SEATTLE PUBLIC UTILITIES
SEPA ENVIRONMENTAL CHECKLIST

This SEPA environmental review of Seattle Public Utilities' (SPU) Cloverdale Bioretention Project has been conducted in accord 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:

Cloverdale Bioretention Project

2. Name of applicant:

Seattle Public Utilities (SPU)

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

Jason Sharpley, Project Manager
Seattle Public Utilities
Project Delivery and Engineering Branch
Seattle Municipal Tower, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018
206-615-0030; Jason.Sharpley@Seattle.gov

4. Date checklist prepared:

March 29, 2021

5. Agency requesting checklist:

Seattle Public Utilities (SPU)

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

Construction is scheduled to begin the 3rd or 4th quarter of 2021, with substantial completion of construction anticipated by the end of 2021. Additional plant establishment activities would then occur intermittently through 2022. Project construction is expected to require 40 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.

This project is part of SPU's Green Stormwater Infrastructure in Urban Villages Program, which has an overall goal of constructing bioretention facilities in the street rights-of-way in City of Seattle designated Urban Villages.

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

SPU Geotechnical Engineering. 2019 (December). Geotechnical Memorandum, 5th Ave S and S Cloverdale St Bioretention Project, Preliminary Feasibility Evaluation.

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.

No applications are known to be pending for governmental approvals of other proposals directly affecting the property covered by this proposal.

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

The following permits and approvals may be required:

City of Seattle Departments of Transportation (SDOT)

- Construction Use Permit [for construction in street rights-of-way]
- Street Improvement Permit

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 proposed Cloverdale Bioretention Project (hereafter, Project or proposal) would be constructed along S Cloverdale St at 5th Ave S in the lower Duwamish River watershed in southwest Seattle. Bioretention cells would be constructed in the existing gravel street right of way (ROW) adjacent to the travel lanes. Stormwater runoff from streets that currently drain to the Duwamish Waterway would be routed to the bioretention cells and would filter through the cells' plants and soil media before being collected in underdrains and discharged to the City of Seattle's piped stormwater conveyance system. After the Project is constructed, SPU would perform regular operation, monitoring, and maintenance activities such as vegetation management and sediment removal from storm drain structures.

The Project includes the following major work elements:

1. New asphalt path, bioretention cells, and street trees along the north side of S Cloverdale St;
2. Underdrains and piping to connect the new bioretention cells to the existing public storm drain system;
3. Removal of the existing gravel shoulder and paved driveways to allow construction of proposed improvements;
4. New ADA-compliant curb ramp at the intersection of S Cloverdale St and 5th Ave S; and
5. Driveway and associated pavement restoration in areas where they are disturbed by construction of the bioretention cells and pathway.

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 in South Park neighborhood of the City of Seattle, King County, Washington and is located entirely in the ROW for S Cloverdale St at, and west of the intersection with, 5th Ave S. The Project is in Section 32, Township 24, Range 4. Vicinity and Location maps are included as Attachments A and B, respectively.

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 area is relatively flat at an elevation of 18 feet above sea level.

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 any of these soils.

Surficial geologic conditions are primarily fill overlying alluvial deposit. Fill materials extend to depths between about 2 and 4 feet below the ground surface. Fill generally consists of medium dense, silty sand and soft to hard silt with sand, sandy silt, and silt with varying amounts of gravel and trace amounts of organics. Alluvial deposits consist of silt with varying amounts of sand and clay and scattered sand lenses. Most of this area has been developed into commercial and industrial properties. As a result, most of the project site has been disturbed by cutting and filling related to that development.

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

Based on mapping by the Seattle Department of Construction and Inspections (SDCI), the project site is approximately 350 feet south of the historic South Park Landfill, within the 1,000-foot methane buffer of that Landfill, and within a liquefaction-prone environmentally critical 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.

The Project would disturb a total of approximately 2,500 square feet (SF) by excavation, grading, and filling during clearing; paved driveway removal; and construction of underground utilities and bioretention cells. Approximately 420 cubic yards (CY) of material would be excavated for bioretention cells and associated improvements. Approximately 400 CY of mineral aggregate, landscape soil, borrow material,

bioretention soil, and backfill for pipes would be imported as fill material. Fill material would be obtained from a commercially licensed and permitted (by the State of Washington) purveyor of such materials. Excavated materials would be reused on-site where feasible or exported off-site and disposed of in an approved disposal location per construction contract requirements.

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

Erosion could occur as a result of the land-disturbing activity, although the risk is low because the area to be disturbed is relatively flat and proposed construction would begin only after best management practices (BMPs) to limit erosion potential are installed. All proposed construction would be required to comply with a SPU-approved construction erosion and sedimentation control (CESC) plan.

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

The project would convert approximately 370 SF of packed gravel shoulder to asphalt-paved pathway. Because packed gravel and asphalt surfaces are considered impervious, there would be no change in impervious surface. Existing removed paved areas associated with the driveways and the ADA ramp would be replaced.

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

The Project would be required to implement a CESC plan with BMPs appropriate to the site, conditions, and activities. During construction, work would be monitored, maintained, and adjusted as necessary to meet changing conditions. Upon completion of construction, disturbed areas would be permanently stabilized through plantings and paving to protect soil from erosion.

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.

Construction equipment could include hand-held power tools, gasoline and diesel-powered compressors and generators, and gasoline and diesel-powered vehicles to remove existing roadway and utility infrastructure and construct new roadway and utility improvements. These tools would generate greenhouse gas emissions (GHG) due to the combustion of gasoline and diesel fuels, and include oxides of nitrogen, carbon monoxide, particulate matter and smoke, uncombusted hydrocarbons, hydrogen sulfide, carbon dioxide, and water vapor. Other emissions during construction could include dust and exhaust from construction vehicles. These effects are expected to be localized, temporary, and minimized.

Total estimated GHG emissions for the Project are summarized in the table below; calculations are provided in Attachment C. The Project would produce GHGs in three ways: embodied in materials to be installed on the Project; through construction activity (especially as described above); and by regular operation, maintenance, and monitoring

activities throughout the life of the completed Project. Emissions generated during the manufacture of materials used in this Project are not estimated or otherwise considered in this environmental analysis due to the difficulty and inaccuracy inherent in calculating such estimates. New bioretention cells and street trees are expected to capture and accumulate biomass (organic matter). However, the mass of carbon sequestered by the bioretention cells during their anticipated 50-year lifespan is not estimated or otherwise considered in this environmental analysis due to the difficulty and inaccuracy inherent in calculating such estimates.

The Project would generate GHG emissions during construction through the operation of diesel- and gasoline-powered equipment, and in the transportation of materials, equipment and workers to and from the site. The estimates provided are based on assumptions for typical numbers of vehicle operations to execute the work (see Attachment C). The completed Project would generate GHG emissions through the routine and emergency operation, maintenance, and monitoring of the Project through an assumed life expectancy of 50 years.

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	0	0
Paving	237,082	107.52
Construction Activities (Diesel)	79,411	36.01
Construction Activities (Gasoline)	3,523.5	1.6
Long-term Maintenance (Diesel)	0	0
Long-term Maintenance (Gasoline)	4,422.6	2
Total GHG Emissions	**324,439.1**	**147.13**

[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 off-site sources of emissions or odors that would affect the Project. The neighborhood and parcels adjacent to the Cloverdale site are fully developed primarily as commercial and industrial properties.

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 federal, state, and local emission control criteria and City of Seattle required construction practices. These would include requiring contractors to use BMPs for construction methods, provide proper vehicle maintenance, and minimize 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.

This project location has no surface water bodies.

(**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.**

This Project would not require work over, in, or adjacent to waters.

(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.

This Project would not place or remove fill or dredge material.

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

This Project would not withdraw surface water.

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

This Project is not 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.

This Project would 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.

This Project would not withdraw 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.

This Project would not discharge waste materials into the ground.

c. Water Runoff (including stormwater):

(1) Describe the source of runoff (including stormwater) 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.

Existing sources of stormwater runoff include upstream streets, driveways and impervious areas on commercial parcels (such as rooftops from businesses, driveways, pathways) from the South Park neighborhood. The Project would direct stormwater along the road edge and via belowground pipes to the new bioretention cells. The bioretention cells would be designed to infiltrate stormwater runoff through the bioretention soil media and discharge stormwater via an underdrain to the City of Seattle's piped stormwater conveyance system. Runoff that enters the City's piped stormwater conveyance system would be discharged to the Duwamish Waterway. The Project is designed to improve the water quality of stormwater being discharged to the Duwamish Waterway.

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

During construction, it is possible that eroded materials from the construction site could enter surface waters. However, a CESC plan using appropriate BMPs would be implemented to avoid or minimize this risk. Work would be monitored, maintained, and adjusted as necessary to meet changing on-site conditions and to meet requirements of the construction stormwater NPDES permit.

Runoff that enters the bioretention cells would pass through bioretention soil media (18 inches deep) that provides water quality treatment in accordance with City of Seattle and Washington State Department of Ecology's (Ecology) stormwater requirements.

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

The Project is intended to collect surface-generated stormwater to provide water quality treatment and convey treated waters to the City of Seattle's piped stormwater conveyance system but would not alter overall surface drainage patterns. Once treated, stormwater would be discharged into the existing piped stormwater conveyance system that discharges to Duwamish Waterway.

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

This Project is intended to provide water quality treatment for stormwater runoff that discharges to the Duwamish Waterway. Stormwater runoff from the Project area is generated within a highly developed, urbanized basin, and currently no flow control or water quality treatment is provided prior to the runoff entering the City of Seattle's piped stormwater conveyance system and discharging to Duwamish Waterway. The Project would provide flow attenuation for surface runoff via bioretention cells and provide water quality treatment for runoff from pollution generating impervious surfaces.

The Project would use typical construction methods; no adverse impacts to surface or ground waters are expected. BMPs, as identified in the City of Seattle's Stormwater Code SMC 22.800 – 22.808 and in Director's Rule: SDCI's 17-2017/SPU's DWW-700, Volume 2 Construction Stormwater Control, would be used to control erosion and sedimentation during construction.

4. Plants

a. Types of vegetation found on the site:

☒ Deciduous trees:	☐ Alder	☒ Maple	☐ Aspen	☐ Other:
☐ Evergreen trees:	☐ Fir	☐ Cedar	☐ Pine	☐ Other:
☒ Shrubs				
☒ Grass				
☐ Pasture				
☐ Crop or grain				
☐ Orchards, vineyards, or other permanent crops				
☐ Wet soil plants:	☐ Cattail	☐ Buttercup	☐ Bulrush	☐ Skunk cabbage
☐ Other: Horsetail (*Equisetum* spp.)				
☐ Water plants**:**	☐ water lily	☐ eelgrass	☐ milfoil	☐ Other:
☐ Other types of vegetation:				

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

Existing grass, vegetation, and plantings in street ROW that conflict with proposed improvements would be removed to allow for grading, construction of the new pathway, bioretention cells, and underground storm drainage infrastructure. Most of the vegetation to be removed is weedy, non-native grass; adjacent vegetation includes a variety of non-native weedy and ornamental shrubs and herbaceous plants. Existing street trees would be protected in place.

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 14, 2020" (accessed at www.dnr.wa.gov), there are no documented occurrences of sensitive, threatened, or endangered plant species in this Section. No federally listed endangered or threatened plant species or State-listed sensitive plant species are known to occur within the municipal limits of the City of Seattle. The Project location has been intensively disturbed by development and redevelopment over the last 100 years. The Project area has been extensively excavated, filled, paved, or occupied by street and other built structures. 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 Project would limit plant removal, pruning, and other disturbance to the minimum required for construction of improvements. No trees would be removed. Construction limits would be physically delineated by protective construction fencing to prevent unauthorized trespass and collateral damage to adjacent vegetation.

The project would install a variety of low-growing grasses, shrubs, bulbs, and perennials in the bioretention cells to perform the bioretention and water quality treatment functions. Landscape plant selections for both bioretention cells would be made using plants from the SPU Green Stormwater Infrastructure Manual for Capital Improvement Projects, Volume III: Design; Bioretention Plant List and Bioretention Street Tree list. All plant selections would be approved for use by SDOT.

Areas outside of bioretention cells would have soil amendments and generally be revegetated with approximately 700 ground cover plants, approximately 700 shrubs, and 7 new street trees.

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

The site is mostly unvegetated paved street ROW, including sidewalks and shoulders. However, numerous weeds are present in adjacent vegetated areas. Himalayan blackberry (*Rubus armeniacus*), English ivy (*Hedera helix*), and reed canarygrass (*Phalaris arundinacea*) are present in upland, wetland, and riparian habitats in the project environs. According to the 'Noxious Weed' data layer in King County's iMap website, diffuse knapweed (*Centaurea diffusa*), spotted knapweed (*C. stoebe*), common reed (*Phragmites communis*), giant knotweed (*Polygonum sachalinense*), and tansy ragwort (*Senecio jacobaea*) are known to be near the Project area. All those noxious weed species are Class B Designate noxious weeds in King County. In addition, giant hogweed (*Heracleum mantegazzianum*) is known from the Project area. This is a Class A noxious weed in King County.

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				
Mammals:	☐ Deer	☐ Bear	☐ Elk	☐ Beaver
☒ Other: possum, raccoon, squirrel, rat				
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 WDFW's 'Priority Habitat Species on the Web' database on October 18, 2020, no threatened or endangered species known to be on or near the site. The Duwamish Waterway is more than 4,000 feet east of the project and contains habitat for Chinook salmon (*Oncorhynchus tshawytscha*), chum salmon (*O. keta*), coho salmon (*O. kisutch*), resident trout (*O. clarki*), bull trout (*Salvelinus malma*), and steelhead trout (*O. mykiss*). Chinook salmon, steelhead trout, and bull trout are federally listed as threatened under the Endangered species Act. 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. The Duwamish Waterway is more than 4,000 feet east of the Project and is an important water migration route for many animal species.

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

The Project would increase the number, diversity, and character of plantings in the street ROW in bioretention cells. Additional plantings of native and non-native low-growing plants, shrubs, and public street trees, are anticipated to increase resting, feeding, refuge, and nesting habitat for wildlife. The Project would also minimize ground disturbance and deploy BMPs identified in the City of Seattle's Stormwater Code (SMC 22.800 through 22.808 and Director's Rule SPU's DWW-700 /SDCI's 17-2017) and Construction Stormwater Control Technical Requirements Manual (Volume 2) to generally protect fish and wildlife and manage stormwater. For example, equipment to be used for construction activity would be cleaned and inspected before it arrives at the Project location to avoid and minimize potential for fuel or lubricant leaks.

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.*

The Project would not use energy once constructed.

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

The Project would not construct structures or plant vegetation that would 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:

The Project does not include energy conservation features.

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 contaminated materials may be present. The project site was not identified on Ecology's contaminated sites database; however, soil testing resulted in lube oil-range hydrocarbons, semi-volatile organic compounds, and select RCRA 8 metals (arsenic, barium, chromium, and lead) at levels below MTCA Method A cleanup levels. In addition, environmental health hazards 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 because of equipment failure or worker error. If disturbed soils contain contaminated substances at higher than anticipated levels, it could expose construction workers and potentially other individuals in the vicinity through fugitive dust, stormwater runoff, and/or vapors.

The Project's bioretention cells would provide water quality treatment for urban stormwater runoff. Typical roadway contaminants found in runoff are expected to accumulate within bioretention soils, although SPU's review of recent scientific studies confirms that many contaminants bind (chelate) with organic matter in the amended bioretention soil media and plant material and/or undergo transformation. While contaminants or their concentrations are not expected to be significant health hazards, bioretention cells are designed to discourage recreational use.

Completed bioretention cells would not increase mosquitoes, water-loving insects, or waterfowl because: 1) cells are designed to have flowing water, which does not support mosquito breeding; and 2) after storm events, the bioretention cells are designed to drain within 24 hours, substantially less than the 72 hours required for development of mosquito larvae.

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

The project site was not identified on Ecology's contaminated sites database; however, soil testing resulted in lube oil-range hydrocarbons, semi-volatile organic compounds, and select RCRA 8 metals (arsenic, barium, chromium, and lead) at levels below MTCA Method A cleanup levels.

(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.

The project site was not identified on Ecology's contaminated sites database; however, soil testing resulted in lube oil-range hydrocarbons, semi-volatile organic compounds, and select RCRA 8 metals (arsenic, barium, chromium, and lead) at levels below MTCA Method A cleanup levels.

(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.

No toxic or hazardous chemicals are planned to be stored, used or produced in the construction of the Project.

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

Fire and/or medic services could be required during Project construction, as well as possibly during maintenance of the completed Project. However, the completed Project would not demand higher levels of special emergency services than already exist at Project sites. Typical emergency services required for medical emergencies are provided by the Seattle Fire Department. Typical security services are provided by the Seattle Police Department and SPU's contractor during Project construction.

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

No such measures are proposed because there would be no environmental health hazards.

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). Within the allowable maximum levels, SMC 25.08 permits noise from construction equipment between the hours of 7 a.m. and 7 p.m. weekdays, and 9 a.m. and 7 p.m. weekends and legal holidays; however, it is expected that most construction activity would occur from 7 a.m. to 6 p.m. on weekdays. After Project completion, occasional noise from equipment used for operation, maintenance, and monitoring would occur periodically, but would be limited to hours allowed by the City of Seattle's Noise Control Ordinance (SMC 25.08).

(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 prescribes limits to noise and construction activities and would be enforced while the Project is being constructed.

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 in street ROWs used for vehicle and/or pedestrian travel, and/or parking. Adjacent property uses are commercial. The Project would not affect current land uses on adjacent parcels.

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?

Project site has not been recently used for working farm or forest lands.

(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?

There is no surrounding farm or forest land.

c. Describe any structures on the site.

There are no structures in the Project area.

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

The Project will not demolish any structures.

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

The Project is located entirely in street ROW. Adjacent properties include zoning classifications:

- IB U/45: Industrial Buffer Unlimited/45
- IG2 U/65: Industrial General 2 Unlimited/65

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

The Project site is designated Manufacturing Industrial Center. For parcel development zoning, see response to the previous question.

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

The Project is not in the City's Shoreline Management District.

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

Based on mapping by SDCI, the project site is approximately 350 feet south of the historic South Park Landfill, within the 1,000-foot methane buffer of that Landfill, and within a liquefaction-prone environmentally critical area.

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

No people would reside in the Project. City maintenance crews would work periodically in the ROW to maintain vegetation, drainage, and other City infrastructural assets.

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

No people would be displaced.

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

There would be no displacements.

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

The Project would be compatible with existing and projected land uses and plans.

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.

9. Housing

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

The Project would not construct housing units.

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

The Project would not eliminate housing units.

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

No measures are proposed because there would 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?

No new buildings are proposed.

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

No views in the immediate vicinity would be altered or obstructed. Street trees planted in the ROW could partially obscure neighborhood and territorial views when they attain full height and maturity.

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

The Project is developing a context-sensitive design for the site to respond to adjacent land uses and how people use and access the ROW. Design is intended to limit impacts to private parcels; lay-out street and sidewalk improvements to respond to existing site conditions (e.g. trees, ECAs) and constraints (topography); and execute a communication outreach plan that builds on the community concept plan and one-on-one meetings with adjacent property owners. The outreach began during preliminary design and will continue through final design to inform the community of the purpose of the Project, present the current design at each Project milestone, and offer opportunity for feedback that could meaningfully inform design.

11. Light and Glare

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

The project is not proposing new lighting.

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

The project is not proposing new lighting.

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

No off-site sources of light or glare would affect the proposal.

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

The project is not proposing new lighting.

12. Recreation

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

The existing public roadway infrastructure provides facilities for people walking and biking along existing city streets.

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

The Project would not displace existing recreational uses. Construction would temporarily disturb or detour walking and biking along existing city streets.

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

The Project would improve recreation opportunities in the neighborhood by providing new accessible pathways in the ROW where none currently exist. These improvements would improve access to nearby recreation opportunities. The selected contractor will be required to submit, obtain approval for, and implement a Temporary Traffic Control Plan to maintain pedestrian and bicycle access through or around the project sites.

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.

The proposed work would not affect any qualifying buildings, structures, or known cultural resources. This Project would affect only City of Seattle existing roadway assets and stormwater systems. None of those objects are considered historically or culturally significant.

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.

There are no known landmarks, features, or other evidence of Indian or historic use or occupation, including human burials or old cemeteries. No historic-period or precontact material evidence, artifacts, or areas of cultural importance were identified on or near the Project. According to the Washington Information System for Architectural and Archaeological Records Data (WISSARD) landscape Predictive Model based on environmental factors, the Project sites are in areas with Moderate to High Risk of inadvertent discovery of archaeological resources. Most of the proposed work would be disturbing upland areas that have been previously disturbed and filled by construction of roadway and utilities. The work's location on previously disturbed and filled ground reduces the chance of encountering contextually significant archaeological materials.

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, State of Washington Heritage, or City of Seattle Landmark properties are in or adjacent to the Project, the Project site was checked against the following registers on February 2, 2021:

Washington Heritage Register and National Register of Historic Places: http://www.dahp.wa.gov/historic-register

Washington Information System for Architectural and Archaeological Records Data database: http://wisaard.dahp.wa.gov. Review included both architectural and archaeological layers.

City of Seattle Landmarks Map: http://www.seattle.gov/neighborhoods/programs-and-services/historic-preservation/landmarks/landmarks-map

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.

The proposed work would not affect buildings or known cultural resources. This Project would affect only City of Seattle existing roadway assets and stormwater systems. None of those objects are considered historically or culturally significant.

Based on the Washington State Department of Archaeological and Historic Preservation's landscape Predictive Model, the Project site is in areas with Moderate to High Risk of inadvertent discovery of archaeological resources. However, most of the proposed work would be disturbing upland areas that have been previously disturbed and filled by construction of roadway and utilities. The work's location on previously disturbed and filled ground reduces the chance of encountering contextually significant archaeological materials. An approved inadvertent discovery plan will be in effect and on site during ground disturbing activities.

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 would occur entirely within existing improved City-owned street ROW. S Cloverdale St is a Principal Arterial and 5th Ave S is a Collector Arterial. There are no sidewalks or on-street parking on the north side of the roadway. There would be no change to existing conditions for access to the existing street system.

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?

Project sites are served by King County Metro public transit Route 60. The transit stop is on the northeast corner of the intersection of S Cloverdale St and 5th Ave S, outside the Project area.

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

The Project would not create or eliminate 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 project would create a new pathway on the north side of S Cloverdale St.

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

The Project would not use 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 would require approximately 650 round-trips (estimated using Attachment C) due to workers and materials being transported to and from the Project location during the anticipated 40 working-day construction period. Generally, trips would occur between 7 a.m. and 7 p.m. weekdays, and 9 a.m. and 7 p.m. weekends and legal holidays. Specific timing of peak volumes is not known. The completed Project is expected to generate approximately 200 new round trips over its life span to support on-going routine operation, maintenance, and monitoring. Peak traffic volumes are not expected to change because of the completed Project.

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

The proposal would not affect movement of products on roads or streets.

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

During construction, the contractor would be required to deploy a traffic control plan approved by SDOT. Project construction would comply with SDOT policies regarding temporary lane and sidewalk closures. SPU and SDOT would encourage the construction contractor to use carpooling for its employees.

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 Project would not create an increased need for public services.

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

The proposed work would improve transportation assets and water quality environmental services. No impacts on public services are anticipated.

16. Utilities

a. Check utilities available at the site:

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

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.

SPU anticipates minimal interruption, relocation, or reconstruction of other utilities such as sewer, water services, or natural gas. However, if more than a short service disruption would occur during relocation, then temporary connections would be provided. Inadvertent damage to underground utilities could also occur during construction. While such incidents occur infrequently, they could temporarily affect services to customers served by the affected utility while emergency repairs are made. No other interruptions to regular utility services are expected during construction.

C. SIGNATURE

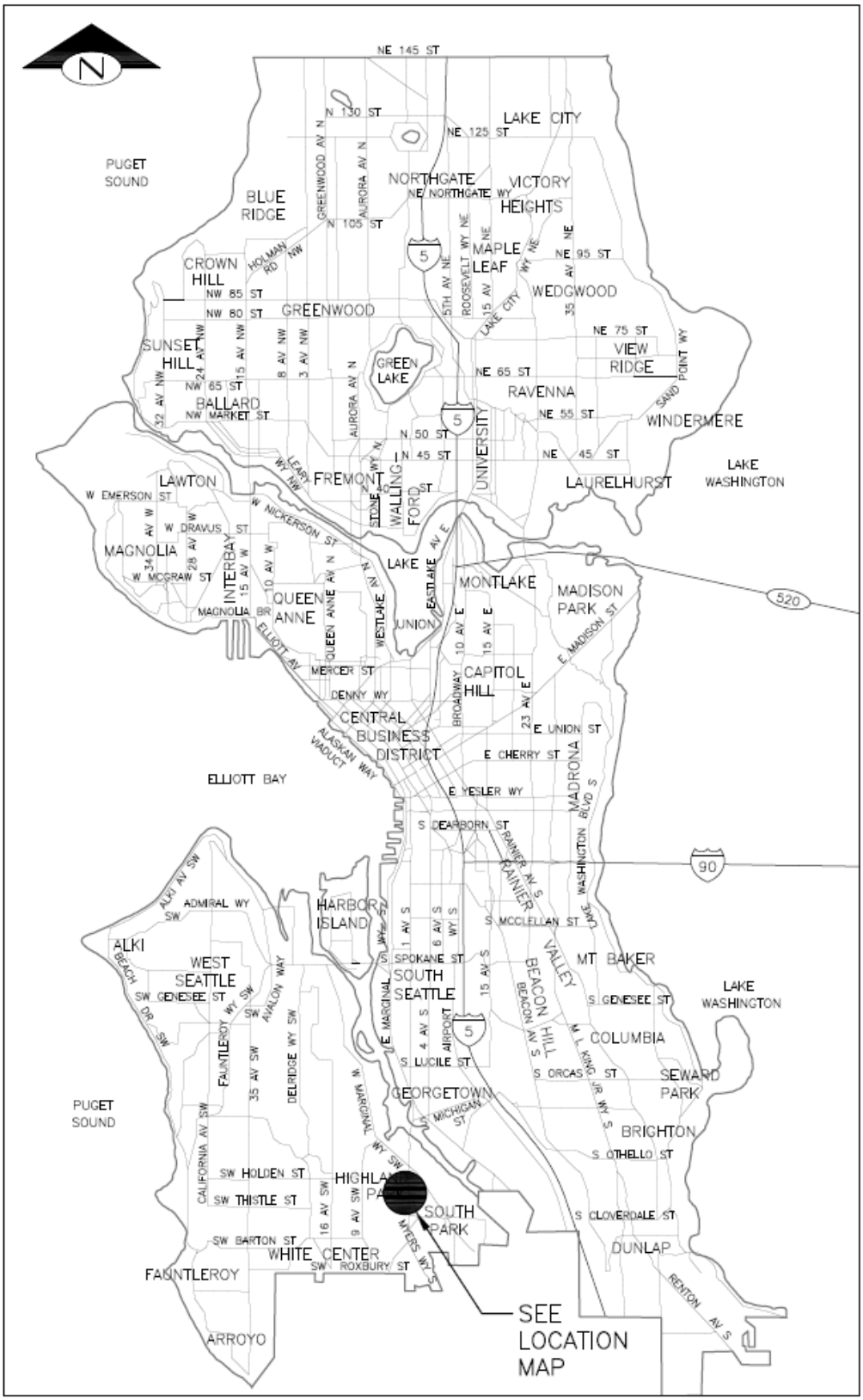
The above answers are true and complete to the best of my knowledge. I understand the lead agency is relying on them to make its decision.

Signature: Jason Sharpley Digitally signed by Jason Sharpley Date: 2021.03.30 09:23:46 -07'00'

Jason Sharpley, Project Manager

Attachment A – Vicinity Map
Attachment B – Location Map
Attachment C – Greenhouse Gas Emissions Worksheet

Attachment A – Vicinity Map



Attachment B – Location Map

Attachment C – 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		0.0	39	1,278	257	**0**
Vacant		0.0	39	162	47	**0**
					TOTAL Section I Buildings	**0**

Section II: Pavement						
						Emissions ($MTCO_2e$)
Pavement (street, sidewalk, asphalt patch) or concrete pad, in thousands of square feet (50 $MTCO_2e$ per 1,000 SF)		2.15				107.50
Gravel aggregate, in cubic yards		48				0.2
					Pavement (street, sidewalk, asphalt patch) or concrete pad, in thousands of square feet	**107.52**

Section III: Construction	
(See detailed calculations below)	**Emissions ($MTCO_2e$)**
TOTAL Section III Construction	**37.61**

Section IV: Operations and Maintenance	
(See detailed calculations below)	**Emissions ($MTCO_2e$)**
TOTAL Section IV Operations and Maintenance	**2**

TOTAL GREENHOUSE GAS (GHG) EMISSIONS FOR PROJECT ($MTCO_2e$)	**147.13**

Attachment C – Greenhouse Gas Emissions Worksheet, continued

Section III: Construction Details		
Construction: Diesel		
Equipment	**Diesel (gallons)**	**Assumptions**
Excavator	1,707	64 gal/day x 40 working days X 2/3 total time
Dump Truck	632	20 miles/round trip (10 CY capacity) x 79 round trips/ 5 mpg x 2 (for excavation and backfill)
Loader	640	24 gal/day x 40 working days X 2/3 total time
Concrete Truck	12	20 miles/round trip (10 CY capacity) x 3 round trips ÷ 5 mpg
Subtotal Diesel Gallons	**2,991**	
GHG Emissions in lbs CO_2e	**79,411**	26.55 lbs CO_2e per gallon of diesel
GHG Emissions in metric tons CO_2e	**36.01**	1,000 lbs = 0.45359237 metric tons

Construction: Gasoline		
Equipment	**Gasoline (gallons)**	**Assumptions**
Pick-up Trucks or Crew Vans	145	4 truck round trips/day x 40 working days x 20 miles round trip ÷ 22 mpg
Subtotal Gasoline Gallons	**145**	
GHG Emissions in lbs CO_2e	**3,523.5**	24.3 lbs CO_2e per gallon of gasoline
GHG Emissions in metric tons CO_2e	**1.60**	1,000 lbs = 0.45 metric tons

Construction Summary		
Activity	**CO_2e in pounds**	**CO_2e in metric tons**
Diesel	**79,411**	**36.01**
Gasoline	**3,523.5**	**1.60**
Total for Construction	**82,934.5**	**37.61**

Section IV: Long-Term Operations and Maintenance Details		
Operations and Maintenance: Gasoline		
Equipment	**Gasoline (gallons)**	**Assumptions**
Pick-up Trucks or Crew Vans	182	1 truck round trip/day x 4 days/year x 50 years x 20 miles round trip ÷ 22 mpg
Subtotal Gasoline Gallons	**182**	
GHG Emissions in lbs CO_2e	**4,422.6**	24.3 lbs CO_2e per gallon of gasoline
GHG Emissions in metric tons CO_2e	**2**	1,000 lbs = 0.45 metric tons

Operations and Maintenance Summary		
Activity	**CO_2e in pounds**	**CO_2e in metric tons**
Diesel	**0**	**0**
Gasoline	**4,422.6**	**2**
Total for Operations and Maintenance	**4,422.6**	**2**