SEATTLE PUBLIC UTILITIES
SEPA ENVIRONMENTAL CHECKLIST

This SEPA environmental review of Seattle Public Utilities' SW Spokane St Pump Station Improvements Project has been conducted in accordance with the Washington State Environmental Policy Act (SEPA) (RCW 43.21C), State SEPA regulations [Washington Administrative Code (WAC) Chapter 197-11], and the City of Seattle SEPA ordinance [Seattle Municipal Code (SMC) Chapter 25.05].

A. BACKGROUND

1. Name of proposed project:

SW Spokane St Pump Station Improvements Project

2. Name of applicant:

Seattle Public Utilities (SPU)

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

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Project Delivery and Engineering Branch
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4. Date checklist prepared:

April 27, 2022

5. Agency requesting checklist:

Seattle Public Utilities (SPU)

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

Project construction is planned to begin during the third quarter of 2023 and conclude during the first quarter of 2025. The project is anticipated to require 360 working days.

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

SPU has no other plans for future additions, expansion, or further activity related to or connected with this proposal.

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

SPU Project Delivery & Engineering Branch. (2021, September 21). *SW Spokane St Pump Station (PS) Improvements Project – Environmental Critical Areas (ECAs) Exemption Memorandum.*

SPU Geotechnical Engineering. (2020, August). *Geotechnical and Environmental Report Southwest Spokane Street Pump Station Improvement Project, Seattle, Washington*.

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.

The SW Spokane St Pump Station Improvement Project is adjacent to SPU's SW Spokane St Water Main Rehabilitation Project which includes replacement of water main within the right-of-way of SW Spokane St, south of the SW Spokane St Pump Station parcel (parcel 7987400820).

Construction of the water main improvements is scheduled to begin in 2022. The water main improvements project is scheduled to be completed before the pump station related project work begins.

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

Implementation of this project may require some of or all the following permits and approvals:

- City of Seattle, Department of Construction and Inspection (SDCI) – Building Permit, Electrical Permit, Demolition Permit, Grading Permit, Drainage and Side Sewer Permit, Contractor designed structures shop drawings approval, Certificate of Occupancy
- City of Seattle, Seattle City Light (SCL) – Electrical Service Application and Permit
- King County, Industrial Waste Program Construction Dewatering – Permit
- Washington State, Department of Health (DOH) – Project Approval Application Form (331-149), Plumbing Permit
- City of Seattle, Seattle Department of Transportation (SDOT) – Street Improvement Permit, Right-of-way Construction Permit, Approved Traffic Control Plans

11. Give a 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.

The project includes two SPU-owned parcels, both of which are in or near the following Environmental Critical Areas (ECAs) and/or their buffers: Steep Slope and Potential Slide. Parcel 7987400820 (3214 SW Spokane St) includes the pump station and parcel 7987400170 (2992 SW Spokane St) is intended for use by SPU's contractor as a construction staging area to comply with the City of Seattle's Community Workforce Agreement with the Seattle Building and Construction Trades Council and the Northwest National Construction Alliance II. To meet current electrical codes, the pump station's building footprint must be expanded to house SCADA equipment and electrical cabinets. The adjacent driveway must also be expanded to accommodate a portable standby generator should the station lose utility power and require operations vehicles. There are no practicable alternatives to the work with less impact on these ECAs or their buffers. As a result, SPU has determined the Project is exempt from the City of Seattle's ECA regulations per SMC 25.09.045.H.3 and SMC 25.09.045.A.3.

The existing building, constructed in 1928, is a rectangular structure of double-wythe brick exterior wall construction which supports an overhead rolling crane and lightweight wood roof. The pump room floor spans the complete basement of the building and contains the facility's water distribution piping. Conditions within the building have deteriorated over time due to water damage from pipe and roof leaks, drainage backups, and resulting condensation. The building does not meet current building code requirements. The building's electrical systems are at the end of their useful life and need to be replaced. The building's perimeter masonry walls are subject to collapse during a seismic event.

As a result, SPU has identified a project (SPU Project C115112) that will include the demolition and replacement of the above grade building shell, electrical systems, water piping, instrumentation, HVAC systems, and plumbing systems to meet current codes, and a building expansion for a new electrical room to meet code clearance requirements for worker safety.

The construction staging parcel will be used to support pump station construction by providing storage area for construction materials, vehicle parking, and rest and toilet facilities for construction workers. Temporary modifications to this parcel may include, but may not be limited to, temporary fencing, placement of a temporary office and temporary toilet facility, and temporary utility services (communications and power service).

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 project is located at 3214 SW Spokane St and 2992 SW Spokane St, on parcels 7987400820 and 7987400170, in the North Admiral neighborhood of West Seattle, City of

Seattle (Attachment A). The pump station work area is located near SW Spokane St and 33rd Ave SW (Attachment B). The construction staging area is located near SW Spokane St and Harbor Ave SW (Attachment C).

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

☐ Flat ☐ Rolling ☒ Hilly ☒ Steep Slopes ☐ Mountainous ☐ Other:

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

The project site has a mix of moderate slopes (3% to 8% slopes) and steep slopes (40% slopes). SPU issued an Environmental Critical Areas (ECAs) Exemption (September 21, 2021) that addresses the site development and steep slopes.

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 agricultural land of long-term commercial significance and whether the proposal results in removing these soils.

The general geologic condition of the Puget Sound region is a result of glacial and non-glacial activity that occurred over the course of millennia. Review of the geologic map covering the work sites (Troost et al. 2005, available at http://pubs.usgs.gov/of/2005/1252/) indicates the work site is underlain primarily by mass wastage, Lawton clay, and advance outwash deposits. Urban development in this area over the last one hundred years has resulted in a predominance of disturbed native soils/sediments, cut slopes, and placements of fill material. The entire project location and immediate surrounding area have been completely developed and disturbed in this way. No agricultural lands of commercial significance are near the work site.

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

The project location is hilly to steeply sloping. There are no surface features such as head scarps, hummocky terrain, seepage along steep slope surfaces, bulging at the bases of slopes, and/or evidence of permeable strata over relatively impermeable strata that indicate past or possible future slide activity. However, historic slides are known to have occurred on parcels immediately south and west of the work area.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate the source of fill.

Project construction will excavate approximately 800 cubic yards of soil and backfill and will install approximately 700 cubic yards of soil and other fill material such as asphalt, concrete, gravel, topsoil, mulch, and pipe bedding material. Fill material will be obtained from purveyors of such materials licensed to conduct business in Washington. Approximately 100 cubic yards of spoil are expected to be exported from the project area. Exported excavated material will be legally disposed at an approved waste facility, or if suitable, used as fill material at sites approved for filling and grading.

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

No significant erosion is anticipated during the proposed work. A temporary erosion and sedimentation control plan will be prepared by the engineer and implemented by the construction contractor. Disturbed areas will be restored to equal or better than - original conditions.

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

Current Impervious Surface Percentages:

- Total Lot Size: 10,000 SF
- Total Impervious Area (street, driveway, building): 2,313 SF
- % Impervious: 23%

Proposed Impervious Surface Percentages:

- Total Lot Size: 10,000 SF
- Total Impervious Area Proposed (street, driveway, building): 4,970 SF
- % Impervious: 50%

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

A temporary erosion and sedimentation control plan will be prepared by the engineer and implemented by the construction contractor. Best Management Practices (BMP) as identified in the City of Seattle's Stormwater Code SMC Title 22, Subtitle VIII, relevant City of Seattle Director's Rules, and Volume 2 Construction Stormwater Control Manual will be used to manage stormwater runoff, construction disturbance, and erosion during construction.

2. Air

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

Mobile and stationary equipment will be used to construct the project. Thus, emissions will be generated due to the combustion of gasoline and diesel fuels. Emissions that will be generated include oxides of nitrogen, carbon monoxide, particulate matter and smoke, uncombusted hydrocarbons, hydrogen sulfide, carbon dioxide, and water vapor. Emissions during construction will also include normal amounts of dust from ground-disturbing activities that are expected to be minimal, localized, and temporary.

This project will generate greenhouse gas (GHG) emissions in four ways: building usage (embodied, energy use, transportation to/from), concrete and asphalt usage (embodied), construction activity, and operations and maintenance activity. The project will generate approximately 3,295.2 metric tons (7,264,516 pounds) of carbon dioxide emissions. The GHG emission calculations are shown in Attachment D and are summarized in the table below.

Embodied emissions from construction materials other than pavement and concrete groundcover, such as building materials, aggregate bedding, pipe materials, etc., used in this project have not been estimated as part of this SEPA environmental review due to the difficulty and inaccuracy of calculating those estimates.

This project will generate GHG emissions during the estimated 18-month (360 total working days) construction period through the operation of diesel and gasoline powered equipment used in site construction and transportation of materials, equipment, and workers to and from the site. Because project construction methods were not completely known at the time this checklist was prepared, the estimates provided here are based on daily vehicle operation times for the estimated project duration (360 working days); actual times may be less. Construction activities will generate an estimated 106.0 metric tons (233,611 pounds) of carbon dioxide emissions.

Once operational, the project is expected to generate GHG emissions due to maintenance of the mechanical systems, electrical systems, and piping within the pump station. Once operational, required maintenance on the installed buried utilities are not anticipated over their estimated 100-year design life.

Summary of Greenhouse Gas (GHG) Emissions

Activity/Emission Type	GHG Emissions (pounds of CO_2e)[1]	GHS Emissions (metric tons of CO_2e)[1]
Buildings	6,593,077	2,990.6
Paving	418,874	190.0
Construction Activities (Diesel)	146,131	66.3
Construction Activities (Gasoline)	87,480	39.7
Long-term Maintenance (Diesel) (20 Years)	0	0
Long-term Maintenance (Gasoline) (20 Years)	18,954	8.6
Total GHG Emissions	7,264,516	3,295.2

[1] Note: 1 metric ton = 2,204.6 pounds of CO_2e. 1,000 pounds = 0.45 metric tons of CO_2e

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 that may affect this proposal.

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

During construction, impacts to air quality will be reduced and controlled through implementation of standard federal, state, and local emission control criteria and City of Seattle construction practices such as requiring contractors to use best available control technologies, proper vehicle maintenance, and minimizing vehicle and equipment idling.

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, wetlands)? If so, describe type and provide names. If appropriate, state what stream or river it flows into.

There are no surface water bodies on or near this project location.

(**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.**

No work will occur over, in, or adjacent to surface water. There are no surface water bodies on or near this project location.

(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 material will be placed in or removed from surface water or wetlands. There are no surface water bodies or wetlands on or near this project location.

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

No surface water will be withdrawn or diverted. There are no surface water bodies on or near this project location.

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

No portion of the project lies within a 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 proposal will not discharge waste materials to surface waters.

b. Ground:

(1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

The project will not withdraw groundwater or discharge water to groundwater.

(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.

The project will not discharge any waste 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.

Stormwater runoff may need to be managed during construction to prevent sediment from leaving the construction site. Any precipitation that lands on the construction site will be contained on-site and allowed to infiltrate or allowed to discharge from the site to the site's natural drainage discharge location once the sediment has settled. Barriers such as sandbags will be used to prevent runoff from entering the construction zone. Once construction is complete, temporary erosion control measures will be removed.

Once the project is complete, stormwater runoff from the roof and paved driveway areas will be conveyed in pipes to the existing combined sewer system in SW Spokane St.

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

No waste materials from this project will enter ground or surface waters.

(3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

The project area is served by a combined sewer system. There are currently no storm drains or inlets on the project site. The existing roof drains from the existing building are discharged to the combined sewer via a side sewer connection. The proposed project will collect stormwater runoff from hard surfaces including the building roof area and driveway area using roof drains and catch basins and route the discharge directly to the public combined sewer system through the side sewer connection. Amended soils and plantings are proposed in all other disturbed areas to meet stormwater management requirements. Grading in disturbed softscape areas will ensure drainage continues to follow its natural discharge path.

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

The project will meet the requirements of the Seattle Stormwater Code and Manual. The project area is served by a combined sewer system. There are currently no storm drains or inlets on the project site. The existing roof drains from the existing building are discharged to the combined sewer via a side sewer connection. The proposed project will collect stormwater runoff from hard surfaces including the building roof area and driveway area using roof drains and catch basins and route the discharge directly to the public combined sewer system through the side sewer connection. Amended soils and plantings are proposed in all other disturbed areas to meet stormwater management requirements. Grading in disturbed softscape areas will ensure drainage continues to follow its natural discharge path.

Limited street restoration and improvements will be completed, including replacement of extruded asphalt curb, and extension of the extruded asphalt curb north along 33rd Ave SW to prevent street runoff from passing through the project parcel. After project construction is completed, street runoff will be directed to an existing downslope catch basin located in SW Spokane St.

4. Plants

a. Types of vegetation found on the site:

☒ Deciduous trees:	☐ Alder	☐ Maple	☐ Aspen	☒ Other: Garry Oak
☒ Evergreen trees:	☒ Fir	☒ Cedar	☐ Pine	☒ Other: Madrone
☒ Shrubs				
☒ Grass (turf)				
☐ Pasture				
☐ Crop or grain				
☐ Orchards, vineyards, or other permanent crops				
☐ Wet soil plants:	☐ Cattail	☐ Buttercup	☐ Bulrush	☐ 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?

The site's pervious area consists of lawn with tree and shrub plantings. Lawn area will be removed for the building expansion. Trees and shrubs will be removed or altered for site improvements.

Trees and shrubs to be removed or altered:

Western Property Edge:
One (1) tree identified as exceptional, *Arbutus Menziesii* (Madrone; 7 inches DSH) will be removed to facilitate installation of power and communication services to the building. One (1) tree identified as exceptional, Arbutus Menziesii (Madrone; 8" DSH) will be pruned to gain clearance from the building.

Northern Property Edge:
Two (2) trees, located north of the property line, but with canopy drip-lines that extend onto the project site, and identified as exceptional, *Thuja plicata* (western red cedar; 42 inches and 17 inches DSH), will be within the project limits and over hanging limbs may be affected during construction activities by construction vehicles. Prior to construction, the limbs that overhang on SPU's parcel may need to be pruned to accommodate construction vehicles.

Eastern Property Edge:
Trees and shrubs identified as not exceptional will be removed for expansion of the driveway to improve site access for operational staff.

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

According to a review of the Washington Department of Natural Resources (WDNR) Natural Heritage Program's document called "Sections that Contain Natural Heritage Features, Current as of July 15, 2021" (accessed at https://www.dnr.wa.gov/publications/amp_nh_trs.pdf), there are no documented occurrences of sensitive, threatened, or endangered plant species at or near the project site. No federally-listed endangered or threatened plant species or State-listed sensitive plant species are known to occur within Seattle's municipal limits. The project site has been intensively disturbed by development and redevelopment over the last 100 years and has been extensively excavated, filled, paved, or occupied by street, utility, and other constructed features. There is no habitat for threatened or endangered plants.

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

The proposed work will limit plant removal, pruning, and other disturbance to that required for project construction. New trees, ground cover, and shrubs will be installed to repair disturbed areas and provide vegetative site enhancements. Plantings will consist of native species.

e. List all noxious weeds and invasive species known to be on or near the site.

No noxious weeds or invasive plant species are known to be at the project site.

5. Animals

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site:

Birds:	☒ Hawk	☒ Heron	☒ Eagle	☒ Songbirds
☒ Other: crow, pigeon, gull				
Mammals:	☐ Deer	☐ Bear	☐ Elk	☐ Beaver
☒ Other: possum, raccoon, squirrel				
Fish:	☐ Bass	☐ Salmon	☐ Trout	☐ Herring
☐ Shellfish	☐ Other:			

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

Based on a check of the Washington Department of Fish and Wildlife's "Priority Habitat Species on the Web" database on April 26, 2022 no portion of the project site or adjacent areas are mapped as being within a known occurrence of any State-identified or federally listed threatened or endangered species. However, the project site is known to be (but not mapped as being) within the habitat of bald eagle (*Haliaeetus leucocephalus*) and great blue heron (*Ardea herodias*)—priority species in Washington.

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

Seattle is in the migratory route of many birds and other animal species and is part of the Pacific Flyway, a major north-south route of travel for migratory birds in the Americas extending from Alaska to Patagonia. Also, Puget Sound, the Duwamish Waterway, and Lake Washington are important water migration routes for many animal species.

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

The project will not provide measures to preserve or enhance wildlife. The proposed work will only remove trees and shrubs necessary for construction of site improvements.

e. List any invasive animal species known to be on or near the site.

King County lists the European starling, house sparrow, Eastern gray squirrel, and fox squirrel as terrestrial invasive species for this area (http://www.kingcounty.gov/services/environment/animals-and-plants/biodiversity/threats/Invasives.aspx).

6. 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 will be used to meet the completed project's energy needs.

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

The project does not involve building structures or planting vegetation that will block access to the sun for adjacent properties.

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:

- Windows will be installed as part of the building to reduce lighting demand during daytime hours.
- Reduced power lighting fixtures, efficient LED lighting fixtures, and enhanced lighting controls will be installed to limit energy consumption for building lighting.
- Building insulation will be installed to reduce HVAC demands.
- Efficient HVAC equipment will be installed to reduce energy consumption for building HVAC needs.
- Efficient point-of-use water heaters will be installed at sinks to reduce energy consumption for water heating needs.

- An electric vehicle charging station will be installed to promote use of City-operated electric vehicles.

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:

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 due to equipment failure or worker error.

Though unlikely, contaminated soils, sediments, or groundwater could also be exposed during excavation. If disturbed, contaminated substances could expose construction workers and potentially other individuals in the vicinity through blowing dust, stormwater runoff, or vapors.

Lead paint and asbestos in the existing pump station building will be abated as part of building demolition.

(1) Describe any known or possible contamination at the site from present or past uses.

The project site is not known to have had any previous industrial or commercial land uses that may have resulted in contamination of soil materials.

(2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

There are no known hazardous chemicals or conditions that might affect project development and design.

(3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Construction activities such as saw cutting, concrete pouring and handling, etc., will generate pollutants that could potentially enter local drainage conveyance systems. Other pollutants that may be present during construction include:

- Petroleum products including fuel, lubricants, hydraulic fluids, and form oils
- Paints, glues, solvents, and adhesives
- Chemicals associated with portable toilets.

No toxic or hazardous chemicals will be permanently stored, used, or produced at any time during the operating life of the completed project. Diesel fuel may be stored and used at the site temporarily if needed to fuel a portable generator should the facility lose power.

(4) Describe special emergency services that might be required.

No special emergency services such as confined space rescue will be required during construction or operation of the project. Possible fire or medic services could be required during project construction as well as during operation of the completed project. However, the completed project will not demand higher levels of special emergency services than already exist at the project location.

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

The construction contractor will be required to develop and implement a Spill Prevention, Control, and Countermeasures Plan to control and manage spills during construction. During construction, the contractor will use standard operating procedures and BMPs identified in the City of Seattle's Stormwater Code SMC Title 22, Subtitle VIII, relevant City of Seattle Director's Rules, and Volume 2 Construction Stormwater Control Manual to reduce or control any possible environmental health hazards. Soils discovered to be contaminated by previous land uses or by spills during construction will be excavated and disposed of in a manner consistent with the level and type of contamination, in accordance with federal, state, and local regulations, by a qualified contractor(s) and/or City staff.

Lead paint and asbestos in the existing pump station building will be abated by a qualified contractor(s) as part of building demolition.

As required by the Washington Department of Labor and Industries (WAC 296-843), a Health and Safety Plan will be prepared by SPU or SPU's contractor prior to work commencing. The plan will address proper employee training, use of protective equipment, contingency planning, and secondary containment of hazardous materials.

b. Noise

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

Noise that exists in the area 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.

Noise levels in the vicinity of project construction will temporarily increase during construction. Short-term noise from construction equipment will be limited to the allowable maximum levels of applicable laws, including the City of Seattle's Noise Control Ordinance [SMC Chapter 25.08.425—Construction and Equipment Operations]. Within the allowable maximum levels, SMC 25.08 permits noise from construction equipment between the hours of 7 AM and 7 PM weekdays, and 9 AM and 7 PM. weekends and legal holidays. SPU expects construction will take no more

than 360 working days to complete. The completed project will generate no permanent additional noise from equipment used for operation or maintenance. Additional temporary noise could be generated by use of a portable generator should the facility lose power.

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

Construction equipment will be muffled in accordance with the applicable laws. SMC Chapter 25.08 (which prescribes limits to noise and construction activities) will be enforced while the project is being constructed and during operations, except for emergencies.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The project is located on a City-owned parcel where an existing water pump station is located and within improved street rights-of-way used for vehicle and pedestrian travel, and parking. Adjacent property uses are single family residential. The project will not affect current land uses on nearby or adjacent properties.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or non-forest use?

The site has not been used as working farmlands or working forest lands for at least the past 80 years, if at all.

(1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?

The proposed work will neither affect or be affected by surrounding working farm or forest land normal business operations because there are no such operations at or near the project site.

c. Describe any structures on the site.

There is one existing above grade structure located on the site which was originally constructed in 1928. The structure is rectangular and constructed of double-wythe brick exterior walls which support an overhead rolling crane and lightweight wood roof. The pump room floor, which houses all this operation's water distribution piping, spans the complete basement of the structure. The above grade structure will be removed, replaced, and expanded by this project.

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

The project will replace and expand the existing above-grade building structure.

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

Single family residential.

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

Single family residential.

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

The project site is not in a Shoreline Management District.

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

The project site is mapped as being in Steep Slope, Potential Landslide, and Known Slide environmentally critical areas, as determined by the City of Seattle Department of Construction and Inspections (http://seattlecitygis.maps.arcgis.com/apps/webappviewer/index.html?id=f822b2c6498c4163b0cf908e2241e9c2)

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

No people will reside or work in the completed project.

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

The project will not displace people.

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

There will be no displacement impacts.

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

The project will be compatible with existing and projected land uses and plans. No such measures are required.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

There are no nearby agricultural and forest lands of long-term commercial significance. No measures are required to reduce or control impacts to agricultural and forest lands of long-term commercial significance.

9. Housing

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

The proposed project will not construct any housing units.

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

The project will not eliminate any housing units.

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

No measures are proposed because there will be no housing impacts.

10. 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 tallest height of the proposed building structure is 22-feet tall. The principal exterior building materials will consist of brick veneer and metal panel siding, glazed windows, and metal roofing.

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

No views will be altered or obstructed.

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

The pump room building exterior wall cladding will be brick veneer that closely matches the color of the brick exterior walls of the existing building. The colors for the metal wall panels for the electrical room wall cladding and metal roof were chosen to compliment the brick veneer.

11. Light and Glare

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

Light and glare produced by the project will be minimized to the extent feasible. Exterior building lights will be shielded and controlled by photo-cells to limit use to between sunset and dawn. Metal roofing will have a dark color to minimize reflection. Metal wall panels for the electrical room will have a non-reflective finish. Glazed windows will not have a reflective coating or finish. No new streetlights are proposed or required.

During construction, if an emergency calls for nighttime work, the construction contractor may deploy portable lights that temporarily produce light and glare.

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

Light or glare produced by the project will be minimized to the extent feasible and will not be a safety hazard or interview with views.

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

There are no existing off-site sources of light or glare that will affect the project.

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

Exterior building lights will be shielded and controlled by photo-cells to limit use to between sunset and dawn. Metal roofing will have a dark color to minimize reflection. Metal wall panels for the electrical room will have a non-reflective finish. Glazed windows will not have a reflective coating or finish.

During construction, if an emergency calls for nighttime work, the construction contractor may deploy portable lights that temporarily produce light and glare.

12. Recreation

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

The project is located on a private parcel with grass lawn that may be used for informal and unauthorized recreational activities such as dog-walking, gardening, and lounging.

Portions of the project are in improved street right-of-way used for informal recreational activities such as dog-walking, walking, jogging, and bicycling.

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

The project may displace existing informal and unauthorized recreational activities taking place on the property, as the lawn area will be reduced to accommodate pump station facility expansion and operational needs. Current existing recreational uses of the site are unauthorized.

The proposed work located within the right-of-way will not permanently displace any existing recreational uses.

Access to the street during project construction will be more challenging, but SPU will require the project contractor to always maintain safe pedestrian and vehicle access.

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

During projection construction, temporary closures or detours affecting vehicle and/or pedestrian routes/access may occur. The project will attempt to make any closures and detours as brief as possible. Project notifications through website updates, emails, and mailings will provide impacted residents with limited advance notice of temporary closures and detours.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

To determine if National Register or State of Washington Heritage properties are in or adjacent to the project area, the project location was checked against the following registers on March 23, 2020:

- City of Seattle Landmarks http://www.cityofseattle.net/neighborhoods/preservation/landmarks_listing.htm
- Washington Heritage Register and National Register of Historic Places and WISAARD database https://dahp.wa.gov/historic-registers

The SW Spokane St Pump Station at 3214 SW Spokane St and the adjacent residential structure at 3206 SW Spokane St have been identified as eligible for the National Register of Historic Places. While the WISAARD database indicates numerous historic property reports have been submitted for various structures near the project location, none of these registers recorded any places or objects formally listed on, or proposed for, national, state, or local preservation registers on or adjacent to the project location.

The City of Seattle Landmarks Preservation Board denied nomination of the SW Spokane St Pump Station on November 20, 2019.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

According to the information sources listed in Item B13c below, there are no archaeological or cultural resources that have been documented to exist on the project site. The closest known archaeological site is 0.42 miles away. All ground disturbance and excavation will occur on private property and in existing transportation/utility right-of-way areas that have been previously disturbed by construction of an underground building foundation and installation of utility infrastructure. According to the Washington Department of Archeology and Historic Preservation's (DAHP) Washington Information System for Architectural and Archaeological Research Data (WISAARD) predictive model, the work site is identified as Very High Risk for discovery of archaeological resources.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the Department of Archaeology and Historic Preservation, archaeological surveys, historic maps, GIS data, *etc.*

To determine if National Register or Washington Heritage properties are in or adjacent to the project site, the project location was checked against the following registers on March 23, 2020:

- Washington Heritage Register and National Register of Historic Places: https://dahp.wa.gov/historic-registers
- WISAARD database: https://wisaard.dahp.wa.gov

Mitigation is not required; however, SPU commissioned a HistoryLink article to focus on the development of West Seattle's water system with an emphasis on the use of pump stations like this one to improve water pressure, fire suppression, etc. in West Seattle. The article can be found at *https://historylink.org/File/21154*.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

All ground disturbance and excavation will occur on private property and in existing transportation/utility right-of-way areas that have been previously disturbed by construction of an underground building foundation and installation of utility infrastructure. The proposed work locations are located on previously disturbed and filled ground which substantially reduces the chance of encountering contextually significant archaeological materials.

An approved inadvertent discovery plan will be onsite and in effect during all construction activities. Excavation is not likely to excavate into previously undisturbed native soil or sediments. Should evidence of cultural artifacts or human remains, either historic or prehistoric, be encountered during excavation, work in that immediate area will be suspended and the find will be examined and documented by a professional archaeologist. Decisions regarding appropriate mitigation and further action will be made at that time.

14. Transportation

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

The project will occur on SPU parcels 7987400820 and 7987400170 located at 3214 and 2992 SW Spokane St. Construction of the proposed project will use existing residential streets for access, including SW Spokane St, SW Manning St, SW Admiral Way, SW Hinds St, 33rd Ave SW, 34th Ave SW, Harbor Ave SW, and SW Avalon Way.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The nearest bus stops are located on SW Admiral Way (Metro routes 56 and 57) and SW Avalon Way (Metro routes C, 21, 55, 116, 118, and 119), more than 900 feet from the project area. Construction will not impact public transit. The completed project will neither require nor affect public transit.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

The completed project will neither create nor eliminate any parking spaces.

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

The completed project will not require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities.

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

The proposed project will not use or occur near water, rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

Project construction will generate approximately 1,800 vehicle round-trips due to workers and materials being transported to and from the site during the estimated construction period of 360 workdays. Most of these trips will occur during business hours, between 7 AM and 6 PM, on weekdays. Construction trips may occur at other times including during weekend days.

The completed project will not generate additional vehicle round-trips. Current routine trips for operation, maintenance, and monitoring of the municipal water system in this area will continue to occur once the project is completed.

No data or transportation models were used to make these estimates.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

The proposal will not interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area.

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

The following measures will be used to reduce or control transportation impacts:

- SPU will require the construction contractor to submit a traffic control plan for approval and enforcement by SPU and SDOT.
- SPU will conduct public outreach before and during project construction to notify residents, local agencies, Metro, and other stakeholders of work progress and expected disruptions or changes in traffic flow.
- Access for emergency-response vehicles will be maintained at all times.
- Through access and vehicle access to private properties may be restricted at times during construction, but temporary closures will be minimized, and detour routes will be properly and clearly signed.

- Street parking will be allowed in approved areas only and restrictions will be enforced by SPU and SDOT.
- Alternative routes for pedestrians, bicyclists, and those with disabilities will be identified and clearly signed, as needed.

15. Public Services

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

The proposed project is not expected to create an increased need for public services. Project construction will be required to accommodate 'all-hours' emergency access for buildings accessed via the affected streets. Emergency access will comply with relevant policies administered by SDOT as part of its street use permitting process.

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

During construction, the project will be required to accommodate 'all-hours' emergency access. Otherwise, no mitigation is being proposed because the project will have no adverse impacts on public services.

16. Utilities

a. Check utilities available at the site, if any:

☐ None
☒ Electricity ☒ Natural gas ☒ Water ☒ Refuse service
☒ Telephone ☒ Sanitary sewer ☐ Septic system
☐ Other: cable, fiber optics

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.

During project construction, water service will be interrupted for brief periods to install and then disconnect a bypass around the affected water main. SPU will notify affected residents and businesses by issuing Service Disruption Notices, in the form of door hangers, at least 48 hours before those outages occur.

No interruptions of other utilities or services are anticipated during project construction.

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.

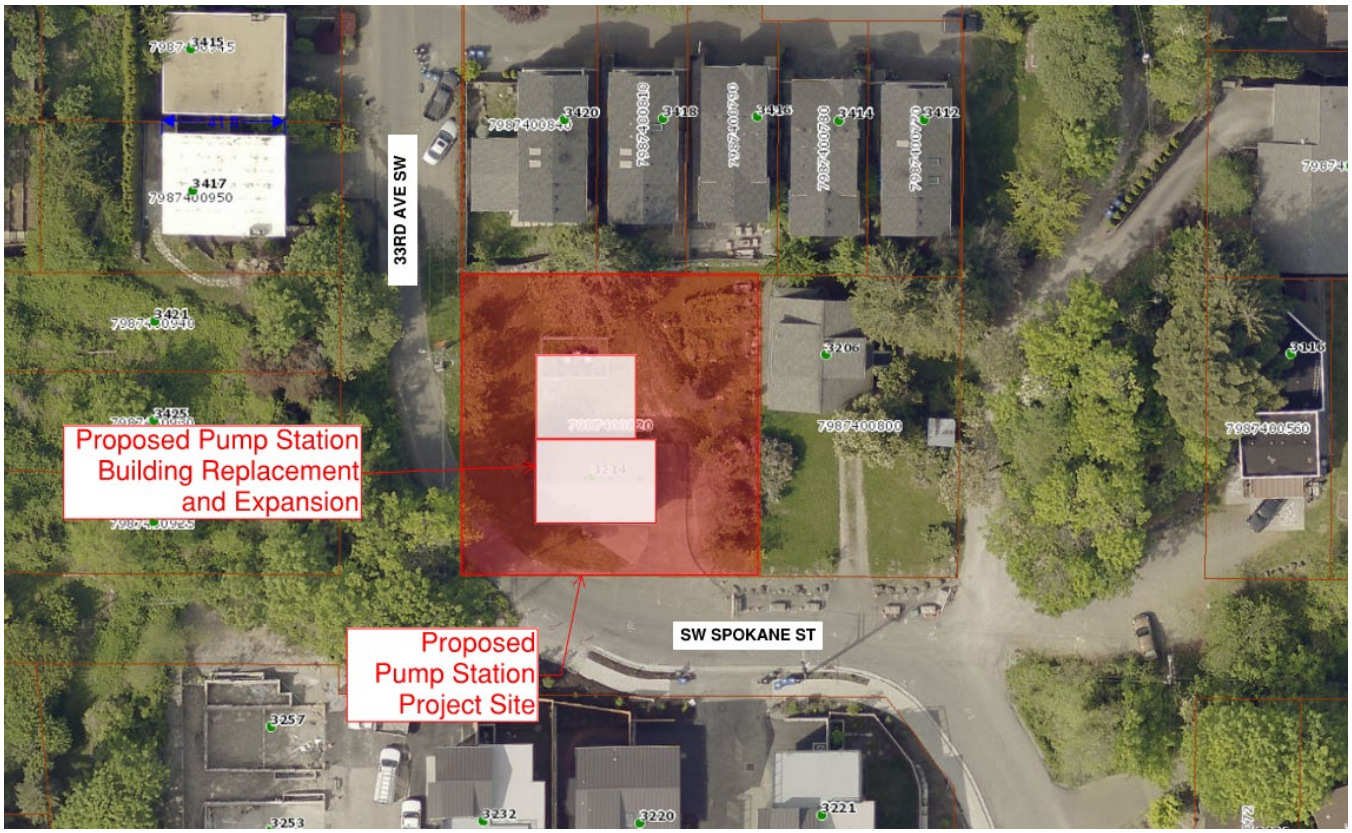
Signature: Ian Fitz-James Digitally signed by Ian Fitz-James Date: 2022.04.27 09:19:24 -07'00'

Ian Fitz-James
Project Manager

Attachment A – Vicinity Map
Attachment B – Pump Station Project Site Map
Attachment C – Construction Staging Area Site Map
Attachment D – Greenhouse Gas Emissions Worksheet

Attachment A – Vicinity Map

Attachment B – Pump Station Project Site Map



Attachment C – Construction Staging Area Site Map

Attachment D – Greenhouse Gas Emissions Worksheet

Section I: Buildings						
			Emissions Per Unit or Per Thousand Square Feet ($MTCO_2e$)			
Type (Residential) or Principal Activity (Commercial)	# Units	Square Feet (in thousands of square feet)	Embodied	Energy	Transportation	**Lifespan Emissions ($MTCO_2e$)**
Single-Family Home	0		98	672	792	**0**
Multi-Family Unit in Large Building	0		33	357	766	**0**
Multi-Family Unit in Small Building	0		54	681	766	**0**
Mobile Home	0		41	475	709	**0**
Education		0.0	39	646	361	**0**
Food Sales		0.0	39	1,541	282	**0**
Food Service		0.0	39	1,994	561	**0**
Health Care Inpatient		0.0	39	1,938	582	**0**
Health Care Outpatient		0.0	39	737	571	**0**
Lodging		0.0	39	777	117	**0**
Retail (Other than Mall)		0.0	39	577	247	**0**
Office		0.0	39	723	588	**0**
Public Assembly		0.0	39	733	150	**0**
Public Order and Safety		0.0	39	899	374	**0**
Religious Worship		0.0	39	339	129	**0**
Service		0.0	39	599	266	**0**
Warehouse and Storage		0.0	39	352	181	**0**
Other		1.9	39	1,278	257	**2,990.6**
Vacant		0.0	39	162	47	**0**
					TOTAL Section I Buildings	**2,990.6**

Section II: Pavement						
						Emissions ($MTCO_2e$)
Pavement (sidewalk, asphalt patch)		3.3	50			**165.0**
Concrete Pad (50 $MTCO_2e$/1,000 sq ft of pavement at a depth of 6 inches)		0.5	50			**25.0**
					TOTAL Section II Pavement	**190.0**

Section III: Construction	
(See detailed calculations below)	**Emissions ($MTCO_2e$)**
TOTAL Section III Construction	**106.0**

Section IV: Operations and Maintenance	
(See detailed calculations below)	**Emissions ($MTCO_2e$)**
TOTAL Section IV Operations and Maintenance	**8.6**

TOTAL GREENHOUSE GAS (GHG) EMISSIONS FOR PROJECT ($MTCO_2e$)	**3,295.2**

Attachment D – Greenhouse Gas Emissions Worksheet, continued

Section III Construction Details		
Construction: Diesel		
Equipment	**Diesel (gallons)**	**Assumptions**
Excavator	2,240	320 hours x 7 gallons/hour (345 hp engine)
Front-end Loader	2,240	320 hours x 7 gallons/hour (345 hp engine)
Dump Truck and Pup (17 CY capacity)	540	45 round trips x 60 miles/round trip ÷ 5mpg
Flat-bed Truck	400	40 round trips x 50 miles/round trip ÷5 mpg
Concrete Truck (10 CY capacity)	84	7 round trips x 60 miles/round trip ÷ 5mpg
Subtotal Diesel Gallons	5,504	
GHG Emissions in lbs CO_2e	146,131	26.55 lbs CO_2e per gallon of diesel
GHG Emissions in metric tons CO_2e	66.3	1,000 lbs = 0.45359237 metric tons

Construction: Gasoline		
Equipment	**Gasoline (gallons)**	**Assumptions**
Pick-up Trucks or Crew Vans	3,600	360 workdays x 5 trucks x 2 round-trip/day x 20 miles/ round trip ÷ 20 mpg
Subtotal Gasoline Gallons	3,600	
GHG Emissions in lbs CO_2e	87,480	24.3 lbs CO_2e per gallon of gasoline
GHG Emissions in metric tons CO_2e	39.7	1,000 lbs = 0.45359237 metric tons

Construction Summary		
Activity	**CO_2e in pounds**	**CO_2e in metric tons**
Diesel	146,131	66.3
Gasoline	87,480	39.7
Total for Construction	233,611	**106.0**

Section IV Long-Term Operations and Maintenance Details (20 Years)		
Operations and Maintenance: Diesel		
Equipment	**Diesel (gallons)**	**Assumptions**
Subtotal Diesel Gallons	0	
GHG Emissions in lbs CO_2e	0	26.55 lbs CO_2e per gallon of diesel
GHG Emissions in metric tons CO_2e	0	1,000 lbs = 0.45359237 metric tons

Operations and Maintenance: Gasoline		
Equipment	**Gasoline (gallons)**	**Assumptions**
Crew Van	780	52 round trips/year x 20 years x 15 miles/round trip ÷ 20 mpg
Subtotal Gasoline Gallons	780	
GHG Emissions in lbs CO_2e	18,954	24.3 lbs CO_2e per gallon of gasoline
GHG Emissions in metric tons CO_2e	8.6	1,000 lbs = 0.45359237 metric tons

Operations and Maintenance Summary		
Activity	**CO_2e in pounds**	**CO_2e in metric tons**
Diesel	0	0
Gasoline	18,954	8.6
Total Operations and Maintenance	18,954	**8.6**