

4.11 Public Services and Utilities

This section describes the potential impacts to public services (fire and police services) and utilities (water, sewer, and stormwater; natural gas; electrical facilities; and solid waste services) that may result from construction and operation of the proposed Project and alternatives. Potential mitigation measures are also identified in this section.

4.11.1 Study Area

The study area for the public services and utilities analysis is the service areas of the public service agencies and utility providers in relation to the Project site and parcels directly adjacent to the site.

4.11.2 Relevant Plans, Policies, and Regulations

This section summarizes state and local regulations related to public services and utilities that are applicable to the Project. There are no federal regulations applicable to the Project. Relevant policies and regulations related to public services and utilities are summarized in Table 4-59.

Table 4-59. Applicable Policies and Regulations for Public Services and Utilities

Policies and Regulations	Description
State	
Washington Administrative Code	The WAC includes water quality standards that are implemented at the local municipality level. Relevant standards that guide stormwater management and site development manuals, include: • Chapter 173-200 of the Washington Administrative Code (WAC), Water Quality Standards for Groundwaters of the State of Washington • Chapter 173-201A WAC, Water Quality Standards for Surface Waters of the State of Washington • Chapter 173-204 WAC, Sediment Management Standards.
Washington State Growth Management Act (GMA)	Under the GMA (RCW 36.70A), certain counties and cities must create and regularly update comprehensive plans to identify where growth will occur and to plan for housing, transportation, water, sewer, natural gas, electrical lines, and other necessary facilities. Jurisdictions under the GMA are required to have a capital facilities' plan element within their comprehensive plans. The capital facilities element requires a forecast of future needs, expansions or new facilities, locations, and capacities of expanded or new facilities and a 6-year plan for financing. The land use element, capital facilities element, and financing plan must all be coordinated and consistent.
Washington Department of Ecology Stormwater Water Quality Regulations	Ecology has the authority to issue stormwater permits guided by both the federal water pollution permit program, known as the NPDES, and also state water quality laws. Stormwater permits vary from water quality general for releasing treated stormwater or wastewater discharge to either surface or groundwater; Construction Stormwater General Permit (CSWGP) to control and reduce water pollution during construction; and Industrial Stormwater General Permit (ISGP), which helps industrial facilities comply with federal regulations that reduce pollution. Most industrial sites in Washington to monitor, measure, and reduce stormwater pollution leaving their site.
Local	

Pierce County Comprehensive Plan, Capital Facilities and Utilities Element	The Pierce County Comprehensive Plan includes chapters that identify goals and policies for capital facilities and utilities. These goals and policies are intended to guide the Pierce County Capital Facilities Plan (Pierce County 2020c) and the provision of utility services in the County. The Pierce County Comprehensive Plan has goals and policies in the Utilities Element and the Capital Facilities Element that address public services and utilities, including: • Policy CF-6.2: Condition development projects in a manner that guarantees public facilities will be in place or that adequate mitigation will be provided as the impacts of the development occur. • Goal U-2. Provide urban level facilities and services only within the designated UGAs prior to or concurrent with development. • Goal U-22. Preserve the high quality and supply of groundwater resources.
Pierce County Code	The Pierce County Code, Chapter 11.05, Illicit Stormwater Discharges and 17A.10, Construction and Infrastructure Regulations – Site Development and Stormwater Drainage, 17A.40, Stormwater Drainage includes minimum requirements and regulations to protect Pierce County's surface and ground water quality by providing minimum requirements for reducing and controlling the discharge of pollutants to stormwater conveyance systems owned and maintained by Pierce County.
Pierce County Stormwater Management Program Plan (SWMPP)	Pierce County's SWMPP (Pierce County 2022) is intended to comply with requirements of Pierce County's NPDES Municipal Phase I Stormwater Permit (MS4, Permit No WAR044002). As the local land use authority in unincorporated portions of the county, Pierce County is required to have appropriate codes, regulations, enforcement, and education capacity to reduce water-polluting practices and promote practices that protect water quality.
Pierce County Stormwater Management and Site Development Manual (PCSWDM)	The PCSWDM (2021) and codified in Chapter 17A.10 of the Pierce County Code, establishes design and analysis criteria for development activity by managing stormwater to minimize contact with contaminants, mitigating the impacts of increased runoff as a result of urbanization, and managing runoff from developed property and property that is being developed under WAC 173-200, 173-201A, and 173-204 water quality standards. Developments in Pierce County must be consistent with the County's Stormwater Management and Site Development Manual.
Pierce County Sheriff's Department (PCSD) Law Enforcement Staffing Study and Strategic Planning Overview	The PCSD Law Enforcement Staffing Study and Strategic Planning Overview (2018) provides a review of staffing and law enforcement operations. It also provides recommendations for future deployment and efficiencies in the context of policing. The Project is within the Foothills Detachment service area of the PCSD, an estimated 15-minute drive time from the nearest station.
Pierce County Solid Waste Management Plan	The Pierce County Solid Waste Management Plan (2020) provides a framework for effective and efficient strategies to increase the uniformity and ease of recyclable waste practices, as well as reducing overall non-recyclable waste production. This strategy is divided into four main goals: system, culture, decisions, and measurement that focus on addressing solid waste related issues. The Pierce County Solid Waste Management Plan also identifies solid waste collection requirements and programs in Pierce County.

City of Puyallup Comprehensive Plan, Utilities Element and Capital Facilities Element	The City of Puyallup Comprehensive Plan includes chapters that identify goals and policies for capital facilities and utilities in order to provide long-term planning for services and facilities and to ensure that new developments can grow concurrently. This includes long-term planning for services and facilities is integrated with other elements of the Comprehensive Plan and addresses services such as fire and emergency medical response, parks and recreation facilities, educational facilities, sewer and stormwater facilities, and transportation facilities. Relevant goals or policies from the Utilities and Capital Facilities Elements include: • Goal U-2. Ensure that adequate water quantity and quality provided by either City or private water purveyors is available to all existing future customers in the City and UGA in a manner that supports the planned growth and development of the community. • Policy U-4.3. Use established minimum standards for the requirement of sanitary sewer service based upon land use intensities and densities. • Goal U-5. Control the quantity and quality of stormwater produced by new development and redevelopment such that they comply with water quality standards and contribute to the protection of beneficial uses of the receiving waters. • Goal U-7. Promote reliable and cost-effective solid waste management services. • Goal U-8. Promote solid waste practices that minimize environmental degradation. • Goal U-9. Ensure that adequate electric, natural gas and telecommunications service, provided by privately-owned utilities companies, is available to all existing and future customers in a manner that supports the planned growth of the community by coordinating and working with private utility providers. • Goal CF-1. Provide continuous, reliable, and cost-effective capital facilities and public services in the city and its UGA in a phased, efficient manner, reflecting the sequence of development as described in other elements of the Comprehensive Plan. • Goal CF-5. Adequate public facilities shall be provided by constructing needed capital improvements that (1) repair or replace obsolete or worn-out facilities, (2) eliminate existing deficiencies, and (3) meet the needs of future development and redevelopment caused by previously issued and new development permits. The City's ability to provide needed improvements will be demonstrated by maintaining a financially feasible schedule of capital improvements in this Capital Facilities Plan. • Goal CF-5.1. Provide, or arrange for others to provide, the capital improvements listed in the schedule of capital improvements in the Capital Facilities Plan, which may be updated and modified.
City of Puyallup Municipal Code	The City of Puyallup Municipal Code, Chapter 14.06.021 Prohibited Discharge Standards and Chapter 12.10.050 Stormwater management requires developers to comply with the Stormwater Manual, identifies discharge pollutants that are prohibited and requires developers to employ BMPs to control stormwater flows, provide treatment, and alleviate erosion and sedimentation.
City of Puyallup Comprehensive Storm Drainage Plan	The City of Puyallup Comprehensive Storm Drainage Plan (City of Puyallup 2012) is intended to guide the City's storm and surface water utility in regard to future activities and improvements for the stormwater drainage system.

	The plan includes a review of background information about the storm and surface water utility, examines relevant City policies and goals, analyzes identified problems and development of alternatives to reduce or eliminate those problems, and provides an implementation plan and a schedule to address that plan. The City's land use goals and policies are supported by the City's Comprehensive Storm Drainage Plan.
City of Puyallup Water Comprehensive Plan	The City of Puyallup completes Water System Planning in accordance with the Washington State Department of Health guidelines to help with identification of both current and future system needs. The most recent Water System Plan was completed in 2011. The Water System Plan provides detail and analysis regarding the water system's infrastructure, current and anticipated future water demand, current and future needs and a review of the Water Utility's financial status.
City of Puyallup Comprehensive Sewer Plan	The City of Puyallup Comprehensive Sewer Plan (City of Puyallup 2016b) reviews the City's current sewage capacities and assesses the impact of projected growth on the City's sewage collection and conveyance system. The Comprehensive Sewer Plan identifies future facilities needed to accommodate both existing and future wastewater collection, conveyance, and treatment needs, and includes possible policies that the City currently has or could adopt relating to operation of the sanitary sewer system. The City of Puyallup's (City) Comprehensive Sewer Plan (the Plan) reviews the City's current sewage capacities and assesses the impact of projected growth on the City's sewage collection and conveyance system. The Plan identifies future facilities required to accommodate both existing and future wastewater collection, conveyance and treatment needs as the City's population grows within the service area limits for the years 2020, 2034, and build out conditions.
Valley Water District Water System Plan	The Valley Water District completes Water System Planning in accordance with the Washington State Department of Health guidelines to help with identification of both current and future system needs (Washington State Department of Health 2021). The last version of the water system plan was issued in 2012. A draft water system plan was developed in 2021 (Valley Water District 2021a). The Water System Plan provides detail and analysis regarding the water system's infrastructure, current and anticipated future water demand, current and future needs and a review of financial status.

4.11.3 Affected Environment

This section describes the affected environment for public services and utilities, which are summarized in Table 4-60.

Table 4-60. Utility Services and Providers within the Project Site

Service	Provider
Police/Sheriff	Pierce County Sheriff's Department
Fire	East Pierce Fire and Rescue
Domestic Water	City of Puyallup Public Works Department Valley Water District
Sanitary Sewer	City of Puyallup Public Works Department

Service	Provider
Stormwater	Pierce County Planning & Public Works Surface Water Management Division*
Natural Gas	Puget Sound Energy
Electrical Facilities	Puget Sound Energy
Solid Waste	Murrey's Disposal and D.M. Disposal

*A note about storm water management: Management of private side of exiting outfall pipe that will connect to the site development will be the responsibility of Pierce County. Other stormwater impacts occurring in City of Puyallup or other agency ROW (coming as a result of traffic mitigation, for example) may be managed separately

Police and Sheriff Services

Jurisdictions that service the Project site rely on the PCSD for public safety services. The County Sheriff's Department serves unincorporated areas, while local municipal police departments typically serve incorporated cities and towns. Many local fire and police agencies have mutual response agreements, which allow public safety responsibilities to be shared across jurisdictional boundaries; in this case, the City and the Sheriff's Department do not share a mutual response agreement.

The City of Puyallup provides informal enforcement support for the general vicinity and would mutually respond to the Project site in the event of a large-scale interagency response. The City would also provide traffic control for roads servicing the Project site in the event of road closures or emergencies.

The Puyallup Police Department nearest to the Project site is approximately 2 miles west of the Project site. The PCSD closest to the Project site is approximately 7 miles southeast of the Project site, located in Bonney Lake. See Figure 4-71 for police stations near the Project site.

Fire Services

The Project site and surrounding region are served by East Pierce Fire and Rescue for fire suppression and emergency medical services; their facilities consist of eight staffed fire stations, two volunteer fire stations, and one facility on Lake Tapps for Marine Rescue. East Pierce Fire and Rescue covers a 153-square-mile area and serves approximately 97,000 citizens in the communities of Bonney Lake, Sumner, Lake Tapps, the Ridge Communities, South Prairie, Tehaleh, Edgewood, and Milton (East Pierce Fire and Rescue 2021b). The closest fire stations are Station 113, located approximately 0.4 mile north of the Project site, and Station 110, located approximately 3 miles east of the Project site (see Figure 4-71).

Domestic Water

The water supply for the Project site and surrounding area is provided by a combination of the City of Puyallup's Public Works Department, which includes 6,700 acres of water service area, 193 miles of water mains, and 150 miles of water services lines, and the Valley Water District. Valley Water serves the majority of the site and is anticipated to provide the majority of domestic water to the Project.

The City receives the majority of its water from two sources: Salmon Springs and Maplewood Springs. The remainder of the water supply comes from five operational wells and an intertie with the City of Tacoma (City of Puyallup 2019b).

Valley Water District is a municipal water utility operating principally in Pierce County. It consists of eight non-contiguous water supply systems, including the Valley Water System, which provides water to

the Project site. The Valley Water System consists of one 1,000-gallon-per-minute-capacity well in the Puyallup Valley and an emergency intertie into the Tacoma Water System for supplemental water during high demand, power outages, or fire flow conditions (Valley Water District 2020a).

Sanitary Sewer

The City's Public Works Department provides sanitary sewer services to the Project site and surrounding parcels within its service area boundaries. The City's wastewater collection system currently consists of 3,200 manholes, 225 miles of gravity sewer lines, and 20 pump stations and 8 miles of force mains. Wastewater flows are treated at the City's Water Pollution Control Plant (WPCP). The WPCP's current capacity is 27.4 million gallons per day. Per the 2016 Sewer Comprehensive Plan, no capital improvement projects are planned in the Project site (City of Puyallup 2016b), and the Project site is not currently served by City sewer; the Project would install all needed infrastructure to serve the proposed structures and uses.

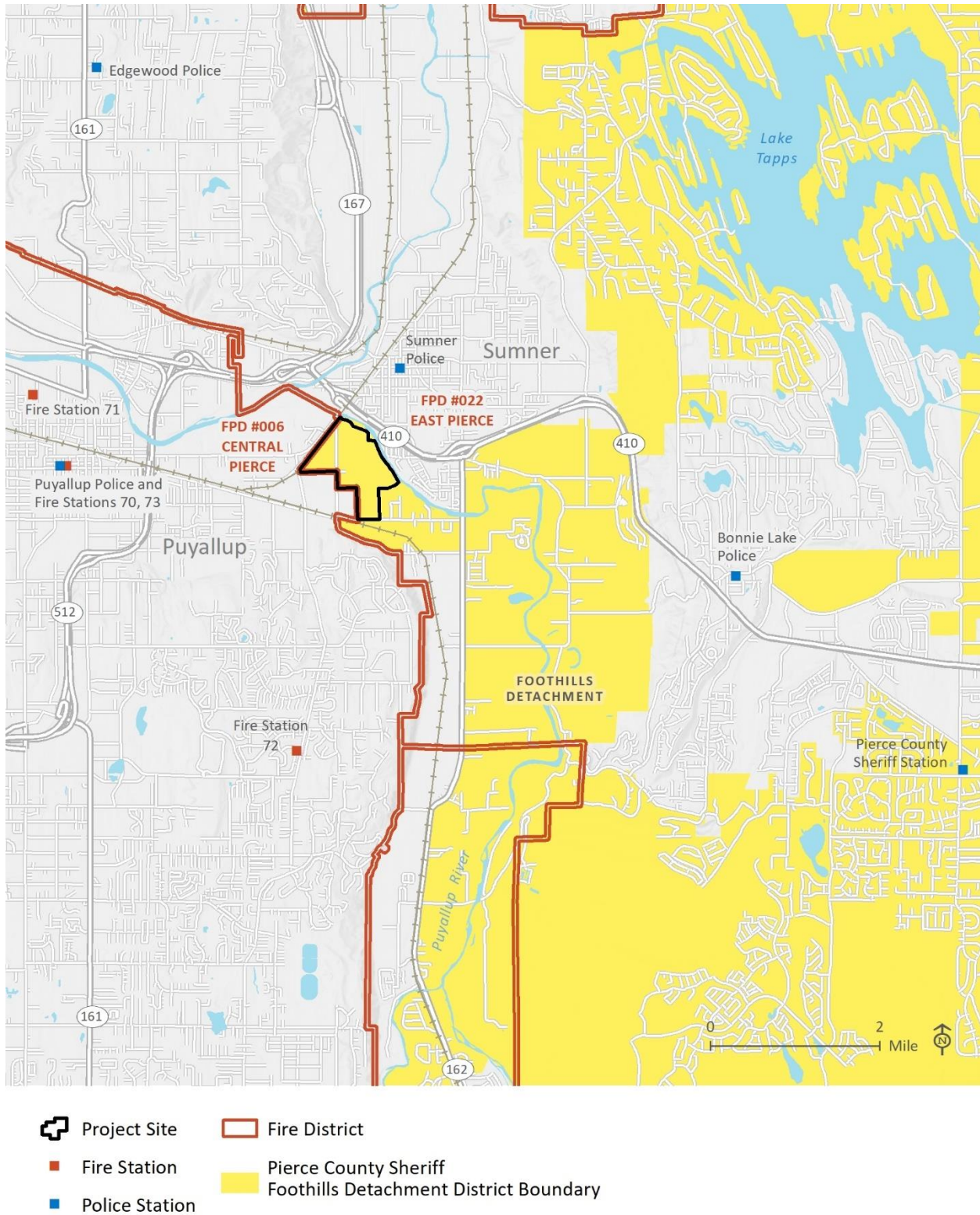


Figure 4-71. Fire and Police Stations in Proximity to the Project site

Stormwater

Stormwater within and adjacent to the Project Site is managed by the Pierce County Planning and Public Works Department, specifically the Surface Water Management Division (Figure 4-72). The Viking outfall currently discharges stormwater from a single warehouse facility into the Puyallup River. The Project is proposing to use the same outfall structure to receive runoff. See the surface water chapter for additional detail.

Natural Gas

Puget Sound Energy (PSE), a regional utility provider, provides natural gas service to the Project site and surrounding parcels through two regulator stations east of the downtown area boundary. PSE has both high-pressure and intermediate-pressure gas pipelines that border the development, as well as a District Regulator that can be used to adjust the flow of natural gas as needed. Natural gas is provided from gas wells in the Rocky Mountains and Canada and is transported through interstate pipelines by Williams Northwest Pipeline to PSE's gate stations. Supply mains then transport gas from the gate stations to district regulators, which feed to distribution mains. Individual residential, commercial, and industrial service lines are fed by the distribution mains (City of Puyallup 2015a, Chapter 8, Utilities Element). The Williams Northwest Pipeline intersects the southern portion of the Project site (see Figure 4-72). The Williams Northwest Pipeline consists of 3,900 miles of high-pressure natural gas transmission pipeline and has a system peak design capacity of 3.8-million dekatherms per day, with 14-million dekatherms of capacity for seasonal storage.

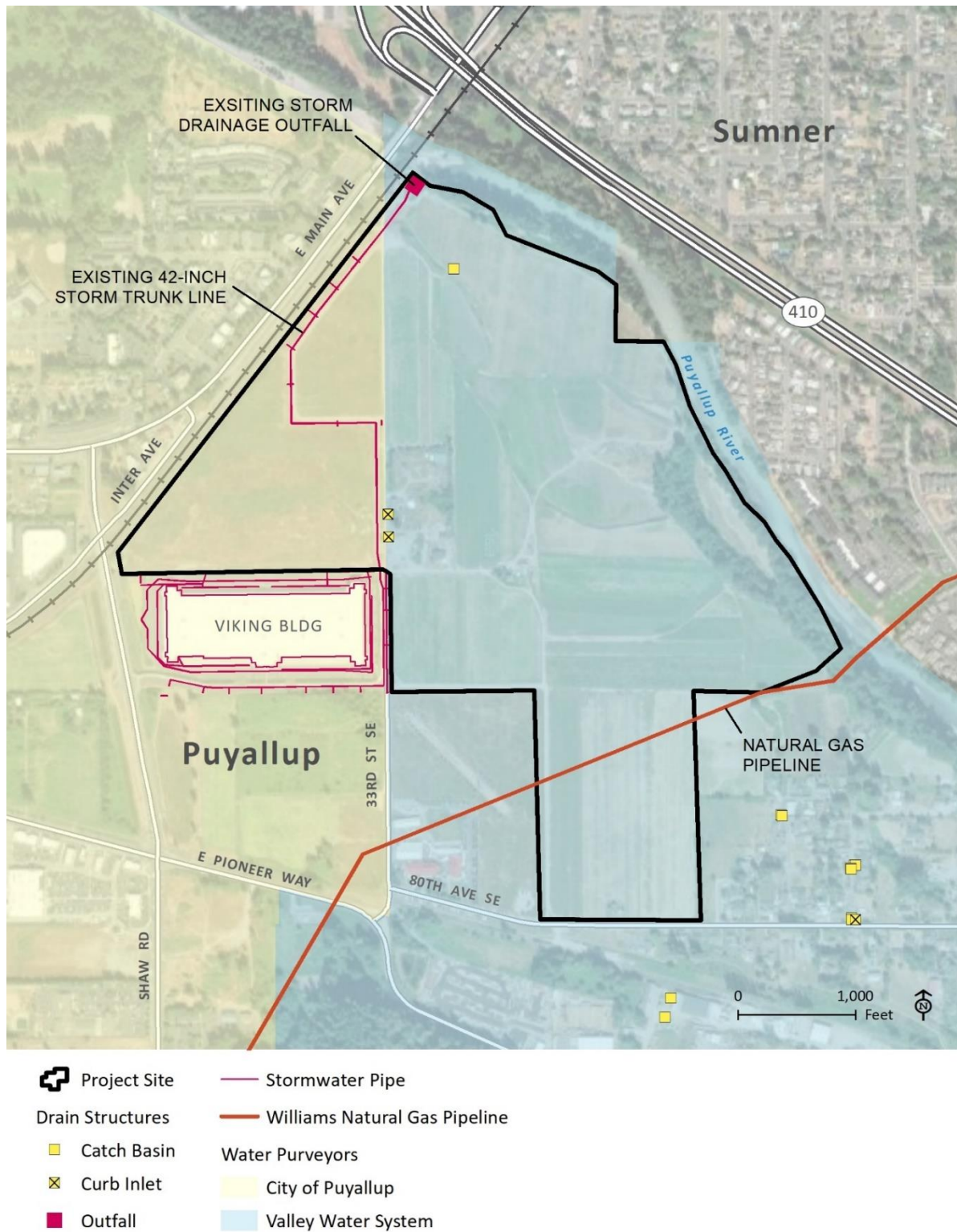


Figure 4-72. Water Purveyors, Stormwater Infrastructure, and Natural Gas Pipeline Utilities in the Project Site

Electricity

PSE provides electricity to the Project site and surrounding parcels. Two main access points exist for receiving power in Pierce County: the White River 230/115-kilovolt Transmission Station and PSE's Frederickson Generation Station. Pierce County is interconnected with multiple transmission lines to systems in King and Thurston Counties. A PSE transmission line is located adjacent to the proposed Project site, running parallel along E Main Avenue.

PSE's demand forecasts come largely from monitoring development applications made to the jurisdictions that they serve in combination with actual applications for new customer services. In order to build new facilities or reinforce existing facilities, PSE needs to have sufficient demand information that can be used to justify facility expenditures to meet new levels of demand. As a fully regulated utility, PSE is precluded from expending resources based on speculative demand—service applications for new or upgraded services are the most reliable means for projecting actual load requirements (PSE 2021).

Solid Waste Services

The Project site would be served by an MSW contracted waste hauler. MSW is a subset of solid waste which includes garbage discarded from residential, commercial, institutional, and industrial sources. The Project site and surrounding parcels receive solid waste collection service under contract with Murrey's Disposal and D.M. Disposal, which offers curbside garbage, recycling, and yard waste collection in Pierce County. Commercial refuse collection occurs weekly at a level commensurate with the amount of solid waste produced by the establishment. All MSW requiring final disposal is currently transported to the LRI Landfill (Pierce County 2020). For the purposes of projecting long-term capacity needs for MSW services, Pierce County maintains a 20-year forecast for the entire County's waste management systems. In 2020, Pierce County issued the *Tacoma-Pierce County Solid and Hazardous Waste Management Plan: 2021-2040* (Pierce County 2020). Under current population and tonnage projections, the LRI Landfill is projected to fill by 2030; however, with long-haul and diversion tactics, the lifespan could be extended to 2032 to 2036.

4.11.4 Impacts

This section describes the potential environmental impacts related to public services and utilities as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

Methodology

The public services and utilities analysis evaluates the Project's potential to result in conflicts and/or plan inconsistencies that would result in significant impacts on public services and utilities. The chapter was written by reviewing publicly available plan information from the affected public service and utility providers, as well as direct outreach to service and utility providers. The Project EIS team sent service and utility capacity and information requests to each affected agency and utility during the analysis phase of this section of the EIS. This analysis was performed at the local level to facilitate an evaluation of the Project's consistency with service standards, plans for serving the Project site at the projected levels, current rates of development in the area, and concurrent service demands. Different levels of

information were available for different service providers. Due to the Applicant's proposal not identifying a final end user, this chapter relied on most intensive impacts scenario analysis on the affected service or utility under review.

This section also evaluates the Project's potential to introduce facilities or components that could result in localized public service and utility conflicts or plan inconsistencies. If the Project is determined to be inconsistent with the provision of public services or utilities, or inconsistent with plans for serving the area as future development occurs, an impact would occur. A significant impact would occur if the Project would result in irreversible interruptions to public services and utilities in the area that cannot be addressed via mitigation or would be inconsistent with local growth and demand for services that cannot be addressed via mitigation.

Impacts Analysis

No Action Alternative

Under the No Action Alternative, the proposed Project would not be constructed at the Project site. No changes to existing public services or utilities would occur as a result of Project activities. Development at the Project site and in adjacent areas would continue according to current planning goals and service demands outlined within the UGA.

Proposed Project

Construction Impacts

Police and Sheriff Services

Less than Significant. During construction, police services would be provided by the PCSD. City of Puyallup Police Department may provide traffic control services for City ROW if during construction utility installation or roadway construction in City ROW would necessitate city police traffic control services by a uniformed officer(s).

Construction activities would result in increased traffic to and from the Project site and an increased presence of physical property. Grading and filling activities would result in up to 320 truck trips per day over the course of 6 weeks, and warehouse construction would result in up to 60 truck trips per day over the course of 40 weeks. Installation of on-site utilities would require approximately 100 truck trips over approximately 27 weeks, resulting in approximately four truck trips per day. Increased traffic has the potential to adversely impact police/sheriff protection response times in the area due to congestion. It is possible that construction that requires traffic control would result in the need for police or sheriff traffic control services.

The addition of construction activity and construction equipment could require the need for increased security on site, which could lead to service calls for property crimes such as theft (PCSD 2021). The PCSD currently observes traffic issues, abandoned vehicles, suspicious vehicles, alarms, and property crime at warehouse properties. In the Project site, the PCSD received approximately 82 calls over the last 5 years (PCSD 2021). Calls for service in all of PPD included a total of 59,883 in 2019, of which 127 (0.27 percent) were related to theft from a building (Puyallup Police Department 2020).

Impacts from increased traffic, construction activities, and traffic control would be intermittent and temporary, occurring over a 5-year construction period, which could create a need for services from police and sheriff services during that time. However, the increased need would not be at a level that would permanently interfere with or cause a decreased level of service for either PPD or PCSD services; impacts would be less than significant.

Fire Services

Less than Significant. East Pierce Fire and Rescue, Station 113 Sumner, would provide fire services to the Project site during construction. East Pierce Fire and Rescue does not have a service goal or a forecasting tool for warehouse developments (East Pierce County Fire and Rescue 2021). Overall, Station 113 Sumner received 2,594 9-1-1 calls in 2020 (East Pierce County Fire and Rescue 2020).

The increased presence of construction equipment, physical property, and vehicles may result in inadvertent traffic delays that may affect emergency service and fire protection response times. Increased traffic from construction could also result in a higher potential for motor vehicle collisions, which could also require emergency services. Further, emergencies related to construction of new buildings on the Project site could lead to the need for fire and emergency services, such as medical emergencies, construction accidents, fires, and emergencies related to natural disasters that could occur in and affect the Project site. For example, fire and rescue services could be involved in the event of a seismic, volcanic, and/or flood event.

Impacts from increased traffic, construction activities, and traffic control would be intermittent and temporary, occurring over a 5-year construction period, which could create a need for emergency and fire services during that time. However, the increased need would not be at a level that would permanently interfere with or cause a decreased level of service for East Pierce Fire and Rescue; impacts would be less than significant.

Domestic Water

Less than Significant. Project construction would require the use of locally available water supplies that are distributed by the City of Puyallup and Valley Water District. During construction, water would be required for various activities, such as controlling dust, compacting soil, and mixing concrete. The Project's construction water demand would be short-term and temporary.

Construction of the Project would be constrained to the Project site and long-term interruption of water services to adjacent parcels is not anticipated. It is possible that short-term interruptions could occur with the need to install new connections or temporary shutoffs. Adjacent parcels could also experience interruptions if an unanticipated large-scale main break were to occur. Water service interruptions would be intermittent and temporary; impacts would be less than significant.

Sanitary Sewer

Less than Significant. Wastewater produced during construction would be minimal and would be discharged to the municipal sewer system or hauled off site and the waste disposed of at an appropriate facility in accordance with appropriate regulations. As such, construction of the Project would not impact the City of Puyallup Public Works water or sewer capacity outside of normal impacts expected

during and after temporary construction projects. Construction activities would also include placement of new sewer and water conveyance lines.

Construction of the Project would be constrained to the Project site, and long-term interruption of sewer services to adjacent parcels is not anticipated. It is possible that short-term interruptions could occur with the need to install new connections or temporary shutoffs. Adjacent parcels could also experience interruptions if an unanticipated large-scale main break were to occur. However, since a main break is unlikely, sewer service interruptions would be intermittent and temporary; impacts would be less than significant.

Stormwater

Less than Significant. Construction would result in ground-disturbing activities that could change drainage patterns on site and in the immediate vicinity of the Project. Prior to construction, the Applicant would be required to comply with Ecology Stormwater Quality Regulations, obtain coverage under the NPDES through a Construction Stormwater General Permit to help control runoff, and reduce water pollution from the construction site. Prior to construction, the Applicant would be required to develop a SWPPP in conformance with requirements in the PCSWDM, implement sediment erosion and pollution prevention control measures, and receive an approved permit under the NPDES program. Further, the Applicant is required to maintain existing operation and maintenance of stormwater facilities in the condition they were at the time of the site development permit approval (Title 17A.40.020 PCC). Therefore, the construction or expansion of storm drainage facilities would not be anticipated.

Additionally, Pierce County requires that development projects be conditioned to guarantee public facilities or mitigation in place if the development would cause impacts (Pierce County Comprehensive Plan, CF 6.2). Therefore, with the required measures (NPDES, SWPPP, PCC Title 17A), stormwater construction impacts related to ground-disturbing activities during construction would be less than significant.

Electricity and Natural Gas

Less than Significant. The Project is located in a developed, semi-rural area of unincorporated Pierce County in the UGA/PAA of the City of Puyallup, which has existing infrastructure for electric power and natural gas provided by PSE. PSE has both high-pressure and intermediate-pressure gas pipelines that border the development, as well as a District Regulator that can be used to adjust the flow of natural gas as needed. The District Regulator is close to the proposed development (PSE 2021). Construction related activities of the Project would result in fuel consumption from the use of construction tools and equipment, as well as transport of workers and materials to or from the construction site. Electricity and natural gas are not expected to be consumed in large quantities during construction-related activities, as construction equipment is expected to be fueled with diesel, gasoline, or electricity.

Construction of the Project would be constrained to the Project site and would not impact or interrupt natural gas service on adjacent parcels. The Project would not include the placement of new natural gas conveyance or alteration of existing natural gas conveyance but may tie into the existing natural gas pipeline. The Applicant would coordinate with the owners of the Williams Northwest Pipeline prior to

construction on an encroachment agreement, as discussed in this section. No impacts are anticipated, as construction would not proceed until the pipeline owners have granted approval of an encroachment agreement, ensuring that impacts to the Williams Northwest Pipeline are less than significant.

Solid Waste Services

Less than Significant. Construction of the Project would be limited to the Project site and would not impact or interrupt solid waste services to adjacent parcels. Construction activities would result in an increase in solid waste services in the Project site during construction; however, no interruptions to service are anticipated.

Operations Impacts

Police/Sheriff Services

Less than Significant. The Project EIS team consulted with the PCSD regarding the Project and anticipated impacts. According to the PCSD, Operation activities would result in increased traffic from employees and warehouse operations, as well as an increase of physical property. The Project is anticipated to employ up to approximately 1,500 individuals and would result in approximately 500 employees in the Project site at any time. Warehouse operations are estimated to result in up to 8,724 vehicles entering and exiting the site each day. The increased traffic has the potential to adversely impact police/sheriff protection response times in the area due to congestion; additional vehicle traffic may also adversely impact services due to responses to local automotive crashes in roadways.

The presence of warehouses and workers would result in an increase in service calls, including for property crimes, traffic issues, abandoned vehicles, suspicious vehicles, and alarms. However, the number of these types of calls is currently low City/County-wide, and the addition of the Project is unlikely to result in many increased calls.

Impacts from increased traffic and crime related to warehouse structures would be less than significant, as the increase in need would not be at a level that would be permanently interfere with or cause a decreased level of service for either the PPD or PCSD services.

Fire Services

Less than Significant. East Pierce Fire and Rescue, Station 113 Sumner, would provide fire services to the Project site during operations. The Project EIS team consulted with East Pierce Fire and Rescue regarding the Project and anticipated impacts. According to East Pierce Fire and Rescue staff, they do not have a service goal or a forecasting tool for warehouse developments (East Pierce County Fire and Rescue 2021). Station 113 Sumner received 2,594 calls to 9-1-1 in 2020 (East Pierce County Fire and Rescue 2020). Currently, types of calls for service to warehouses are related to sick or injured individuals (East Pierce County Fire and Rescue 2021).

The increased presence of vehicles may result in inadvertent traffic delays that may affect emergency service and fire protection response times. Increased traffic could also result in a higher potential for motor vehicle collisions, which could also require emergency services.

Emergencies related to warehouse operations, such as chemical or hazardous waste storage exposure or release, and potential medical aid response for employees, could lead to the need for fire and

emergency services. Warehouse operations that carry chemical or hazardous wastes would be required to notify the State Emergency Response Commission and Local Emergency Planning Committee and local fire department. Additionally, employers with more than 10 employees are required under 29 CFR 1910.38 and 1910.30 (OSHA 2020), OSHA, to have Emergency Action Plans and Fire Prevention Plans, the creation and communication of which can minimize property damage and prevent injury. Prevention planning and compliance with state and local laws would lessen the need for emergency services as a result of warehouse operations accidents.

The need for additional fire or emergency medical services due to increased traffic, employee medical needs, warehouse operations, and traffic control would be intermittent; impacts would be less than significant.

Domestic Water

Less than Significant. During operations, the Project would increase demand for water when compared to existing conditions. Since the end use of the Project is not known, the EIS Project team utilized the most intensive end-user scenario analysis, as taken from Hickey (2008). Based on the typical water usage levels presented in Table 4-61, the highest estimated water use during Project operations for 60 acres of heavy-industrial warehouse would be approximately 136,200 gallons per day (or 49,713,000 gallons annually). This type of land use could include power plants, large building construction, and airports. The City of Puyallup Comprehensive Plan considers industrial use to mainly support the development of business and industrial parks, clean light industry, and warehousing. Water consumption in these land use types may include use for industrial and/or manufacturing processes, domestic water for employees, and fire flow for sprinkler systems and hydrants.

Table 4-61. Industrial Land Uses Water Usage

Land Use	Water Usage (gallons/day/acre)		
	Low	Average	High
Light – Industrial	200	4,700	1,620
Heavy – Industrial	200	3,100	2,270

Source: Hickey 2008

The water sourced for the Project would come from the City of Puyallup Public Works Division and the Valley Water District. As the Project site is covered by both utilities' service areas, it is possible that both utilities could ultimately provide water to the site. However, for the purposes of analyzing the potential impact on water supply, this analysis makes the conservative assumption that all water would be supplied from one or the other utility.

The City of Puyallup Public Works Division has capacity to produce more than 13.7 million gallons of water per day. Assuming that the City of Puyallup was serving the whole Project, the Project would require approximately 1 percent of the total capacity of the system per day. Additionally, all water system extensions to serve the site would be designed to provide flow and capacity for this specific Project. The City therefore anticipates having water capacity to serve the Project within the city's service area of the site; however, a final determination including any appropriate utility permit conditions or

system development charges will be made following publication of the EIS. City of Puyallup Code Chapter 14.02 sets forth water system development charges that may be required once an end user and final water usage projections are known. As such, implementation of mitigation measure PS-1 is required to avoid a significant impact to the City of Puyallup water system:

- **PS-1: Comply with Title 14.02 PCC for Water Usage.** The Applicant will be required to pay any system development charges in accordance with Chapter 14.02.040.

In 2018, the Valley Water System produced about 95 million gallons of water, with daily consumption of about 230,000 gallons (Valley Water District 2021a). Assuming that the Valley Water District serves the entire Project, the Project would represent a 59 percent increase over current consumption levels. Although this is a large increase over current consumption levels, Valley Water District indicated (during consultation with their manager) that they have the capacity to serve the proposed Project (Valley Water District 2021b). Valley Water's service area is smaller than the entire site area, so the demand on their system is not expected to equal the entire Project area unless an alternative agreement on the service area was established with the Puyallup Water Department. The Applicant would be required to apply for a Water Availability Letter prior to construction to determine if the water availability is sufficient for development.

Sanitary Sewer

Mitigated Significant Impact. Operation of the Project would require connection to the City of Puyallup's existing wastewater facilities. The level of service for sanitary sewer is a level that allows collection of peak wastewater discharge plus infiltration and inflow (City of Puyallup 2015a). The City of Puyallup Comprehensive Sewer Plan describes estimates for growth and development in local populations and populations receiving sewer service. The proposed Project is located in mini-basin PUY 32 under the Comprehensive Sewer Plan (City of Puyallup 2016b). In 2016, the baseline sewered employment population estimate in PUY-32 was 0 and with full employment buildout is projected to be 1,564 (City of Puyallup 2016b). Table 4-62 outlines employment population baselines and projections in Puyallup mini-basin 32.

Table 4-62. Puyallup Mini-Basin 32 Employment Population Estimates and Projections

Mini-Basin	Baseline Employment		2020 Employment Projection		2034 Employment Projection		Buildout Employment Projection	
	Total	Sewered	Total	Sewered	Total	Sewered	Total	Sewered
Puyallup 32	78	0	269	190	545	466	1,564	1,564

The Project would introduce up to 1,500 new employees, with up to 500 on site at a time. A total of 500 new employees would be within the employment projections of Puyallup mini-basin 32; however, a review of sanitary sewer impacts at the time of utility permit application, and once Project uses were more defined, would enable the City to determine whether capacity improvements were needed ahead of planned timeframes and whether any would need to be completed prior to Project operations.

During the preparation of the utility permit application, the City of Puyallup may require physical capacity improvements to correct any failures in the downstream system resulting from the Project occupancy (final user(s)) build-out. If there are potential failures, the following mitigation measure would be required to avoid, minimize, or reduce impacts to the extent feasible:

- **PS-2: Conduct a Sanitary Sewer Assessment.** The Applicant will provide a site and user specific modeling report to determine if the Project would lead to downstream failures of the sanitary sewer system to ensure that unmitigated impacts do not occur and to determine if any system improvements need to be made prior to Project occupancy. The Applicant should pay any mitigation costs associated with the Project consistent with City of Puyallup Code Chapter 14.10 in order to mitigate this potential impact. This is consistent with CPCP policies U-4.3, CF-1, CF-5, and CF-5.1 and the LOS standard for sewer in Table 9-1 of the CPCP. It is also consistent with Pierce County Comprehensive Plan policies CF-6.2 and U-2.

Stormwater

Mitigated Significant Impact. The Project would result in substantial increases in the impervious surface of the Project site and, thus, the rate and amount of surface runoff is expected to increase with Project implementation. The Applicant would be required to obtain and maintain an Industrial Stormwater General Permit to reduce pollution associated with industrial facilities and maintain water quality requirements of Pierce County's NPDES Municipal Phase I Stormwater Permit (MS4, Permit No WAR044002).

The Project would include two separate stormwater systems to manage runoff from proposed impervious surfaces. The first consists of trench drains, catch basins, a storm drain network, and water quality vaults to collect, convey, and treat stormwater runoff from pavement areas and roof runoff from Warehouses B, F, and G. Approximately 70 acres of impervious surfaces would drain to this system. Following water quality treatment, the runoff would be directed to a new 42-inch-diameter storm trunk line, which would discharge to the Puyallup River at the northeast corner of the Project site at a recently constructed engineered outfall (see Figure 4-73). The engineered outfall is a large armored and vegetated energy dissipator located above the OHWM of the Puyallup River. The outfall is currently receiving flow from a 42-inch-diameter trunk line and would receive additional flow from this Project. The outfall is currently in poor condition and may need improvements to function as intended. More information on the potential water quality impacts associated with the outfall can be found in Section 4.2 Surface Water. The following mitigation measure would be required to avoid, minimize, or reduce impacts to the extent feasible:

- **PS-3. Comply with Stormwater Quality Requirements.** The Project is required to comply with Minimum Requirements 1 through 10 of the PCSWDM (Pierce County 2021b) in order to control the quantity and quality of stormwater produced by the site to meet water quality standards and beneficial uses of the receiving waters.

The 42-inch-diameter trunk line is sized to convey a 100-year storm event. The Puyallup River is a flow-control-exempt receiving water due to its size; therefore, no effect is anticipated from the additional runoff from the Project on channel morphology. Few details are known about the proposed water

quality vaults, although, while effective, they tend to be expensive up front and prone to frequent and expensive maintenance. In the event they are not properly maintained, untreated runoff may discharge to the Puyallup River.

There have been issues with the stormwater system at the Viking Warehouse on the property adjacent to the Project site. Groundwater was encountered that was nearer the surface than expected during design, which has necessitated the installation of dewatering trenches to manage post-construction groundwater intrusion coming through the surface through pavement and foundations on the adjacent Viking Warehouse site. Given the proximity of the Viking Warehouse to the Project site, it is likely that similar issues would be encountered with the stormwater system for the proposed Project. Therefore, the following mitigation measure would be required to avoid, minimize, or reduce impacts to the extent feasible:

- **PS-4. Conduct Groundwater Monitoring.** The Applicant will need to provide additional monitoring of groundwater through at least two more wet seasons (wet season as defined by the SMMWW [Ecology 2019]) in order ensure that the Applicant has obtained enough data to adequately design their facilities.

The second stormwater system would convey rooftop runoff from Warehouses A, C, D, and E to one of three infiltration/dispersion systems along the northeast bench of the site (see Figure 4-73). The function of these systems is to reduce surface water runoff rates from the Project site and maintain the hydrology of the adjacent wetlands and riparian areas in compliance with “Minimum Requirement 8: Wetlands Protection” of the PCSWDM (Pierce County 2021b). Approximately 38 acres of impervious surfaces would drain to these facilities. Design of the infiltration/dispersion systems appears feasible based on the preliminary geotechnical information provided; however, it is unclear where flows above the Minimum Requirement will be directed. The new 42-inch-diameter storm trunk line may not have capacity for the entire Project site runoff. Additionally, the location of the infiltration trenches may not be properly located relative to the minimum setback requirements from the topographical bench/steep slope and may not be appropriately located as to convey hydrology to the wetlands (generally located southeast of some of the trenches). Therefore, the following mitigation measure would be required to avoid, minimize, or reduce impacts to the extent feasible:

- **PS-5. Comply with Infiltration and Dispersion Trench Design Requirements.** Infiltration and dispersion trenches must be designed to take into account all requirements of the SMMWW (Ecology 2019), including:
 - Trenches cannot be located within any of the critical area buffers but can have flow paths that reach into the buffers.
 - As currently proposed, the infiltration/dispersion trenches appear to be shown too close to the steep slope. Per the stormwater manual, infiltration trenches should not be built on slopes steeper than 25 percent (4:1). A geotechnical analysis and report may be required on slopes over 15 percent or if located within 200 feet of the top of slope steeper than 40 percent or in a landslide hazard area. If solely designed as infiltration facilities, a mounding analysis must be performed to show that the trenches will infiltrate as designed. To

determine infiltration rates, pilot infiltration tests are required to be performed per the manual.

- If these will be used as a dispersion or infiltration/dispersion trenches, per the stormwater manual, a vegetated flowpath of at least 25 feet in length must be maintained between the outlet of the trench and any property line, structure, stream, wetland, or impervious surface. A vegetated flowpath of at least 50 feet in length must be maintained between the outlet of the trench and any slope steeper than 15 percent. Sensitive area buffers may count towards flowpath lengths.
- If being used as dispersion trenches, these facilities must have some sort of grade board and be located in such a way to ensure sheet flow out of the facilities and through the runout zone so that no erosion issues are created.

A significant impact may result from inappropriate or poorly functioning permanent stormwater facilities. The facilities may require excessive maintenance or need to be retrofitted. Complete failure of a permanent stormwater facility would result in significant impacts.

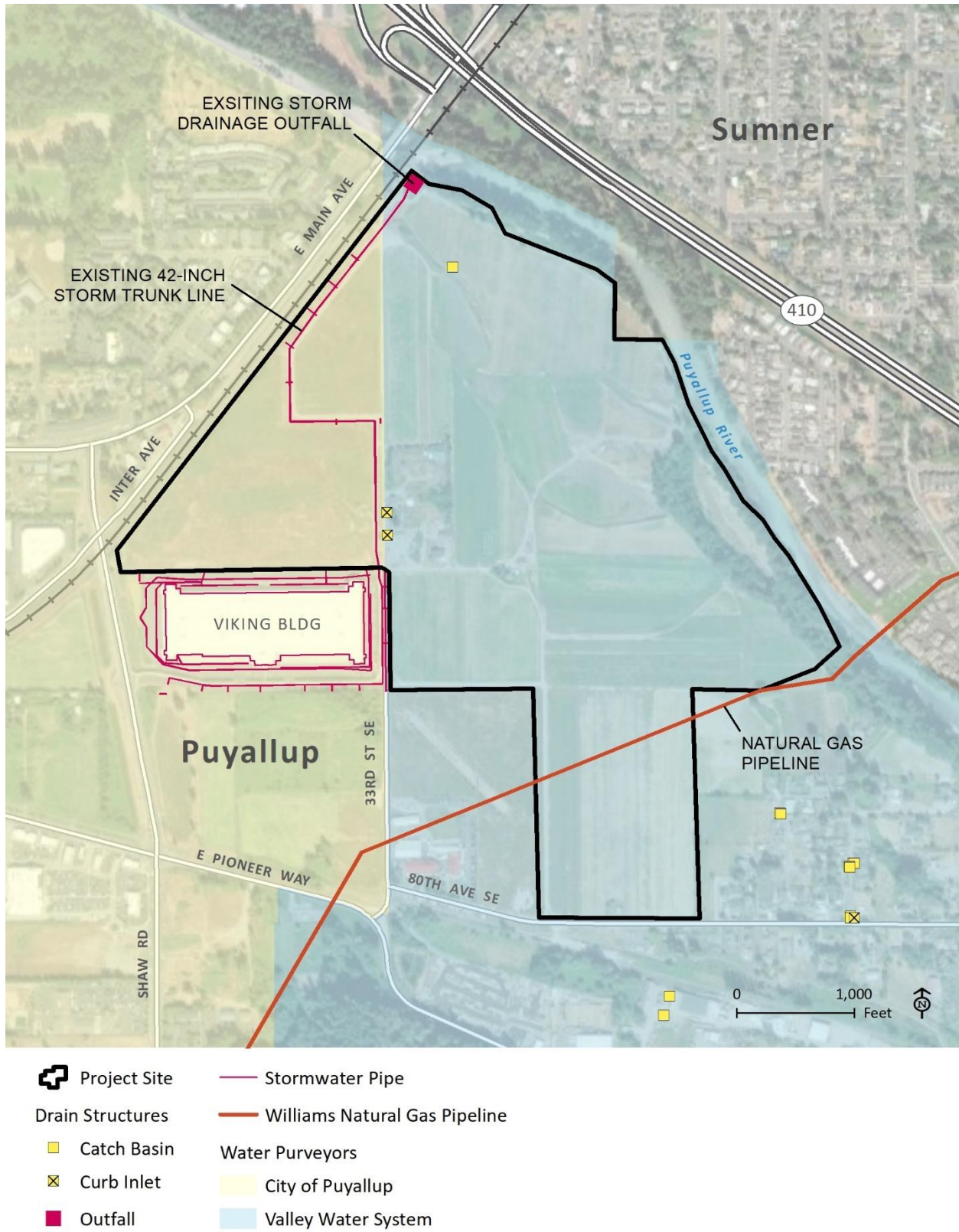


Figure 4-73. Proposed Stormwater System

Electricity and Natural Gas

Less than Significant. During operation, the Project would increase electrical power or natural gas demand as a result of power needs for lighting, security, heating and cooling, and systems operations. Coordination with PSE would be needed for electrical needs at signal houses, platforms, the underpass, and the pump station. These improvements would facilitate proposed Project actions that include water and sanitary sewer extensions, stormwater facility construction, and franchise utility improvements to support warehouse operational activities.

Additional electrical utilities would be used at the warehouse sites but would not result in an overall strain on existing area infrastructure. Operations at the warehouses would not impact existing electrical infrastructure or service to the area and adjacent parcels, and electrical usage would be consistent with current growth and development of the area. The net increase in electrical consumption following implementation of the Project would be met with PSE's 9 megawatts of available peak capacity to service the Project, which is estimated to be adequate for the most likely uses of the Project (PSE 2021). It is possible that certain reinforcement of PSE facilities could be required depending on the actual load requirements of the development. PSE has both high-pressure and intermediate-pressure gas pipelines that border the development, as well as a District Regulator that can be used to adjust the flow of natural gas as needed. The District Regulator is close to the development; PSE is confident in their ability to provide sufficient supply to meet the needs of the most likely uses of natural gas at this location (PSE 2021). Further, the Applicant would be required to submit service applications to PSE to ensure adequate supply for both electrical and natural gas services availability; impacts would be less than significant.

Solid Waste Services

Less than Significant. Regardless of the final end user, operations at the warehouses would increase the need for solid waste disposal in the County. Once an end user has been determined for the site, the user would be responsible for negotiating their solid waste disposal requirements with the service provider. As noted above, the LRI Landfill, which is the landfill servicing Pierce County and the Project site, is projected to be full as soon as 2030 based on projected County population growth. As noted in the Tacoma-Pierce County Solid Waste Management Plan, the County is considering negotiating a new solid waste disposal contract once the LRI Landfill is full. As such, while this Project would contribute to the solid wastes disposed of at the landfill, it is not anticipated to hasten the filling of the landfill, as the projections in the solid waste management plan are based on reasonable population growth.

Alternative 1 – Rail Transport

Construction Impacts

Less than Significant. The impacts from construction of Alternative 1 would be similar to those described for the proposed Project but would include construction of the proposed rail line and track extensions from BNSF mainline/Meeker Southern interchange. Construction would not require additional police/sheriff or fire services beyond those that were already identified under the proposed Project. Construction of the rail line would require use of domestic water, stormwater, natural gas, electrical facilities, and solid waste services. However, when compared to the proposed Project, the

additional utility requirements would be very similar. Therefore, impacts on public services and utilities from construction of Alternative 1 would be less than significant.

Operations Impacts

Mitigated Significant Impact. The public services and utilities impacts associated with operation of Alternative 1 would be similar to those described for the proposed Project. Public services and utilities requirements for rail transport of materials to or from the warehouse complex would require use of police/sheriff or fire services, domestic water, and natural gas, but would not require, sanitary sewer, stormwater, electrical facilities, or solid waste services to operate. The use of police/sheriff or fire services, domestic water, and natural gas would be similar to those described for the proposed Project. The stormwater and sanitary sewer issues identified under the proposed Project would also occur under Alternative 1. Implementation of mitigation measures PS-1, PS-2, PS-3, PS-4, and PS-5 would be required to minimize potential impacts to domestic water, stormwater, and sanitary sewer services. Therefore, public services and utilities impacts would be less than significant.

Alternative 2 – Reduced Intensity Alternative

Alternative 2 considers the potential impacts that would result if the mitigation measures that reduce the site footprint of the facility (AES-2, LU-1, REC-1, and SW-4) as outlined in this EIS for the proposed Project) were adopted by the Applicant. As noted below, Alternative 2 would still require Project implementation mitigation measures to reduce public services and utilities impacts.

Construction Impacts

Less than Significant. The impacts from construction of Alternative 2 would be similar to, but less than, those described for the proposed Project. Construction would not require additional police/sheriff or fire services beyond those that were already identified under the proposed Project. Construction would require use of domestic water, stormwater, natural gas, electrical facilities, and solid waste services. However, when compared to the proposed Project, the additional utility requirements would be lessened due to the decreased size of the facility. Therefore, impacts on public services and utilities from construction of Alternative 2 would be less than significant.

Operations Impacts

Mitigated Significant Impact. The public services and utilities impacts associated with operation of Alternative 2 would be similar to, but less than those described for the proposed Project. The reduced size of the facility would result in a reduction in the demand for public services and utilities and would lessen the potential impact on those resources. The stormwater and sanitary sewer issues identified under the proposed Project would also occur under Alternative 1. Implementation of mitigation measures PS-1, PS-2, PS-3, PS-4, and PS-5 would be required to minimize potential impacts to domestic water, stormwater, and sanitary sewer services. With implementation of these mitigation measures, public services and utilities impacts would be less than significant.