that could affect water quality and soil resources. In accordance with the federal CWA, off-site improvements would be required to comply with the NPDES Construction General Permit Program. To comply with the program, a SWPPP would be developed that would include soil erosion and sediment control practices to reduce the amount of exposed soil, prevent runoff from flowing across disturbed area, slow runoff from the site, and filter sediment from the runoff. With standard construction practices and specifications required by the NPDES permit program, and local requirements, including the City of Lacey Municipal Code Chapter 14.27, which includes provisions intended to manage stormwater runoff from construction and development sites, and WSDOT *Temporary Erosion and Sediment Control Manual* (WSDOT, 2019b), the off-site roadway improvements or utility trenching would result in less-than-significant effects associated with erosion and water quality during construction.

Stormwater collection and detention facilities will be designed and installed in accordance with applicable local requirements, including the City's Municipal Code Chapter 14.27, which includes provisions intended to control stormwater runoff generated by development, redevelopment, construction sites, or

modifications to existing stormwater systems, or the WSDOT *Highway Runoff Manual* (WSDOT, 2019a) to accommodate the increase in impervious surfaces resulting from the off-site roadway improvements or utility trenching. With incorporation of these drainage features, effects to water quality and geology and soils would be less than significant.

Other Values

Construction of the off-site roadway improvements or utility trenching could potentially result in noise, hazardous materials, potential temporary disruptions to public utilities and visual effects. Construction would adhere to local requirements, such as Section 16.57.030 of the City's Municipal Code, which includes provisions related to noise in order to protect public health and general welfare, Chapter 173-60 of the Washington Administrative Code, which includes maximum environmental noise levels, and Chapter 446 of the WSDOT Environmental Manual, which is intended to minimize and avoid noise impacts (Chapter 446 of WSDOT, 2022). Lane or shoulder closures or disruptions in public utilities would be temporary. Hazardous materials would be handled in accordance with federal, state and local regulations. Visual effects associated with off-site improvements would be consistent with the visual components of surrounding commercial development. Therefore, indirect effects resulting from off-site improvements would be less-than-significant.

Section 4 | Mitigation Measures

NEPA requires that, if a project would have significant adverse effects on the environment, mitigation for those impacts must be identified. Mitigation consists of the following:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments (40 CFR Section 1508.20).

Mitigation measures to be implemented during construction and operation of the alternatives are summarized below. All mitigation is enforceable because it is (1) inherent to the project design; and/or (2) required by federal or tribal regulations.

Resource Area	Proposed Mitigation	Alternative
Water Resources (WR)	WR-1. The following measures are recommended to prevent impacts to Woodland Creek: A. If the Tribe chooses to develop a groundwater well on the Project Site to provide water for the development alternative, the Tribe shall first develop a test well to determine if a well can provide an adequate and sustainable yield without significant impacts to Woodland Creek and its tributaries and neighboring wells. A hydrogeologic study shall be conducted to evaluate the hydraulic connectivity with the applicable aquifer to assess potential impairment to Woodland Creek and neighboring wells to determine mitigation needs. B. If the hydrogeologic study determines that the streamflow of Woodland Creek and/or its tributaries would be impaired or depleted by use of the Tribe's groundwater well on the Project Site, a mitigation program shall be drafted and adopted by the Tribe to offset any associated losses in the streamflow of Woodland Creek and/or its tributaries. Options to offset the adverse effects of the Tribe's groundwater withdrawal include, but are not limited to, the use of reclaimed water, purchase of additional water rights, or fair share payments towards groundwater offset projects within the Woodland Creek Subbasin, such as the Hicks Lake Stormwater Retrofit or Managed Aquifer Recharge Project included in the WRIA 13 Watershed Restoration and Enhancement Plan. C. If the hydrogeological report determines a significant impact to the groundwater supply of neighboring wells due to drawdown effects, a mitigation program shall be drafted and adopted by the Tribe to offset any potential water supply losses to the neighboring well. Options to offset the adverse effects of the Tribe's groundwater withdrawal include, but are not limited to, the use of reclaimed water, purchase of additional water rights, or fair share payments towards groundwater offset projects within the vicinity of the impacted well(s).	1, 2 Water Supply Option 2

Resource Area	Proposed Mitigation	Alternative
	D. No well shall be installed on the Project Site within 2,700 feet of the City of Lacey's Betti Well. **WR-2. The following measures are recommended to prevent groundwater quality impacts related to the use of on-site reclaimed water infiltration:** A. If the Tribe selects Wastewater Treatment Option 2, resulting in on-site treated effluent discharge, the Tribe shall develop a comprehensive groundwater monitoring plan during final design of the wastewater treatment plant. The monitoring plan shall include: a. Tracer studies to evaluate subsurface groundwater flow patterns from the proposed infiltration area. b. Installation of groundwater monitoring wells at the property boundary and, if feasible, off-site locations with property owner permission. c. Baseline groundwater sampling and regular monitoring for constituents associated with reclaimed water. B. The effluent discharge location shall be subject to a site-specific hydrogeologic study to determine infiltration feasibility, contaminant attenuation, and aquifer connectivity. If the study identifies potential groundwater migration pathways toward the City's Betti Well or other potable water sources, the Tribe shall modify the infiltration design or incorporate additional treatment measures to prevent groundwater degradation. C. If groundwater monitoring results indicate that infiltration of reclaimed water is causing or is likely to cause exceedance of groundwater quality standards under Chapter 173-200 WAC, the Tribe shall implement enhanced treatment technologies—such as ozone, activated carbon filtration, or reverse osmosis—targeted at the specific contaminants of concern.	
Biological Resources (BIO)	BIO-1. The following avoidance and minimization measures will be implemented during construction activities to avoid or minimize potential adverse impacts to federally and state protected species, and other migratory nesting birds. A. Prior to construction, the Tribe shall retain a qualified biologist to conduct an informational meeting to educate all construction staff on the pocket gophers, marbled murrelet, streaked horned lark, and nesting migratory birds. This will include a description of habitat needs, status of the species, and the following measures below. B. Preconstruction mound surveys for Yelm pocket gophers shall be conducted between June and October by a qualified biologist who has received training from WDFW or USFWS in Mazama pocket gopher survey protocols. If no occupied pocket gopher habitat is identified, then no further action is necessary. C. In the highly unlikely event that a survey shows occupied pocket gopher habitat within the Project Site, as determined by WDFW or USFWS training protocols, then a habitat protection area shall be established according to consultation with USFWS. Width to length ratio of the habitat protection area shall be maximized so that large, contiguous patches are protected. Long, narrow corridors shall be	1,2

Resource Area	Proposed Mitigation	Alternative
	avoided as habitat protection areas. Multiple habitat protection areas may be appropriate or necessary to allow development. Access to the habitat protection area shall be restricted. No construction shall occur in habitat protection areas. A detailed list of species management recommendations from the WDFW for Mazama pocket gophers is found in **Appendix I-1**, Attachment E, these will be followed in the unlikely event pocket gophers are found on site. D. If tree removal is to occur within the mixed conifer-hardwood forest habitat, a preconstruction survey for western gray squirrel shall be conducted by a qualified biologist. E. In the highly unlikely event that a western gray squirrel nest is observed, a 50-foot no cut buffer shall be established around each nest tree. A 400-foot no disturbance buffer shall be established for all active nest trees during the breeding season (March 1 to September 20). Nests shall be documented and flagged. BIO-2. The following measures are recommended to avoid and/or reduce impacts to potentially nesting migratory birds and other birds of prey in accordance with the federal MBTA. A. Tree clearing and removal of vegetation shall occur outside the bird nesting season (February 15 to September 15) to the extent feasible. B. If tree removal or trimming of vegetation and trees cannot avoid the bird nesting season, a qualified wildlife biologist shall conduct a pre-construction nesting survey within 7 days prior to the start of such activities or after any construction breaks of 14 days or more. Surveys shall be performed for the Project Site and suitable habitat within 250 feet of the Project Site in order to detect any active passerine (perching bird) nests and within 500 feet of the Project Site to identify any active raptor (bird of prey) nests. C. If active nests are identified during the pre-construction bird nesting surveys, the wildlife biologist shall place species- and site-specific no-disturbance buffers around each nest. Buffer size would typically be between 50 and 250 feet for passerines and between 300 and 500 feet for raptors (birds of prey). These distances may be adjusted depending on the level of surrounding ambient activity (i.e., if the Project Site is adjacent to a road or community development) and if an obstruction, such as a building structure, is within line-of-sight between the nest and construction. For bird species that are federal sensitive species (i.e., fully protected, endangered, threatened, species of special concern), a Project representative, supported by the wildlife biologist, shall consult with the USFWS regarding modifying nest buffers. The following measures shall be implemented based on their determination: a. If construction would occur outside of the no-disturbance buffer and is not likely to affect the active nest, then construction may proceed. However, the biologist should be consulted to determine if changes in the location or magnitude of construction activities could affect the nest. b. If construction may affect the active nest, the biologist and a Project representative shall consult with USFWS and/or WDFW, dependent on regulatory status, to develop alternative actions	

Resource Area	Proposed Mitigation	Alternative
	such as modifying construction, monitoring of the nest during construction, or removing or relocating active nests. D. Any birds that begin nesting within the Project Site and survey buffers amid construction activities shall be assumed to be habituated to construction-related or similar noise and disturbance levels and minimum work exclusion zones of 25 feet shall be established around active nests in these cases.	
Cultural Resources (CR)	CR-1. The following measures are recommended to avoid or reduce potential impacts to previously unknown archaeological and historical resources that may exist on the Project Site: A. In the event of any inadvertent discovery of prehistoric or historic archaeological resources during construction-related earth-moving activities, all such finds shall be subject to Section 106 of the National Historic Preservation Act as amended (36 CFR 800). Specifically, procedures for post-review discoveries without prior planning pursuant to 36 CFR 800.13 shall be followed. Work within 50 feet of the find shall be halted until a professional archaeologist meeting the Secretary of the Interior's qualifications (36 CFR 61), or paleontologist if the find is of a paleontological nature, can assess the significance of the find in consultation with the THPO), BIA, and/or other appropriate agencies. If any find is determined to be significant by the archaeologist or paleontologist, a THPO representative shall meet with the archaeologist or paleontologist to determine the appropriate course of action, including the development of a Treatment Plan and implementation of appropriate provisions, if necessary. All significant cultural or paleontological materials recovered shall be subject to scientific analysis, professional curation, and a report prepared by the professional archaeologist or paleontologist, according to current professional standards. B. If human remains are discovered during ground-disturbing activities on Tribal lands, the THPO and BIA shall be contacted immediately. No further disturbance shall occur until the THPO and BIA representative have made the necessary findings as to the origin and disposition. If the remains are determined to be of Native American origin, the provisions of the Native American Graves Protection and Repatriation Act shall apply.	1,2
Noise (NOI)	NOI-1. The following mitigation measures are recommended for reducing potential construction noise and vibration impacts to sensitive receptors: A. Loud stationary construction equipment shall be located as far away from residential receptor areas as feasible. To the extent feasible, existing barrier features (structures) shall be used to block sound transmission between noise sources and noise sensitive land uses. B. Construction equipment and machinery that produce reduced noise levels shall be utilized to the extent feasible. C. The Tribe shall monitor construction noise and vibration and will designate a disturbance coordinator (such as an employee of the general contractor or the project manager for the Tribe), post the coordinator's contact telephone number conspicuously around the Project Site, and provide the number to nearby sensitive receptors. The disturbance coordinator shall receive all public complaints, be	1, 2

Resource Area	Proposed Mitigation	Alternative
	responsible for determining the cause of the complaints, and implement any feasible measures to alleviate the problem. D. The use of vibrational construction equipment shall be restricted such that vibration levels will not exceed 90 VdB at apartment complexes adjacent to the Project Site. Should any vibrational construction equipment be required that results in vibration decibel levels that would exceed 90 VdB at the adjacent apartment complexes, a buffer or set back will be utilized.	
Transportation and Circulation (TR)	TR-1. The following mitigation measure is recommended for public transport: A. The Tribe shall work with Intercity Transit to provide adequate and safe public transportation to and from the Project Site as needed. This may include contracting Intercity Transit vanpools for employees, establishing shuttles to serve patrons/employees, and increasing the quantity of buses serving Route 65 during peak times. B. The Tribe shall implement the regional Commute Trips Reduction (see **Appendix H** for additional details) programs already in place in the County, including employee trip reductions programs, employee shuttles and other similar means of achieving commute trip reduction. TR-2. The following mitigation measure is recommended to reduce vehicle trips generated by the Proposed Project at study area intersections: A. The Tribe shall work with the City to develop and implement a robust Transportation Demand Management (TDM) Plan to reduce and manage trips in the vicinity of the Project Site. Potential measures to be included in the TDM Plan could include the following: a. Install commuter information centers in multiple locations where appropriate. b. Construct infrastructure improvements related to the transit, bike, and pedestrian environment. c. Provide weather-protected bicycle storage and amenities. d. Provide onsite commuter shower and locker facilities for onsite employees. e. Prioritize parking for carpool and vanpool parking. f. Provide or require tenants to offer transit pass subsidy to onsite employees. g. Provide shuttle services to the Project Site. h. Provide shared vehicle/bicycle fleets for tenant use. i. Offer incentive for onsite employee commuters who bicycle or walk to work. j. Allow flexible working hours for employees to avoid peak commute times. B. The TDM Plan will include a process for monitoring, reporting, and compliance to ensure that plan elements are being implemented correctly. The requirements of the TDM plan shall be specified in any lease agreements between the Tribe and third parties for development within the Project Site. TR-3. The following mitigation measure is recommended for Marvin Road NE/I-5 Southbound Ramp (Alternative 1 only):	1, 2

Resource Area	Proposed Mitigation	Alternative
	A. Adjust the proposed land uses to reduce trip generation by approximately 5 percent, which is the reduction needed to improve LOS conditions at this intersection to acceptable operating conditions under the Year 2027 Combined Development traffic scenario, which is the only traffic scenario in which LOS conditions are forecast to not meet WSDOT's LOS standard (LOS D). While this mitigation measure allows the flexibility to achieve the trip generation reduction through any adjustment to the size or intensity of the proposed land uses, one possible adjustment would be to replace the proposed truck stop at the southeast corner of the Project Site with a gas station with 10 vehicle fueling positions and a 10,000 square foot convenience store. TR-4. Traffic volumes in the buildout year for each project phase shall be monitored and the traffic impact analysis shall be updated to assess the necessity for the timing of the mitigation outlined below (TR-4a-c). If the results of the updated TIA determine that the traffic mitigation identified below should be adjusted due to changes in future traffic background conditions, the recommendations shall be subject to review and approval by the City prior to any modifications to the traffic mitigation plan. TR-4a. The following mitigation measure is recommended for Project Site access intersections along Britton Parkway NE at Eastern Parkway NE (Twin Oak Road NE), Western Parkway NE, and Central Parkway NE: A. The Tribe shall pay for the installation of three roundabouts in place of the two-way stop-controlled existing traffic controls with the northbound approaches serving as the Project Site access. TR-4b. The following mitigation measure is recommended for Pacific Avenue SE/Carpenter Road SE: A. Modify the southbound approach to provide dedicated through- and right-turn lanes, including restriping and removing the receiving lane on the south side of the intersection with curb and gutter. B. Modify the traffic signal to implement a southbound right-turn overlap. TR-4c. The following mitigation measure is recommended for Marvin Road SE (SR 510)/Steilacoom Road SE: A. Construct either a westbound right-turn or southbound right-turn lane at the intersection. TR-5. The following mitigation measure is recommended to reduce cumulative impacts on planned transportation improvement projects due to increased trips: A. The Tribe shall pay the City traffic impact fees based on the City's 2024/2025 Transportation Improvement Mitigation List. Although total impact fees are currently estimated to total approximately $2.6 million for Alternative 1 and approximately $1.9 million for Alternative 2, actual payment obligations shall be proportionate to the level of development proposed and implemented. Fees shall be paid prior to	

Resource Area	Proposed Mitigation	Alternative
	the commencement of each development phase, based on the extent of development at that time.	
Utilities (UTIL)	UTIL-1. The following measure is recommended for Water Supply Option 1 (off-site connection): A. The Tribe shall negotiate a service agreement with the City of Lacey that will provide payment for the water service and for any distribution infrastructure upgrades or renovations necessary to provide water service to the Project Site. UTIL-2. The following measure is recommended for Wastewater Treatment Option 1 (off-site connection): A. The Tribe shall negotiate a service agreement with the City and LOTT that will provide payment for the wastewater service and for any distribution infrastructure upgrades or renovations necessary to provide wastewater service to the Project Site. UTIL-3. The following measure is recommended for off-site wastewater in the cumulative year of 2040: A. The Tribe shall contribute a fair share towards the replacement of the 15-inch along Martin Way East that is southeast of the Project Site. The mechanism for contribution shall be negotiated with LOTT and may include the option of the Tribe paying a fair share for the replacement or constructing the replacement of the pipeline with proportionate share funding contributed by LOTT.	1, 2 Water Supply Option 1 and Wastewater Treatment Option 1
Public Services (PS)	PS-1. The following measures are recommended for all alternatives: A. The Tribe shall make good faith efforts to amend its existing agreement or enter into a new service agreement with Lacey Fire District 3 that will provide payment for the provision of fire protection and emergency medical services to the Project Site. The agreement shall address any required conditions and standards for emergency access and fire protection system. B. The Tribe shall make good faith efforts to enter into a service agreement with the City of Lacey and/or Thurston County for the coordination of law enforcement, prosecution, and court administration, which will identify the scenarios when cases would be referred to the City/County and address the payment of actual costs for investigation, prosecution, and court administration. The agreement shall include a provision requiring the Tribe to meet with LPD at least once a year, if requested, to discuss ways to improve police services and prosecution of crimes associated with the project.	1, 2

Section 5 | Consultation and Coordination

This section lists agencies and organizations consulted during the preparation of this EA.

Agencies, Organizations, and Individuals Consulted	Summary of Consultation and Coordination
U.S. Fish and Wildlife Service	The USFWS was consulted to obtain a list of federally listed special-status species with the potential to occur in the vicinity of the Project Site. Additionally, the USFWS NWI was consulted to identify potential wetlands and waters in the vicinity of the Project Site. The BIA has initiated informal consultation with USFWS regarding the potential for the project alternatives to impact federally listed species in accordance with the federal FESA (letter attached as **Appendix I-4**). Concurrence was received from USFWS and included as **Appendix I-4**.
U.S. Army Corps of Engineers	USACE manuals and guidance were reviewed during preparation of the Biological Resources Letter Report (included in **Appendix I**).
National Oceanic and Atmosphere Administration Fisheries Service	The NOAA Fisheries Service website was reviewed for information concerning special-status fish species and EFH. The BIA has initiated informal consultation with NOAA Fisheries Service regarding the potential for the project alternatives to impact federally managed marine fish in accordance with the federal Magnuson-Stevens Act (letter attached as **Appendix I-4**). Concurrence was received from NOAA and included as **Appendix I-4**.
U.S. Environmental Protection Agency	The USEPA website was reviewed for information regarding NAAQS Attainment status. Additionally, the USEPA's MOVES3 model was used to calculate emissions. If an on-site wastewater treatment option is selected, the USEPA will be consulted regarding the registration of the sub-surface drainage system with the UIC program as a Class V injection well.
U.S. Geological Survey	The USGS website was reviewed for information concerning geological and hydrological information in addition to geological hazards, such as volcanic information.
U.S. Census Bureau	The U.S. Census Bureau website was reviewed for information concerning demographical data.
U.S. Department of Health and Human Services	The U.S. Department of Health and Human Services website was reviewed for information concerning federal poverty guidelines to determining poverty.
U.S. Department of Agriculture Natural Resources Conservation Service	The NRCS website was consulted for data concerning farmland and soil characteristics information.
U.S. Bureau of Labor Statistics	The U.S. Bureau of Labor Statistics website was reviewed to obtain labor statistics.
Washington Department of Archaeology and Historic Preservation (State Historic Preservation Office)	The BIA has initiated consultation with the SHPO regarding the potential for the project alternatives to impact cultural resources in accordance with the National Historic Preservation Act (letter is included in **Confidential Appendix J**)
Washington Department of Archaeology and Historic Preservation Information System for Architectural and	WISAARD was consulted in order to obtain a list of previous archaeological surveys and identified cultural resources.

Agencies, Organizations, and Individuals Consulted	Summary of Consultation and Coordination
Archaeological Records Data (WISAARD)	
Nisqually Indian Tribe, Tribal Historic Preservation Office	The THPO office was contacted for information regarding known cultural resources within the property and to monitoring field investigations. The cultural resources studies for the Proposed Project were reviewed by the THPO and the THPO concurred with the findings of the studies. The studies and letters of concurrence are included in **Confidential Appendix J**.
Washington Department of Fish and Wildlife	The WDFW online database was reviewed to obtain a list of threatened, endangered, and sensitive species with the potential to occur in the vicinity of the Project Site. The WDFW online database was also consulted to obtain maps of sensitive habitat and sensitive species' ranges. The results are summarized in **Appendix I**.
Washington State Department of Transportation	The WSDOT website was consulted to determine historic average daily traffic volumes. The WSDOT website was also consulted to obtain noise contour lines on I-5, scenic highway designations, and environmental manuals and guidelines. WSDOT was consulted regarding the TIA methodology, and to determine the intersections and roadways that may be impacted as a result of the alternatives and mitigation solutions (see **Appendix H** and **Appendix N**).
Washington State Department of Ecology	The WDOE website was reviewed for water resources information, including water quality standards.
Washington State Department of Natural Resources	The WDNR website was reviewed for information concerning volcanoes and wildfire data within the State.
City of Lacey	The City was consulted to determine the City's water supply, and wastewater services infrastructure and capacity. Select information was utilized and included in **Appendix C** to determine appropriate connection points and potential infrastructure improvements. Additionally, the City was consulted regarding the potential provision of law enforcement services for the alternatives. The City was consulted regarding necessary transportation and infrastructure improvements to serve the development. Refer to comments and responses thereto in **Appendix N**.
Lacey Fire District #3	Lacey FD#3 was consulted regarding the potential provision of fire protection and emergency medical services for the alternatives (**Appendix A**).
Thurston County	The County's website and reports were reviewed for information concerning taxes and public services.
Hawks Prairie Landfill	The Hawks Prairie Landfill website was reviewed to obtain information about its solid waste services.
Roosevelt Regional Landfill	The Roosevelt Regional Landfill website was reviewed to obtain information about its solid waste services.
Puget Sound Energy	The PSE website was reviewed to obtain information about PSE's services including natural gas and electrical capacity.

Section 6 | References

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