King County
Department of Natural Resources and Parks
Parks and Recreation Division
King Street Center
201 South Jackson Street, Suite 700
Seattle, WA 98104
http://www.kingcounty.gov/parks

SEPA Environmental Checklist

A. BACKGROUND

1. Name of the proposed project:

Green to Cedar Rivers Trail – North Segment

2. Applicant:

King County Parks and Recreation Division

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

Linda Frkuska, Capital Project Manager
King County Parks and Recreation Division
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Seattle, WA 98104
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4. Date checklist prepared:

April 10, 2018

5. Agency requesting checklist:

King County Department of Parks and Natural Resources

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

Start date: Fall 2018
End Date: Spring 2020

7. Plans for future additions, expansion, or further activity related to or connected with this proposal:

The proposed north segment of the Green to Cedar Rivers Trail (Project) extends approximately 3.25 miles along an existing segment of the Green to Cedar (GTC) trail system. The north segment will connect to a future south segment to form an 11-mile multi-purpose regional trail that will improve existing trail conditions (north segment), as well as create an additional new trail alignment (south segment) that will eventually extend from the existing Cedar River Trail to Flaming Geyser State Park on the Green River. The final south segment alignment has not been determined at this time and is currently under preliminary consideration and analysis, but will extend from SE Kent Kangley Road to SE Green Valley Road and the State Park. The south segment, when designed, will be evaluated under a separate SEPA process.

8. Environmental information that has been prepared, or will be prepared, directly related to this project:

- North Segment Stream and Lakeshore Delineation Report (The Watershed Company [TWC], July 2015)
- North Segment Green to Cedar Rivers Trail: Critical Areas Reconnaissance Memorandum (ESA, 2018)
- Geotechnical, Geologic, and Environmental Services Reports (GeoEngineers, 2015a and 2015b)
- Existing Traffic Condition Inventory and Analysis Memo (Concord Engineering, 2015)
- Biological Evaluation (ESA, 2018)
- Feasibility Study (King County, 2012)
- Corridor Inventory Report (Alta, 2015)
- 60% Technical Information Report (KPFF, 2018)

This information is available for review on the King County website at http://www.kingcounty.gov/parks/publicnotices

9. Applications that are pending for governmental approvals or other projects directly affecting the property covered by the proposal:

No pending applications or government approvals are known at this time.

10. List of governmental approvals or permits that will be needed for this proposal:

- U.S. Army Corps of Engineers, Clean Water Act Section 404
- National Historic Preservation Act Section 106
- Washington State Department of Ecology, Clean Water Act Section 401
- Washington State Department of Ecology, Construction Stormwater General Permit
- King County Critical Areas Review
- King County Clearing and Grading Permit
- City of Maple Valley Critical Areas Review
- City of Maple Valley Clearing and Grading Permit
- City of Maple Valley Shoreline Substantial Development
- City of Maple Valley Site Development Permit and Design Review
- City of Maple Valley Tree Removal Request

11. Brief, complete description of the proposal, including the proposed uses and the size of the project and site:

The Project will improve approximately 3.25-mile of existing trail from the Cedar River Trail to SE Kent-Kangley Road in unincorporated King County and Maple Valley, Washington. The Project is located within a former rail corridor and in the footprint of an existing trail that traverses 750 feet of unincorporated King County, with the remainder of trail located within Maple Valley. The trail is located adjacent to residential and commercial districts, schools, and open spaces, such as Lake Wilderness Park, which offer recreational opportunities. The Project will improve the existing gravel trail to a standard, paved, shared-use regional trail that will accommodate pedestrians, cyclists, and equestrians.

Installation of the new trail will require removal of existing gravel, asphalt, and concrete along with clearing and grubbing activities and tree removal. Two trail sections are proposed for the project: a typical trail section and typical extended trail section that will be constructed dependent on site constraints. The typical trail section will be 12 feet wide and composed of hot mixed asphalt plus 2-foot wide shoulders consisting of gravel and have 1-foot cleared of vegetation on the outside of the trail.

The Project will provide connections to other existing trails and adjacent residential neighborhoods by providing 21points of access by means of paved or graveled pathways, ramps, or stairs.

Topography constraints and landslide hazards necessitate the installation of approximately 1,730 feet of retaining walls to facilitate construction of the trail that

meets King County regional trail standards. A variety of wall types, including solider pile, concrete cantilever, and gravity block will be installed dependent on local conditions. In addition, a network of catch basins, gravel trench drains, and storm drains, will be constructed within and adjacent to the trail to collect stormwater and natural seepage from the adjacent hillslope to meet stormwater discharge requirements.

The vision for this trail was originally proposed in the 1992 King County Regional Trails Plan (King County Parks, 1992). More recently, the Project was proposed as part of the list of projects in the 2014-2019 King County Parks Levy. The goals of the Green to Cedar Trail are to:

- Develop a shared use trail appropriate to current and anticipated future user volumes,
- Provide a continuous equestrian facility where feasible,
- Facilitate future connections among the regional trails, local trails, and major destinations,
- Develop new road crossings that meet current standards for safety and improve existing crossings where necessary, and
- Connect to a regional trail network to provide connectivity for residents of South King County and the region.

This trail also fulfills the level of service needs included in the Growth Management Act, which establishes goals for cities and counties to assure that their quality of life is sustained as their communities grow. One of these goals is to enhance recreational opportunities, increase access to natural resource lands and water, and develop parks and recreational facilities (RCW 36.70A.020(9)). This trail will provide recreational opportunities to new and existing residential developments in the area such as Lake Wilderness Estates, Wilderhaven, and Highlands at Lake Wilderness.

12. Location of the proposal, including street address, if any, and section, township and range; legal description, site plan; vicinity map, and topographical map, if reasonably available:

The Green to Cedar Regional Trail, North Segment, is located in a former railroad corridor that begins at the SE Kent-Kangley Road in Maple Valley and extends north to its intersection with the Cedar River Trail in unincorporated King County, Washington. The trail lies along the east side of Lake Wilderness and the approximate mid-point of the Project is at Lake Wilderness Park (Section 21, Township 22N, Range 6E) (see Figure 1). The alignment will traverse the following tax parcels: 0922069022, 1622069022, 21222069017, 2222069053, 4017051160, 2722069019, and 8081650460.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (underline):

flat, rolling, hilly, steep slopes (along Lake Wilderness), mountainous, other

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

The steepest slope on site is approximately 55 to 65 percent, and is located along the north end of Lake Wilderness below the existing trail.

c. What general types of soils are found on the site (for example clay, sand, gravel, peat, muck)? Specify the classification of agricultural soils and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Soils mapped by the U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS, 2017) along the proposed trail alignment consist of the following units:

- Alderwood gravelly sandy loam, 15 to 30 percent slopes
- Everett gravelly sandy loam, 5 to 15 percent slopes
- Everett gravelly sandy loam, 15 to 30 percent slopes
- Everett gravelly sandy loam, 0 to 5 percent slopes

There are no agricultural lands or soils within the project area.

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

The north end of Lake Wilderness has a history of landslide and erosion adjacent to the project area. However, retaining walls will be used to provide stabilization of the slope and to support the proposed trail grades. There are no other known indications or history of unstable soils in the project area.

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

Approximately 10,000 cubic yards of fill materials will be imported to the site to construct the trail. Clean fill material will be obtained from an approved commercial quarry within proximity to the project. Approximately 11,700 cubic yards will be excavated and reused onsite, while 12,000 cubic yards will be disposed of offsite. In addition, approximately 68,300 square yards of rough grading and 49,200 square yards of fine grading is proposed for the Project.

f. Could erosion occur as a result of clearing, construction, or use?

Soil erosion could occur as a result of clearing and grading during Project construction, primarily during precipitation events. However, appropriate erosion control best management practices (BMPs) will be utilized during construction to minimize or eliminate sediment runoff. The trail will be surfaced with hot mixed asphalt with gravel shoulders so significant erosion is not expected to occur after construction is complete.

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

The Project will result in a net increase of about 1.65 acres of new impervious surface. The additional impervious surface is considered non-pollution generating as it will only be used by non-motorized vehicles. In addition, a network of catch basins, gravel trench drains, and storm drains will be constructed within and adjacent to the trail to collect stormwater and natural seepage from the adjacent hillslope to meet stormwater discharge requirements.

h. Describe the proposed measures to reduce or control erosion, or other impacts to the earth, if any.

Temporary erosion and sedimentation control BMPs and construction water quality measures will be installed to minimize erosion and treat stormwater runoff during construction, in accordance with King County and Department of Ecology requirements as described in the Stormwater Pollution Prevention Plan (SWPPP) prepared for the Project. After construction, the side slopes of the trail will be seeded and mulched, and a biodegradable erosion control blanket will be placed on the soil surface.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation and maintenance when the project is completed? If any, generally describe and give approximate quantities, if known.

Some emissions can be expected during project construction (exhaust emissions from construction vehicles and equipment, and a temporary increase in fugitive dust due to earthwork). The mitigation listed below, in Section 2.c, would ensure that the effects of construction activities on air quality would be minimized.

The project entails the construction of a non-motorized, paved trail; therefore, no increases in air emissions are anticipated from trail operation.

During construction, approximately 80% of the waste generated from construction will be composted and thus diverted from a landfill. This will result in an estimated net decrease in greenhouse gas emissions during construction by 1,171 metric tons over using typical construction methods.

b. Are there any off-site sources of emissions or odors that may affect your proposal? If so, generally describe.

There are no known off-site sources of emissions or odor that would affect the project.

c. Describe proposed measures to reduce or control emissions or other impacts to air, if any.

Best management practices to control fugitive dust and reduce equipment emissions will be implemented if needed. Measures that could be incorporated during construction to minimize impacts to air quality include:

- Spray exposed soil and storage areas with water during dry periods.
- Remove particulate matter deposited on paved, public roads and sidewalks to reduce mud and dust; sweep and wash streets frequently to reduce emissions.
- Equip construction equipment with appropriate emission controls.

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

Lake Wilderness is an approximately 65-acre lake situated in Lake Wilderness Park in the City of Maple Valley. Lake Wilderness is the headwaters for Jenkins Creek, which is documented to contain numerous salmonid-fish species. The lake is identified as a shoreline of the state.

The Watershed Company (TWC) reported in *Stream and Lakeshore Delineations Report for the Green to Cedar Rivers Trail – North Segment* (July, 2015) that in addition to Lake Wilderness, which is a shoreline of the state, one stream (Stream F) and three potential streams (Potential Streams G, H, and I) were identified in the project area. Stream F was identified near the north end of the alignment and all three potential streams were identified east of

Lake Wilderness. However, based upon a site visit performed by Environmental Science Associates (ESA) and the U.S. Army Corps of Engineers (Corps) during October 2017, only two of the features (Stream H and Stream I) were determined to be jurisdictional waters regulated by the Corps (ESA, 2017). Findings can be found in the *North Segment Green to Cedar Rivers Trail: Critical Areas Reconnaissance Memorandum* (ESA, December 18,2017) and are summarized below.

Stream H is located east of Lake Wilderness and flows down the steep hillside on the east side of the trail and into a trail-side ditch. Water then flows approximately 150 feet north in the trail-side ditch to the culvert located downslope of Wetland A and eventually discharges into Lake Wilderness.

During the October 24, 2017 site visit, the Corps determined this feature is a jurisdictional, seasonal stream based on the presence of defined bed and banks. In addition, the Washington Department of Fish and Wildlife (WDFW) determined that Potential Stream H is jurisdictional after a January 30, 2018 site visit. Because Stream H is designated as a regulated stream, the connecting trail-side ditch is also considered a stream. The stream is designated a non-fish bearing intermittent stream with a 25-foot buffer per Maple Valley Municipal Code (MVMC) 18.60.310(A)(3) (ESA, 2018). However, the stream is located at the toe of a 30-40 percent slope, requiring an additional 25 feet applied to the stream buffer. The result is a 50-foot buffer for Stream H (MVMC 18.60.310(A)(5)(b)).

During the agency field visits, Stream I was determined to be a jurisdictional Wetland A rather than a stream. Wetland A is a palustrine forested and palustrine emergent slope wetland located 100 feet north of Stream H. The outlet to the wetland is the same culvert mentioned above in the trailside ditch at the bottom of the slope. Wetland A contained a forested and emergent vegetation classes dominated by black cottonwood and giant horsetail respectively. The Corps determined this feature to be jurisdictional during the October 24, 2017 site visit.

According to the Washington State Wetland Rating System for Western Washington (Ecology, 2014), Wetland A scored a total of 13 points, categorizing it a Category IV wetland. Category IV wetlands are provided a 50-foot buffer per MVMC 18.60.260(A)(4). However, the wetland is located at the toe of a 30-40 percent slope, requiring an additional 25 feet applied to the

wetland buffer. The result is a 75-foot buffer for Wetland A (MVMC 18.60.260(A)(6)(b)).

Table 1 lists the categories and buffer widths of the regulated aquatic resources located within the project area

Table 1. Regulated Aquatic Resources within the Project Area

Aquatic Resource	Type or Category	Standard Buffer (feet)	Jurisdiction
Lake Wilderness	Type S	115	Maple Valley[1]
Stream H	Type N	50	Maple Valley[2]
Wetland A (originally Stream I)	Category IV	75	Maple Valley[3]

[1]Per King County Code (KCC) 21A.25 as adopted by the City of Maple Valley per MVMC 14.05.010
[2]Per MVMC 18.60.310.A
[3]Per MVMC 18.60.260.A

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.

Much of the trail will be constructed on the existing, abandoned railroad embankment to avoid impacts to Lake Wilderness, streams, and wetlands. No work will occur below the OHWM of Lake Wilderness; however, some project elements will occur adjacent to Lake Wilderness and will directly impact Stream H and Wetland A (Figure 2).

A 10-inch wide retaining wall will be constructed parallel to the trail in the vicinity of Stream H and Wetland A and will impact both aquatic resources. The wall is required to stabilize the eroding slope in this segment of the trail alignment that has experienced past landslide events. Associated with the top of the wall is an 18-inch wide concrete gutter designed to capture runoff from the slope and eventually transport it to a detention vault. In addition, an 18-inch wide concrete gutter located at the base of the wall will impact the stream.

Wall construction activities will permanently fill 8 square feet of Wetland A and 1,169 square feet of Stream H (292 linear feet). Non-regulated Stream G will also be impacted by grading associated with

the trail; however, because this feature is a non-regulated drainage, impacts were not determined.

Compensatory mitigation for critical area impacts is not proposed for the project. The stream and trailside ditch are loaded with sediment. Because the project design includes stormwater improvements that will greatly reduce the stream's sediment load from entering Lake Wilderness, ecological functions of the stream will be improved post-construction. The Corps and WDFW indicated in February 2018 that mitigation would not be required and consider the project self-mitigation. In addition, the City of Maple Valley determined that mitigation would not be required for the project impacts. These emails/letters are available upon request.

3. Estimate the amount of fill and dredge material that could 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 materials.

Approximately 2.28 cubic yards of fill will be placed within regulated aquatic resources, including: approximately 0.13 cubic yards of material within Wetland A and 2.15 cubic yards within Stream H to facilitate construction of the soldier pile wall (Figure 2). Clean fill material will be imported for use in wall construction.

Stream G will be impacted by grading associated with the trail; however, because this feature is a non-regulated drainage, fill quantities were not determined.

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

The proposal will not require surface water withdrawals, but will divert flows. A retaining wall will be constructed parallel to the trail in the vicinity of Stream H and Wetland A and will impact both aquatic resources. Eighteen inches back from the top of the wall, an 18-inch wide concrete gutter will be constructed to collect flow from Stream H, as well as other slope runoff. The gutter will follow the wall top north, approximately 200 feet (STA 113+00), until the wall height decreases to match the trail grade. Here, flow from the gutter will enter a catch basin and an associated storm drain. The storm drain will run approximately 160 feet east to STA 111+40, where the flow will discharge to the trail-side ditch, where it is conveyed further north (approximately STA 107+50) and enters a catch basin and 40-foot-long storm drain that will discharge into a bio-infiltration pond (retrofitted from existing stormwater pond). Here, a

portion of the water will be infiltrated, while the remainder will be discharged via an existing culvert outfall west to the slope above Lake Wilderness.

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

No portion of the proposed project lies within a 100-year flood plain.

6. Does the proposal involve discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

The Project does not involve discharges of waste materials to surface waters.

b. Ground

1. Will ground water be withdrawn from a drinking water well for 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 ground water? Give general description, purpose, and approximate quantities if known.

The Project will not involve ground water withdrawals from wells or discharges to ground water.

2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any. 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) is expected to serve.

The Project will not involve any waste discharges to ground water.

c. Water Runoff (including storm water)

1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (including quantities if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Within the project area, there is approximately 4.89 acres of existing impervious surface, all of which is non-pollution generating. The Project will result in a net increase of about 1.65 acres of new impervious surface, resulting in a total of 6.55 acres of impervious surface, post-project (KPFF, 2018). The additional impervious surface is all considered non-pollution generating as it will only be used by pedestrians, non-motorized vehicles, and equestrians. No pollution generating impervious surfaces (PGIS) will be constructed as part of this project.

All new impervious surface will be treated using water quality BMPs. The Project will include a network of catch basins, gutters, and storm drains that will convey stormwater collected from the project area to stormwater treatment BMPs. A variety of stormwater BMPs will be employed to treat stormwater, specifically:

- One detention pond with infiltration
- Two bio-retention ponds
- Seven drywells for infiltration
- Full dispersion, and
- Infiltration in closed depressions.

In addition, these stormwater features will also collect natural seepage from the adjacent hillslope. Flow from Stream H and Wetland A will discharge into a bio-infiltration pond. Here, a portion of the water will be infiltrated, while the remainder will be discharged via an existing culvert outfall west to the slope above Lake Wilderness.

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

Best management practices (described below) will minimize the potential for sediment and waste materials to enter the streams and wetlands during construction. No materials will be discharged to ground or surface waters as a result of operation of the trail.

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

The Project is expected to affect drainage patterns in the site vicinity, as a network of catch basins, gravel trench drains, and storm drains will be constructed. While flow patterns will be altered

through installation of these stormwater features, the ultimate destination of flows, usually Lake Wilderness, will remain the same.

d. Describe proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impacts, if any.

During construction, the following measures shall be implemented to reduce or control impacts to water:

- Implementing a Temporary Erosion and Sediment Control (TESC) Plan to address erosion control (including directing runoff away from unstabilized soils, slowing runoff with structures, and installing silt fences to catch sediment).
- Developing, implementing, and maintaining a Stormwater Pollution Prevention Plan (SWPPP) to minimize erosion resulting from rainfall runoff at construction sites, and to reduce, eliminate, and prevent the pollution of stormwater.
- Developing a Spill Prevention Control and Countermeasures Plan (SPCC) to manage toxic materials associated with construction activities (including the protocols for dealing with equipment leaks, disposal of oily wastes, cleanup of any spills, and proper storage of petroleum products/chemicals).
- Refueling of equipment greater than 100 feet from surface waters.
- Staging/storing equipment, when not in use, away from the wetland and stream.

4. Plants

a. List types of vegetation found on site:

_X_ deciduous tree: big-leaf maple and black cottonwood

_X_ evergreen tree: Douglas-fir, western red cedar

_X_ shrubs: salal, vine maple, beaked hazelnut, red elderberry, Douglas spirea, Indian plum, Himalayan blackberry, thimbleberry

_X_ grass

___ pasture

___ crop or grain

___ Orchards, vineyards or permanent crops

__X__ wet soil plants: reed canarygrass, black cottonwood, field horsetail

___ water plants:

__X__ other types of vegetation: sword fern

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

Vegetation that will be removed includes mixed forest (e.g., cottonwood, big-leaf maple, western red cedar, red alder and Douglas fir) along with native shrubs (e.g., Oregon grape, salal, and Indian plum), as well as invasive plants such as English holly, English ivy, Scotch broom, and Himalayan blackberry. The Project will involve the removal of approximately 313 trees over 8" dbh (diameter at breast height). Trees within the project area have been surveyed by King County and KPFF. The highest concentration of deciduous trees to be removed will be between the trail and Witte Road, to the south of SR 169 and to the north of SE 240th Street. The highest concentration of coniferous trees to be removed will be on the east side of the trail, to the south of Lake Wilderness Lodge and to the north of the 30-foot wide right-of-way.

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

The Washington State Department of Natural Resources (WDNR) Natural Heritage Program (NHP) database does not indicate the presence of any threatened or endangered plant species within the project area.

d. Describe proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on site.

Installation of native plants is proposed in the Project planting plan along both sides of the trail throughout the project area. 100 coniferous trees and 48 deciduous trees would be planted along the trail. Coniferous species would include incense Cerda, Sitka spruce, Douglas fir, western red cedar, and western hemlock. Deciduous species would include vine maple, Oregon ash, and Pacific dogwood. In addition, 6,851 square feet of native shrubs and groundcover would be installed throughout the alignment.

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

Yellow-flag iris and Himalayan blackberry have both been identified in the project site and are listed as non-regulated Class C noxious weeds by the King County Noxious Weed Control Program.

5. Animals

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

X birds: crow, bald eagle, red-tailed hawk

X mammals: rabbit, squirrel, mole

X fish: salmon, trout

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

Lake Wilderness is mapped by WDFW as providing habitat for the following Endangered Species Act-listed species:

- Puget Sound ESU Chinook salmon (threatened); and
- Puget Sound DPS steelhead (threatened).

No other threatened or endangered species or critical habitat is documented within 2 miles of the project site.

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

The Puget Sound area is located within the Pacific Flyway, which is a flight corridor for migrating waterfowl and other avian fauna. The Pacific Flyway extends south from Alaska to South America. No portion of the Project would interfere with or alter the Pacific Flyway and migrating and nesting birds within the project area will be protected under the Migratory Bird Treaty Act.

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

The following measures will be implemented to minimize the potential adverse effects on fish and wildlife species in the area:

- The proposed project will incorporate TESC measures including silt fencing, straw bales/wattles, and mulch, to minimize the potential for sedimentation and turbidity of downstream areas.

- All construction will comply with Washington State Department of Ecology 2012 Stormwater Management Manual for Western Washington (SWMMWW).

- All cleared areas will be re-vegetated with native vegetation following construction.

- Tree retention will occur so canopy cover will exceed the minimum canopy coverage required (10% of the site area) per MVMC 18.40.130.J(8) by 6.7 acres.

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

Rodents are likely present in the project area.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The Project will require very limited power supply to light a total of 14 lights that will be placed within the undercrossings of SE 231st Street, SR-169, Witte Road Southeast, and SE 263rd Street.

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

The Project would not require the use of solar energy and would not affect solar energy use 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 will require very limited power supply and therefore, not have energy conservation needs. Once constructed, the trail may result in a decrease in passenger vehicle traffic in the area.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spills, or hazardous waste that could occur as a result of this proposal? If so, describe.

With any construction project, there is the risk of potential construction related spills or leaks. This Project would face similar risks, but all risks would be well within the range of typical construction projects. No toxic chemicals would be used or stored at the construction sites, other than fuels and other construction-related fluids. Existing information does not indicate the presence of contaminated soils in the project area.

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

The many years of railroad operations in the corridor pose a risk for prior leaks, spills, or releases of chemicals used in railroad equipment (fuels, etc.) or other hazardous substances in railroad cargo that could have spilled in a railroad incident or derailment. Petroleum products, metals, herbicides/pesticides, and other contaminants are commonly present in railroad corridors. The potential for contamination with former railroad operations has not yet been assessed. However, soil impacted by petroleum products, metals, or other contaminants associated with railroad operations is possible along former railroad track portions of the proposed alignment.

Other sites of current or former businesses that may contain contaminated soils (gas stations, dry cleaners, etc.) also occur along the project alignment. However, construction activities are not proposed in close proximities to these areas and overall risk is low.

Details of sites along the proposed project alignment that may contain contaminated sediments or groundwater are discussed in the *Green to Cedar Rivers Regional Trail: Corridor Inventory Report – Appendix A: Geotechnical, Geologic, and Environmental Services* (GeoEngineers, 2015a and 2015b).

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

See Section a.1, above, for a discussion of hazardous chemicals/conditions in the project area.

(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.

During construction, fuels will be used for equipment. Operation of the trail will not result in the storage, use, or production of any toxic or hazardous materials.

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

It is not anticipated that special emergency services would be required for the Project. The trail will be designed such that emergency vehicles can access the route if required.

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

As described above, applicable measures would be followed to minimize release of any hazardous materials if encountered on site.

b. Noise

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

Vehicular traffic along area roadways adjacent to the site are the major noise sources in the area. There are no existing sources of noise in the area that would adversely affect the proposal.

(2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)?

Temporary noise impacts would result from vehicle and equipment operation during construction. Construction hours and noise levels would comply with the City of Maple Valley and King County noise standards, which limits construction noises to between the hours of 7:00 am and 7:00 pm, (MVMC 9.05.480(F) and KCC 12.86.520, respectively). Construction is anticipated to last 18 months.

After construction, noise levels would be typical of a non-motorized trail.

(3) Describe proposed measures to reduce or control noise impacts, if any.

As stated above, the Project would adhere to the City of Maple Valley and King County noise standards (MVMC 9.05.480 and KCC 12.86.520, respectively).

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 majority of the project area is forested, containing an unpaved trail on a former railroad alignment that is open to the public. The trail extends from the intersection with Cedar River Trail in unincorporated King County to SE Kent-Kangley Road (State Route [SR]-516) in City of Maple Valley. The trail alignment passes through two commercial areas located at: the intersection with SR-169 and the intersection with SE Kent-Kangley Road. The remainder of the trail is flanked by low- and medium-density residential uses with some areas designated as parks, such as Lake Wilderness Park.

b. Has the project site been used as working farmland 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 as working farmland or working forest lands.

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

There are no working farm or forest land businesses in the project area.

c. Describe any structures on the site.

Because the project alignment is along the same alignment as the existing Green to Cedar Rivers Trail, few structures exist on the property. There are four at-grade pedestrian underpasses located along the trail alignment, including at:

1. the SE 231st Street crossing (Station 27+75),
2. SR-169 (Station 43+00) crossing,
3. Witte Road Southeast (Station 78+50) crossing, and
4. SE 263rd Street (Station 165+50) crossing.

Both the SE 231st Street and SR-169 underpasses are made of corrugated metal and concrete, and are 16 feet in height and 10 feet in width. The Witte Road Southeast underpass is made strictly of concrete, and is 13 feet in height and 10 feet in width.

Several retaining walls occur within the alignment as well as trail access structures in the form of stairs and concrete ramps. Three benches are located along the trail alignment within Lake Wilderness Park. The road crossing at SE Kent-Kangley Road includes a pedestrian crosswalk with a median and a rectangular rapid flash beacon. Below ground, sewer lines, power lines, and several storm drains and culverts occur throughout the project alignment.

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

The Project will not involve demolition of existing structures.

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

The trail alignment is zoned as "Parks, Recreation, Open Space."

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

The comprehensive plan designation of the trail alignment is "Parks, Recreation, Open Space."

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

Lake Wilderness is a regulated shoreline of the state. The portion of the site within shoreline jurisdiction is designated as "Conservancy."

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

King County critical areas maps, along with field investigations, show the presence of a shoreline of the state (Lake Wilderness), a wetland (Wetland A), and stream (Stream F) within the project area. In addition, several geologic hazards (i.e., erosion hazards, landslide hazards, seismic hazards, and steep slopes) are mapped in the project area. Therefore, critical areas in the project area include wetland and wetland buffers, wildlife habitat conservation areas (fish only), and stream and stream buffers. Shorelines and shoreline buffers are regulated under the King County Shoreline Master Program (SMP).

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 completed Project would not displace any people.

k. Describe proposed measures to avoid or reduce displacement impacts, if any.

Displacement would not occur as a result of the Project; therefore, mitigation measures have not been developed.

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

The vision for this trail was originally proposed in the *1992 King County Regional Trails Plan*. More recently, the North Segment was proposed as part of the list of projects in the *2014-2019 King County Parks Levy*. The proposed trail is compatible with the Parks, Recreation, Open Space comprehensive plan designation.

m. Describe proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any.

There are no agricultural or forest lands in the project area.

9. Housing

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

No housing units will be provided by the Project.

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

No housing units will be eliminated by the Project.

c. Describe proposed measures to reduce or control housing impacts, if any.

Not applicable.

10. Aesthetics

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

Soldier pile wall heights will vary dependent on local site conditions, but could extend up to 10 feet, or greater, in elevation above the trail.

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

The proposal will not alter or obstruct existing views; retaining walls will be constructed along the up-gradient side of the trail to stabilize the slope and will not obscure views.

c. Describe proposed measures to reduce aesthetic impacts, if any.

There are no specific measures proposed to reduce or control aesthetic impacts. No significant aesthetic impacts are expected to result from the Project.

11. Light and Glare

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

The Project will require very limited use of lights for safety purposes with a total of 14 lights placed within the under-crossings of SE 231st Street, SR-169, Witte Road Southeast, and SE 263rd Street. No light glare would be generated by the project.

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

The Project would not generate significant light or glare.

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

The majority of the project alignment is located within a forested corridor, with exceptions located at the undercrossings of SE 231st Street, SR-169, Witte Road Southeast, and SE 263rd Street. In addition, the southern terminus of the alignment is located adjacent to commercial development and SE Kent-Kangley Road.

d. Describe the proposed measures to reduce or control light and glare impacts, if any.

Though anticipated to be minimal, light impacts will be minimized by using LED lights that will reduce glare, using a motion sensor to control lights so they are not on at all times, and directing the lights directly onto the trail.

12. Recreation

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

Lake Wilderness Park is located adjacent to the Project from approximately MP 1.3 to MP 1.9. This park is owned by the City of Maple Valley. The existing trail alignment is currently used by pedestrians and bicycles.

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

Construction of the Project will temporarily displace trail users. It is anticipated that construction will last approximately 18 months. During that time, trail users will be detoured to surface streets.

c. Describe proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant.

The proposed trail project will ultimately enhance recreational opportunities in the area by improving the northernmost portion of the proposed 11-mile Green to Cedar Rivers Trail. Once completed, the Green to Cedar Rivers Trail system would improve recreational access to Lake Wilderness Park, Lake Sawyer Park, Cedar Downs Park, Cedar Creek Park, Whitney Bridge Park, and undeveloped open space in the Black Diamond Natural Area. In addition, the trail system will increase connectivity between Flaming Geyser State Park and the Cedar River Trail.

This Project also fulfills the level of service needs included in the Growth Management Act, which establishes goals for cities and counties to assure that their quality of life is sustained as their communities grow. One of these goals is to enhance recreational opportunities, increase access to natural resource lands and water, and develop parks and recreational facilities (RCW 36.70A.020(9)). The Green to Cedar Rivers Trail will provide recreational opportunities to new and existing residential developments in the area such as Lake Wilderness Estates, Wilderhaven, and Highlands at Lake Wilderness.

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 or listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

The project area is located along a recorded section of the abandoned Columbia & Puget Sound/Pacific Coast Railroad grade (45KI722) (Ostrander et al., 2015). This recorded segment of railroad is part of the main line connecting Seattle and Franklin and opened in 1884. It was built to support coal mining efforts in the Franklin and Black Diamond areas and continued to operate until the 1960s. It was abandoned in the 1990s. This recorded segment of railroad was recommended Not Eligible for listing in the National Register of Historic Places (NRHP) (Ostrander et al., 2015). An isolated CCS flake (45KI1267) is also in the project area. The isolate was recommended Not Eligible for listing in the NRHP. DAHP concurs with the eligibility recommendations for both 45KI722 and 45KI1267.

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.

The alignment is within the traditional territory of the *Skopamish* people, a southern Coast Salish group who traditionally inhabited the Central Green River Valley and had several villages on the Green and Cedar Rivers. The area was also used by the *Stkamish* (Lower White River People) and the *Smulkamish* (Upper White River People). Descendants of all three groups are members of the Federally-recognized Muckleshoot Indian Tribe. The project alignment was used by these groups. A village was located on the Cedar River in the vicinity of today's Maple Valley, and the Lake Sawyer was a resource procurement area. Historic use of the area includes coal mining, logging, and sparse residential development since the 1880s. The alignment passes through the 19th century communities of Wilderness, Eddyville, and Summit. Due to the sensitive cultural setting, Parks retained a professional archaeologist to conduct a cultural resources assessment of the Green to Cedar Rivers Regional Trail project (Ostrander et al., 2015). As described in the answer to Question 13a, two archaeological sites, 45KI722 and 45KI1267, were recorded during field investigations for the project. No other cultural resources, landmarks, features, or other evidence of Indian or historic use or occupation were observed.

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.

The King County Historic Preservation Program (KCHPP) recommended cultural resources assessment of the project as part of due diligence required by King County Executive Procedures for Cultural Resources (LUD 16-1 AEP). The cultural resources assessment for the Green to Cedar Rivers Regional Trail project (Ostrander et al., 2015) included pedestrian and subsurface survey of portions of the project alignment where ground disturbance is proposed and there is heightened potential for encountering archaeology based on slope, landform, soils, and past land use, as determined by KCHPP. The entire project corridor was not surveyed during the cultural resources assessment. The resulting cultural resources assessment report was submitted to and accepted by the Department of Archaeology and Historic Preservation (DAHP).

d. Describe 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.

King County Parks will archaeologically monitor ground disturbance in portions of the south end of the project area during construction following a project specific Archaeological Resources Monitoring Plan (ARMP), as recommended in the cultural resources assessment. King County Parks will also develop an Inadvertent Discovery Plan to use during unmonitored construction throughout the rest of the project area. These documents would be developed prior to construction and establish procedures to be followed if cultural resources are found during construction. If human remains are encountered, the County will follow state laws dictating procedures (RCW 68.50.645, 27.44.055, and 68.50.055).

The King County Historic Preservation Program (KCHPP) will revisit project plans at 90% design to ensure no additions or changes have been made to the project that may warrant additional cultural resources investigations. King County Parks will support additional cultural resources investigations of changes to the project plans or design will result in new planned ground disturbance within yet unsurveyed portions of the project where there is potential for encountering buried cultural resources.

No state-issued excavation permits are required for with within and around 45KI722 and 45KI1267 because the sites are Not Eligible for listing in the NRHP. This portion of the proposed trail travels through unincorporated King County and the City of Maple Valley, so other permits for clearing and grading, critical areas review, shoreline substantial development, Section 404, Section 106, and Section 401 will be required from both jurisdictions. In addition to this SEPA checklist, the cultural resources assessment completed for the project will also be submitted to support Section 404 and Section 106 permits.

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 northern terminus of the Project can be reached from the eastern SE 231st Street exit of SR-169 (Figure 1). From SE 231st Street, turn left (north) onto Witte Road Southeast until the Seattle Public Utilities easement that runs parallel to SE 230th Place. The graveled access road terminates at the trail approximately 750 feet south of the northern project extent (intersection with the Cedar River Trail).

The southern project terminus can be reached from the SE 272nd Street exit from SR-18. Take SE 272nd Street east, approximately 4 miles east; the road becomes SE Kent-Kangley Road. The project terminus is immediately west of the intersection with 238th Avenue Southeast and SE Kent-Kangley Road.

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 site vicinity is served by a King County Metro Transit bus line. The nearest bus stop is located approximately 500 feet east of the southern project terminus near the intersection of SE Kent-Kangley Road and SR-169.

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

No change in parking spaces is planned as a result of the Project. No additional parking spaces would be provided.

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

Other than the trail project described in this checklist, no improvements to existing transportation facilities are proposed under the Project (Concord Engineering, 2015).

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

The Project would not use, nor interfere with, water, rail, or air transportation.

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

The Project is not expected to result in a noticeable increase in vehicular trips. Once improvements are made, there may be in increase in people traveling to the trail to use it. On the other hand, once constructed, some people may choose to use the trail instead of their vehicle to access the parks along the trail, slightly decreasing vehicle trips in the vicinity.

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.

There are no agricultural or forest practice areas in the project area. The Project will not affect the movement of products through the project area.

h. Describe proposed measures to reduce or control transportation impacts, if any.

Since traffic is not expected to change substantially, no mitigation measures are proposed.

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 explain.

The Project would not result in the need for any additional public services.

b. Describe proposed measures to reduce or control direct impacts on public services.

Impacts to public services are not anticipated; therefore, mitigation measures have not been developed.

16. Utilities

a. Underline utilities currently available at the site:

Electricity, natural gas, water, refuse service, telephone, and sanitary sewer are available within the project area.

Most utilities, while available to parcels adjacent to the Project, do not serve the site but run through the project area within existing right-of-way and utility easements.

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.

Electricity is required to supply power to the 14 lights that will be placed within undercrossing of SE 231st Street, SR-169, Witte Road Southeast, and SE 263rd Street. Puget Sound Energy will supply electricity for lights on the undercrossing.

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: Lindsey Miller

Name of Signee: Lindsey Miller, Capital Project Manager Environmental Specialist

Agency/Organization:
King County Department of Natural Resources and Parks, Parks and Recreation Division

Date Signed: 4/26/2018

D. REFERENCES AND BIBLIOGRAPHY

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E. FIGURES

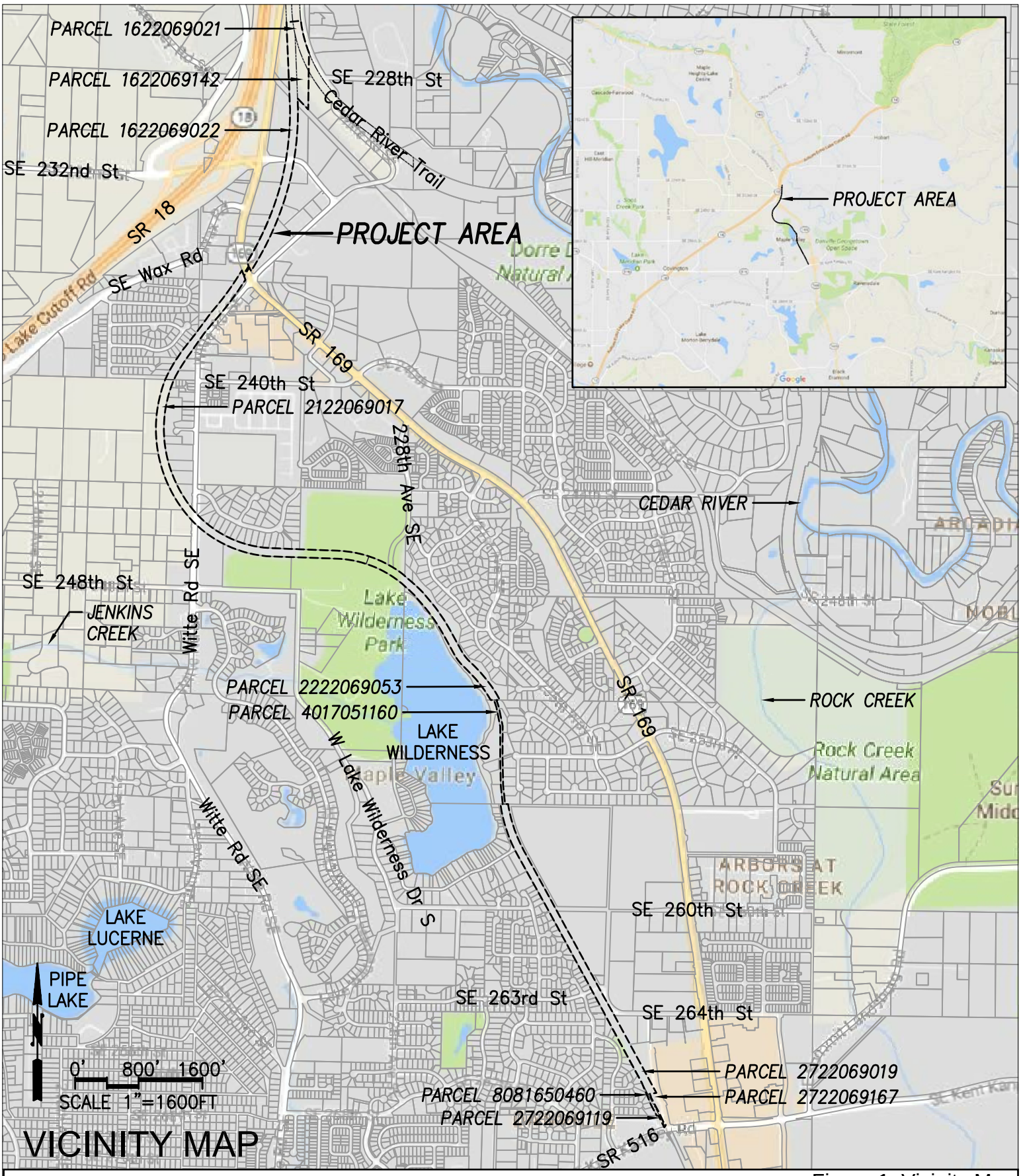
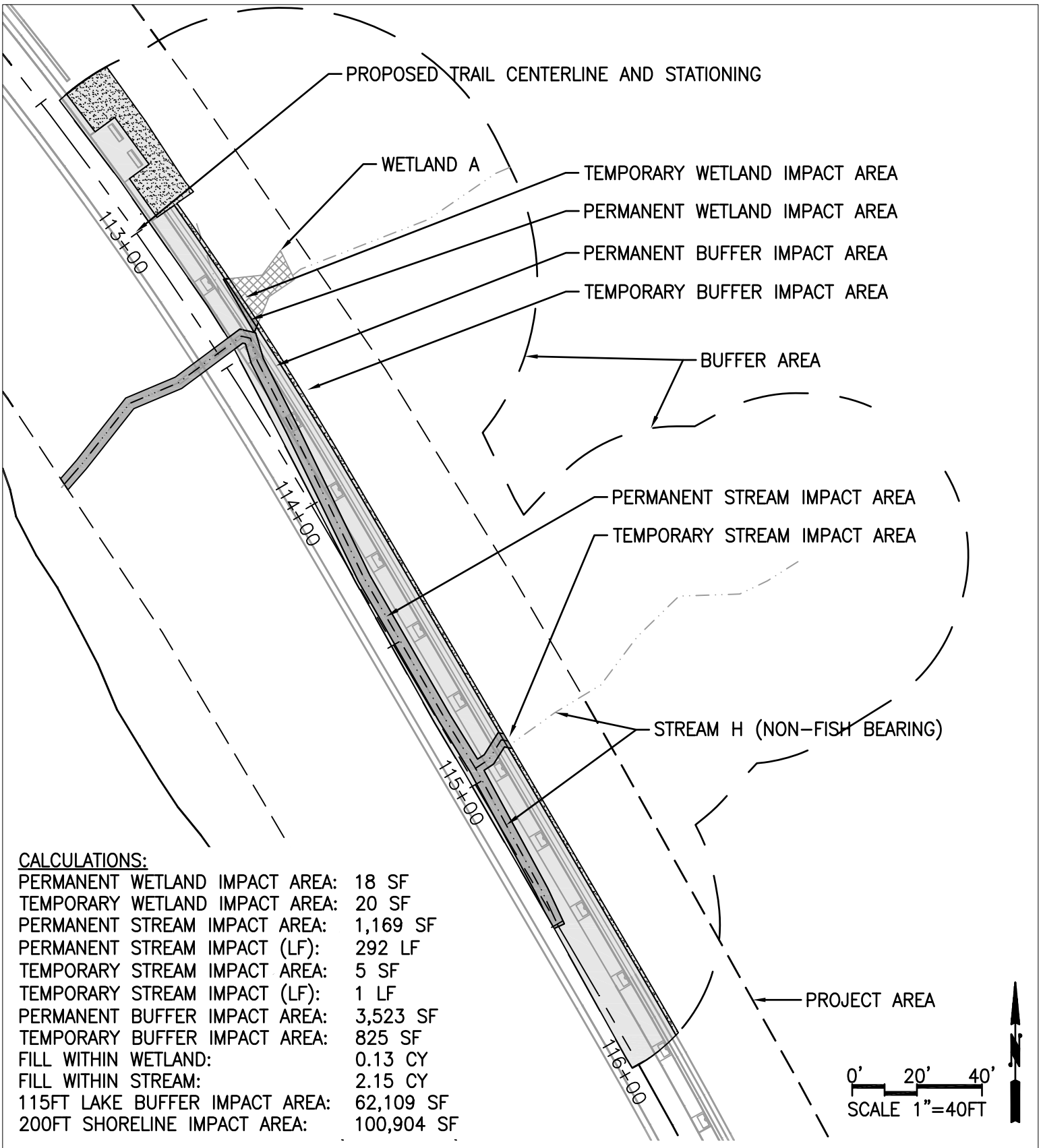


Figure 1. Vicinity Map
Green to Cedar Rivers Trail Project



CALCULATIONS:

PERMANENT WETLAND IMPACT AREA:	18 SF
TEMPORARY WETLAND IMPACT AREA:	20 SF
PERMANENT STREAM IMPACT AREA:	1,169 SF
PERMANENT STREAM IMPACT (LF):	292 LF
TEMPORARY STREAM IMPACT AREA:	5 SF
TEMPORARY STREAM IMPACT (LF):	1 LF
PERMANENT BUFFER IMPACT AREA:	3,523 SF
TEMPORARY BUFFER IMPACT AREA:	825 SF
FILL WITHIN WETLAND:	0.13 CY
FILL WITHIN STREAM:	2.15 CY
115FT LAKE BUFFER IMPACT AREA:	62,109 SF
200FT SHORELINE IMPACT AREA:	100,904 SF

PROJECT IMPACTS

Figure 2. Aquatic Resources and Project Impacts
Green to Cedar Rivers Trail Project