



**Burke-Gilman Trail Extension
11th Ave NW to the Ballard Locks
Seattle, Washington**

Revised SEPA Checklist

~~November 17, 2008~~ February 1, 2011

STATE ENVIRONMENTAL POLICY ACT (SEPA) ENVIRONMENTAL CHECKLIST

The Seattle Department of Transportation (SDOT) Burke-Gilman Trail Extension Project seeks to complete the missing link between two existing portions of the Burke-Gilman Trail between 11th Ave NW and 30th Ave NW (at the Hiram M. Chittenden Locks) in Seattle. SDOT issued a Determination of Non-significance (DNS) for the project under the State Environmental Policy Act (SEPA) on November 26, 2008, which was appealed.

Now, upon remand by the King County Superior Court, SDOT has revised its description of the project to include Shilshole Ave NW between 17th Ave NW and NW Vernon Pl in Seattle. This Revised SEPA Checklist analyzes the potential environmental impacts along Shilshole Ave NW between 17th Ave NW and NW Vernon Pl, referred to throughout as the Shilshole segment, together with the original environmental analysis completed in 2008. In cases where the responses to the checklist have changed since issuance of the original DNS, strikeouts (~~example~~) and underlined text (such as this paragraph) are used to show the change.

A. BACKGROUND

1. Name of proposed project, if applicable:

Burke-Gilman Trail Extension: 11th Ave NW to the Ballard Locks

2. Name of applicant:

City of Seattle Department of Transportation (SDOT)

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

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(206) ~~615-0862~~ 684-5192

4. Date checklist prepared

~~November 17, 2008~~ February 1, 2011

5. Agency requesting checklist:

SDOT

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

~~There are two basic phases of the project:~~

- ~~Phase 1 of the project includes the construction of the trail and associated improvements from 11th Ave NW to 17th Ave NW. Phase 1 of the project is planned for construction in the spring of 2009.~~
- ~~Phase 2 of the project is from 17th Ave NW to the Henry M. Chittenden Locks (commonly referred to as the Ballard Locks) and includes a mixture of temporary and permanent trail routing. Phase 2 is anticipated to begin construction late fall of 2009. However, a portion of this phase, from 24th Ave NW to 28th Ave NW along existing City right of way (ROW), is anticipated to begin in spring of 2010, once SDOT obtains easements to widen its ROW between 26th Ave NW and 28th Ave NW to allow room for the trail.~~

Construction may begin as early as autumn of 2011. Project phasing will depend on a variety of factors unknown at this time, including the availability of funding and development of design.

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

No. There are no plans for future additions, expansion, or further activity related to or connected with this proposal ~~beyond the two phases of construction.~~

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

- Historical Research Associates, Inc., *Cultural Resources Assessment, Burke-Gilman Trail Extension Project (11th Ave NW to the Ballard Locks)*; prepared for SDOT November 2008
- GeoEngineers, *Revised Final Hazardous Materials Technical Memorandum, Burke-Gilman Trail Corridor, 11th Avenue NW to the Ballard Locks*; prepared for SDOT October 13, 2008
- GeoEngineers, *Preliminary Geotechnical Evaluation, Burke-Gilman Trail Corridor, 11th Avenue Northwest to the Ballard Locks*; prepared for SDOT March 21, 2008
- GeoEngineers, *No Effect Letter; Burke-Gilman Trail Extension, 11th Avenue NW to the Hiram M. Chittenden Locks Segment, File No. 0129-128-00*; prepared for SDOT November 4, 2008
- Parsons Brinckerhoff, *Transportation Technical Memorandum, Burke-Gilman Trail Extension*; Prepared for SDOT November 6, 2008
- SvR Design Company, *Parking Review, Burke-Gilman – 11th Ave NW to Hiram Chittenden Locks*; Prepared for SDOT November 13, 2008

Reports prepared for the Shilshole segment:

- Historical Research Associates, Inc., *Cultural Resources Assessment of the Proposed Burke-Gilman Trail Extension Project, Segment 4*; prepared for SDOT September 2010
- GeoEngineers, *Hazardous Materials Discipline Report, Burke-Gilman Trail Corridor, Shilshole Avenue, 17th Avenue NW to NW Vernon Place*; prepared for SDOT December 1, 2010

- GeoEngineers, Preliminary Geotechnical Evaluation, Burke-Gilman Trail Extension, Shilshole Ave NW between 17th Avenue NW and NW Vernon Place; prepared for SDOT December 8, 2010
- GeoEngineers, No Effect Letter; Burke-Gilman Trail Extension, Shilshole Avenue NW from 17th Avenue NW to NW Vernon Place; prepared for SDOT October 21, 2010
- Parsons Brinckerhoff, Burke-Gilman Trail Extension Project: Transportation Technical Memorandum – Shilshole Segment; Prepared for SDOT January 28, 2011
- Parsons Brinckerhoff, Burke-Gilman Trail Extension Project: Parking Assessment – Shilshole Segment; Prepared for SDOT January 31, 2011

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

The King County Wastewater Treatment Division is planning to replace the Ballard Siphon, a set of two wooden sewer pipes that cross the Lake Washington Ship Canal, beginning mid- to late-2011. The sewer pipes cross the canal between the end of 20th Ave NW in Ballard and the former Marco Shipyard in Magnolia. Construction is expected to last two-and-a-half to three years; SDOT will coordinate with King County to avoid conflicts during construction.

There are no other applications for governmental approvals of other proposals that would directly affect the property covered by this proposal.

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

- City of Seattle Shoreline Substantial Development Permit Exemption (obtained March 27, 2008)
- City of Seattle Shoreline Substantial Development Permit Exemption for revised project description (obtained February 1, 2011)
- Approval by the Ballard Avenue Landmark District Board
- Coverage under the National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit
- City of Seattle Street Use Permit
- Federal Highway Administration approval under the National Environmental Policy Act

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The project will complete the “missing link” between the existing segments of the Burke-Gilman Trail, which currently travels west from the Ballard Locks to Golden Gardens Park and east from 11th Ave NW to Tracey Owen Station in Kenmore, Washington. At present, trail users disperse onto various

streets within the Ballard neighborhood between the existing portions of the trail. The project will provide a marked, dedicated route for pedestrians and cyclists to connect the existing trail segments.

The project follows the preferred route for this portion of the Burke-Gilman Trail adopted by the Seattle City Council through Resolution 30583 in April 2003. The project will be located completely within City of Seattle right-of-way (ROW), except between 26th Ave NW and 28th Ave NW where ~~it will require~~ a permanent easement has been acquired because the existing ROW is too narrow to accommodate the trail.

The project ~~will~~ may include both permanent and temporary routes, described in further detail in question 12. Construction for the permanent portions of the trail will include removal of existing concrete, asphalt, and compact gravel to be replaced with an 8- to 12-foot paved multi-use pathway. Improvements include landscaping at key locations, storm water drainage controls, driveway improvements, street lighting, and traffic signals at two crossing points along Shilshole Ave NW. In addition, the project will relocate portions of the Ballard Terminal Railroad (BTRR) track where required. Depending on the project phasing and progression of design, an interim trail may be developed along Ballard Ave NW, between 17th Ave NW and NW Vernon Pl. Construction for the interim portions of the trail will include the addition of wayfinding signs.

Project construction along the Shilshole segment will take place within the existing street right-of-way and, when necessary, temporary easement areas. It will involve the same type of work and improvements involved in project construction for the other portions of the project route; specifically, it will remove existing concrete, asphalt, and compact gravel to construct a multi-use pathway; add improvements such as railway crossings and stormwater drainage controls; relocate underground utilities and reconstruct existing driveways; and install traffic controls, warning signs, and signals to direct motor-vehicle, bicycle, and pedestrian traffic.

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

The project is located in the Ballard neighborhood in northwest Seattle, Washington, Township 25N, Range 3E, Section 12. The project will begin at NW 45th St and 11th Ave NW, extend west along the south side of NW 45th St to the Ballard Bridge, and then continue onto the south side of Shilshole Ave NW to the intersection of 17th Ave NW past 22nd Ave NW, then continue parallel to the railroad tracks along City of Seattle property and NW 54th St ROW to the Ballard Locks.

The project ~~will~~ may install wayfinding signs along the existing street to mark the interim route along Ballard Ave NW between 17th Ave NW and NW Vernon Pl. ~~At NW Vernon Pl the project will head south to Shilshole Ave NW, where it will continue along the south side of Shilshole Ave NW. From Shilshole Ave NW the project will continue west along NW 54th St to the Ballard Locks.~~

~~If there is a significant delay in acquiring easements or resolving design issues, a temporary signed route would be established between 24th Ave NW and 28th Ave NW along NW Market St. The temporary alignment would turn south at 28th Ave NW, then head west at NW 54th St to the Ballard Locks.~~

Please see Figure 1 and the revised Figure 2 for maps of the project vicinity and route.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other...**

The project site is generally flat.

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

The steepest slopes along the project site are approximately five percent.

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

The project is located within an intensely developed urban area. Existing conditions include compacted gravel, asphalt pavement, and concrete pavement. Much of the site is situated on artificial fill; however, underlying soils that were not filled in during early development of the area include interbedded clays, silts and sands that are overlying glacial till.

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

There is no surface indication or history of unstable soils within the immediate vicinity of the project.

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

The project will require limited amounts of grading and fill to level existing low points to improve drainage and trail safety. Railroad relocation between NW Vernon Pl and 24th Ave NW may require up to 100 cubic yards of heavy rock fill to support the tracks. Some pavement will be replaced where existing rail lines are relocated, in coordination with the rail operator.

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

Erosion could occur during construction activity where the removal of existing asphalt, concrete, or other impervious surface is required. However, construction best management practices (BMPs) will be in place to minimize the potential for erosion.

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

The project site is located in an intensely developed urban industrial area with over 95 percent impervious cover, including concrete, asphalt, and compact gravel. While both impervious and pervious surfaces will be added, the project will reduce the total impervious surface on the site ~~from approximately 11 acres to 10.7 acres, resulting in a net decrease in impervious surface by approximately 3.2 percent~~ by approximately 0.3 acres. However, over 95 percent of the site will still be covered by impervious surfaces.

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

BMPs will be implemented to contain loose material during construction in accordance with the City's Standard Specifications for Road, Bridge and Municipal Construction and the Seattle Stormwater, Grading and Drainage Control Code (Since the completion of the original checklist in 2008, the City's Stormwater, Grading, and Drainage Control Code has been amended and replaced by a new, separate Stormwater Code and Grading Code). The contractor will be required to submit and follow a Stormwater Pollution Prevention Plan (SWPPP) and a Temporary Erosion and Sediment Control (TESC) plan, as well as follow the requirements of an NPDES Construction Stormwater General Permit.

2. Air

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

During project construction, air emissions may be generated from soil disturbing activities, operation of heavy-duty equipment, traffic delays, and the laying of asphalt. The total emissions and the timing of the emissions from these sources will vary depending on the phasing of the project and construction methods. Typical sources of emissions during construction of transportation projects such as this include:

- Fugitive dust generated during excavation, grading, and other construction activities;
- Engine exhaust emissions from construction vehicles, worker vehicles, and construction equipment;
- Increased motor vehicle emissions associated with increased traffic congestion during construction; and
- Volatile organic and odorous compounds emitted during asphalt paving.

The project is estimated to result in an increase of approximately ~~8,320~~ 15,269 metric tons of carbon dioxide equivalent (MTCO_{2e}), which accounts for the manufacture of paving materials,

construction related emissions, and maintenance of the pavement over its expected life cycle.

This estimate was calculated using the conservative emission factor of 50 MTCO₂e per 1,000 square feet of new pavement, developed by King County from an analysis of several different life cycle assessments of the environmental impacts of roadway projects. It is important to note that these studies estimated the embodied emissions for streets. Paving that does not need to stand up to the rigors of heavy use—such as that for driveways, sidewalks, or mixed-use trails—would likely use less materials and hence have lower embodied emissions.

As the project will not increase vehicle capacity or change traffic patterns once completed, the project is not expected to result in an increase or decrease of motor vehicle emissions, including greenhouse gas.

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 odor that may affect the proposal.

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

The goal of the project is to encourage non-motorized transportation to reduce the number of motor vehicle trips, potentially resulting in an overall reduction of air emissions. During construction, impacts to air quality will be reduced and controlled through implementation of standard federal, state and local emission control criteria in accordance with the City's Standard Specifications for Road, Bridge and Municipal Construction. The City's Standard Specifications require that the contractor maintain air quality to comply with the National Emission Standards for Hazardous Air Pollutants. The following is a list of actions that may be used to reduce and control fugitive dust and vehicle emissions:

- Regular street cleaning.
- Reduce exhaust emissions by minimizing vehicle and equipment idling.
- Use phased development to keep disturbed areas to a minimum.
- Promptly clean up spills of transported material on public roads.
- Schedule work tasks to minimize disruption of the existing vehicle traffic on streets.
- Cover dirt, gravel, and debris piles as needed to reduce dust and wind-blown debris.

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 yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The project is located near the Lake Washington Ship Canal, between Lake Washington and the Ballard Locks. The Ship Canal flows from Lake Washington to Puget Sound.

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

Yes, portions of the trail are within 200 feet of the Ship Canal. Construction work in these areas will include concrete and asphalt pavement removal and reconstruction to add the trail and associated facilities. SDOT received a Substantial Development Permit Exemption for the project on March 27, 2008 and a new Shoreline Substantial Development Permit Exemption for the revised project on February 1, 2011.

- 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.**

The project will not place fill in or remove dredge material from surface water or wetlands.

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

No. The project will not require surface water withdrawals or diversions.

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

No. The project does not lie 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.**

No. The project will not discharge waste material to surface water.

b. Ground:

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

No. Groundwater will not be withdrawn and no water will be discharged to groundwater.

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

The project will not discharge waste material into the ground.

c. Water runoff (including stormwater):

- 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.**

Runoff is primarily generated by storm water and is collected by drainage inlets throughout the project area. The storm drainage network enters the Ship Canal through permitted discharge locations. In the area underneath the Ballard Bridge, storm water runoff sheet-flows to the south through a vegetated area and eventually into the Ship Canal. Storm water runoff also sheet-flows from Shilshole Ave NW directly into the Ship Canal.

Stormwater runoff from the completed project will be collected in catch basins, drainage swales, rain gardens, and planting medians and conveyed to the existing storm drainage network except along the area underneath the Ballard Bridge and possibly 20th Ave NW, where it will continue as sheet flow into the Ship Canal.

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

During construction, there is a potential for waste materials from construction debris, exposed soil, or mechanical equipment to enter surface waters through stormwater runoff. However, BMPs will be in place to minimize the potential for surface and groundwater pollution.

Once completed, the project will not result in waste materials entering ground or surface waters as bicycle and pedestrian facilities are considered non-pollution-generating surfaces.

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

BMPs will be implemented to contain loose material during construction in accordance with the City's Standard Specifications for Road, Bridge and Municipal Construction and the Seattle Stormwater, ~~Grading and Drainage Control~~ Code. The contractor will be required to submit and follow a SWPPP and a TESC plan, as well as comply with an NPDES Construction Stormwater General Permit. All refueling of construction vehicles will be conducted according to a Spill Prevention and Counter Measures and Control Plan (SPCC) to be developed by the contractor.

Storm water runoff from the trail and adjacent roadway will be controlled through catch basins, drainage swales, rain gardens, and planting medians. These facilities in conjunction with other landscaped areas will provide approximately 0.3 acre of net new pervious area to the project, which will reduce overall runoff. All stormwater improvements will be designed and constructed to meet the Seattle Stormwater, ~~Grading and Drainage Control~~ Code.

Work within the shoreline zone will be in accordance with the Shoreline Substantial Development Permit Exemption obtained from the City of Seattle Department of Planning and Development. The exemption specifies that appropriate BMPs shall be employed to prevent deleterious material from entering the water and to minimize erosion and contamination of the shoreline environment during construction.

4. Plants

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

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

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

There is limited vegetation in the project area. Although small patches of grass and shrubs will be removed, two trees immediately adjacent to the permanent trail portion of the project will be preserved.

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

There are no threatened or endangered plant species known to be on or near the site.

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

A four-foot wide planting strip is planned adjacent to the trail for the area between 11th Ave NW and the west side of 14th Ave NW and along Shilshole Ave NW from NW Vernon Pl to 24th Ave NW. The project will also install bioengineered planters, rain gardens, and natural drainage swales. Native plants will be used to the extent possible.

5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site (indicated by bold, underlined font):

birds: **hawk, heron, eagle, songbirds**, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, **salmon, trout**, herring, shellfish, other:

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

As discussed in the 2008 and 2010 No Effect Letters, Coastal/Puget Sound bull trout (*Salvelinus confluentus*), Puget Sound Chinook salmon (*Oncorhynchus tshawytscha*), and Puget Sound

steelhead (*Oncorhynchus mykiss*) are known to migrate through the Lake Washington Ship Canal near the project site.

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

The City of Seattle is within the North American Pacific Flyway and the Ship Canal provides a migratory passage for several fish species. However, the project site itself does not contain any suitable habitat for migrating birds or fish.

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

As described in the *No Effect Letters*, the project does not include any in-water work and therefore will not impact any threatened or endangered fish species.

BMPs will be implemented to contain loose material during construction in accordance with the City's Standard Specifications for Road, Bridge and Municipal Construction, the Seattle Stormwater, ~~Grading and Drainage Control~~ Code, and the Regional Road Maintenance Endangered Species Act Program Guidelines. The contractor will be required to submit and follow a SWPPP and a TESC plan, as well as comply with an NPDES Construction Stormwater General Permit. All refueling of construction vehicles will be conducted according to an SPCC Plan to be developed by the contractor.

In addition, work within the shoreline zone will be in accordance with the Shoreline Substantial Development Permit Exemption obtained from the City of Seattle Department of Planning and Development.

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.

Construction equipment will use fuel and oil products. Once completed, the project will require electricity to operate the additional street lights and signals proposed on Shilshole Ave NW at the NW Vernon Pl and 17th Ave NW intersections. However, the energy demand by the new street lights and signals would be negligible compared to existing demand on the City's electrical system.

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

No. The project will not affect the potential use of solar energy by 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 is meant to encourage the use of alternate modes of transportation that do not use fuel and oil energy, such as walking and biking.

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.**

There is a potential to encounter contaminated groundwater and soil along the project alignment due to the amount of historic and current industrial activity in the area. The 2008 Revised Final Hazardous Materials Technical Memorandum identifies four substantially contaminated sites adjacent to or upgradient of the project area. Contaminants of concern include volatile organic compounds, petroleum hydrocarbons, polycyclic aromatic hydrocarbons, halogenated solvents, and other petroleum products and metals.

The 2010 Hazardous Materials Discipline Report identifies one moderate impact site along the Shilshole segment. (Since the publication of the original Hazardous Materials Technical Memorandum in 2008, WSDOT has changed its risk level terminology from “reasonably predictable” and “substantially contaminated” to “low impact,” “moderate impact,” and “high impact.”) Contaminants of concern include petroleum hydrocarbons.

Construction workers and the public could be exposed to hazardous materials that could be uncovered, released, or spilled during construction. Workers would be more at risk than the public because of their proximity to contaminated soils, vapors from hot asphalt, and spills during construction operations. The most likely spill materials that a worker could be exposed to are petroleum-based products such as fuels and hydraulic fluids. The common routes of exposure are inhalation, ingestion, and skin contact. Petroleum products could cause damage to the eyes, exposed skin, or lungs.

Public health impacts from construction would be related to exposure to a release of hazardous materials. A spill of materials brought onsite or encountered during construction, including dust, may expose the public to hazardous substances that pose a health risk. The most likely type of material that may be released is petroleum-based product, such as fuels and lubricants. The product could be released to the soil, surface water, groundwater, or air. The most likely route of exposure to the public would be through inhalation and direct contact. The greatest danger would be a release of unidentified contaminants.

The overall impact of a release on the public could include illness and discomfort from exposure to the hazardous substance and may also include lost wages for those exposed and health care costs for treating the symptoms of the exposure.

1) Describe special emergency services that might be required.

No special emergency services will be required. As with any construction project, emergency response might be required for work place accidents, injuries, or spills of hazardous materials.

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

A Health and Safety Plan that meets the requirements of the Washington State Department of Labor and Industries will be developed by the contractor before work commences. Workers

will be required to use appropriate personal protective equipment (PPE) and proper hygiene to reduce the risk of exposure. An SPCC Plan will be developed to control spills on site. Any contaminated soils that may be encountered will be excavated and disposed of in a manner consistent with the level of contamination, in accordance with federal, state and local regulatory requirements, by a qualified contractor(s) and/or City staff.

The project will also comply with the NPDES Construction Stormwater General Permit as construction activity will disturb more than one acre of ground.

In the vicinity of the Fentron Site along the west end of the trail, excavation for storm water drain lines may reach groundwater levels. The location of the drain lines has been reviewed by the designer of the groundwater remediation system and construction activities within this area will be observed by a representative of the remediation system designer.

If necessary, any disposal of contaminated water during project construction activities will comply with regulatory permit requirements. Permit requirements generally include treatment and monitoring of water prior to discharge or disposal.

b. Noise

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

Portions of the trail are within the Ballard Interbay North Manufacturing and Industrial Center. Industrial businesses load and receive goods along and within the public ROW. As a result, truck noise is common along the proposed trail route. However, this existing noise will not affect this proposal.

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.

Project construction will generate short-term noise increases from the use of construction equipment and vehicles, which typically have noise levels between 72 and 97 decibels. These noise impacts will be temporary and transitory in nature, as construction progresses along the project site. This noise will be insignificant compared with the existing levels of industrial noise in the area.

Construction activities would be subject to the City of Seattle Noise Ordinance, which sets maximum noise levels and generally restricts construction hours to between 7:00 a.m. to 10:00 p.m. on weekdays and 9:00 a.m. to 10:00 p.m. on weekends.

Once complete, the project will not contribute any noise to the area beyond occasional use of equipment for routine maintenance and repair.

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

SMC Chapter 25.08, which prescribes limits to noise and construction activities, will be fully enforced while the project is under construction. A noise variance will be obtained for any construction activity outside normal working hours. The following measures may be used to minimize noise impacts during construction:

- Whenever possible, operation of heavy equipment and other noisy procedures will be limited to non-sleeping hours.
- Effective mufflers will be installed and maintained on equipment.
- Equipment and vehicle staging areas will be located as far from residential areas as possible.
- Idling of power equipment will be minimized.

8. Land and shoreline use

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

The project site is currently used by industrial, BTRR, commercial, and commuter vehicle traffic as well as by cyclists and pedestrians. Adjacent properties are currently used for commercial and industrial purposes.

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

No. The site has not been used for agriculture.

c. Describe any structures on the site.

There are existing utilities within the ROW including power and utility poles, hydrants, gas meters, and railroad tracks. In addition, there are retaining walls in the ROW between 24th Ave NW and 28th Ave NW.

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

Utility structures will be relocated in several locations and a failing wall will be replaced along the south side of NW 54th St and a sheet metal and chain link fence may need to be removed along NW 54th St to accommodate the project alignment. A sheet metal and chain link fence was removed by the property owner along NW 54th St to accommodate the project alignment.

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

~~The project site is located within general industrial zones IG 1 and IG 2 and neighborhood commercial zones NC2-65 and NC3-65.~~

The project site is zoned Industrial General 1 Unlimited/65 (IG1 U/65), IG2 U/65, and Industrial Commercial 65. The signed portion of the trail along Ballard Ave NW would fall within Neighborhood Commercial 2-65 (NC2-65), NC3-65, and Commercial 1-65 zones.

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

The Seattle Comprehensive Plan designates this portion of the Burke-Gilman Trail as a planned portion of the Urban Trail Network.

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

~~A portion~~ Portions of the project passes through the Urban Industrial Environment of the Shoreline District.

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

Portions of the project site are adjacent to Shoreline Habitat designated environmentally critical areas (ECAs) (and within the City's Shoreline District) near the intersection of Shilshole Ave NW and NW 45th St, the intersection of Shilshole Ave NW and NW Dock Pl/20th Ave NW, and along NW 54th St. However, project construction will not impact any shoreline habitat.

The project is also adjacent to an Abandoned Landfill ECA on the south side of Shilshole Ave NW near the intersections with NW Vernon Pl and 22nd Ave NW as well as a Liquefaction ECA south of NW 45th St and east of 14th Ave NW. However, there will be no construction activities within these ECAs.

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

Not applicable. The project will not build any residences or businesses.

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

No residences or businesses will be displaced as part of this project. However, many businesses currently use the street ROW as a part of their business operations. Some of these uses are not expressly permitted or allowed, but have been ongoing for decades. The street and trail improvements will change how the ROW is currently used by private businesses, including the reconfiguration of three loading docks. In addition, BTRR tracks will be relocated at three locations to accommodate the trail.

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

SDOT will provide financial assistance directly to the property owners to implement the reconfiguration of the loading docks separately from the project. Each reconfiguration will be coordinated with the respective property owner and business. ~~SDOT will be responsible for the relocation of the BTRR tracks as part of the project.~~

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

The project, as a transportation facility, is compatible with the existing land uses. The Seattle Comprehensive Plan designates the project as a planned portion of the Urban Trail Network. The trail will pass through industrial and commercial areas (~~Zoned IG, and NC~~) (zoned IG and IC along

NW 45th St and Shilshole Ave NW and zoned C and NC along Ballard Ave NW), which are currently used by bicycle riders, joggers and walkers for recreational and commuting transportation purposes. The trail will be within City of Seattle ROW that has historically been used for transportation as well as within existing City of Seattle property and easement areas acquired for this project.

Much of the project area does not have organized roadway or utility infrastructure, such as sidewalks, curb ramps, or storm water drainage systems. The Burke-Gilman Trail project will add storm water infrastructure and provide a delineated area for pedestrians and bicyclists to travel.

Traffic signals are proposed at two locations: the intersection of 17th Ave NW and Shilshole Ave NW and the intersection of NW Vernon Pl and Shilshole Ave NW. Signage, striping and paving will direct trail users along an organized path of travel. Signs will be provided to notify trail users of potential truck movements and ongoing business operations. Driveways will be delineated with paint or change of pavement type.

The City of Seattle Department of Planning and Development (DPD) reviewed this project for consistency with the Shoreline Management Act and the City of Seattle Shoreline Master Program as part of its exemption review in 2008 and found it to be consistent. An updated Shoreline Substantial Development Permit Exemption application was approved by DPD on February 1, 2011 and has the same findings. The project will comply with the stipulations of the exemption, which outline BMPs to protect shoreline habitat and water quality.

9. Housing

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

The project will not provide any housing units.

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

The project will not eliminate any housing units.

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

Not applicable.

10. Aesthetics

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

The project will not build any new buildings. Some utility poles will be relocated and traffic signal poles will be installed at NW Vernon Pl and Shilshole Ave NW and at 17th Ave NW and Shilshole Ave NW.

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

The project will not alter or obstruct any views.

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

Not applicable.

11. Light and glare

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

Additional street lights are proposed along Shilshole Ave NW at the NW Vernon Pl and 17th Ave NW intersections. The lights will be traditional cobra head lights to improve vehicular and pedestrian safety and will be in addition to the existing lighting. The poles will be up to 33.5 feet in height. Lights will generally operate from dusk to dawn; actual hours of operation will vary by time of year.

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

The street lights will not provide a safety hazard or interfere with views. The street lights will be designed according to standard street lighting codes and direct light downward rather than out. The lights will be placed on non-residential arterial streets and enhance the lighting already present in the area.

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

Existing sources of light or glare will not affect the proposal.

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

Not applicable.

12. Recreation

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

Formal recreational opportunities within the immediate vicinity of the project include the existing portions of the Burke-Gilman Trail, the Ballard Locks, and the 14th Ave NW Boat Launch. The termini for the two existing segments of the Burke-Gilman Trail are located at the east and west ends of the project site, at the Ballard Locks and at NW 45th St and 11th Ave NW. Other formal recreational opportunities include marked bike lanes along 24th Ave NW.

Although there are no formal recreational opportunities within the project site, several streets are commonly used by cyclists and other recreational users. These include, but are not limited to, 28th Ave NW, NW Market St, Ballard Ave NW, Shilshole Ave NW, 20th Ave NW, the Ballard Bridge, and NW 45th St.

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

The project will not displace existing recreational uses.

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

Not applicable.

13. Historic and cultural preservation

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

Yes, a portion of the project—delineated by signs—~~may~~ will travel through the Ballard Avenue Landmark District.

According to the 2008 Cultural Resources Assessment two buildings near the project site are recommended eligible for listing in the National Register of Historic Places (NRHP), the Washington Heritage Register (WHR), and the City of Seattle Landmarks Register: the C.D. Stimson Lumber Company Office at 2116 NW Vernon Pl and the Seattle Boiler Works Office at 1132 NW 45th St. In addition, a portion of a historic corridor of the former Seattle, Lake Shore, and Eastern Railroad is within the project area and is recommended eligible for the NRHP and WHR. However, as ground disturbance activities will be confined to the street ROW, project construction should not impact these buildings or the railroad corridor.

The 2010 Cultural Resources Assessment, which assessed the potential for cultural and historic resource impacts along the Shilshole segment of the project, did not find any historic properties along Shilshole Ave NW between 17th Ave NW and NW Vernon Pl.

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

As described above, the 2008 Cultural Resources Assessment identified two buildings and a portion of a historic railroad corridor as historically and culturally important. No archaeological resources were identified by either the 2008 or 2010 Cultural Resources Assessments. However, given the historic use of the project area and its location near the shoreline, there is a high probability for prehistoric and historic Native American and historic Euro-American archaeological resources throughout the entire project corridor.

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

Due to the potential to impact archaeological resources, a professional archaeologist will monitor ground-disturbing activities that may penetrate beneath fill soils, approximately ~~eight~~ twelve feet in depth. Construction will follow the City of Seattle standard specifications for archeological and historic preservation, which includes suspension of activity if any artifacts, skeletal remains, or other archaeological resources are discovered until the State Historic Preservation Officer or other authority is consulted. The project will be reviewed and approved by the Ballard Avenue

Landmark District Board ~~before it undergoes construction~~ if a signed route is established along Ballard Ave NW.

No historic buildings or structures eligible for listing in federal, state, or local registers will be directly or indirectly affected by the proposed project.

14. Transportation

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

The trail will be accessed from the existing Burke-Gilman Trail from the east (at 11th Ave NW) and west (at NW 54th Street). Major public roadways accessing the area are 15th Ave NW and NW Market Street.

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

Yes, Metro Bus service is located on NW Market and 15th Ave NW (including but not limited to Routes 15, 18 and 44).

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

The project will result in a net loss of ROW area used for informal parking. Currently, the ROW along Shilshole Ave NW is heavily parked ~~between NW Vernon Pl and 24th Ave NW~~ by patrons of businesses along NW Market St and Ballard Ave NW, particularly during evening hours and weekends. Much of the ROW is also used by the daily and seasonal workforce for the marine, light industrial, sand and gravel, and fuel businesses.

To estimate the impact of the project on informal parking, a limited study was completed as part of this project in May 2007. As described in the 2008 Parking Review memorandum, the study estimated that space for approximately 140 of 480 vehicles will be lost throughout the project area, not including the Shilshole segment.

In 2010, an additional parking study was completed to estimate the loss of parking along the Shilshole segment. As described in the 2010 Parking Assessment, up to 91 of 169 spaces may be lost along the Shilshole segment.

However, the number of vehicles that actually park in the ROW depends on time of day, season, and how close together the vehicles park. In addition, the project will add some parking efficiencies by demarcating spaces at 24th Ave NW and along Shilshole Ave NW ~~near 14th Ave NW~~. As a result actual vehicle displacement will be less, as described in question B.14.g.

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

The project will not add any new roads or streets. In addition to constructing the trail as described above, the project will modify existing public roadways as follows:

- From 11th Ave NW to 15th Ave NW a travel lane will be improved on the north side of NW 45th St. The driveways along this section will be graded to match the roadway improvements.
- The southwest corner of the Ballard Ave NW and 17th Ave NW intersection will be modified to accommodate a curb bulb.
- New access is proposed between the proposed hotel at 5300 Shilshole Ave and 24th Ave NW to improve access to Shilshole Ave NW for local businesses.
- A new traffic signal, pedestrian crossing, and east-bound left-hand turn lane will be installed at the Shilshole Ave NW and 17th Ave NW intersection and a new traffic signal and pedestrian crossing will be installed at the Shilshole Ave NW and NW Vernon Pl intersection.
- Motor vehicle lanes may be widened along Shilshole Ave NW between 17th Ave NW and NW Vernon Pl.

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

Yes, the project will be directly adjacent to the BTRR at several locations. The project will parallel the railroad tracks as it travels along 45th Ave NW in the vicinity of the Ballard Bridge and realign the tracks south of the bridge supports. The project will continue along Shilshole Ave NW adjacent to the tracks between the Ballard Bridge and 17th Ave NW, with a railroad crossing at the 17th Ave NW intersection for trail users continuing north on 17th Ave NW. Between ~~NW Vernon Pl~~ 17th Ave NW and 24th Ave NW, the project will travel along Shilshole Ave NW adjacent to and north of the railroad with another rail crossing west of the 17th Ave NW intersection. Between 24th Ave NW and the Ballard Locks, the project will be located north of and at varying distances from the tracks.

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

The project is not expected to generate additional vehicular trips. It is meant to increase the opportunities for non-motorized transportation.

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

The proposed project is a multi-use trail and could potentially reduce the number of vehicle trips in the area. The trail will provide greater connectivity to existing bicycle and pedestrian facilities and provide users with dedicated, marked pathways and crossings. Overall, traffic movements

will be better organized and safer as a result of traffic signals, striping, signage, and roadway improvements.

As described in the 2008 Parking Review memorandum and the 2010 Parking Assessment, the project will improve parking efficiency by demarcating spaces in existing ROW areas used for informal parking at 24th Ave NW and along Shilshole Ave NW ~~near 14th Ave NW~~. While there will be a net loss of free, on-street parking along the project route, additional space can be created through better parking management and enforcement within ROW areas along Shilshole Ave NW and other streets just outside the project area. Based on current use of ROW areas in the project vicinity, SDOT anticipates that displaced vehicles can be absorbed within the commercial and industrial area surrounding the project site. Parking spill-over is not anticipated to impact the surrounding residential neighborhood.

The 2008 Transportation Technical Memorandum discusses the anticipated traffic level of service (LOS) impacts of the project, including the new signals and pedestrian crossings along Shilshole Ave NW. According to the report, the LOS is expected to improve from the projections of its current conditions.

The 2010 Transportation Technical Memorandum analyzed the impact that the trail may have as it intersects with several major driveways along the Shilshole segment. A trail through the Shilshole segment is not expected to impact through traffic travelling along Shilshole Ave NW; however, it may result in moderate delays at some driveways within the Shilshole segment. If necessary, passive or active control measures such stop signs or vehicle-activated warning signals may be installed to reduce and minimize wait times at driveways.

To reduce any construction related traffic impacts, SDOT will implement the following measures during construction:

- SDOT will work to minimize disruptions during the construction phase and strive to maintain adequate access.
- SDOT will inform adjacent property owners of work progress.
- SDOT will conduct advance and continued public outreach during construction to notify residents, businesses, local agencies, school districts, transit agencies, and other stakeholders of expected disruptions or changes in traffic flow.
- Temporary road closures will be minimized and detour routes will have proper signage.
- The construction contractor will be required to submit a traffic control plan for approval by the City, which the contractor will maintain during construction.
- Alternative routes for pedestrians, bicyclists, and those with disabilities will be identified and clearly marked.
- Transit stops will be clearly marked.

15. Public services

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

The project will not result in an increased need for public services. During construction, temporary lane closures and detours may result in minor increases in the response and travel

times of fire, emergency medical, police, and other public service vehicles that travel along the project route.

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

To reduce any construction related ~~traffic~~ impacts to public services, SDOT will implement the following measures during construction:

- SDOT will coordinate with fire, emergency medical, and police service providers before construction to notify them of construction schedules and any planned closures or detours, and work with them to establish alternative detour routes, if necessary.
- SDOT will make provisions for fire, emergency medical, and police vehicle travel in the project area during construction to ensure that access is not blocked and response times are affected as little as possible.
- The construction contractor will be responsible for preparing a traffic control plan prior to making any changes in the traffic flow, such as road closures.
- SDOT will notify area residents, businesses, local agencies, school districts, and transit agencies in advance of any disruptions or changes to services through a public information process.

16. Utilities

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

Utilities available at the site include electricity, natural gas, water, refuse service, telephone, and sanitary sewer.

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

The project will install new stormwater drainage facilities, including new catch basin inlets, drainage swales, and drainage connections as well as relocate water, gas, electrical, and telephone facilities. As a result there may be minor disruptions to utility services. The construction contractor will inform and coordinate with utility customers before any service disruptions.

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: *Ron Schaub*

Date Submitted: *2/1/11*

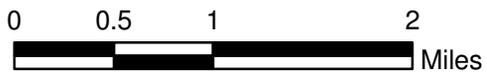
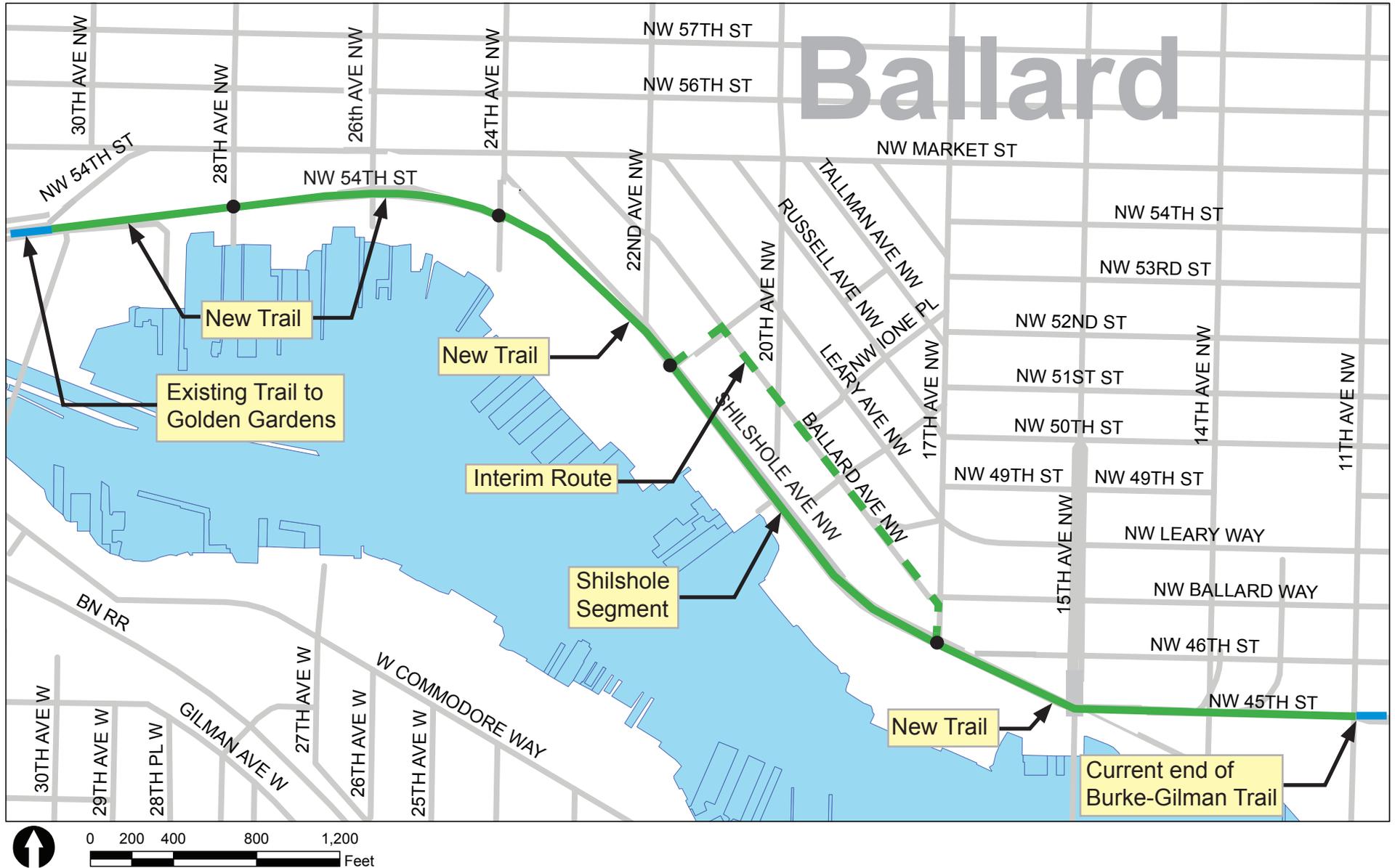


Figure 1
Burke Gilman Trail Extension Vicinity Map

Revised Figure 2 - Burke-Gilman Trail Extension Project Route



Legend

 Recommended Route*

* As adopted by the Seattle City Council through Resolution 30583 in April 2003