A. BACKGROUND

A1. Name of proposed project, if applicable:
   South Park Pump Station and Water Quality Facility

A2. Name of applicant:
   Seattle Public Utilities

A3. Address and phone number of applicant and contact person:
   Alan Lord, Project Manager
   Seattle Public Utilities
   Engineering Services Branch
   Seattle Municipal Tower, Suite 4900
   PO Box 34018
   Seattle, WA 98124-4018

A4. Date checklist prepared:
   March 6, 2008

A5. Agency requesting checklist:
   Seattle Public Utilities

A6. Proposed timing or schedule (including phasing, if applicable):

A7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal?
   SPU plans to eventually construct a new lateral storm drain collection system upstream of the pump station and water quality facility included in this project. The future storm drain collection system would address chronic flooding in the basin and would increase flows to the Duwamish Waterway. The future storm drain collection also would increase flows through the pump station included in this project. The future collection system cannot be constructed until this project’s pump station is operational.

   The water quality facility included in this project would provide the stormwater code-required water quality treatment for the future storm drain collection system.

A8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
   Phase I and Phase II Environmental Site Assessment reports have been prepared for properties at 636 and 640 South Riverside Drive – two properties that the City of Seattle is working to acquire for this project. The Phase I investigation identified the following as potential hazards, to be further investigated during the Phase II assessment:
   - Heating oil tanks
   - Lighting ballasts potentially containing PCBs
   - Lead paint
   - Soil contamination resulting from historical operations by adjacent business
• Asbestos-containing materials in the buildings

The Phase II investigation identified diesel-range hydrocarbons, volatile organic compounds, and polycyclic aromatic hydrocarbon constituents in groundwater sampled from the right-of-way adjacent to the properties, indicating that a petroleum release had occurred. None of these contaminants exceeded their respective Model Toxics Control Act (MTCA) cleanup levels. The source of the release is unknown. These contaminants would be monitored in case they are encountered during construction, and any contaminated dewatering discharge or excavated soils would be treated and/or disposed of according to applicable regulations and permit requirements.

The Phase II investigation also identified the presence of vinyl chloride in the groundwater in one location in 7th Avenue South. As a result, a thorough groundwater investigation was conducted both on 636 and 640 South Riverside Drive and the adjacent right-or-way properties. Vinyl chloride was not located in the subsequent investigation, but lead and arsenic were located in the groundwater at or above the MTCA cleanup levels. Soil and groundwater removed during construction would be treated and/or disposed of according to applicable regulations and permit requirements.

A Draft Geotechnical Report, South Park Pump Station Project, (W. A. No. C353202) was completed in January 2008 by the SPU Materials Laboratory. This report summarizes mapped geology, findings of subsurface exploration, and provides recommendations for design and construction the drainage improvements.

Although not documented as a report or memorandum, SPU has been monitoring groundwater elevations at the intersection of 7th Avenue South and South Riverside Drive via piezometers since November 2006.

A9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
We are unaware of other proposals or government approvals related to the subject properties.

A10. List any government approvals or permits that will be needed for your proposal, if known.
• Seattle DOT Street Use Permit
• Seattle DPD Master Use Permit (shoreline, flood zone development, demolition)
• Seattle DPD building permit
• King County Industrial waste discharge permit (likely required to discharge construction dewatering material to the combined sanitary sewer) or
• Department of Ecology discharge permit (if discharge to downstream stormdrain)

A11. Give brief, complete description of your proposal, including the proposed uses and the site of the project. 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 project includes construction of a new stormwater pump station and water quality treatment facility within existing right-of-way and on private property that SPU is in
the process of acquiring. The project would ensure that the existing stormwater collection system and outfall would function during all tidal conditions and would improve water quality of stormwater that is discharged to the Duwamish Waterway. The proposed pump station and water quality facility would allow future expansion of the stormwater collection system to occur without increasing flooding at the downstream end of the basin.

Specific elements of this project are as follows:

- Demolition of 2 existing structures located at 636 and 640 South Riverside Drive and removal of associated underground utilities.
- Construction of a below-grade stormwater pump station, approximately 30 feet x 25 feet and approximately 30 feet deep.
- Construction of a buried valve vault adjacent to the new pump station approximately 10 feet x 30 feet and approximately 10 feet deep.
- Modification of an existing buried vault within 7th Avenue South to add a flow diversion structure.
- Construction of an above-grade water quality facility, approximately 50 feet by 100 feet and approximately 15 feet high.
- Relocation of existing overhead utility lines and 2 poles in front of 636 and 640 South Riverside Drive to the south side of South Riverside Drive.
- Construction of a security fence around the new facilities located at 636 and 640 South Riverside Drive and within 7th Avenue South.
- Although not currently proposed, if shoreline improvements along 636 and 640 South Riverside Drive and at the end of 7th Avenue South are required by DPD, they would be subject to separate permitting and environmental review to the extent applicable.

A12. 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. (For most proposals, a vicinity map and site plan (both 8½ x 11) should be provided.)

The proposed project is located in the South Park neighborhood of the City of Seattle, King County, Washington in the southwest quarter of Section 29, Township 24N, Range 4E. The project location is at the intersection of 7th Avenue South and South Riverside Drive. The project site includes City right-of-way within 7th Avenue South and 2 parcels located at 636 and 640 South Riverside Drive that the City of Seattle is in the process of acquiring.

B. ENVIRONMENTAL ELEMENTS

B1. Earth

a. General description of the site:

☑ Flat ☐ Rolling ☐ Hilly ☐ Steep Slopes ☐ Mountains
☐ Other:

b. What is the steepest slope on the site (approximate percent slope)?

The steepest existing slope on the site is a 30-foot long driveway and boat
launch along the northwest property line (boat ramp extends off the subject property into neighboring property near the shoreline). This launch area has an approximate slope of 15% into the Duwamish River. Additionally, the 7th Avenue South right-of-way has a 2% slope toward the Duwamish. The two parcels are relatively flat. As a part of this project proposal, the site would remain flat with only minor regrading for drainage control.

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.**
   Based on the subsurface exploration conducted in October 2006 and November 2007, the site soils generally consist of 2.5 feet to 5 feet of fill atop alluvium. Groundwater was reported to range from 4 feet to 10 feet below ground surface from November 2006 through December 2007. Groundwater reached a high of approximately 2.5 feet below ground surface during the large December 3, 2007 rain storm.

d. **Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe:**
   There is no surface indication or apparent history of unstable soils in the immediate vicinity of the proposed project; however, the geotechnical engineers at SPU’s Materials Laboratory have identified soils that are susceptible to liquefaction during earthquakes, generally in the project area.

e. **Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.**
   Excavation for the project would include excavation associated with the below-grade pump station and valve vault (1220 cubic yards) and diversion structure (420 cubic yards), and over excavation for the foundation of the above-grade water quality facility (340 cubic yards) and electrical building (20 cubic yards). The total estimated excavation volume is 2,000 cubic yards. There is no plan to fill the site. Final site grade would remain close to the existing grade. Only minor grading would be required onsite to control site stormwater runoff.

f. **Could erosion occur as a result of clearing, construction, or use? If so, generally describe:**
   During excavation, filling, and compaction, disturbed areas of the site could be susceptible to erosion. However, best management practices (BMPs) would be implemented during construction to minimize erosion. Erosion from the completed project, once site paving is complete, should be minimal.

g. **About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**
   The 7th Avenue South right-of-way is currently gravel surfaced. The parcels at 636 and 640 South Riverside Drive are currently mostly impervious with buildings and asphalt covering the site. The exception is the grass lawn area located in the backyard of 636 South Riverside Drive. Following construction, these parcels and the street right-of-way would be nearly 100% impervious with asphalt surfaces and buildings.

   Estimated existing impervious surface = 60%
   Post-development impervious surface = 100%
While the impervious area would increase, the quality of runoff overall would likely improve due the installation of the new water quality facility.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.
   Best Management Practices (BMPs) would be implemented to contain erodible materials during construction. The contractor would be required to submit and follow a Temporary Erosion and Sediment Control (TESC) Plan.

   The contractor also would be required to develop a Spill Prevention and Counter Measures and Control Plan (SPCC), including procedures for safe refueling of construction vehicles.

B2. Air

   a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.
      Emissions during construction would include normal amounts of dust from grading activities and exhaust (carbon monoxide, sulfur, particulates) from construction equipment. The placement of asphalt patches (to repair surfaces that are trenched) and asphalt paving may temporarily affect air quality in the immediate vicinity. The Volatile Organic Compounds and associated odors are expected to dissipate quickly once the asphalt surfaces are laid. The completed project would not produce any emissions.

   b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
      There are no known off-site sources of emissions or odor that would affect this proposal.

   c. Proposed measures to reduce or control emissions or other impacts to air, if any:
      During construction, impacts to air quality would be reduced and controlled through implementation of standard federal, state and local emission control criteria and Seattle construction practices. These could include: spraying areas of exposed soil with water for dust control, regular street cleaning, prompt covering of disturbed soils, and reducing exhaust emissions by minimizing vehicle and equipment idling.

B3. 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, wetlands)? If so, describe type and provide names. If appropriate, state what stream or river or water body it flows into.
      The project site is located on the south shore of the Duwamish Waterway, a freshwater river that flows into Puget Sound.
(2) **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If so, please describe and attach available plans.**

All work proposed in this project would take place within 200 feet of the mean higher high water level of the Duwamish Waterway. No work would be performed below the mean higher high water level.

(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 filling or dredging activities are proposed within any surface water body. This project would reuse an existing outfall to the Duwamish River.

(4) **Will the proposal require surface water withdrawals or diversions? If so, give general description, purpose, and approximate quantities if known.**

No surface water withdrawals or diversions are proposed with this project. The pump station would only pump stormwater runoff to the river that is currently discharged to the river anyway. The pump station would allow the runoff water to be discharged to the river at high tide; whereas under the existing condition water “backs up” in the pipe at high tide and then drains at low tide.

Under existing conditions, none of the runoff water is treated prior to being discharged to the Duwamish River. When the proposed facility is complete, the majority of runoff would be treated prior to being discharged to the Duwamish River (some high flows would be bypassed around the water quality facility to prevent flooding).

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

According to FEMA’s Flood Insurance Rate Maps, the project site is within the 100-year floodplain.

(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.**

The project would not produce or discharge waste materials to surface waters. As previously stated, only stormwater runoff would be discharged to the river, and when the proposed facility is completed the majority of the stormwater runoff would be treated prior to discharge – an improvement over current conditions where none of the water is treated prior to discharge. See also B3.a(4). The pump station would not increase or change the source or volume of runoff water that is discharged to the river.

SPU anticipates that construction dewatering water pumped from excavations would be discharged to an approved combined sewer system in South Riverside Drive (by permit through King County), or to the downstream storm drain system (by permit through Department of Ecology)

b. **Ground:**
(1) Will ground water be withdrawn, or will water be discharged to ground water? If so, give general description, purpose, and approximate quantities if known.
   Based on high groundwater levels found during sub-surface explorations, it is anticipated that construction dewatering of the trenches/excavations would be necessary. This dewatering would be temporary during construction; and the extent would be determined during construction. SPU anticipates that water pumped from excavations would be discharged to an approved combined sewer system in South Riverside Drive (by permit through King County), or to the downstream storm drain system (by permit through Department of Ecology).

(2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, agricultural, etc.). Describe the general size 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.
   The project would not discharge waste materials from septic tanks or other sources into the ground.

c. Water Runoff (including storm water):

(1) Describe the 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.
   The source of runoff during construction would be from any rainfall that may occur during construction, which would be collected in the contractor's collection system and disposed of by either discharging to the combined sewer (by permit through King County) or treated and discharged into the downstream storm drain system which flows to the Duwamish Waterway (by permit through Ecology).

   After the project is completed, stormwater runoff would be collected in catch basins and conveyed to the Duwamish River via the new pump station and water quality facility. The pump station would allow the runoff water to be discharged to the river at high tide; whereas under the existing condition water "backs up" in the pipe at high tide and then drains at low tide. As stated previously, when the proposed facility is completed the majority of the stormwater runoff would be treated prior to discharge – an improvement over current conditions where none of the water is treated prior to discharge. (some high flows would be bypassed around the water quality facility to prevent flooding). See also B3.a(4).

   The estimated site runoff from the right-of-way and other project parcels is approximately 0.34 cfs which is 0.09 cfs greater than existing conditions (based on City of Seattle Stormwater Manual).

(2) Could waste materials enter ground or surface waters? If so, generally describe.
   The typical industrial area waste materials that get washed into drainage systems or the ground, such as soap from car washing, motor oil leaks,
exhaust residue, process water, etc., would not be substantially increased or decreased by this project. However, the amount might be reduced slightly due to the removal of the residence, business, and associated activities located at 636 and 640 South Riverside Drive.

The project site is currently mostly paved and would remain paved following construction, minimizing the potential for wastes to enter groundwater. Surface water from the site would be collected into the storm drain system where it would be treated by the new facilities and discharged into the Duwamish Waterway.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
The primary goal of this project is to allow the existing storm drainage system to function under high tidal conditions, thereby reducing flooding and allowing the storm drain system to be expanded and further reduce flooding. The reduction in flooding in the area would help to control the impacts of runoff water (specifically flooding and erosion events).

In addition, the new water quality facility would treat stormwater runoff from potentially pollution generating surfaces (i.e., roadways) prior to conveying the runoff to the Duwamish River, which would help to reduce water pollution impacts. Under existing conditions stormwater runoff is discharged untreated to the Duwamish River.

B4. Plants

a. Check types of vegetation found on the site:

- Deciduous trees (check types):
  - [ ] alder
  - [ ] maple
  - [ ] aspen
  - [x] other: species unknown

- Evergreen trees (check types):
  - [ ] fir
  - [ ] cedar
  - [ ] pine
  - [x] other: species unknown

- Shrubs
- [x] Grass
- Pasture
- [ ] Crop or grain
- [ ] Wet soil plants (check types):
  - [ ] cattail
  - [ ] buttercup
  - [ ] bulrush
  - [ ] skunk cabbage
  - [x] Other: (NOTE: wet soil plants are located in wetland adjacent to 4th Avenue South, which is adjacent to project area).

- Water plants (check types):
  - [ ] water lily
  - [ ] eelgrass
  - [ ] milfoil
  - [ ] Other: Other types of vegetation: bushes are planted along the west side of 636 S Riverside Dr for privacy purposes, species unknown.

The project site is currently mostly paved with a commercial metal fabrication shop and a single family residence.

b. What kind and amount of vegetation will be removed or altered?
The project site is currently mostly paved with a commercial metal fabrication shop and a single family residence. Grass in the backyard would be removed as well as the privacy bushes and trees along the west
side of 636 S Riverside Dr.

The site is not expected to have significant landscaping following construction, perhaps some grass strips.

c. List threatened or endangered species known to be on or near the site.
The Washington Natural Heritage Program’s Natural Heritage Information System does not contain information on significant natural features in the project area. As of March 2008, it contains no records for rare plants or high quality native ecosystems in the vicinity of the project.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
The work would remove the existing grass and privacy bushes and trees at the site. Because of maintenance concerns associated with landscaping, only minimal landscaping/vegetation is planned for the project site.

B5. Animals

a. Checkmark any birds and animals that have been observed on or near the site or are known to be on or near the site:
The following animals are anticipated to be on the site, but have not been observed (no formal observations or studies have been conducted).

<table>
<thead>
<tr>
<th>Birds:</th>
<th>hawk</th>
<th>heron</th>
<th>eagle</th>
<th>songbirds</th>
<th>other:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ducks, geese:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mammals:</th>
<th>deer</th>
<th>bear</th>
<th>elk</th>
<th>beaver</th>
<th>other:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fish:</th>
<th>bass</th>
<th>salmon</th>
<th>trout</th>
<th>herring</th>
<th>shellfish</th>
<th>other:</th>
</tr>
</thead>
</table>

b. List any threatened or endangered species known to be on or near the site:
The Washington Department of Fish and Wildlife Area Habitat Biologist referred to the StreamNet Project data base for additional potential fish presence. This is described for the adjacent Duwamish Waterway as follows:
- For migration and rearing: chum salmon, fall Chinook
- For migration only: summer and winter steelhead, coho, sockeye

The Seattle Biological Evaluation, City of Seattle, updated 5/11/2007, lists the Duwamish River as critical habitat for Chinook & Bull trout. The proposed project would not adversely affect aquatic habitat within the Duwamish River, and the completed project would actually improve aquatic habitat within the Duwamish River (see B3.a.4)

c. Is the site part of a migration route? If so, explain.
The Washington Department of Fish & Wildlife Habitats and Species Map (dated August 5, 2005) does not show this site as being part of a terrestrial or
aerial migration route. The StreamNet Project database shows the Duwamish Waterway as a potential migration route for anadromous fish (see above).

d. **Proposed measures to preserve or enhance wildlife, if any:**
Other than construction BMPs, the project would include no special measures to preserve or enhance wildlife during construction. After construction is complete, however, aquatic habitat would be improved by the project’s water quality facility that would remove pollutants from storm water prior to discharge to the Duwamish River. The existing outfall has a valve that prevents fish from entering the storm drain pipe and this valve would remain in place during and after construction.

**B6 Energy and Natural Resources**

a. **What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**
Electricity provided by the existing distribution system would provide the energy required to operate the pump station and security lighting at the site. The water quality facility does not require any additional power to operate.

The only enclosed building at the site would not require heating, so there is no energy requirement for heat.

Gasoline and diesel powered vehicles would be required to construct and maintain the facilities at the site. Diesel would be used to power portable backup generators which would be used in emergencies.

b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**
The project does not involve building tall structures or planting vegetation that would block access to the sun for adjacent properties. The water quality facility would be approximately 15-feet tall.

c. **What kinds 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 major energy use at the site would be the pumps in the pump station. These pumps would be selected to be as energy efficient as possible to minimize energy usage and cost.

The only other energy use at the site would be security lighting, which would be used only during nighttime hours to save energy and costs. Energy efficient bulbs would be investigated for this lighting.

**B7. 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:**
Small amounts of materials likely to be present during construction include gasoline and diesel fuels, hydraulic fluids, oils, lubricants, solvents, paints and other chemical products. A spill of one of these chemicals could potentially occur during construction as a result of either equipment failure or worker
Contaminated soils, and/or groundwater are expected to be exposed during excavation. When disturbed, contaminated substances could expose construction workers and potentially other individuals in the vicinity through blowing dust, stormwater runoff or vapors. The contaminated soils that are excavated would be treated and/or disposed of in an approved facility. Any contaminated groundwater that is encountered during dewatering would be treated and disposed of in accordance with either King County or Ecology permit requirements, depending on where the water is discharged.

The water quality facility would require maintenance which would remove the dirty filter media (full of removed roadway contaminants) and replace with clean media. There is a potential that some dirty filter media, which is a granular material, could spill onto the ground. If this happens, it would be cleaned up immediately. Any residual material would be removed from the water quality facility before the facility resumes service, so the material would be removed prior to water entering the Duwamish River.

Finally, if a permanent or portable generator is located at the site, diesel fuel would be required and there is potential for a spill when refilling the tank (no permanent generator is planned for now, but one could be installed in the future). Standard fueling procedures would be followed to minimize the risk of a spill. In the case of a permanent generator, a spill containment curb would be located around the fuel tank.

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

In the case of a power failure, a portable backup generator would be brought to the site to power the pump station and address potential flooding caused by a storm event.

In the case of a pump station failure (e.g. no pumps operational), the system would revert to its current operation of draining to the Duwamish Waterway via gravity when the tide is low. This may cause upstream flooding in the event of high tide and a significant rain event, similar to the current (pre-pump station) drainage system.

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

A Health and Safety Plan would be submitted by the contractor before work commences. The construction workers would have had 40-hour OSHA Health and Safety Training for working in potentially contaminated areas.

A spill control plan would be developed to control spills on site. Any contaminated soils would be excavated and disposed of in a manner consistent with the level of contamination, in accordance with federal, state and local regulatory requirements, by a qualified contractor(s) and/or City staff.

In the long term, the project would reduce environmental health hazards by providing water quality treatment to remove contaminants from stormwater runoff prior to discharging the water to the Duwamish Waterway.

b. Noise
(1) **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**
Noises that exist in the area would 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.**
Noise levels in the vicinity of construction would temporarily increase during construction activities. Short-term noise from construction equipment would be limited to the allowable maximum levels of City of Seattle's Noise Control Ordinance (SMC Chapter 25.08).

Per City Code, noise from construction equipment may occur between the hours of 6 a.m. and 7 p.m. weekdays, and with special permission from 6 a.m. to 7 p.m. weekends during construction. This may be further restricted based upon community needs.

Long term operational noises associated with the facility would be minimal. It is doubtful that any noise would be audible outside of the fenced facility when the pumps turn on. The only noise associated with the water quality facility would be water moving within the open-topped water quality facility structure. This noise is expected to be minor and would only occur when the pumps are running.

There would be occasional vehicle noises from equipment used infrequently for routine maintenance and repair by SPU staff.

The primary noise associated with maintenance of the pump station would be a vactor truck removing sediment and debris from within the buried structure. It is believed that this activity would be accomplished within one, 8-hour work day.

The primary noise associated with maintenance would be the annual or biannual changing of filter media for the water quality facility. This maintenance task would create noise associated with a truck-mounted crane loading and unloading plastic filter canisters and a vactor truck removing the used filter media from the used canisters. It is believed that this activity would be accomplished in approximately one week (5 consecutive 8-hour work days), possibly up to two weeks (at 5 consecutive 8-hour days per week). The vactor truck would operate almost continuously during this time and the crane would operate intermittently.

Based on limited research, vactor trucks produce noise that may be as high as 115 decibels at the equipment. Noise levels decrease as distance from the equipment increases.

(3) **Proposed measures to reduce or control noise impacts, if any:**
Construction equipment would be muffled in accordance with the applicable laws. SMC Chapter 25.08, which prescribes limits to noise and construction activities, would be fully enforced while the project is under construction.
No special provisions are proposed to reduce operational noise because these noises are expected to be minimal.

As stated above, maintenance noises would occur infrequently during normal business hours and no special noise reduction measures are proposed because they are not expected to be burdensome, and because the facility would be located in a noisy industrial area.

B8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?
The project site is comprised of the 7th Avenue South right-of-way and two private parcels (636 and 640 South Riverside Drive) that the City of Seattle is in the process of acquiring. The properties being acquired do not front on the Duwamish River. The parcel on the southeast of the subject properties contains an approximately 10-foot wide strip of land between the Duwamish River and 636/640 South Riverside Drive. The strip of land is currently used by the owner of 636 and 640 South Riverside Drive, although he does not formally own the land. The City may attempt to acquire this strip of land in the future, but it is not included in current plans.

The 7th Avenue South right-of-way is a dead end at the Duwamish Waterway and it is currently used by neighboring properties as private storage (via a street use permit administered by the Seattle Department of Transportation).

The two private parcels consist of a commercial metal fabrication shop and storage yard on one parcel (640 South Riverside Drive), and a single family residence on the second parcel (636 South Riverside Drive).

Properties adjacent to the project site are owned by a private construction contractor. The property adjacent to the southeast of the 7th Avenue South right-of-way is the contractor’s office. The property adjacent to the southwest of 636 South Riverside Drive is the contractor’s storage yard. Other properties in the area are industrial.

b. Has the site been used for agriculture? If so, describe.
No, the site has not been used for agriculture in recent history.

c. Describe any structures on the site.
There is an existing below grade storm drain vault (approx. 15 feet wide x 15 feet long x 17 feet deep) within the 7th Avenue South right-of-way. The structure located at 640 South Riverside Drive is a rectangular 1-story masonry industrial shop structure constructed in 1960. The structure located at 636 South Riverside Drive is a rectangular 1-1/2 story single family residential structure with basement constructed in 1910. There is also a fixed wooden dock and a floating wooden dock located along and within the Duwamish River, respectively. These structures are not located within the property limits of 636 and 640 South Riverside Drive.

d. Will any structures be demolished? If so, what?
All of the structures located within the property lines of 636 and 640 South Riverside Drive described in Item B8.c would be demolished as part of this project to clear the site for construction new facilities. However, the docks located outside the property, would remain.
e. What is the current zoning classification of the site?
   The zoning of both 636 and 640 South Riverside Drive is General Industrial 1 (IG1).

f. What is the current comprehensive plan designation of the site?
   Seattle's Comprehensive Plan (2005) designates the project site as "Industrial Areas" and "Manufacturing/Industrial Center" on the future land use map.

g. If applicable, what is the current shoreline master program designation of the site?
   The current designation of the area under SMC 23.60, Shoreline District, is Urban Industrial. Refer to SMC 23.60.220 and Seattle DPD MapBooks Map Number 169, 20Feb08.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
   The environmentally critical areas tool on the City of Seattle DPD GIS Mapping website defines the site as having the following environmental classifications:

   Steep Slope: No; Potential Slide: No; Riparian Corridor: No; Wetland: No; Liquefaction: Yes; Flood Prone: Yes; Abandoned Landfill: No; Known Slide Area: No; Wildlife: No; Shoreline Habitat: No

   Although not necessarily an environmental sensitive area, the project area is located adjacent to the Duwamish Waterway.

i. Approximately how many people would reside or work in the completed project?
   No people would reside or work in the completed project.

j. Approximately how many people would the completed project displace?
   One person who resides at 636 South Riverside Drive and owns a business operated out of 640 South Riverside Drive would be displaced by the project. The City of Seattle is following local and federal standards for property acquisition, which provides relocation assistance and reimbursement to this property owner.

k. Proposed measures to avoid or reduce displacement impacts, if any:
   Ideally the proposed new pump station would have been sited entirely within the 7th Avenue South right-of-way, but this is impossible given the size of the pump station and supporting structures (i.e., building for electrical equipment, flow diversion structure).

   Regardless of the pump station location, the water quality facility requires property acquisition as it must be located with the pump station. A study was conducted in 2006 and 2007 to identify the best location and technology to be used for the water quality facility. The current project site was selected based on cost, location within the basin (to treat as much flow as possible), and proximity to the pump station which is required for operation of the water quality facility.
l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
The pump station and water quality facility would be designed to fit in with the surrounding industrial and warehouse area. It is expected that the Seattle Design Commission would review the design to ensure compatibility with the surrounding land uses as well.

B9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
This project does not involve the construction of any housing units.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
One single family residence (see B8d. above) would be eliminated. The residence is likely considered low or possibly middle income housing as it is located in an industrial area within a FEMA floodplain.

c. Describe proposed measures to reduce or control housing impacts, if any:
Other than the single family residence to be demolished, this project does not have any housing impacts. SPU would meet all requirements to address relocation impacts.

B10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?
The main above grade structure would be the water quality facility, which is expected to be a maximum 15 feet tall. The structure would be made of reinforced concrete, possibly with an aesthetic finish for the exterior.

b. What views in the immediate vicinity would be altered or obstructed?
Theoretically, views to the Duwamish Waterway from the industrial facility on the south side of South Riverside Drive would be altered. It should be noted that the buildings on 636 and 640 South Riverside Drive currently obstruct the industrial facility's view of the Duwamish River. The view would continue to be obstructed by the proposed facilities.

c. Proposed measures to reduce or control aesthetic impacts, if any:
Security fencing would be installed, which would control views into the site. Small amounts of landscaping would be considered for the site; however the benefit would be weighed against long-term maintenance cost and effectiveness at this location. An aesthetic finish to the above grade water quality facility would be considered.

Seattle Public Utilities also is considering an art aspect as a follow on to this project, which would be constructed as a follow on contract.

B11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
Security lighting would be provided for security within the fenced area. Lighting would likely be overhead flood lights which would turn on at night and be directed toward the facility.

b. **Could light or glare from the finished project be a safety hazard or interfere with views?**
   It is not believed that lighting would interfere with views (see B10.b above). It is also not believed that lighting at night would be a safety hazard in an industrial area.

c. **What existing off-site sources of light or glare may affect your proposal?**
   Existing lighting/glare in the area is not expected to affect our project. If anything, existing lighting may reduce the amount of lighting necessary for this project.

d. **Proposed measures to reduce or control light and glare impacts, if any:**
   Security lighting would be turned on at nighttime only and lighting would be designed to direct the light intensity within the fenced project area, minimizing off-site impacts.

**B12. Recreation**

a. **What designated and informal recreational opportunities are in the immediate vicinity?**
   There are no formal recreational opportunities nearby the project site as the surrounding streets and buildings are industrial in nature. The Duwamish Waterway, which neighbors the site, is also an industrial river (and a superfund cleanup site) and does not offer formal recreational opportunities. However, kayakers and boaters do use the waterway.

The nearest recreational access opportunities are located at the end of 8th Avenue South, adjacent to the Duwamish Waterway. The Port of Seattle is constructing a shoreline improvement project at that location which may include a pedestrian gazebo and walkway. The Port of Seattle facilities would be unaffected by the proposed project. Elsewhere, the Port of Seattle provides access to launch kayaks and other small boats in the Duwamish Waterway.

b. **Would the proposed project displace any existing recreational uses? If so, describe.**
   No, this project will not displace existing recreational uses. Also see also B12.a

c. **Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**
   No measures are planned to control impacts on recreation as the proposed project would not affect any recreational opportunities.

**B13. 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.**
The project was checked against the following registers on March 5, 2008:
City of Seattle Landmarks
Washington Heritage Register
National Register of Historic Places.

No listed or known eligible historic resources are present in the project area.

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

According to Marie Ruby, SPU’s Cultural Resources Advisor (March 200*), the Burke and ethnographic databases show the following areas of cultural resource interest:

There are six ethnographically recorded native named features within 0.5 miles of the project. Four of these are geographic features, one is a village site, and one is a mythological place. A burial was found in 1925 0.4 miles from the project area.

The only archaeological survey in the vicinity of the project was reported February 2008, recording 3 hunter-gatherer sites.

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

Due to the indications that native peoples were in the area close to the project, all City or contracted workers would be advised to be aware of the possibility of encountering cultural resources, and to be familiar with the following protocol for discovery of resources during construction. Should either historic or prehistoric cultural material be encountered during the project activity, work in that immediate area would be suspended, and the find would be examined and documented by a professional archaeologist. Decisions regarding appropriate mitigation and further action would be made at that time.

B14. 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.

Generally, the project area is located in the South Park neighborhood of Seattle, State Route 509 and State Route 99 are located to the west of the project. Both of these highways can provide access to and from the site via South Holden Street.

Access to the project streets after construction would be unchanged from the existing street access.

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

The nearest public transit is Metro bus #132, with a stop on 5th Avenue South and South Holden Street, several blocks northwest of the project site. The use of that bus stop would not be affected by this project during construction or following project completion.

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

The completed project would not change the available public parking in the
right-of-way or on nearby streets. Several parking spots (4 maximum) would be provided on the project site for SPU employees. Construction parking would be accommodated on-site or the Contractor would be responsible for locating additional parking during construction (either in the right-of-way or renting property).

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).
   No new roads are proposed with this project.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
   The project site is located adjacent to the Duwamish Waterway, but is not expected to use water transportation for construction or on a long term basis. The project would not use rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
   In the long term, vehicle trips to/from the project site would be reduced from the current condition. The only vehicle access would be for maintenance which is expected to occur weekly, which is less than the daily trips generated by the existing residence and industrial business.

   Increased traffic from construction-related vehicles would be temporary and would occur during the work hours described in Item B.7.b(2). These trips would be well within the traffic volume capacity of surrounding streets and comparable to existing site traffic.

g. Proposed measures to reduce or control transportation impacts, if any:
   The contractor would be required to mitigate traffic impacts during construction as required by City of Seattle Standard Specifications, which would be in force during construction.

B15. 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 would have no impact on the need for public services. If anything, the project would reduce the need for public services compared to the existing residence and industrial use.

b. Proposed measures to reduce or control direct impacts on public services, if any.
   Not applicable (see B15a. above) as no increase in public service demand is anticipated.

B16. Utilities

a. Check utilities currently available at the site, if any: □ None
   ✔ 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. □ None

The completed project site would domestic water service for washdown of the facilities. The site also would have a stormwater collection system which would route stormwater to the site’s pump station and water quality facility. Finally, the site would be equipped with electrical power to power the pump station, site lighting, and security system. Construction activities required for these utilities would involve trenching to install water service and stormwater collection pipes, and relocating 2 existing utility poles and associated overhead lines in the South Riverside Drive right-of-way. During the demolition phase of construction, trenching would also be required to dig up the existing water service and side sewer pipe to the existing structures and remove and/or cap these utilities.

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: [Signature]
Alan Lord
Project Manager

Date: 3-17-2008