



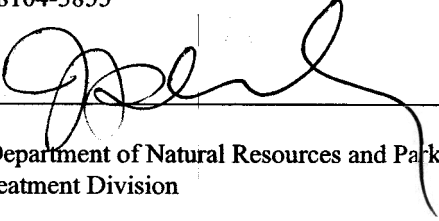
King County Department of Natural Resources and Parks • Wastewater Treatment Division, Environmental Planning & Community Relations • 201 S. Jackson St., MS KSC-NR-0505, Seattle, WA 98104-3855 • Phone (206) 684-1714 • FAX 684-1278

## DETERMINATION OF NONSIGNIFICANCE (DNS)

**TITLE OF PROPOSAL:** Juanita Bay Pump Station Replacement Project

**DESCRIPTION OF PROPOSAL:** The King County Wastewater Treatment Division (WTD) proposes to construct a new wastewater pump station to replace the existing Juanita Bay Pump Station. The existing pump station, constructed in 1969, lacks the capacity to convey projected future wastewater flows. The maximum capacity of the existing pump station is about 14 million gallons per day (mgd). The new pump station will have a capacity of about 31 mgd to meet the demand projected through the year 2050. There are also concerns about the reliability of the pump station's older equipment. The new pump station will be located across 93<sup>rd</sup> Avenue NE from the existing pump station on the site of a former park maintenance facility.

**LOCATION OF PROPOSAL, INCLUDING STREET ADDRESS, IF ANY:** The project site is in the City of Kirkland. The proposed new pump station site is located on the northeast corner of the intersection of Juanita Drive NE and 93<sup>rd</sup> Avenue NE at 11700 93<sup>rd</sup> Ave. NE.

<b>Responsible Official:</b>	Don Theiler
<b>Position/Title:</b>	Manager, King County Wastewater Treatment Division
<b>Address:</b>	201 S. Jackson St., MS KSC-NR-0505 Seattle, WA 98104-3855
<b>Date:</b> <u>2. 9. 2004</u>	<b>Signature:</b> 
<b>Proponent and Lead Agency:</b>	King County Department of Natural Resources and Parks Wastewater Treatment Division
<b>Contact Person:</b>	Wesley Sprague, Senior Environmental Planner Environmental Planning 201 S. Jackson St., MS KSC-NR-0505 Seattle, WA 98104; (206) 684-1169; wesley.sprague@metrokc.gov
<b>Issue Date:</b>	February 11, 2004

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This DNS is issued under WAC 197-11-340 (2); the lead agency will not act on this proposal for 17 business days from the issue date. **Comments must be submitted by March 1, 2004.** Submit comments to Shirley Marroquin, Supervisor Environmental Planning & Community Relations Unit, 201 S. Jackson St., MS KSC-NR-0505, Seattle, WA 98104-3855.

Written appeals of this threshold determination must be received by the SEPA Responsible Official at the above address **no later than 5:00 p.m. March 1, 2004, and must be accompanied by a \$250 fee.** The appeal must follow the procedure established in King County Public Rule PUT 7-4. The rule may be viewed at <http://www.metrokc.gov/recelec/archives/policies/put74pr.htm> or contact Wesley Sprague at 206-684-1169 or [wesley.sprague@metrokc.gov](mailto:wesley.sprague@metrokc.gov) to obtain a copy.

There is no agency appeal.

## ENVIRONMENTAL CHECKLIST

### A. BACKGROUND

**1. Name of proposed project, if applicable:**

Juanita Bay Pump Station Replacement

**2. Name of applicant:**

King County Wastewater Treatment Division

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

King County Wastewater Treatment Division  
201 S. Jackson St., MS KSC-NR-0505  
Seattle, WA 98104-3855

CONTACT: Wesley Sprague, Telephone: (206) 684-1169; e-mail:  
wesley.sprague@metrokc.gov

**4. Date checklist prepared:**

February 9, 2004

**5. Agency requesting checklist:**

King County Wastewater Treatment Division (WTD)

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

The project will be constructed in two main phases: demolition of the existing park maintenance building and site preparation/construction of the new Juanita Bay Pump Station.

Demolition of the existing park maintenance building and site preparation for the new pump station construction will take about 3 months. Work during this period will also include provision of the temporary construction power for the pump station construction. The projected schedule for this phase is from summer through fall 2004.

The duration of pump station construction will be about 30 months. Major construction will include excavation for the main pump station building and construction of its foundation, installation of an influent sewer pipe via trenchless technology and associated excavation and shoring, construction of pump station structures, pump station equipping and site work. The projected schedule for construction is from early 2005 to mid 2007.

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

During planning and design of the pump station, WTD has also conducted preliminary studies of the Juanita force mains. The Juanita Bay pump station

pumps wastewater through these two pipes to the Juanita interceptor, which conveys it to WTD's South Treatment Plant. WTD will continue to study whether it is necessary to upgrade the Juanita force mains. If studies indicate that an upgrade is necessary, WTD will begin a force main upgrade project. When enough information about the project has been developed to identify potential environmental impacts, WTD will conduct an environmental review of the project under SEPA. Any required upgrading of the force mains would take place after completion of the new pump station.

There are no aspects of the pump station project that would limit the range of reasonable alternatives for a potential force main upgrade project.

WTD has not yet determined what will be done with the existing pump station or the property it occupies after the new pump station goes into service. When WTD makes this determination, appropriate environmental review of the proposed action regarding the existing pump station and property will be conducted as required under SEPA.

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

Wetland Delineation Report for Juanita Beach Park, Kirkland, Washington. HDR Engineering, Inc., July 2002.

Letter from Adolphson Associates to City of Kirkland regarding above report, September 6, 2002.

Juanita Bay Pump Station Draft Predesign Report. Brown and Caldwell, Inc. June 14, 2002.

Draft Geotechnical Report, Proposed Juanita Bay Pump Station. Shannon and Wilson, Inc., September 3, 2002.

Juanita Bay Pump Station Task 310 Report. King County Wastewater Treatment Division, November 30, 1999.

Phase I Environmental Site Assessment, Juanita Bay Pump Station. King County Wastewater Treatment Division, May 2002.

Phase 2 Environmental Site Assessment, Proposed Juanita Bay Pump Station. Shannon and Wilson, Inc., June 2002.

Juanita Pump Station Monitoring Well and Product Sample Results Memo, Juanita Bay, Kirkland, Washington. Shannon and Wilson, Inc., July 2003.

Juanita Bay Pump Station and Force Mains Cultural Resources Overview and Assessment, King County, Washington. Larson Anthropological Archaeological Services Limited, June 2003.

Habitat Inventory and Assessment of Juanita Creek in 2000. King County Water and Land Resources Division, April 2002.

Final Report, Soils Investigation, Juanita Bay Pumping Station, Juanita Heights Pumping Station, Juanita Force Main Near Kirkland, Washington. Metropolitan Engineers, October 1966.

Report - Geotechnical Engineering Services: Juanita Drive Reconstruction and Utility Improvement Project, 93<sup>rd</sup> Avenue Northeast to 98<sup>th</sup> Avenue Northeast, Kirkland, Washington. GeoEngineers, November 12, 1999.

Asbestos, Lead, and Hydrocarbons Final Report, Proposed Juanita Bay Pump Station Site, Kirkland, Washington. Prezant Associates, Inc., Seattle, Washington, for R.W. Beck, Seattle, Washington, February 2001.

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

None known.

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

State (Washington Department of Ecology,):	NPDES permit for stormwater discharges associated with construction activity Underground Injection Control Registration
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King County Industrial Waste	Construction Dewatering Discharge
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City of Kirkland:	Demolition Building – shoring, street use, clear and grade, construction dewatering discharge, fire marshal Electrical, Plumbing, Mechanical Fire Marshal Permits Stormwater Uniform Fire Code (UFC) – potential hydraulic oil UST
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King County Health Department:	Septic Abandon Notice – potential septic tank
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Northshore Utility District:	Water and sanitary sewer
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**11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description).**

The King County Wastewater Treatment Division (WTD) proposes to construct a new wastewater pump station to replace its existing Juanita Bay Pump

Station. The existing pump station was constructed in 1969 and lacks the capacity to convey projected future wastewater flows. The maximum capacity of the existing pump station is about 14 million gallons per day (mgd). The new pump station will have a capacity of 31 mgd, which is the capacity WTD projects that it will need by the year 2050. There are also concerns about the reliability of the older equipment in the existing pump station.

The new pump station will be constructed across the street from the existing one on the site of a former King County Parks Division maintenance facility (see Figure 1 - vicinity and location maps). This half-acre site was until recently used to store and maintain park maintenance equipment such as lawnmowers. The Parks Division removed this equipment when the site was transferred to the Wastewater Treatment Division. A maintenance building and large gravel parking area presently occupy the site. The maintenance building will be demolished prior to pump station construction.

The new pump station will consist of one structure housing the pump equipment, chemical storage, odor control scrubber, and standby generator (see Figure 2 - Site Plan). This structure will occupy about a third of the site, with landscaping and vehicle access/parking covering about another third each. The pump station will extend 60 to 80 feet below the ground surface and about 30 feet above ground.

The pump station will have rooms for different functions. The main room will house pumps, piping, electrical and other equipment. The chemical storage room will house a tank containing a chemical that will be fed into the wastewater stream to control odors and corrosion in downstream pipes. The odor control scrubber room will contain the odor control scrubber. The standby generator room will contain the standby generator and associated equipment.

Outside the pump station, an underground standby generator fuel tank will be located near the northwest corner of the building. This tank will provide enough fuel to allow the generator to run the station for about 24 hours in the event of a power outage. Other small equipment and structures will be located outside the pump station as shown in Figure 2.

The new pump station will be connected to existing incoming and outgoing pipes. It will be connected to the incoming trunk sewer pipe through a new 60-inch-diameter pipe that will be constructed under Juanita Drive. The length of this pipe will be about 150 feet. Short segments of new pipe will connect the pump station to the existing force main pipes (Juanita force mains) immediately west of the site (see Figure 1 – Vicinity Map and Project Area).

A construction staging area will be established and used for approximately two and one-half years in the northwest corner of Juanita Beach Park, across Juanita Drive NE from the new pump station site (see Figure 1). This approximately one-acre site will be used to store and maintain construction equipment and supplies, to store pump station materials and equipment and to prepare pump station equipment for installation.

Generally, construction work on the new pump station will consist of demolition of the existing park maintenance building, excavation to a depth of up to 80 feet for the pump station building, construction of that building, installation of

equipment, grading, backfilling, trenching and boring for pipes, and landscaping.

The existing pump station will remain in service until the new pump station is completed and put into service. At that time the existing pump station will go out of service (see section A.7. above).

- 12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The pump station will be located on the northeast corner of the intersection of Juanita Drive NE and 93<sup>rd</sup> Avenue NE in Kirkland. The site's address is 11700 93<sup>rd</sup> Ave. NE. The site is in S30, T26N, R5E. (See Figure 1)

## **B. ENVIRONMENTAL ELEMENTS**

### **1. Earth**

- a. General description of the site (circle one):** Flat, rolling, hilly, steep slopes, mountainous, other \_\_\_\_\_.
- b. What is the steepest slope on the site? (approximate percent slope)?**

The pump station site is level. The steepest slope in the staging area is about ten percent.

- c. What general types of soils are found on the site? (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.**

Soils in the project area are mainly Kitsap silt loam and Indianola loamy find sand.

Soil borings indicate that there are at least five distinct soil layers at the project site. These are summarized below.

- The uppermost soil layer at the project site ranges from 3 to 10 feet thick. It is composed of imported sandy and gravelly fill material.
- Beneath the surface fill is a layer of "overbank deposits" 15 to 20 feet thick. This layer is mostly sand, with some seams of peat and other organic material. It is relatively permeable.
- A recessional outwash deposit 16 to 23 feet thick lies beneath the overbank deposits. The outwash deposit consists primarily of sand.

The outwash material is permeable and, together with the overbank deposits, forms the shallow aquifer at the project site.

- Below the outwash is a glacial till deposit 8 to 21 feet thick. It consists of very dense fine sand with some clay pockets. Due to its low permeability, this layer probably acts as an “aquitard”, which is a layer that impedes the downward or upward movement of groundwater.
- A layer of interglacial alluvium is found beneath the till layer. This layer is mostly sand with some gravel. It is relatively permeable and comprises the deeper artesian aquifer at the project site.

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

The City of Kirkland has classified an area including the new pump station site as a seismic hazard area. The primary hazards include development of liquefaction and associated settlement and liquefaction-induced lateral spreading. The risk of other earthquake-induced geologic hazards, such as ground surface fault rupture and landsliding, is relatively low.

**e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.**

During demolition of the existing park maintenance building, about 60 cubic yards of soil and 150 cubic yards of below-grade building materials (e.g., concrete, brick) will be exported from the site and about 300 cubic yards of soil will be imported as fill. This soil will be used to fill voids left by removal of the building foundation, existing concrete or brick pads, and, potentially, septic and hydraulic tanks.

During pump station construction, all fill placed beneath floor slabs, pavements, behind walls, or areas where settlements are to be minimized will be structural fill consisting of a well-graded mixture of pit-run sand or sand and gravel that is free of organics, debris, and rubbish. Some of the near-surface sand fill and native silty sand underlying the site may be suitable for reuse as structural fill. As needed, fill will be imported. Recycled concrete may be used as an alternate for the imported pit-run sand and gravel soil. About 15,000 to 17,000 cubic yards of fill will be exported and about 200 to 400 cubic yards of fill will be imported. Imported fill will be obtained from local commercial sources.

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

Some erosion could occur during grading, excavation and filling but erosion control measures will be used to minimize this potential (see item h. below). The fact that the site is flat will also help minimize the potential for erosion. After construction has been completed, the unpaved portions of the site will be graded and landscaped to minimize potential erosion.

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

Impervious surfaces now cover about 90% of the site. When construction is finished, impervious surfaces will cover about 70% of the site.

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

Following demolition of the existing park maintenance building, measures will be taken to minimize erosion and sedimentation in the period before pump station construction begins. All voids will be backfilled and the site will be graded to direct runoff to the on-site catch basin. Additional measures could include quarry spalls at the site entrance, filter fabric fencing, a sediment trap at the catch basin, and either crushed rock surfaces or, where soil backfill has been placed, hydroseeding, mulch or similar measures.

Temporary erosion and sedimentation control measures will be employed throughout pump station construction. Typical measures that could be used are filter fabric fences, hay bales, covering soil stockpiles and exposed soils, and use of settling tanks or other means to prevent sediment from leaving the site. Other measures could include designating personnel to inspect and maintain temporary erosion and sedimentation control measures, using appropriate means to minimize tracking of sediment onto public roadways by construction vehicles, and restoring disturbed areas by replanting or repaving as soon as practical after construction is completed.

Temporary erosion and sediment control measures will be implemented throughout construction as required by the state General Permit for Stormwater Discharges Associated with Construction Activity and the City of Kirkland Clearing and Grading permit. Temporary erosion and sediment control measures will be identified in a stormwater pollution prevention plan as required by the state General Permit, and incorporated in the project's construction plans and specifications. Erosion and sedimentation control measures will be put in place prior to clearing, grading or excavation activities and will remain in place within the construction staging area for the duration of the project. Limits of construction activities will be delineated on construction drawings to maintain required buffers around surface waters and other environmentally sensitive areas.

Dewatering during construction has the potential to cause ground settlement. To minimize the risk of ground settlement, dewatering will be limited to only the area and depth necessary for construction. In addition, nearby ground surface elevations will be monitored during dewatering and groundwater will be re-injected into the shallow aquifer if needed to avoid ground settlement.

After construction has been completed, there will be no long-term erosion or other impacts to the earth due to operation of the project.



The project site is located within UBC Zone 3. Seismic design of the pump station will be accomplished using the equivalent base shear method of analysis as outlined in the 1997 Uniform Building Code, which is based on a 500-year event.

**2. Air**

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile emissions, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.**

Temporary construction-related air emissions during park maintenance building demolition and pump station construction will include dust generated by construction activities and exhaust from construction equipment. Emissions will consist primarily of soil particles, carbon monoxide and hydrocarbons.

During pump station operation the main source of air emissions will be the standby generator when it is tested or when used during power outages.

The generator will emit minor amounts of carbon monoxide, hydrocarbons and sulfides when operated. Testing is expected to occur for about one hour per month. Since the pump station is located in a reliable electric service area, standby operation is expected only once per year for up to an hour.

Wastewater in the pump station will generate odors from hydrogen sulfide and other substances in sewage. The pump station will include an odor control system as described in c. below.

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

No off-site emission sources will affect this proposal.

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

During dry weather, construction-related dust emissions will be minimized through dust control measures such as watering construction areas to wet bare soils, and cleaning roadways around construction areas.

Construction equipment-related emissions will be reduced by requiring proper maintenance of equipment, using electrically powered equipment where practical, and avoiding prolonged idling of vehicles and equipment.

During operation, the pump station will incorporate measures to minimize odor and other air emissions from the pump station and standby generator. The pump station will have an odor control unit consisting of a single-stage, 3'-deep carbon bed. The unit will draw air exposed to

wastewater through the carbon bed for treatment and will discharge the treated air through a stack. The odor control system will be entirely indoors except the stack.

The odor control system is designed based on historical odor levels and the potential to emit odors (based on expected concentrations of odor-causing substances in the wastewater). According to the Puget Sound Clean Air Agency (PSCAA), carbon filters are considered BACT (Best Available Control Technology) for odor control purposes for King County. The system will minimize the pump station's emissions of hydrogen sulfide and other odorous, volatile compounds.

In addition to the odor control system, the pump station will include a chemical storage and feed system to control odors and corrosion in the Juanita force mains and Juanita interceptor, located downstream of the pump station (see also B.7.A below). This system will inject chemicals into the Juanita force mains at the pump station, which will also reduce odors in the station.

Through these means, the proposed pump station will provide better odor control than the existing station, because the existing station does not have an odor control system.

Air pollutant emissions by the standby generator will be minimized through selection of a generator designed to optimize its air-fuel mixture to minimize these emissions.

### 3. Water

#### a. Surface:

- 1) **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, or wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

Juanita Creek is located about 80 feet east of the new pump station site. (A condominium is located between the pump station site and Juanita Creek.) This creek flows into Lake Washington about 500 feet south of the pump station project site. At its closest, the construction staging area is located about 75 feet west of Juanita Creek, about 100 feet north of some wetlands adjoining Juanita Creek and about 300 feet north of Lake Washington.

- 2) **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

All construction work will take place at least as far from Juanita Creek and Lake Washington as described in 1) above.

- 3) **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and**

**indicate the area of the site that would be affected. Indicate the source of fill material.**

No fill or dredge material will be placed in or removed from surface waters or wetlands as a result of construction of the new pump station.

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

No surface water withdrawals or diversions will occur.

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

No.

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

Small spills or leaks of motor oil, diesel fuel, or hydraulic fluid could occur during construction. See item d. below for measures to minimize the potential for hydrocarbons or other pollutants to reach surface waters.

Project construction will involve substantial groundwater dewatering. See item b. below for estimated volumes.

Most of the groundwater removed from the site is planned to be discharged to Juanita Creek during the wet season (October-May) using an existing City-owned storm sewer. A small amount of the water may also be discharged to the existing pump station through a sanitary sewer during this season.

During the dry season, all of the water is planned to be discharged to the existing pump station through the sanitary sewer. However, if a large storm event occurred during the dry season, it could become necessary to temporarily divert discharges to Juanita Creek or dispose of the water off site. Off-site disposal would probably be by vector truck, which would discharge the water at an approved location. After the storm flows receded, the discharges would be redirected to the sanitary sewer.

After construction, potential waste discharges will be spills or leaks of petroleum hydrocarbons from vehicles using the small parking lot, from vehicles delivering fuel to the underground standby generator, from the generator fuel tank or from vehicles delivering chemicals to the pump station. Chemical spills during delivery are another potential waste discharge source. See item d. below for measures to minimize these potential discharges.

**b. Ground:**

- 1) **Will ground water be withdrawn, or will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.**

Construction of the project will involve substantial groundwater dewatering. In total, about 29 million cubic feet of groundwater could be withdrawn to allow below-grade construction. The rate of dewatering during construction could reach a peak of up to 1.45 cfs (650 gpm), and a long term rate (after 30 days of dewatering) of 1.16 cfs (520 gpm). These rates are estimated worst-case conditions. Actual rates will depend on the contractor's construction methods and sequencing.

Some of this groundwater may be reinjected into the upper aquifer if necessary to avoid land subsidence and consequent settling of structures located near the new pump station site. The need for and amount of groundwater reinjection will be determined based on monitoring of groundwater levels and nearby ground surface elevations during dewatering. If reinjection becomes necessary, the injection wells will be registered and operated in accordance with the state Underground Injection Control Program requirements.

- 2) **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

Small spills or leaks of motor oil, diesel fuel, or hydraulic fluid could occur during construction. See item d. below for measures to minimize the potential for these materials to be discharged into the ground.

After construction, potential waste discharges will be spills or leaks of petroleum hydrocarbons from vehicles using the small parking lot, from vehicles delivering fuel to the underground standby generator, from the generator fuel tank or from vehicles delivering chemicals to the pump station. Chemical spills during delivery are another potential waste discharge source. See item d. below for measures to minimize these potential discharges.

**c. Water Runoff (including storm water):**

- 1) **Describe source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

During both construction and operation, the source of runoff will be storm water.

During construction, stormwater runoff from the pump station site and staging area will be collected and treated to remove sediments prior to discharge to the City storm sewer line, which discharges into Juanita Creek about 80 feet east of the project site.

After construction, stormwater runoff from the roof will be directed to rock infiltration beds from which it will seep into the soil. Runoff from other impervious surfaces on the site will be treated on site prior to discharge to the City storm sewer, which ultimately discharges into Juanita Creek. See item d. below for a description of on-site treatment. After construction is finished, the staging area across the street from the pump station will be restored to existing or better condition to minimize surface runoff.

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

Runoff from construction sites has the potential to contain small amounts of motor oil, diesel fuel, hydraulic fluid, and other equipment-related materials, as well as sediment. See item d. below for measures to minimize the potential for these materials to enter ground or surface waters.

After the pump station is completed, potential waste discharges will be spills or leaks of petroleum hydrocarbons from vehicles using the small parking lot, from vehicles delivering fuel to the underground standby generator, from the generator fuel tank or from vehicles delivering chemicals to the pump station. Chemical spills during delivery are another potential waste discharge source. See item d. below for measures to minimize these potential discharges.

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

The project will be constructed in accordance with applicable state and local permits, which will specify a range of measures designed to reduce or control potential surface, ground, or runoff water impacts. Prior to construction, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared as required for the state NPDES General Permit for Stormwater Discharges Associated with Construction Activity. The SWPPP will prescribe erosion and sediment controls and other Best Management Practices (BMPs) designed to minimize the risk of sediment or other contaminants entering the surface or groundwater from the project site or staging area. Potential construction BMPs include:

- Employ typical erosion control measures such as filter fabric fences, hay bales, and covering of soil stockpiles or exposed soils;
- Apply sediment control measures as needed such as settling tanks to prevent sediment from leaving the site;

- Designate personnel to inspect and maintain temporary erosion and sedimentation control measures;
- Store materials away from surface waters and wetlands;
- Refuel construction equipment and vehicles away from surface waters and wetlands whenever practicable;
- Maintain spill containment and clean up material at the construction site;
- Contain equipment and vehicle wash water associated with construction and keep it from draining into surface waters and wetlands;
- Use appropriate means to minimize tracking of sediment onto public roadways by construction vehicles;
- Restore disturbed areas by replanting or repaving as soon as practical after construction is completed.

Groundwater samples collected from the project site did not contain contaminants in excess of Class AA surface water quality standards. Moreover, the dewatering discharges are not expected to come into contact with any waste materials at the site. Thus, the dewatering discharges are unlikely to convey waste materials to surface or ground waters.

However, the quality of water to be released from the project site will be monitored during construction. Settling tanks or other treatment measures, including chemical treatment if necessary, will be used if needed to ensure that this water meets water quality standards before it is discharged to surface water or groundwater. Implementation of the SWPPP and other applicable measures will be included in project construction contract specifications.

After construction is completed, surface, ground, and runoff water impacts are expected to be less than under existing conditions. The volume of runoff will be reduced because there will be approximately 20% less impervious surface than at present. Runoff quality will be improved by use of non-leachable roof material, routing of roof runoff through rock infiltration beds, and treatment of runoff from other impervious areas prior to discharge to the City storm sewer system. Treatment will consist of a media filtration device or a similar City-approved stormwater treatment BMP. This system will remove hydrocarbons, sediment and other contaminants from the stormwater before it is discharged to the City's storm drain system.

Structural and operational measures will be taken to minimize the potential for fuel spills associated with the standby generator's underground fuel tank. The tank will be double-walled and have automatic shutoff valves and a leak detection system. A sump will be provided around the underground fill port to catch any spills during filling and direct them to the fuel tank. The pad overlying the fuel tank will be

sloped to direct any spilled fuel to a catch basin, from which it would flow to the filtration system described above. Appropriate BMPs, such as a fuel level indicator, signage to discourage over-filling, and staff training will be implemented to minimize the risk of fuel spills.

The chemical storage and feed installation will be provided with comprehensive safety features to comply with requirements of the Uniform Building Code and the Uniform Fire Code. Safety features will include secondary containment, leak detection systems, alarms, overfill protection, clear labeling, splash guards, eyewash and shower, and cabinets for goggles and other personal protection equipment. The chemical storage tank will be filled inside the chemical storage room. This will minimize the potential for chemical spills because the floor of this room will be lower than the entrance, thus providing a "basin" to contain any chemicals that might be spilled (secondary containment).

#### 4. Plants

**a. Check or circle types of vegetation found on the site:**

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

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

Small amounts of grass and shrubs and a few trees will be removed during construction at the new pump station site and construction staging area.

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

No threatened or endangered plant species are known to be located on or near the site.

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

Substantial landscaping will surround the pump station. The new plantings will primarily be native species with the addition of a few other species that are common in the Pacific Northwest. Since very few plants presently exist on the site, this will greatly enhance site vegetation.

When the project is finished, grass and trees will be planted in the construction staging area to restore it to its existing condition or better.

**5. Animals**

- a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:**

birds: hawk, heron, eagle, songbirds, other: waterfowl, osprey

mammals: deer, bear, elk, beaver, other: \_\_\_\_\_

fish: bass, salmon, trout, herring, shellfish, other: crayfish\_\_.

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

No threatened or endangered animal species are known to occur on the project site. Chinook salmon have been reported in Juanita Creek in the past.

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

Juanita Creek is part of a migration route for coho, sockeye, kokanee and possibly chinook salmon. The entire Puget Sound area is part of the Pacific Flyway for migratory birds.

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

The project site was used as a County maintenance facility for many years; consequently the site provides little wildlife habitat at present. Compared to the old maintenance facility, the proposed pump station will have appreciably more landscaped area. The new facility will be landscaped with native plants, which will provide better wildlife habitat and reduce the need for fertilizer and pesticide use.

All construction activities will be performed in accordance with applicable state and local permits. A Stormwater Pollution Prevention Plan will be developed and implemented throughout construction to minimize potential water quality and aquatic habitat impacts.

**6. Energy and Natural Resources**

- a. What kinds of energy (electric, natural gas, oil, woodstove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

During construction, fossil fuels will power construction vehicles, equipment and haul trucks. Electrical energy will also be used to operate some construction equipment.

Electricity will be used to run the pump station equipment including heating, cooling and ventilation. Standby power will be supplied by an onsite generator, which will use diesel fuel.



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

No.

- c. **What kind of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:**

The new pumps and motors will be more energy efficient than the existing pumps and motors.

## 7. Environmental Health

- a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.**

Some materials that could present health hazards are present on the proposed pump station site. Until recently, the existing park maintenance building on the site contained some asbestos. This has been removed. The building still contains lead paint. This material will be properly handled and disposed of when the building is demolished. Low levels of petroleum hydrocarbons, lead and gasoline-related volatile organic compounds have been found at various locations on the site. None of these are at concentrations that exceed the Washington State Model Toxics Control Act (MTCA) Method A cleanup criteria. Consequently, no cleanup activities should be necessary.

A hydraulic lift and possible oil reservoir are present on the site. A sample was collected from the fill port of the oil reservoir. No halogenated compounds, with the exception of a low concentration of chloroform, were detected in the sample. An abandoned septic system may be on the site.

During construction, petroleum products, including fossil fuels, lubricants and solvents, will be used. It is possible that spills of these substances could result in health hazards, however the potential for adversely affecting the environmental health of workers and nearby residents is very low. As noted above, a Stormwater Pollution Prevention Plan (SWPPP) will be implemented throughout construction. The SWPPP will specify BMPs to minimize the risk of spills or leaks, as well as procedures for prompt containment and clean-up should a leak or spill occur.

The pump station will include a chemical storage and feed system to control odors and corrosion in the Juanita force mains and Juanita interceptor. The system will be designed to use any of the following chemicals: ferrous chloride, sodium hydroxide, sodium hypochlorite, sodium nitrate, and calcium nitrate. All of these chemicals are anticipated to be effective in controlling odors and corrosion at this facility. Only one chemical will be used at any one time. The chemical used will be selected during operations and may change from time to time based on factors such as chemical supply, cost and effectiveness in

treating odor and corrosion . The volume of chemical storage capacity needed is based on accepting a full tanker of chemical when the storage vessel is half full. Meeting this criterion results in a vessel with a 6,000-gallon capacity.

During pump station operation, about 3,000 gallons of diesel fuel will be stored in an underground, double-walled standby generator fuel tank.

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

If a diesel fuel occurred, hazardous materials cleanup services could be needed.

Fire and police emergency services would be required if a fire or explosion occurred.

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

A contractor certified to remove and properly dispose of lead paint will be used for the demolition of the existing park maintenance building.

The existing hydraulic lift and possible associated hydraulic oil reservoir will be removed and legally disposed of. The reservoir does not fall under Washington Administrative Code cleanup criteria and no levels of contaminants exceed MTCA. Necessary precautions will be taken if contamination is detected.

If a septic tank and drainfield are found, they will be removed and disposed of if or as required by County Health Department regulations.

As described in item B.1.h. and B.3.d. above, best management practices will be used to avoid and/or contain and control any spills of hazardous materials during project construction.

Several measures have been incorporated into the project to minimize potential environmental health hazards when the new pump station is in operation. As noted in B.3.d. above, the standby generator's underground fuel tank will be double walled and will have fuel-level and double-wall leak indicators. The sump, sloped pad, catch basin and BMPs described in B.3.d will also help minimize the potential for fuel spills.

The chemical storage and feed installation will be provided with comprehensive safety features to comply with requirements of the Uniform Building Code and the Uniform Fire Code. Safety features will include secondary containment, leak detection systems, alarms, overfill protection, clear labeling, splash guards, eyewash and shower, and cabinets for goggles and other personal protection equipment. The chemical storage tank will be filled inside the chemical storage room. This will minimize the potential for chemical spills because the floor of this room will be lower than the entrance,

thus providing a “basin” to contain any chemicals that might be spilled (secondary containment).

Project design includes measures to minimize the risk of fire or explosion. Examples include fire sprinklers and an alarm system. In addition, the building will be constructed of non-combustible materials.

Pump station emergency operating procedures have been established to minimize the likelihood and volume of an accidental discharge of sewage into Lake Washington. As is the case with the present pump station, if such discharges occurred, they would enter the lake through the existing Holmes Point Trunk overflow structure.

**b. Noise**

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

Noise in the vicinity of the new pump station site is primarily traffic noise from Juanita Drive and, to a lesser degree, 93<sup>rd</sup> Avenue NE. This noise will not affect the project.

**2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**

Demolition and construction activities will generate noise in the vicinity of the pump station and staging area sites. Construction noise will consist of engine noise, reverse gear warning systems, pile driving and mechanical and scraping noises associated with the use of heavy construction equipment such as bulldozers, graders, scrapers, loaders and excavators. Construction noise levels will vary depending on the specific equipment used for particular activities. Based on previous construction projects, typical noise levels can be expected to range from about 70 to 90 dBA measured at a distance of 50 feet from the source. If impact pile driving were used, peak noise levels could reach as high as about 100 dBA.

The pump station foundation will consist of secant pile walls, for which shafts will be drilled then filled with concrete. This activity will result in noise from the drills and concrete pumping. There may also be vibratory sheet pile driving. Impact pile driving is also possible, but less likely than vibratory pile driving. Foundation building and pile driving will occur for approximately 9 months.

A new 60-inch pipeline will be installed by microtunneling under Juanita Drive. Associated noise will result from a slurry separation system, a slurry bentonite pump, and possibly a ventilation system coming from the tunneling excavation. The tunneling will occur for approximately one to two weeks, but excavation and shoring

procedures, with secant piles or steel sheeting, will add approximately 2 additional months.

Materials hauling activities and workers' vehicles will add slightly to traffic noise on roads used to access the site during project construction.

Construction will mainly occur during normal weekday working hours. Weekend or overtime work may occur at times. The hours of this work will be in compliance with State of Washington and City of Kirkland regulations.

The new pump station and standby power generator will create noise during operation but will be within the City of Kirkland's permissible noise levels. The standby generator will typically be tested for one hour once per month during weekday working hours.

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

Measures to reduce or control noise impacts during construction could include the following:

- Mufflers on all gas powered equipment;
- Provide electricity from the power grid and encourage the use of electric or hydraulic tools whenever practicable;
- Notify residents and businesses near active construction areas of upcoming noisy construction activities;
- 24-hour construction hotline to promptly respond to questions and complaints.

In addition, all construction activities will comply with applicable noise regulations.

To limit noise levels during operation, the pump station will incorporate noise reduction measures in its design. These measures could include enclosure of equipment inside the pump station building, location of pumps and motors below ground level, silencers in the air exhaust paths, sound traps in the generator room louvers, sound absorbing liners, strategic placement of walls and landscaping, and building construction of sufficient mass to reduce transmission of the sound through the building walls. Doors to the buildings will be carefully designed to ensure that they do not compromise acoustical integrity. All operational activities will comply with applicable noise regulations.

To minimize the potential for vibration-caused impacts to nearby properties, a monitoring program is proposed. This program may include ongoing monitoring of ground settlement monitoring points established before construction begins and pre-, during and post-construction videos and still photography. If vibration impacts are

detected, steps will be taken to reduce these impacts to acceptable levels.

During operation, the pump station building and equipment in it will be designed to minimize vibration. Vibration control measures will include equipment balancing, vibration-reducing equipment mounting pads and bases, and adequate building mass and stiffness to avoid vibration in the structure and prevent transmission of vibration into the ground.

**8. Land and Shoreline Use**

**a. What is the current use of the site and adjacent properties?**

The pump station site was until recently used as a park maintenance facility for the King County Department of Parks and Natural Resources (Parks Division). Multifamily residential housing adjoins the site on the east and north. The existing Juanita Bay Pump Station is located to the west across 93<sup>rd</sup> Avenue NE. Juanita Beach Park is located south of the site across Juanita Drive NE.

**b. Has the site been used for agriculture? If so, describe.**

No.

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

The park maintenance building is a concrete block and wood structure.

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

Yes, the park maintenance building will be demolished.

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

The pump station site is zoned P, parks/public use.

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

The comprehensive plan designation for the pump station site is Parks/Open Space.

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

Not applicable for the pump station.

**h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.**

The City of Kirkland has classified an area including the new pump station site as a seismic hazard area. The primary hazards include development of liquefaction and associated settlement and liquefaction-induced lateral spreading. The risk of other earthquake-induced geologic

hazards, such as ground surface fault rupture and landsliding, is relatively low. The pump station will be designed to meet applicable seismic code.

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

The pump station will not be staffed. King County staff will make one or two visits per week to the station for inspection and maintenance.

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

A small number of park maintenance workers have been relocated to another maintenance facility.

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

None needed.

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

Through the permit approval process, the City of Kirkland will be consulted to ensure that the proposal is compatible with existing and projected land uses and plans.

Landscaping, architectural treatment, structural facility screening, and odor and noise control equipment will help ensure that the facility is compatible with existing and projected land uses.

**9. Housing**

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

None.

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

None.

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

Not applicable.

**10. Aesthetics**

**a. What is the tallest height of any proposed structure(s), not including antennae; what is the principal exterior building material(s) proposed?**

The highest point on the new pump station will be about 30 feet above ground level. The building will have two air discharge stacks. These may extend up to four feet above the highest point of the building, (i.e., reaching about 34 feet above ground level). The building will be constructed mainly of masonry and concrete. Roofs and upper building enclosures will be painted steel and metal siding.

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

The existing park maintenance building is about 18 feet tall, but it spans the entire width of the site (east to west). The proposed pump station will be about 30 feet tall at the center of the structure, but will only block one-third of the width of the site. The remainder of the structure will only block an additional one-sixth of the width of the site leaving view corridors through the site for the other half of the site width.

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

When construction is finished, the temporary construction staging area will be returned to its previous condition or better.

The new building and landscaping will be an aesthetic improvement over the existing site and structure. Integrated landscaping (including native plants), architectural treatment and screen walls will be incorporated into the design. These measures will help blend the facility into the surrounding neighborhood.

**11. Light and Glare**

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

During construction, there may be lighting used on the pump station site and in the staging area, in the vicinity of the work or within excavations. This could occur at any time during working hours and at night.

During operation, interior and exterior security and safety lights will be on at night.

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

No.

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

None.

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

During construction, lights will be angled in the direction of work. To reduce disturbance of residents in the area, the contractor may provide shielding to reduce glare if necessary.

During operation, several measures will be used to control light and glare. Exterior building lighting will be shielded to minimize glare on adjacent properties. Low and diffused landscape lighting will be used as well. Small-canopy trees will be used around the site to deflect on-site night lighting.

## 12. Recreation

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

Juanita Beach Park is located across Juanita Drive NE, south of the new pump station site. In and near the proposed construction staging area the park consists of an extensive grass-covered area. Some picnic tables are located in/near this area. Further away is a picnic shelter. This area can be used for active and passive recreational activities.

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

The project will temporarily displace recreational use in the northwest corner of the park. A construction staging area is proposed to occupy about one acre in this area during construction of the pump station. The usable area will be less, to eliminate impacts within stream and wetland buffers. This is a large park so displaced uses should be readily able to relocate to other areas of the park during construction.

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

When pump station construction is completed the staging area will be restored to its previous or better condition.

## 13. Historic and Cultural Preservation

**a. Are there any places or objects listed on, or proposed for, national, state or local preservation registers known to be on or next to the site? If so, generally describe.**

Per the Juanita Bay Pump Station and Force Mains Cultural Resources Overview and Assessment, there are no places or objects listed or proposed for preservation registers on the site.

**b. Generally describe any landmarks or evidence of historic, archaeological, scientific or cultural importance known to be on or next to the site.**

None are known to be on or next to the site.



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

It is not expected that any archaeological or historic resources will be encountered. However, if artifacts are uncovered during excavation, work will be stopped pending notification of and response from appropriate agencies.

**14. Transportation**

**a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

The pump station site is served by Juanita Drive NE and 93<sup>rd</sup> Avenue NE. The pump station site is on the northeast corner of the intersection of these two streets (see Figure 1 - Vicinity Map and Project Area).

**b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

Yes, Metro Transit route 935 serves the pump station site. Routes 233, 234, 236, 255, 260 and 277 serve NE 116<sup>th</sup> Street and 98<sup>th</sup> Ave. NE.

**c. How many parking spaces would the completed project have? How many would the project eliminate?**

The current site has approximately 6 parking spaces. The completed project will have 3 parking spaces for periodic inspection and maintenance.

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

At the beginning of construction, a new storm drain and storm drain manhole will be installed in 93<sup>rd</sup> Avenue NE next to the site. This will take about two weeks. Traffic will be routed around this work during this time.

Following construction, new street pavement (half street width), curb, gutter, and sidewalk will be installed in the section of 93<sup>rd</sup> Avenue NE paralleling the west side of the new pump station site. The sidewalk along Juanita Drive next to the site will also be replaced.

Repaving 93<sup>rd</sup> Avenue NE will require closure of the eastern half of that street for two to three weeks. During this time the old pavement will be removed, utility work will be performed as needed and the new pavement will be installed. Traffic will be routed around this work. Construction of the curb, gutter and sidewalk will take another week or two, but should have minimal impact on traffic. Construction of the sidewalk along Juanita Drive will take about two to three weeks and should have minimal impact on traffic.

- e. **Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

No.

- f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

Demolition of the existing park maintenance building will generate about 8 to 10 one-way truck trips per day over about one to two months.

During most of the pump station construction period, the number of daily one-way truck trips will range between about 10 and 40. During some of the more intensive construction activities, such as pump station and pipeline excavation, this number could increase to as much as 60 one-way trips per day. Construction vehicle trips will typically be distributed fairly evenly throughout the working day.

There will be some additional construction traffic between the staging area and the pump station site during working hours. The number and timing of these trips will depend on many factors and would be very difficult to predict.

After construction is completed, the number of vehicle trips generated to operate and maintain the pump station will be about one to two per week. This will be about the same as the current number of trips to the existing pump station.

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

Transportation impact mitigation could include the following during construction.

- Use flaggers if necessary to minimize potential conflicts between construction activities and traffic using Juanita Drive NE and 93<sup>rd</sup> Avenue NE.
- Coordinate with King County Metro Transit for the relocation of one existing bus stop and the removal of a second bus stop during construction.
- Develop a traffic control plan describing detour routes, lane closures, sidewalk closure, signage, flagging, hauling routes, etc. for approval by the City of Kirkland prior to start of construction.
- To the extent practicable, schedule truck traffic to avoid peak commuter hours. Try to minimize weekday truck traffic during rush hours.
- Require construction vehicles to follow major arterial routes to the maximum extent practicable.

In addition, tunneling the new 60-inch influent pipeline under Juanita Drive will eliminate the traffic disruption that would have occurred had the pipe been trenched across that street.

**15. Public Services**

- a. **Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.**

The project will not result in an increased need for public services.

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

None are proposed.

**16. Utilities**

- a. **Circle the utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.**

- b. **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

The new pump station will need larger water lines. Currently there is a 1-inch line. Two additional lines, a 2-inch line for potable, non-potable, and irrigation water and a 6-inch fire line, will tap the main line on 93<sup>rd</sup> Avenue NE to serve the new pump station. Reduced pressure backflow preventors and an air gap tank will be installed as needed to meet code requirements. Water is provided by the Northshore Utility District.

Puget Sound Energy will provide electricity for both construction and operation, and Verizon will provide telephone service.

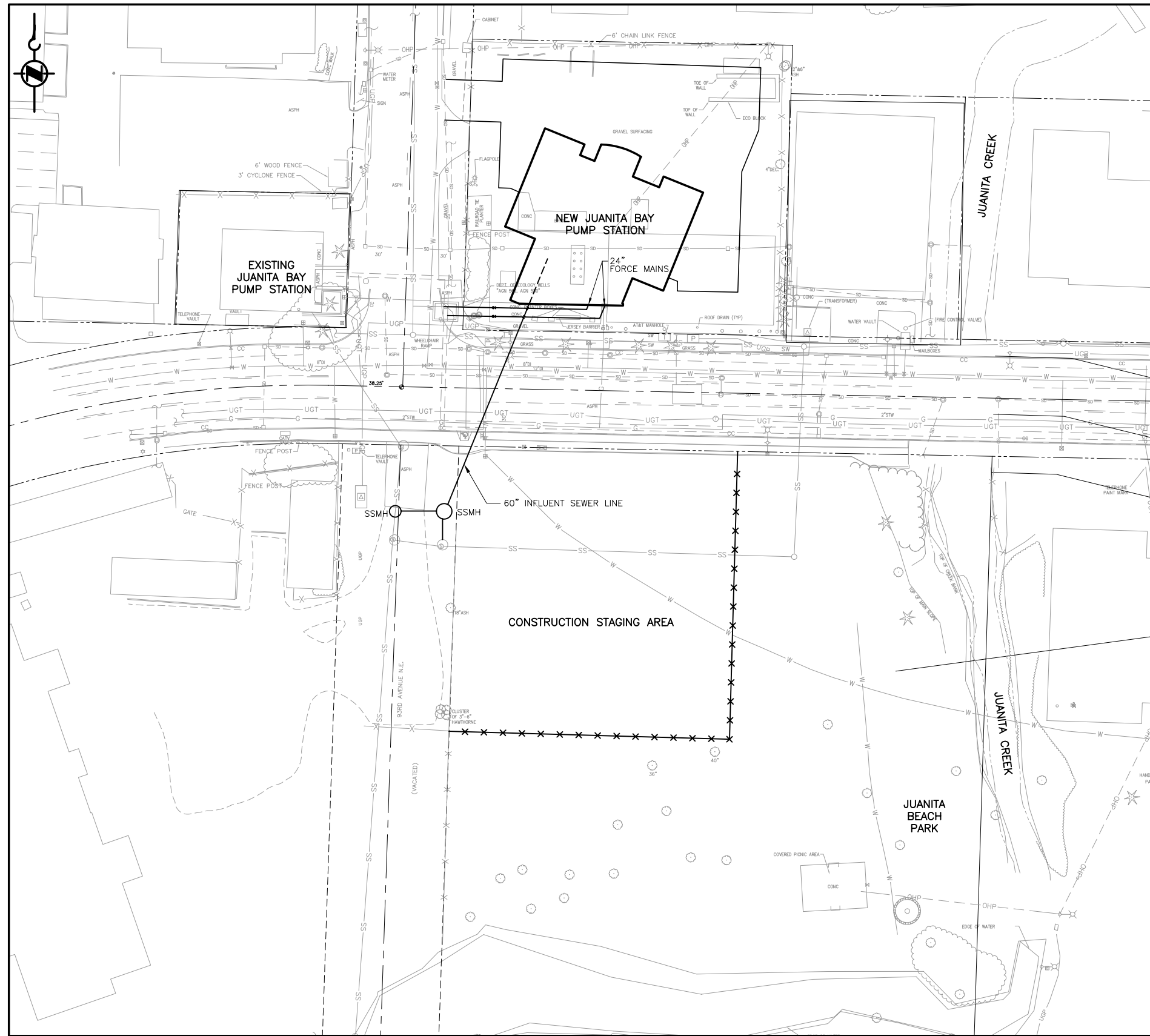
**C. SIGNATURE**

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

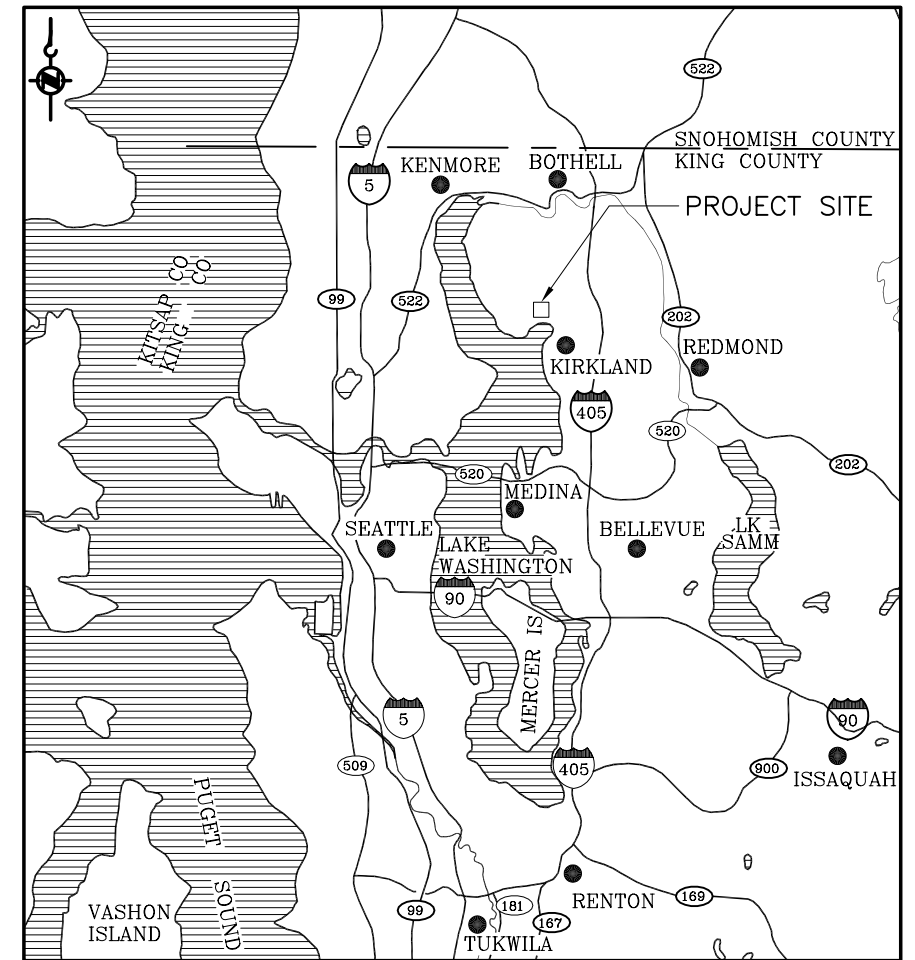
Signature: *Ashley Managuan*

Date Submitted: 2/9/04

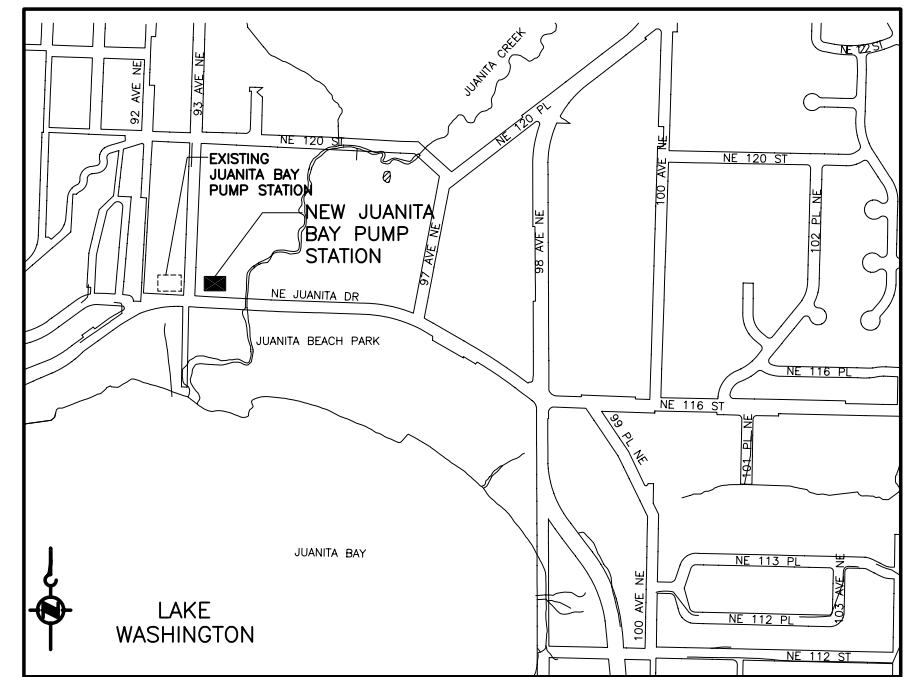
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 Xref Filename: | JBPS-C-1000-01 | JBPS-C-1000-04 | D-ttl-kc\_1 |



PROJECT AREA  
SCALE: 1"=30'



VICINITY MAP  
NOT TO SCALE



LOCATION MAP  
NOT TO SCALE

ONE INCH  
AT FULL SIZE, IF NOT ONE  
INCH SCALE ACCORDINGLY

No.	REVISION	BY	APP'D	DATE

**BROWN AND CALDWELL**  
SEATTLE, WASHINGTON

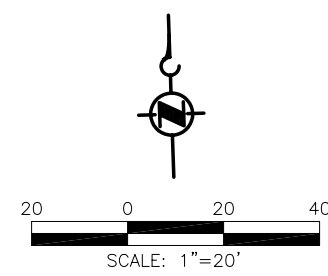
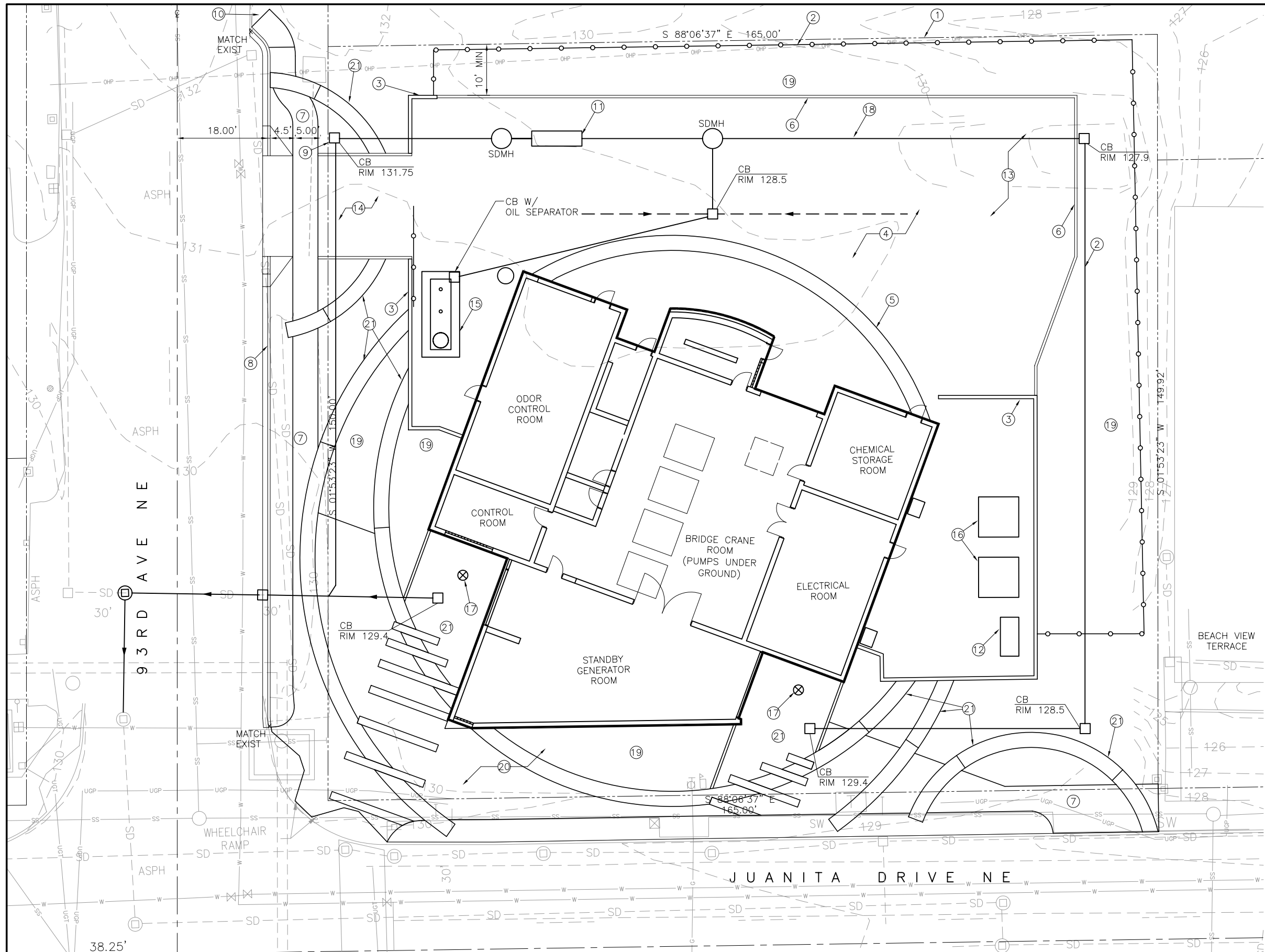
DESIGNED/DRAWN:	SCALE:
PROJECT ENGINEER:	RECOMMENDED:
DESIGN APPROVAL:	APPROVED:
PROJECT ACCEPTANCE:	CONTRACT NO.:



Department of Natural Resources and Parks  
 JUANITA BAY PUMP STATION REPLACEMENT  
 SEPA CHECKLIST  
**VICINITY MAP  
 AND PROJECT AREA**

DATE:	JAN 2004
FILE NO.:	
DRAWING NO.:	<b>FIG 1</b>
SHEET NO.:	OF

Path: P:\24351 Juanita Bay DD and CS\CAD\0-Project\Figures\ Fig2 Plot date: Jan 16, 2004-10:53:53am CAD User: mchoastain.  
 Xref Filename: | JBPS-C-1000-01 | JBPS-C-1000-02 | JBPS-C-1000-03 | JBPS-C-1000-05 | D-tti-kc\_1 |



- KEY NOTES:**
- ① PROPERTY LINE.
  - ② 8' HIGH CHAIN LINK FENCE.
  - ③ 8' HIGH CMU WALL.
  - ④ ASPHALT PAVEMENT.
  - ⑤ CONCRETE APRON.
  - ⑥ 6" CONCRETE CURB.
  - ⑦ 5' WIDE SIDEWALK.
  - ⑧ 6" CURB AND GUTTER.
  - ⑨ CATCH BASIN, TYP.
  - ⑩ ASPHALT APRON TO EXISTING SIDEWALK.
  - ⑪ WATER QUALITY STRUCTURE.
  - ⑫ CONDENSER.
  - ⑬ PARKING AREA.
  - ⑭ 20' WIDE DRIVEWAY ENTRANCE.
  - ⑮ UNDERGROUND DIESEL STORAGE TANK AND CONTAINMENT AREA.
  - ⑯ ELECTRICAL TRANSFORMER AND ELECTRICAL EQUIPMENT.
  - ⑰ ROOF WATER DRAIN FEATURE.
  - ⑱ UNDERGROUND STORM DRAIN, TYP.
  - ⑲ LANDSCAPE.
  - ⑳ CONCRETE HARDSCAPE.
  - ㉑ RIVER ROCK.

ONE INCH  
 AT FULL SIZE, IF NOT ONE  
 INCH SCALE ACCORDINGLY

No.	REVISION	BY	APP'D	DATE

**BROWN AND CALDWELL**  
 SEATTLE, WASHINGTON

DESIGNED/DRAWN:	SCALE:
PROJECT ENGINEER:	RECOMMENDED:
DESIGN APPROVAL:	APPROVED:
PROJECT ACCEPTANCE:	CONTRACT NO.:



Department of Natural Resources and Parks  
 JUANITA BAY PUMP STATION REPLACEMENT  
 SEPA CHECKLIST  
**SITE PLAN**

DATE:	JAN 2004
FILE NO.:	24351
DRAWING NO.:	<b>FIG 2</b>
SHEET NO.:	OF