SEATTLE PUBLIC UTILITIES
SEPA ENVIRONMENTAL CHECKLIST

This SEPA environmental review of Seattle Public Utilities' Delridge Combined Sewer Basin 99 Retrofit 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:

Delridge 99 Gate Retrofit Project

2. Name of applicant:

Seattle Public Utilities (SPU)

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

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4. Date checklist prepared:

April 12, 2018

5. Agency requesting checklist:

Seattle Public Utilities (SPU)

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

Project construction is scheduled to begin during the first quarter of 2019 and conclude by the end of third quarter of 2019. The project is anticipated to require 180 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 currently has no plans for future additions or expansions related to the proposed project.

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

SPU Geotechnical Engineering. 2017 (July 20). Geotechnical memorandum, preliminary geotechnical study: Delridge 99 CSO Project.

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.

SPU is not aware of pending government approvals of other proposals that directly affect the property covered by this proposal. In the future, SPU plans to coordinate with King County Department of Natural Resources (DNRP) to identify a project that can be designed to reduce combined sewer overflows (CSOs) from this area to the State and Federal performance standard (an average of no more than one CSO per year at each outfall, based on a 20-year moving average). The nature of that future work has not yet been identified.

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

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

- Utility Major Permit (type 51, major projects), City of Seattle, Department of Transportation (SDOT)
- Street Use Permits, SDOT

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.

In some areas of the City of Seattle, sewage and stormwater runoff are collected in the same pipes, known as combined sewers. During storm events, sometimes the flow in these pipes exceeds the combined sewer system capacity. When this happens, the sewer system overflows at an outfall structure designed for this purpose. There are currently 85 outfalls in the City of Seattle where combined sewer overflows (CSOs) can occur.

Per requirements in SPU's waste discharge permit (National Pollutant Discharge Elimination System [NPDES] Permit WA0031682) and the City's wastewater Consent Decree (2:13-cv-00678), SPU must limit the number of CSOs at each outfall to an average of no more than one per year based on a 20-year moving average. Combined sewer Basin 99 currently exceeds this performance standard, averaging 2.3 CSOs per year.

Combined sewer Basin 99 is in the Delridge neighborhood of West Seattle and includes a combined sewage storage facility (CSO Control Facility 34). Facility 34 is located underground in the right of way of Southwest Andover Street at 26th Avenue Southwest (Attachments A and B). It consists of a series of weirs, pipes, an 84-inch diameter storage pipe with approximately 150,000 gallons of storage, and a HydroBrake (vortex regulator orifice) that controls discharge from the storage facility.

Under normal conditions, flows leaving Facility 34 discharge to DNRP's Delridge Trunk sewer to the north. However, the existing HydroBrake at Facility 34 is not able to optimize the amount of flow discharged to the Delridge Trunk. This sometimes causes CSOs to occur before the system storage is fully utilized. During these CSO events, Facility 34 overflows through Outfall 99 to Longfellow Creek.

The proposed project would replace the existing HydroBrake with an electric-motor actuated slide gate. This would allow SPU to make maximum use of existing storage while optimizing discharges to the Delridge Trunk. It would also reduce the frequency of CSOs from Outfall 99.

The gate and its actuator would require installation of a new Type 204 maintenance hole structure and a new precast concrete vault with a hinged access hatch in the street right-of-way. The project would also install upgraded electrical and Supervisory Control and Data Acquisition (SCADA) infrastructure required to operate and monitor the flow-control and storage system. This work would include installing a new roadside electrical cabinet and components, new electrical/communication conduits, wiring, and instrumentation in the SPU sewer system. Two existing roadside electrical cabinets would be removed. Sewage would be bypassed around the work areas as needed during construction. All demolished and damaged landscaping and paved surfaces in the right-of-way would be restored as directed by SDOT.

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 street right-of-way for Southwest Andover Street at 26th Avenue Southwest in the City of Seattle's Delridge neighborhood (zip code 98106) (Attachments A and B). There is no street address for this project. The project location is in the southeast quarter of Section 21 and the southeast quarter of Section 13, Township 24N, Range 3E and within the Green-Duwamish Water Resource Inventory Area (WRIA 9).

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 flat.

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.

Urban development in this area over the last 100 years has resulted in a predominance of disturbed native soils/sediments, cut slopes, and placements of fill material. The entire project location and immediately surrounding area have been completely developed and disturbed in this way.

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

The project location is flat. 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.

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 would excavate approximately 50 cubic yards of soil and backfill with approximately 20 cubic yards of soil, aggregate, and other fill material. The fill material would be obtained from purveyors of such materials licensed to conduct business in Washington. About 30 cubic yards of spoil are expected to be exported from the project area. All exported excavated material would be legally disposed at an approved upland location or used as fill material (if suitable) 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 Construction Stormwater and Erosion Control Plan (CSECP) would be prepared and implemented. Disturbed areas would be restored to their near-original conditions (concrete, compacted gravel, and turf).

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

The project would demolish and replace-in-kind approximately 315 square feet of concrete street paving, approximately 600 square feet of compacted gravel (shoulder parking), and 835 square feet of turf. There would be no new impervious surfaces.

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

A CSECP would be prepared and implemented. Best Management Practices (BMP) as identified in the City of Seattle's Stormwater Code SMC 22.800 – 22.808, Director's Rule: 2009-004 SPU/16-2009 SDCI, and Volume 2 Construction Stormwater Control Technical Requirements Manual would 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 would be used to construct the proposed project, thus generating emissions due to the combustion of gasoline and diesel fuels (such as oxides of nitrogen, carbon monoxide, particulate matter and smoke, uncombusted hydrocarbons, hydrogen sulfide, carbon dioxide, and water vapor). Emissions during construction would also include normal amounts of dust from ground-disturbing activities and exhaust (that is, carbon monoxide, sulfur, and particulates) from construction equipment and are expected to be minimal, localized, and temporary.

This project would generate greenhouse gas (GHG) emissions in two ways: pipe/concrete usage (embodied) and construction activity. Total GHG emissions for the project are estimated to be about 101 metric tons of carbon dioxide emission (MTCO2e).

The GHG emission calculations are shown in Attachment C and summarized in the table below. One metric ton is equal to 2,205 pounds.

The project would replace demolished and damaged concrete surfaces/structures. The estimated volume of replacement concrete is 10 cubic yards (315 square feet 10 inches thick). This volume of concrete is estimated to embody 27 MTCO2e. Embodied energy in other materials (such as aggregate, pre-cast structures, and so forth) used in this project has not been estimated as part of this SEPA environmental review due to the difficulty and inaccuracy of calculating those estimates.

This project would generate GHG emissions during the estimated 180 total working-day construction period through the operation of diesel- and gasoline-powered equipment and to transport 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 (180 working days); actual times may be less. Construction activities would generate an estimated 74 MTCO2e.

Once operational, the project is not expected to generate additional GHG emissions because this project would not require additional maintenance beyond that which is currently required for the existing facility.

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	59, 535	27
Construction Activities (Diesel)	135,724	62
Construction Activities (Gasoline)	26,244	12
Long-term Maintenance (Diesel)	0	0
Long-term Maintenance (Gasoline)	0	0
Total GHG Emissions	161,968	101

[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 would be reduced and controlled through implementation of standard federal, state, and local emission control criteria and City of Seattle construction practices. These would include 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 uncontained surface waterbodies on or in the immediate vicinity of the project location. Longfellow Creek passes near the project but is contained within a 60-inch diameter concrete pipe.

(**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.**

There would be no work over or in any waterbodies.

(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 would be placed in or removed from surface water or wetlands.

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

Stormwater runoff from the project area is directed into the existing combined sewer system. The project would not change the volume, timing, or duration of those discharges.

(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 proposed project would not produce or discharge waste materials to surface waters. The project would result in a reduction in the frequency of combined sewage discharges to Longfellow Creek.

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 proposed project would not withdraw, discharge, or surcharge 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.

No waste material would be discharged to groundwater for this project.

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 entering and leaving the construction site. Any precipitation that lands on the construction site would be contained on-site and allowed to infiltrate or discharged to the sewer system with permission from local agencies. Barriers such as sand bags would be used to prevent runoff from entering the construction zone. Once construction is complete, temporary erosion control measures would be removed.

The completed project would be re-covered with concrete or gravel or turf, and would not create a need to manage additional stormwater runoff beyond currently existing conditions. Stormwater would follow pre-construction pathways. The current volume, timing, and duration of these stormwater flows are not known.

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

There would be no waste materials from this project that could 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 completed project would restore disturbed areas to near-original condition (concrete, compacted gravel, and turf) and would not create a need to manage additional stormwater runoff beyond currently existing conditions. Stormwater would follow pre-construction pathways. The current volume, timing, and duration of these stormwater flows are not known.

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

No adverse impacts to surface, ground, or runoff water are anticipated. BMPs, as identified in the City of Seattle's Stormwater Code SMC 22.800 – 22.808, Director's Rule: 2009-004 SPU/16-2009 SDCI, and Volume 2 Construction Stormwater Control Technical Requirements Manual, would be used as needed to control erosion and sediment transport from and to the project site during construction.

4. Plants

a. Types of vegetation found on the site: *[check the applicable boxes]*

☒ Deciduous trees: ☐ Alder ☒ Maple ☐ Aspen ☐ Other:
☒ Evergreen trees: ☐ Fir ☐ Cedar ☐ Pine ☒ Other: Leyland cypress
☐ Shrubs
☒ Grass
☐ 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?

Proposed work in the street right-of-way would affect impervious surfaces, including concrete travel lanes and compacted gravel shoulders. Proposed work in the street right-of-way would affect paved surfaces outside of street tree canopy drip-lines. Vegetated areas in the affected public right-of-way are planted with lawns. Adjacent private parcels consist mostly of impervious surfaces (i.e., roofs, driveways, patios), with pervious areas vegetated with lawn, landscaping, and trees. The proposed project would not remove any trees or shrubs.

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 February 6, 2017" (accessed at www.dnr.wa.gov), 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:

Project construction would not remove any trees or shrubs, and nearby street trees would be protected during construction. Approximately 835 square feet of turf disturbed by construction would be restored as directed by SDOT.

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: *[check the applicable boxes]*

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 February 12, 2018, Longfellow Creek is shown as supporting resident coastal cutthroat trout (*Oncorhynchus clarkii*) and coho salmon (*O. kisutch*), both of which are State priority species. Longfellow Creek passes near the project but is contained within a 60-inch diameter concrete pipe. The project site is also 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 located within 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, Lake Washington, the Lake Washington Ship Canal, and the Duwamish Waterway are important water migration routes for many animal species.

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

The proposed work would limit plant pruning and other vegetation disturbance to that required for project construction. Project construction would not remove any trees or shrubs.

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 require a small, *de minimis* amount of energy beyond that used by the current facility. Energy would be supplied by the local energy grid.

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

The proposed project does not involve building structures or planting 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:

There are no proposed conservation features or measures to reduce or control energy impacts.

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.

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

The project site is not known to have had 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 sawcutting, concrete pouring and handling, etc., would generate pollutants that could potentially enter local drainage conveyance systems. Non-sediment pollutants that may be present during construction include:

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

No toxic or hazardous chemicals would be stored, used, or produced at any time during the operating life of the constructed project.

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

No special emergency services would be required during construction or operation of the project. Possible fire or medic services could be required during project construction, as well as possibly during operation of the completed project. However, the completed project would not require 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 would be required to develop and implement a Spill Prevention, Control, and Countermeasure Plan to control and manage spills during construction. During construction, the contractor would use standard operating procedures and BMPs identified in the City of Seattle's Stormwater Code and Manual (Title 22, Subtitle VIII of the SMC and Directors' Rules SDCI 21-2015/SPU DWW 200) to reduce or control any possible environmental health hazards. Soils contaminated by previous land uses or by spills during construction would 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 qualified contractor(s) and/or City staff.

As required by the Washington Department of Labor and Industries (WAC 296-843), a Health and Safety Plan would be prepared by SPU's contractor prior to work commencing. The plan would 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 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 near project construction would temporarily increase during construction. Short-term noise from construction equipment would 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 a.m. and 7 p.m. weekdays, and 9 a.m. and 7 p.m. weekends and legal holidays. It is expected that construction would take no more than 180 working days to complete with only about 60 of those days involving noise generated by excavation and installation of pre-cast structures. The remaining 120 days would generally involve work that does not generate noise, such as electrical work, testing the new equipment, and so forth. Operation and maintenance of the completed project would generate no additional noise beyond that which is currently produced.

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

Construction equipment would be muffled in accordance with the applicable laws. SMC Chapter 25.08 (which prescribes limits to noise and construction activities) would be 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 proposed project is in improved public rights-of-way used for vehicle and pedestrian travel, and parking. Adjacent property uses are residential, industrial, and neighborhood commercial.

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 nonforest use?

The site has not been used for agricultural purposes for at least 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 would neither be affected by nor affect 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.

The proposed work is associated with an existing combined sewer system facility located in improved public right-of-way used for vehicle and pedestrian travel and parking. Adjacent property uses are residential (some of which may include space for home-based occupations) industrial, and neighborhood commercial. Utilities are in street rights-of-way.

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

The project would demolish and replace two existing above-ground electrical cabinets.

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

Single Family Residential; Manufacturing/Industrial; Multi-family, and Neighborhood/Commercial.

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

Single Family Residential; Manufacturing/Industrial; Multi-family, and Neighborhood/Commercial.

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

The project site 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.

The project is in a riparian area (for Longfellow Creek) and a liquefaction area—Environmentally Critical Areas as identified and mapped by the City of Seattle Department of Construction and Inspections. Longfellow Creek passes near the project but is contained within a 60-inch diameter concrete pipe.

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

No people would reside or work in the completed project.

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

The project would not displace any people.

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

There would 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 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 proposed project would not construct any housing units.

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

The proposed project would not eliminate any 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?

Most of the facility will be belowground. Two existing above-ground electrical cabinets will be removed, and a new approximately 5-foot high electrical cabinet will be installed.

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

No views would be altered or obstructed.

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

No such measures are proposed because there would be no aesthetic impacts.

11. Light and Glare

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

The constructed project would not produce light or glare. No new street lights are proposed or required. During construction, if an emergency situation calls for after-dark 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?

The completed project would not create light or glare.

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

There are no existing off-site sources of light and glare that would affect the proposal.

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

No measures are needed to reduce or control light and glare impacts because no impacts would occur. If an emergency requires after-dark work during construction, portable lighting would be adjusted as feasible to minimize glare.

12. Recreation

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

The proposed project is also located in improved street right-of-way used for informal recreational activities such as dog-walking, walking, jogging, and bicycling. Longfellow Creek Greenspace (a City of Seattle Park) is located more than 400 feet southwest of the project.

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

The proposed work would not permanently displace any existing recreational uses. Access to the streets affected by project construction would be more challenging, but SPU would require the project contractor to maintain safe pedestrian and vehicle access at all times. Temporary closures or detours affecting vehicle and pedestrian routes/access may be required.

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

Temporary closures or detours affecting vehicle and pedestrian routes/access may be required. The project would attempt to make those closures and detours as brief as possible. Project notifications through website updates, emails, and mailings would provide affected residents with advance notice regarding 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.

There are no places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site. 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 February 12, 2018.

- 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 http://www.dahp.wa.gov/learn-and-research/find-a-historic-place

Longfellow Creek Greenspace (a City of Seattle Park) is located more than 400 feet southwest of the project location. While the WISAARD database indicates numerous historic property inventories 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. No architectural inventory is required for this project because no structures would be demolished or significantly altered.

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 WISAARD, there are no such cultural resources at or near the project site. All ground disturbance and excavation would occur in existing street right-of-way and developed areas that have been disturbed previously by installation of underground utility infrastructure, roads, and residential structures.

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 February 12, 2018:

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

WISAARD database: https://fortress.wa.gov/dahp/wisaardp3/

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. Only portions of SPU's municipal wastewater system would be affected. None of those objects are considered historically or culturally import. Also, the proposed work is located on previously disturbed and filled areas. The project's location on previously disturbed and filled ground significantly reduces the chance of encountering contextually significant archaeological materials. Work crews would be trained to recognize archaeological materials should they be discovered. Should evidence of cultural artifacts or human remains, either historic or prehistoric, be encountered during excavation, work in that immediate area would be suspended and the find would be examined and documented by a professional archaeologist. Decisions regarding appropriate mitigation and further action would be made at that time.

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 in existing, improved public rights-of-way for Southwest Andover Street and 26th Avenue Southwest. Construction contractors would use the West Seattle Freeway, Delridge Way Southwest, and Southwest Andover Street to access the work site.

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 proposed project would not affect public transportation. The nearest bus stop (Metro Route 125) is on Delridge Way Southwest, more than 500 feet east of the project.

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

Because the proposed work involves demolishing panels and other work in the street right-of-way, construction would require temporary closures of parking as well as travel lanes. Parking associated with street right-of-way is currently on-street, free parking managed by the City of Seattle. During construction, there may be no or restricted parking on one or both sides of the affected streets. Project construction would temporarily eliminate up to approximately 20 on-street public parking spaces adjacent to the construction zone to accommodate contractor vehicles, mobilization, construction, and local and through access. Generally, however, there is ample on-street parking available elsewhere at the project site and most nearby residences and businesses have their own off-street parking. The specific timing and duration of parking and lane closures are not known at this time, but such closures would comply with relevant policies administered by SDOT as part of its street use permitting process. The completed project would 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 project would restore all demolished and damaged street panels, curbs, sidewalks, and traffic aprons to pre-construction conditions or better. No new permanent roads or streets would be constructed as part of the project.

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 would not use water, rail, or air transportation. The project is close to, but separated from, railroad spurs serving the adjacent Nucor Corporation industrial facility.

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 nonpassenger vehicles). What data or transportation models were used to make these estimates?

Project construction would generate about 550 vehicle round-trips due to workers and materials being transported to and from the site during the estimated total 180-working-day construction period. Most of those trips would occur during business hours (between 7 a.m. and 6 p.m.) on weekdays (Mondays through Fridays) but trips may occur at other times including weekend days. The completed project would not generate any additional vehicle round-trips beyond that which would normally occur for the on-going and routine operation, maintenance, and monitoring of the municipal sewer system in this area.

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 would 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 would be used to reduce or control transportation impacts:

- SPU would require the construction contractor to submit a traffic control plan for approval and enforcement by SPU and SDOT.
- SPU would 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 would be maintained at all times.
- Through access and vehicle access to private properties may not be available at all times during construction, but temporary closures would be minimized and detour routes would be properly and clearly signed.
- Alternative routes for pedestrians, bicyclists, and those with disabilities would 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. The project would be required at all times to accommodate emergency access for buildings accessed via the affected streets. Emergency access would comply with relevant policies administered by SDOT as part of the Street Use permitting process.

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

During construction, the project would be required at all times to accommodate emergency access for structures accessed via Southwest Andover Street and 26th Avenue Southwest. The project would avoid impacting known buried and overhead utilities, which include overhead electrical and communications, a buried 12-inch diameter high-pressure gas main, and a buried 12-inch by 24-inch telephone ductbank. No mitigation is being proposed because the project would 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.

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

C. SIGNATURE

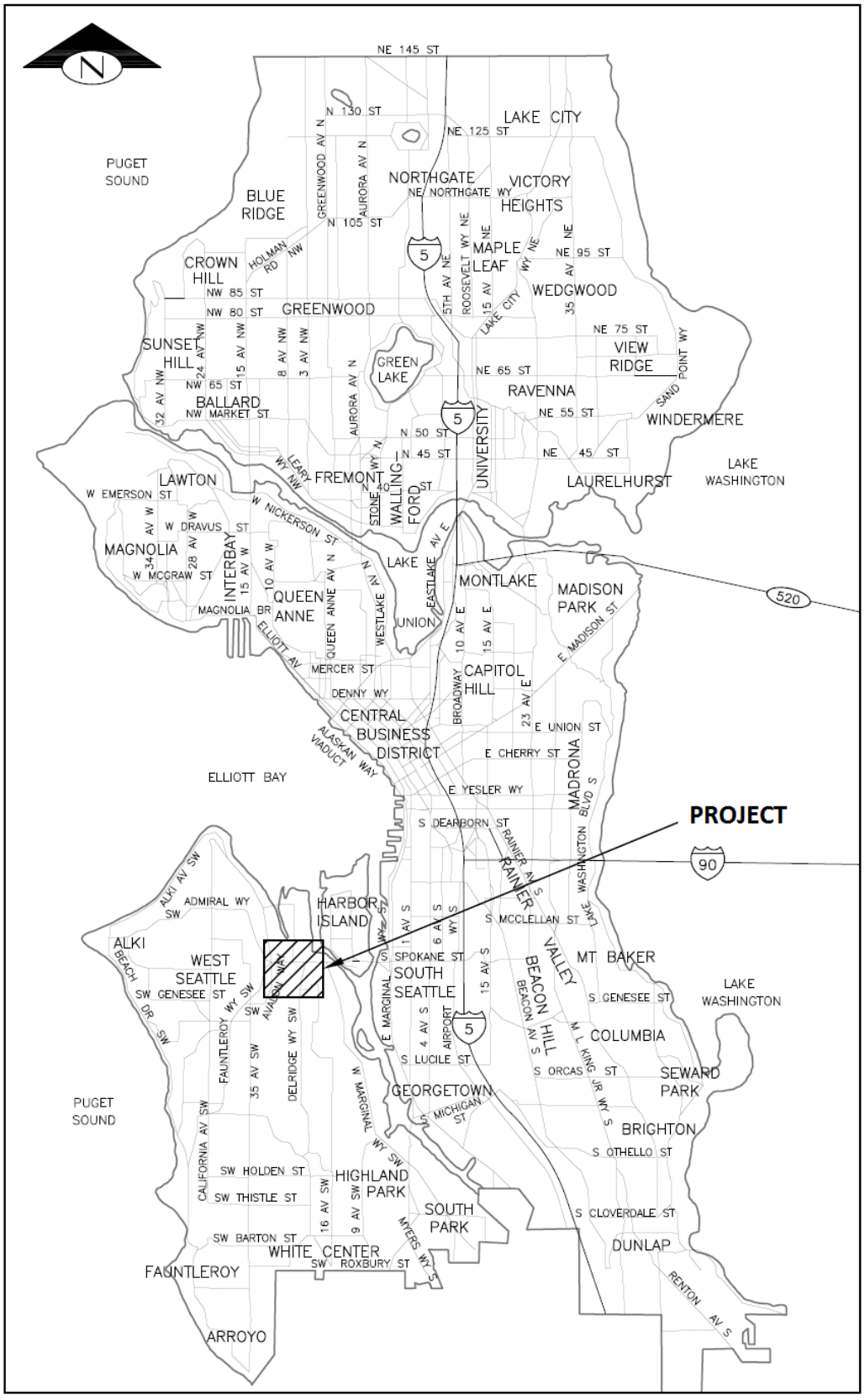
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Josh Campbell Date: 4/12/2018

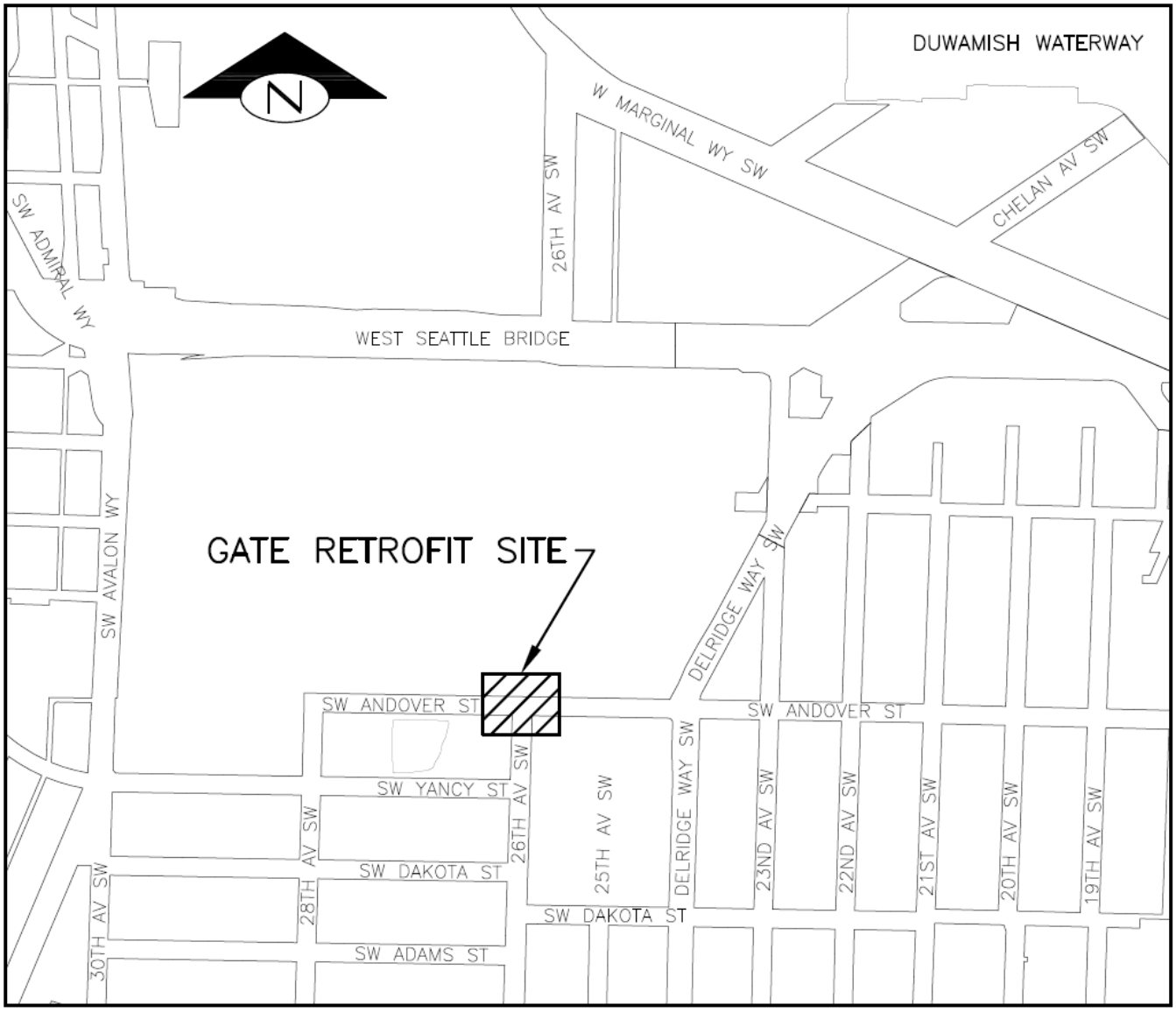
Josh Campbell
Project Manager

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

Attachment A – Vicinity Map



Attachment B – Site Map



Attachment C – Greenhouse Gas Emissions Worksheet

54.8Section 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 (sidewalk, asphalt patch)						
Concrete Pad (50 $MTCO_2e$/1,000 sq ft of pavement at a depth of 6 inches)		10 CY (315 sq ft 10 inches thick)				27
					TOTAL Section II Pavement	27

Section III: Construction	
(See detailed calculations below)	Emissions ($MTCO_2e$)
TOTAL Section III Construction	74

Section IV: Operations and Maintenance	
(See detailed calculations below)	Emissions ($MTCO_2e$)
TOTAL Section IV Operations and Maintenance	0

TOTAL GREENHOUSE GAS (GHG) EMISSIONS FOR PROJECT ($MTCO_2e$)	101

Attachment C – Greenhouse Gas Emissions Worksheet, continued

Section III Construction Details		
Construction: Diesel		
Equipment	**Diesel (gallons)**	**Assumptions**
Front-end Loader/Excavator	5,040	720 hours x 7 gallons/hour (345 hp engine)
Dump Truck (10 CY capacity)	20	10 round trip x 10 miles/round trip ÷ 5 mpg
Flat-bed Truck	40	10 round trips x 20 miles/round trip ÷ 5 mpg
Concrete Truck (10 CY capacity)	12	1 round trip x 60 miles/round trip ÷ 5 mpg
Subtotal Diesel Gallons	5,112	
GHG Emissions in lbs CO_2e	135,724	26.55 lbs CO_2e per gallon of diesel
GHG Emissions in metric tons CO_2e	62	1,000 lbs = 0.45359237 metric tons

Construction: Gasoline		
Equipment	**Gasoline (gallons)**	**Assumptions**
Pick-up Trucks or Crew Vans	1,080	180 working days x 3 trucks x 2 round-trip/day x 20 miles/ round trip ÷ 20 mpg
Subtotal Gasoline Gallons	1,080	
GHG Emissions in lbs CO_2e	26,244	24.3 lbs CO_2e per gallon of gasoline
GHG Emissions in metric tons CO_2e	12	1,000 lbs = 0.45359237 metric tons

Construction Summary		
Activity	**CO_2e in pounds**	**CO_2e in metric tons**
Diesel	135,724	62
Gasoline	26,244	12
Total for Construction	161,968	**74**

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

Operations and Maintenance: Gasoline		
Equipment	**Gasoline (gallons)**	**Assumptions**
Subtotal Gasoline Gallons		
GHG Emissions in lbs CO_2e		24.3 lbs CO_2e per gallon of gasoline
GHG Emissions in metric tons CO_2e		1,000 lbs = 0.45359237 metric tons

Operations and Maintenance Summary		
Activity	**CO_2e in pounds**	**CO_2e in metric tons**
Diesel		
Gasoline		
Total Operations and Maintenance		