



DEVELOPMENT SERVICES DEPARTMENT  
ENVIRONMENTAL COORDINATOR  
450 110<sup>th</sup> Ave NE., P.O. BOX 90012  
BELLEVUE, WA 98009-9012

**OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS**

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 13-115660-LO  
Project Name/Address: Primrose Loop Trail Improvements and Bridge Replacement  
14100 SE 66th Street  
Planner: David Pyle / dpyle@bellevuewa.gov  
Phone Number: 425-452-2973  
Minimum Comment Period: June 20, 2013

Materials included in this Notice:

- Blue Bulletin
- Checklist
- Vicinity Map
- Plans
- Other:

City of Bellevue Submittal Requirements
<b>ENVIRONMENTAL</b>

*Thank you in advance for your cooperation and adherence to these procedures. If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.*

**INTRODUCTION**  
**Purpose of the Checklist:**

The State Environmental Policy Act (SEPA), chapter 43.21c RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City of Bellevue identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the City decide whether an EIS is required.

**Instructions for Applicants:**

This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly, with the most precise information known, or give the best description you can. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the Planner in the Permit Center can assist you. The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. Include references to any reports or studies that you are aware of which are relevant to the answers you provide. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.

**Use of a Checklist for Nonproject Proposals:** *A nonproject proposal includes plans, policies, and programs where actions are different or broader than a single site-specific proposal.*

For nonproject proposals, complete the Environmental Checklist even though you may answer "does not apply" to most questions. In addition, complete the Supplemental Sheet for Nonproject Actions available from Permit Processing.

For nonproject actions, the references in the checklist to the words *project*, *applicant*, and *property* or *site* should be read as *proposal*, *proposer*, and *affected geographic area*, respectively.

**Attach an 8½" x 11" vicinity map which accurately locates the proposed site.**

City of Bellevue Submittal Requirements	<b>27a</b>
<b>ENVIRONMENTAL CHECKLIST</b>	
12/21/00	
<p>If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.</p>	
<b>BACKGROUND INFORMATION</b>	
<p>Property Owner: <b>City of Bellevue</b></p>	
<p>Proponent: <b>City of Bellevue – Parks and Community Services Department, Attn: Geoff Bradley</b>  <b>450 110<sup>th</sup> Ave NE</b>  <b>Bellevue, WA 98004</b>  <b>(425) 452-2740</b></p>	
<p>Contact Person: <b>The Watershed Company, Attn: Kenny Booth</b>        (If different from the owner. All questions and correspondence will be directed to the individual listed.)</p>	
<p>Address: <b>750 Sixth Street South, Kirkland, WA 98033</b></p>	
<p>Phone: <b>(425) 822-5242</b></p>	
<p>Proposal Title: <b>Primrose Loop Trail</b></p>	
<p>Proposal Location (Street address and nearest cross street or intersection) Provide a legal description if available:</p>	
<p><b>Project is located in Coal Creek Park, between Newcastle Golf Club Road and Forest Drive SE, south of the Forest Glen East Neighborhood Park, King County.</b></p>	
<p><b>No address, 1) tax parcel 2724059005, legal description: POR OF NE 1/4 OF NW 1/4 LESS SW 1/4 THOF and 2) tax parcel 2724059002, legal description: POR OF NW 1/4 OF NE 1/4 LESS BEG W 1/4 COR SD SEC TH S 67-55-48 E 647.55 FT TH N 06-03-02 E 1593.01 FT TH S 67-00-58 E 1459.70 FT TH N 88-19-02 E 1218.60 FT TH N 15-14-02 E 170.38 FT TH N 06-41-34 W 322.77 FT TH N 03-34-06 E 443.73 FT TO TPOB TH S 86-25-54 E 45 FT TH N 03-34-06 E 125 FT TH N 86-25-54 W 345 FT TH S 03-34-06 W 125 FT TH S 86-25-54 E 300 FT TO TPOB,</b></p>	
<p>Please attach an 8½" X 11" vicinity map that accurately locates the proposal site.</p>	
<p>Give an accurate, brief description of the proposal's scope and nature:</p> <p>1. General description:</p> <p><b>The four project sites are located within the existing Coal Creek Park, on the Primrose Loop Trail that follows Coal Creek. Three existing pedestrian bridges, two across the mainstem and one across a small tributary, need to be replaced. Approximately 90 linear feet of existing trail that parallels Coal Creek will be upgraded with a welded wire mesh railing against the adjacent steep slope. Restoration plantings are also proposed. Detailed plans are attached.</b></p> <p>2. Acreage of site: <b>Tax parcels 2724059005 and 2724059002 are approximately 30.4 and 39.2 acres, respectively. However, the four project areas (where construction will occur) total less than 0.2 acre.</b></p>	

- 3. Number of dwelling units/buildings to be demolished: **None**
- 4. Number of dwelling units/buildings to be constructed: **None**
- 5. Square footage of buildings to be demolished: **N/A**
- 6. Square footage of buildings to be constructed: **N/A**
- 7. Quantity of earth movement (in cubic yards): **Cut: 13.6 cubic yards / Fill: 0 cubic yards**
- 8. Proposed land use: **The project area is located within Coal Creek Park, and will upgrade existing pedestrian bridges and a trail. There are no changes proposed to the existing land use.**
- 9. Design features, including building height, number of stories, and proposed exterior materials: **The replacement bridges and new boardwalk will have safety railings approximately 36" high. All materials will be wood and/or wire mesh.**
- 10. Other

Estimated date of completion of the proposal or timing of phasing:

**Once started, bridge replacements and boardwalk construction should take approximately four to six weeks. It is anticipated that construction would occur sometime in summer 2013.**

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

**None at this time.**

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

**Primrose Loop Trail – Habitat Assessment. The Watershed Company. May 21, 2013.**

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

**No such applications are pending.**

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

**Critical Areas Land Use Permit – submitted concurrently with this SEPA Checklist (City of Bellevue)  
Building Permit – (City of Bellevue)  
Hydraulic Project Approval – Washington Department of Fish and Wildlife**

Please provide one or more of the following exhibits, if applicable to your proposal. (Please check appropriate box(es) for exhibits submitted with your proposal):

- Land Use Reclassification (rezone)  
Map of existing and proposed zoning

Primrose Trail Improvements  
COB File # 13-115660-LO

- Preliminary Plat or Planned Unit Development  
Preliminary plat map
- Clearing & Grading Permit  
Plan of existing and proposed grading  
Development plans
- Building Permit (or Design Review)  
Site plan  
Clearing & grading plan
- Shoreline Management Permit  
Site plan

A. ENVIRONMENTAL ELEMENTS

1. EARTH

- a. General description of the site (circle one): Flat Rolling Hilly **Steep slopes** Mountains Other:

**Steep slopes exist adjacent to the trail proposed for a safety railing. Slopes along the banks of Coal Creek are also steep in places.**

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

**The steepest slopes on-site are nearly vertical streambanks in several locations.**

- 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.

**According to the King County Soil Survey, the site is mapped as Beausite gravelly sandy loam, 15 to 30 percent slopes (BeD) and Alderwood and Kitsap soils, very steep (AkF). City critical areas mapping shows that the project sites are within an erosion hazard area.**

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

**Minor erosion has occurred along sections of Coal Creek streambanks.**

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

**Cut: 13.6 CY**

**Fill: 0 CY**

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

**Erosion could occur if exposed soils are mobilized by rainfall. Short-term erosion may occur during trail and bridge modifications and in small areas cleared of vegetation. However, any impacts would be short-term and the measures described below would help minimize erosion.**

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

**No new impervious surfaces are proposed; nor are any surfaces currently located within the project area. Bridge sections located over soil are made of wood decking and will allow stormwater to infiltrate beneath the bridge.**

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

**All clearing and grading construction would be in accordance with City of Bellevue Clearing and Grading Code (Chapter 23.76), permit conditions, and all other applicable codes, ordinances, and standards. To ensure that no impact to the streams occurs, the applicant proposes to use temporary erosion and sedimentation control measures such as coir logs, mulching, erosion blankets, and plastic sheeting.**

## 2. AIR

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

**Any air quality impacts from construction-related vehicle trips would be temporary. After project completion, no further impacts to air would occur.**

- 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 that will affect the project.**

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

**Standard methods of reducing impacts to air would be utilized, and include keeping all hand-held power equipment in good operating condition and managing disturbed soils as described above under 1h.**

## 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 site includes Coal Creek and a small tributary, both Type F waters per the City's critical areas overlay district regulations. Coal Creek flows into Lake Washington.**

- 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.

**The entirety of proposed work will occur over or within 200 feet of Coal Creek or a small tributary. Detailed plans are attached.**

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

**No cuts or fills below the ordinary high water mark of the streams is proposed.**

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

**No.**

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

**Yes.**

- 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 intentional discharges of waste materials would occur during project construction.**

b. Ground

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

**There will be no withdrawal of or discharge to ground water associated with this project.**

- 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.

**There will be no waste material from septic tanks or other sources discharged into the ground as part of this project.**

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.

**The bridge sections over land will drain to adjacent vegetated areas for infiltration, and then into Coal Creek or the tributary of Coal Creek.**

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

**It is not expected that waste materials will enter the on-site stream channels.**

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

**The erosion control measures described under question 1h would help control impacts to surface and runoff water. In addition, all hand-held power equipment would be in good working order.**

#### 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: **salmonberry, sword fern, red elderberry, lady fern, Solomon's seal, devil's club, vine maple**  
 pasture  
 crop or grain  
 wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other:  
 water plants: water lily, eelgrass, milfoil, other:  
 other types of vegetation:

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

**Minor clearing of vegetation will occur in areas of new bridge abutments. Vegetation to be impacted includes native shrubs and groundcover. No significant trees are to be impacted.**

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

**No threatened or endangered plant species are 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:

**Restoration plantings will occur in areas disturbed during construction and areas devoid of existing native vegetation. A total of approximately 864 square feet of plantings are proposed. Species include vine maple, sword fern, snowberry, salal, and wild ginger.**

## 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:

birds: **hawk**, heron, **eagle**, **songbirds**, other: **woodpeckers**

mammals: **deer**, **bear**, elk, beaver, other: **raccoon**, **opossum**, **other small mammals**

fish: bass, **salmon**, **trout**, herring, shellfish, other:

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

**No federally listed fish or wildlife species are known to be present in the upper Coal Creek basin. Coho salmon (federal candidate) presence is mapped by WDFW to a point just downstream of the downstream work area, and cutthroat trout (no special federal or state status) are also mapped by WDFW through the work areas.**

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

**No.**

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

**Measures that will preserve and may enhance wildlife usage include restoration of disturbed and degraded areas.**

## 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.

**Hand-held power equipment will be used for vegetation removal and bridge removal/installation. However, no energy will be necessary after the project is completed.**

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

**No.**

- 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:

**No forms of energy are necessary for the completed project.**

## 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.

**Typical hazards related to electrical and gasoline-powered hand tools are associated with construction of the proposed project.**

- 1) Describe special emergency services that might be required.

**Emergency services are not anticipated at the site. In the unlikely event that an accident (spill, fire, other exposure) occurs involving toxic chemicals or hazardous wastes, the local Fire Department's Hazardous Materials Team would respond. If necessary, local medical services might also be required. Safety and accident response supplies would be on-site to treat emergencies during construction.**

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

**Standard precautions would be taken to ensure the safety of the work crew. The construction manager would be contacted by a crew member immediately upon discovery of a spill. The construction manager would then ensure that the spill is cleaned up in the manner dictated by the chemical use instructions and would contact the appropriate authorities.**

- b. Noise

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

**There are no noise sources affecting the immediate project area.**

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

**Noise associated with the proposed project would include hand-operated power tools during the construction phase. Construction noise would be limited to normal daytime working hours as dictated by the City of Bellevue's noise policy. The only noise generated by the proposed project would be that of trail users (pedestrians, etc.). There would be no significant long-term noise associated with the proposed project.**

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

**As mentioned above, construction noise would be limited to normal daytime working hours. No other noise-control measures are necessary.**

**8. LAND AND SHORELINE USE**

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

**The City of Bellevue Parks and Community Services Department currently owns the parcels upon which improvements are proposed. The parcels are used strictly for a natural park. Properties to the north and east are primarily single-family residential. A golf course and some limited commercial (YMCA) and industrial uses are located to the south and southwest.**

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

**No.**

- c. Describe any structures on the site.

**The only structures on the site consist of the three bridges being replaced.**

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

**The three existing bridges will be demolished and removed from the site. The exception is a portion of the bridge at Site 3 (see plans) that includes a natural log as part of the crossing. Railings and planks will be removed from the log and the log will be preserved in its current location.**

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

**The project site is zoned Single-Family Residential (R-1).**

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

**The project site is designated as Parks/Single-Family Residential – Low Density (P/SF-L).**

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

**N/A**

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

**The project site includes Coal Creek and a small tributary, both Type F waters. The streams are considered an "environmentally sensitive" area. The project areas are also mapped in an erosion hazard area and a FEMA 100-year floodplain. An application for a Critical Areas Land Use Permit to allow for disturbances within the sensitive area and buffers is being submitted concurrently with this checklist.**

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

**No person will reside or work in the completed project.**

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

**No person will be displaced as a result of this project.**

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

**Does not apply.**

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

**The proposed project is in accordance with the City's long-term goal of making open and natural spaces accessible to citizens for passive recreation.**

## 9. HOUSING

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

**None.**

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

**None.**

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

**Does not apply.**

## 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 proposed wire mesh railing as well as the railings on the replacement bridges will be approximately 36 - 42" in height. All building materials will be wood and/or wire mesh.**

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

**None of the proposed improvements will be visible to others outside the park. Bridge improvements and related restoration plantings will be visible to trail users within the park, only in close proximity to the improvements due to local vegetation and terrain.**

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

**No measures are necessary.**

## 11. LIGHT AND GLARE

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

**No light or glare will be produced by the proposed project.**

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

**No.**

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

**None.**

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

**No measures are necessary.**

## 12. RECREATION

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

**The proposed trail improvements are located within Coal Creek Park. The park is a natural area that offers only passive recreation – mainly hiking on the 4.5-mile trail system.**

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

**No. The proposed project will enhance passive recreational use within the area.**

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

**No measures are necessary.**

## 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.

**No places or objects of this type are known to exist in the immediate vicinity.**

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

**There is no known evidence of historic or cultural importance on the project site.**

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

**Should historic, archeological, scientific or cultural significant items be encountered during implementation of this project, work would be temporarily stopped while the appropriate agencies and Tribes are notified.**

## 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 proposed project will improve four sections of the Primrose Loop Trail within Coal Creek Park. There is no existing or proposed formal street or highway access to the site.**

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

**The nearest King County Metro transit stop is located approximately 1 mile to the southwest of the work area on Newcastle Way, just west of Coal Creek Parkway SE.**

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

**The project does not include new or eliminated parking.**

- 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).

**No impacts/improvements to roads or streets will occur.**

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

**Water, rail, or air transportation would not be utilized by the completed project.**

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

**The completed project is not expected to alter the number of vehicular trips per day generated by the existing park.**

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

**None.**

#### 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.

**No increase in public service needs will result from this project.**

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

**None.**

#### 16. UTILITIES

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

**No utilities are currently available at the site.**

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

**No new utilities are proposed as part of the project.**

**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

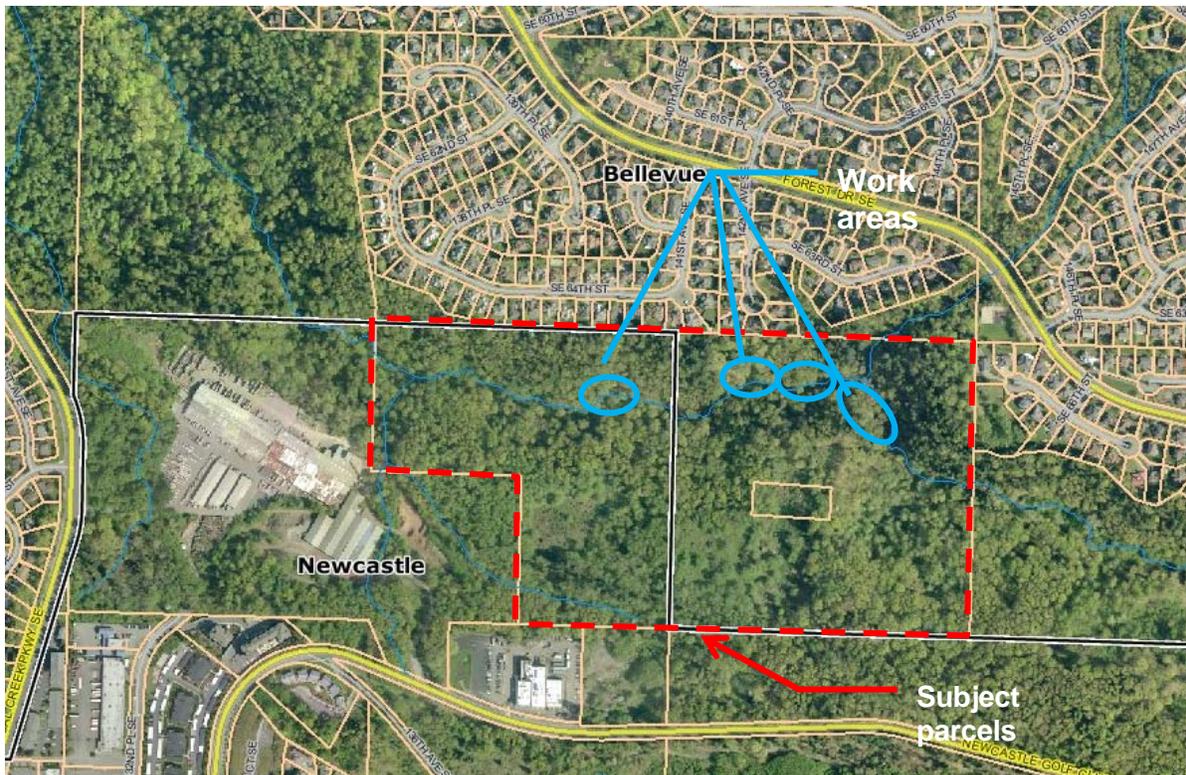
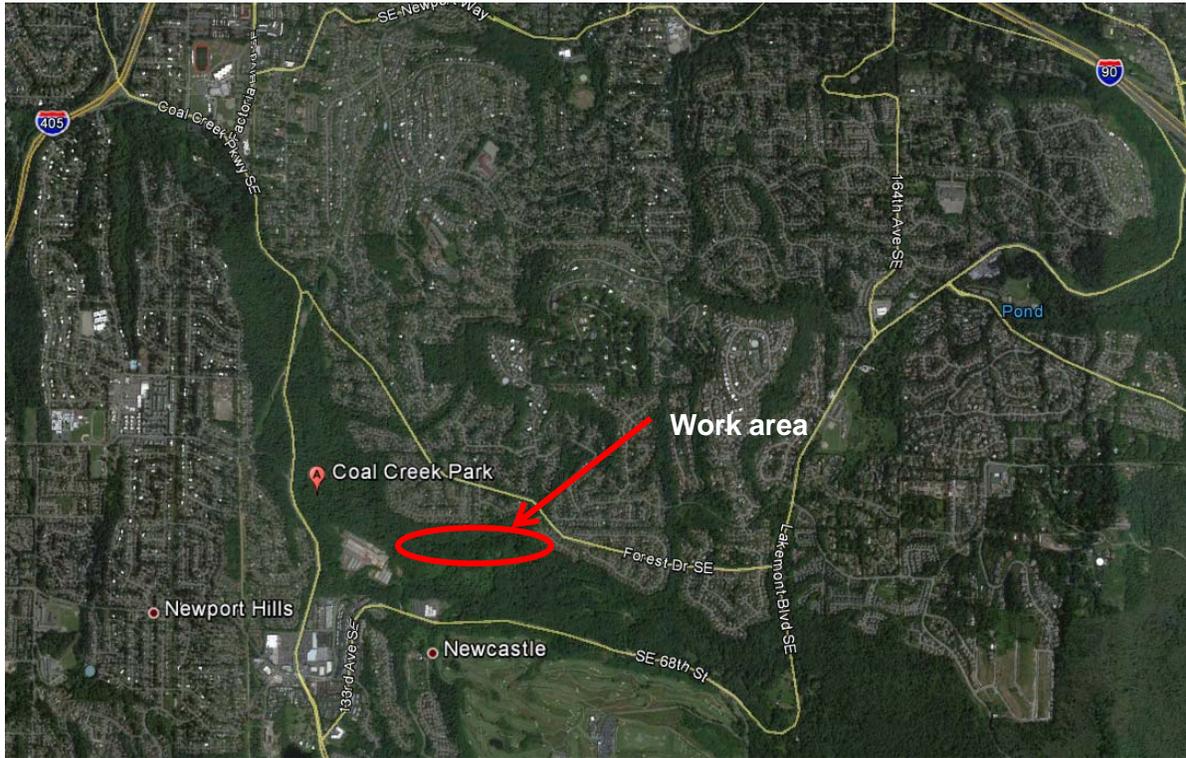


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Kenny Booth, AICP

Date Submitted: \_\_\_\_\_

**Vicinity Map** from Google Earth (top) and iMAP (bottom)





**Primrose Loop Trail  
Critical Areas Land Use Permit  
Narrative Description  
May 21, 2013**

*Description of the project site, including landscape features, existing development, and site history as applicable.*

Response: The project is located in the Coal Creek Natural Area between Newcastle Golf Club Road and Forest Drive SE, south of the Forest Glen East Neighborhood Park (parcel numbers 2724059005 and 2724059002). The two parcels are approximately 30.4 and 39.2 acres, respectively. However, the four project areas (where construction will occur) total less than 0.2 acre.

The City of Bellevue Parks and Community Services Department currently owns the parcels upon which improvements are proposed. The parcels are used strictly for a natural park. Properties to the north and east are primarily single-family residential. A golf course and some limited commercial (YMCA) and industrial uses are located to the south and southwest.

A total of four project sites are included in the proposal. Three of the sites include replacement of existing bridge crossings and the fourth site includes installation of a steep slope railing system.

Existing conditions at the first site include a wooden bridge consisting of two logs spanning Coal Creek, overlaid by approximately 2.5 foot-wide planks and a wooden railing on both sides. The support logs are partially rotted, and the planks and railings are not stable. A log extends out of the left bank just below the bankful width and just upstream of the existing bridge. Vegetation consists of a bigleaf maple overstory, and understory vegetation predominantly consists of vine maple, salmonberry, and sword fern.

The second site includes a wooden bridge consisting of two logs spanning a tributary to Coal Creek. On the left bank of the tributary, the bridge is supported by a large log that extends approximately 30 feet landward of the streambank, where it functions as a nurse log for mature cedar trees. The log also extends approximately 10 feet into the tributary, downstream from the bridge crossing. Bank erosion landward of the support log has caused an approximately 1 foot wide gap to form between the ground and the bridge on the left bank of the

tributary. Vegetation consists of a bigleaf maple and western red cedar overstory, and understory vegetation predominantly consists of salmonberry, lady fern, sword fern, and giant horsetail.

The third site includes a wooden bridge consisting of two sections, forming a “V”. The bridge section on the right bank is similar in construction to the bridge at Site 1, with two logs spanning the length of the bridge, and planks lying across the logs. This section of the bridge is unstable, rotting, and in disrepair. The left bank bridge section consists of a single, solid, approximately 36-inch diameter log, with a wooden railing attached to one side. The log is within the bankful channel, and it provides structural habitat diversity to the stream. Vegetation consists of bigleaf maple and western hemlock, and understory vegetation is dominated by red alder, vine maple, salmonberry, devil’s club, sword fern, red elderberry, and young western red cedar.

The final site is located on a steep slope, approximately 35 feet above the elevation of Coal Creek. The existing dirt footpath is narrow, and it has eroded in places. Vegetation overstory consists of bigleaf maple and western hemlock, and understory vegetation is dominated by red alder, red elderberry, sword fern, and Solomon’s seal.

The proposed project will replace three existing pedestrian bridges, two across Coal Creek and one across a small tributary to Coal Creek. Approximately 90 linear feet of existing trail that parallels Coal Creek will be upgraded with a steep slope railing system. The proposed project will not include in-water work and it includes measures to minimize potential adverse impacts from bridge/trail improvements in the floodplain and riparian habitat of Coal Creek. Detailed plans are attached.

*A description of how the design constitutes the minimum necessary impact to the critical area.*

Response: The design includes removal of existing bridges with replacement structures proposed entirely outside of the ordinary high water mark (OHWM). Bridges have been sized to the minimum size necessary to safely span the streams while providing for current and expected demand within the natural area. No direct impacts to the stream will occur and impacts to the stream buffer will be offset with restoration of adjacent areas with native plantings. A total of approximately 864 square feet of plantings are proposed. Species include vine maple, sword fern, snowberry, salal, and wild ginger. The steep slope railing system is the minimum necessary to protect the existing trail and allow for safe passage.

***A description of why there is no feasible alternative with less impact to the critical area, critical area buffer, or critical area structure setback.***

Response: There is no feasible alternative with less impact to the critical area buffer. Existing bridges are undersized and dilapidated. Replacement is essential to allow for safe passage of the stream crossings. Design has utilized the minimum sized bridges to accomplish the project purpose while ensuring that all bridge components are located outside the OHWM. Earlier design iterations for the steep slope railing system site included an on-grade boardwalk. However, the current proposal includes only a welded wire mesh railing system, leaving the existing trail undisturbed and uncovered.

***A description of alternatives considered and why the alternative selected is preferred.***

Response: Design at each of the three bridge sites looked at several factors, including existing vegetation (with special consideration to significant trees), channel width and potential for migration/erosion, and existing trail location. The proposed bridges represent the preferred alternative for each site. Design for the steep slope railing system site looked at an on-grade boardwalk. However, the current proposal includes only a welded wire mesh railing system, leaving the existing trail undisturbed and uncovered.

***A summary of how the proposal meets each of the decision criteria contained in Land Use Code Section 20.30P.***

*The Director may approve or approve with modifications an application for a Critical Areas Land Use Permit if:*

*A. The proposal obtains all other permits required by the Land Use Code.*

Response: In addition to a Critical Areas Land Use Permit, the project applicant will apply for a Building Permit (BW) and if needed, a Right-of-Way Use Permit from the City of Bellevue. No other City of Bellevue land use or construction permits will be required of this project.

*B. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer.*

Response: The proposed project involves the replacement of three bridges and installation of one steep slope railing system. Bridges have

been designed to entirely span the OHWM of the streams, while avoiding as much existing native vegetation as is feasible. The railing system is designed to protect park users along a 90-foot-long section of trail adjacent to a steep slope. The railing utilizes the best available design to limit impacts to habitat and views while simultaneously protecting trail users.

Restoration plantings are proposed in those areas within the project area that are disturbed during construction or are currently devoid of significant native vegetation. A total of approximately 864 square feet of plantings are proposed. Species include vine maple, sword fern, snowberry, salal, and wild ginger. Proposed plantings will improve habitat complexity within the stream buffer.

By avoiding direct stream impacts, minimizing impacts within the buffer, and restoring areas with native plantings, the design and development of the proposed project will not decrease ecological function of the project site, and may improve ecological function over the long-term. Furthermore, the public will have improved access to this area.

*C. The proposal incorporates the performance standards of Part 20.25H LUC to the maximum extent applicable.*

20.25H.055.C.3.g *New and Expanded City and Public Parks*

*i. Trails. New nonmotorized trails within the critical area or critical area buffer must meet the following standards:*

*(A) Trail location and design shall result in the least impacts on the critical area or critical area buffer.*

Response: Design of the proposed improvements will result in the least amount of critical area and critical area buffer impacts possible. No direct stream impacts are proposed; permanent impacts will take place only within the stream buffer. Where feasible, bridge abutments are located within the existing trail alignment. Proposed native plantings within the project area are expected to offset any minimal impact to the buffer and may result in a long-term ecological improvement.

*(B) Trails shall be designed to compliment and enhance the environmental, educational, and social functions and values of the critical area with trail design and construction focused on managing and controlling public access and limiting uncontrolled access.*

Response: The proposed bridge and trail improvements have been designed to enhance several aspects of the critical area:

- 1) Environmentally, the critical area buffer will be restored with native plantings. Overall, ecological function within the critical area will be preserved and may improve as a result of the proposed project.
- 2) Educational and social values of the critical area will also be improved as a result of the proposed project. In addition to restoring portions of the buffer, the proposed project includes new bridges that will allow for safe travel through the natural area. Therefore, the public would be provided with improved passive access opportunities, all while protecting the critical area and creating further awareness of the ecological sensitivity and uniqueness of the area.

*(C) Trails shall be designed to avoid disturbance of significant trees and to limit disturbance of native understory vegetation.*

Response: No existing significant trees are proposed for removal as part of the proposed project. Existing significant trees within the project corridor will be adequately protected during construction activities. Areas of native shrubs and groundcover that are impacted during construction activities will be restored with native plantings after construction is complete.

*(D) Trails shall be designed to avoid disturbance of habitat used for salmonid rearing or spawning or by any species of local importance.*

Response: According to WDFW's Salmonscape maps and WRIA 8's Known Freshwater Distribution of Salmon and Trout maps, listed salmonids have not been observed within the project area, but federally threatened Chinook salmon and steelhead, as well as coho salmon, a federal species of concern, have been observed in Coal Creek downstream from the project area. Within the project area, coast resident cutthroat trout are present. According to Washington Department of Fish and Wildlife's PHS on the Web, no priority species or habitats are located in the immediate project area. Project improvements are not expected to impact any species of local importance.

*(E) The trail shall be the minimum width necessary to accommodate the intended function or objective.*

Response: The proposed bridges and modified approaches have been designed to have a width of approximately four feet. The proposed width is intended to provide adequate and safe capacity for expected demand while limiting impacts to the natural area.

*(F) All work shall be consistent with the City of Bellevue's "Environmental Best Management Practices" and all applicable City of Bellevue codes and standards, now or as hereafter amended.*

Response: All bridge and trail improvement work shall be consistent with the City of Bellevue Clearing and Grading Code (Chapter 23.76), permit conditions, and all other applicable codes, ordinances, and standards, including "Environmental Best Management Practices."

*(G) The facility shall not significantly change or diminish overall aquatic area flow peaks, duration or volume or flood storage capacity, or hydroperiod.*

Response: All portions of the proposed improvements will be located outside the limits of the on-site stream. Overall, there will be no change in flow peaks or storage capacity within the stream channel.

*(H) Where feasible and consistent with any accessibility requirements, any trail shall be constructed of pervious materials.*

Response: The existing on-site trails are pervious and all modified bridge approaches will also be pervious.

*(I) Crossings over and penetrations into wetlands and streams shall be generally perpendicular to the critical area, and shall be accomplished by bridging or other technique designed to minimize critical area disturbance considering the entire trail segment and function.*

Response: All proposed bridge crossings are perpendicular to the maximum extent feasible. However, topography and existing vegetation have resulted in one of the crossings (Site 3) oriented in a less than perpendicular fashion.

*(J) Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.*

Response: The project includes restoration of temporarily disturbed areas as well as restoration of degraded areas to offset impacts associated within the expanded bridges. These actions will be implemented in accordance with LUC 20.25H.210.

*D. The proposal will be served by adequate public facilities including streets, fire protection, and utilities.*

Response: The proposed project will be served by adequate public facilities. No additional public facilities will be required with implementation of the proposed project.

*E. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan.*

Response: A restoration plan, prepared in accordance with the requirements of LUC 20.25H.210, is included in the plan set. The plan details areas of buffer restoration with native plantings. A total of approximately 864 square feet of plantings are proposed. Species include vine maple, sword fern, snowberry, salal, and wild ginger.

*F. The proposal complies with other applicable requirements of this code.*

Response: The proposed project complies with all other applicable City of Bellevue Land Use Codes, including 20.25H and 23.76.

***A summary of how the proposal meets each of the criteria and performance standards contained in Land Use Code Section 20.25H associated with the critical area you are modifying.***

*Development on sites with a Type S or F stream or associated critical area buffer shall incorporate the following performance standards in design of the development, as applicable:*

1. *Lights shall be directed away from the stream.*

Response: No lights are proposed as part of the bridge/trail improvement project.

2. *Activity that generates noise such as parking lots, generators, and residential uses, shall be located away from the stream, or any noise shall be minimized through use of design and insulation techniques.*

Response: The proposed project will not generate any significant amounts of noise. The only noise generated within the project area would be passing pedestrians.

3. *Toxic runoff from new impervious area shall be routed away from the stream.*

Response: No new impervious surfaces are proposed.

4. *Treated water may be allowed to enter the stream critical area buffer.*

Response: As indicated in the prior response, no impervious surfaces are proposed.

5. *The outer edge of the stream critical area buffer shall be planted with dense vegetation to limit pet or human use.*

Response: Degraded areas within the stream buffer will be restored with native vegetation.

6. *Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices," now or as hereafter amended. (Ord. 5680, 6-26-06, § 3)*

Response: All enhancement and restoration activities associated with the trail improvement project, including pesticide, insecticide and fertilizer usage, will be in compliance with the City of Bellevue's "Environmental Best Management Practices."

*In addition to generally applicable performance standards set forth in LUC [20.25H.055](#) and [20.25H.065](#), development within a landslide hazard or steep slope critical area or the critical area buffers of such hazards shall incorporate the following additional performance standards in design of the development, as applicable. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function.*

A. *Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;*

Response: The proposed railing system involves the placement of 2-inch-diameter galvanized posts every six feet. The posts will be installed along the edge of the trail near the top of the adjacent steep slope. The installation of the posts is the only ground disturbed proposed. This technique will result in the least impact and will preserve all portions of the steep slope and existing vegetation.

*B. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;*

Response: See prior response.

*C. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;*

Response: The proposed railing system is located in excess of 200 feet from the nearest parcel and therefore will not result in an increased risk on neighboring parcels.

*D. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes where graded slopes would result in increased disturbance as compared to use of retaining wall;*

Response: No retaining walls or the grading of slopes are proposed.

*E. Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer;*

Response: No new impervious surfaces are proposed.

*F. Where change in grade outside the building footprint is necessary, the site retention system should be stepped and regrading should be designed to minimize topographic modification. On slopes in excess of 40 percent, grading for yard area may be disallowed where inconsistent with this criteria;*

Response: No buildings are proposed as part of the project.

*G. Building foundation walls shall be utilized as retaining walls rather than rockeries or retaining structures built separately and away from the building wherever feasible. Freestanding retaining devices are only permitted when they cannot be designed as structural elements of the building foundation;*

Response: No building foundation walls or retaining structures are planned as part of the proposed project.

*H. On slopes in excess of 40 percent, use of pole-type construction which conforms to the existing topography is required where feasible. If pole-type construction is not technically feasible, the structure must be tiered to conform to the existing topography and to minimize topographic modification;*

Response: No structures are proposed on slopes in excess of 40 percent.

*I. On slopes in excess of 40 percent, piled deck support structures are required where technically feasible for parking or garages over fill-based construction types; and*

Response: No structures are proposed on slopes in excess of 40 percent.

*J. Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC [20.25H.210](#).*

Response: Restoration will occur in accordance with the requirements of LUC 20.25H.210.



May 21, 2013

Geoff Bradley  
City of Bellevue, Parks and Community Services Department  
450 110<sup>th</sup> Ave SE  
Bellevue, WA 98004  
Via email: [gbradley@bellevuewa.gov](mailto:gbradley@bellevuewa.gov)

**Re: Primrose Loop Trail – Stream Study / Habitat Assessment**

The Watershed Company Reference Number: 130213

Dear Geoff:

The purpose of our review is to assess the effects of proposed bridge and trail improvements on Primrose Loop Trail in the Coal Creek Natural Area. This report focuses on the effects to listed salmonids via changes to stream buffers and floodplain areas. In 2008, the National Marine Fisheries Service (NMFS) issued a Biological Opinion, which found that the implementation of the National Flood Insurance Program (NFIP) in the Puget Sound region jeopardizes the continued existence of federally threatened salmonids and resident killer whales. As a result, NMFS established Reasonable and Prudent Alternatives to ensure that development within the Special Flood Hazard Area (100 year floodplain), floodway, Channel Migration Zone (CMZ), and riparian buffer zone (RBZ) does not adversely affect water quality, water quantity, flood volumes, flood velocities, spawning substrate, or floodplain refugia for listed salmonids. Because the NFIP is implemented by FEMA through participation by local jurisdictions that adopt and enforce floodplain management ordinances, FEMA has delegated responsibility to the local jurisdictions to ensure that development does not adversely affect listed species. The following discussion evaluates the likely effects of the proposed bridge replacement and suspended railing project, described below, and finds that the project is not likely to adversely affect threatened salmonids.

**Project Area**

The project is located in Coal Creek Natural Area in the City of Bellevue, King County, Washington, between Newcastle Golf Club Road and Forest Drive SE, south of the Forest Glen East Neighborhood Park (parcel numbers 2724059005 and 2724059002, Figure 1).

The project area is within the mapped 100-year floodplain of Coal Creek, based on the adopted 1995 FEMA Flood Insurance Rate Map, as amended (Figure 1). However,

based on a hydraulic evaluation completed by the City of Bellevue Utilities staff, the 100-year-flood flows would be contained within the channel, below the proposed bridge footings (B. Ward 2013). The channel migration zone is not mapped for Coal Creek, and significant channel migration is not anticipated given the small size of the creek.



Figure 1. Site map with parcels outlined in purple and approximate work locations identified. Mapped FEMA floodplain shaded blue.

### Species Identification and Site Use

According to WDFW's Salmonscape maps and WRIA 8's Known Freshwater Distribution of Salmon and Trout maps, listed salmonids have not been observed within the project area, but federally threatened Chinook salmon (*O. tshawytscha*) and steelhead (*O. mykiss*), as well as coho salmon (*O. kisutch*), a federal species of concern with designated Essential Fish Habitat, have been observed in Coal Creek downstream from the project area. Within the project area, coast resident cutthroat trout (*Oncorhynchus clarki*) are present (WRIA 8 2005).

Critical habitat has been designated for Chinook salmon and bull trout, and critical habitat has been proposed for steelhead trout. Designated critical habitat for Chinook salmon and bull trout includes the Lake Washington watershed, but does not specifically include Coal Creek. Proposed habitat for Puget Sound steelhead excludes the Lake Washington watershed and Coal Creek.

## Site Conditions

### Site 1:

An existing wooden bridge consists of two logs spanning Coal Creek, overlaid by approximately 2.5-foot-wide planks and a wooden railing on both sides (Figure 2). The support logs are partially rotted, and the planks and railings are not stable. A log extends out of the left bank just below the bankful width and just upstream of the existing bridge.

Vegetation at Site 1 consists of a bigleaf maple overstory, and understory vegetation predominantly consists of vine maple, salmonberry, and sword fern (Figure 3).

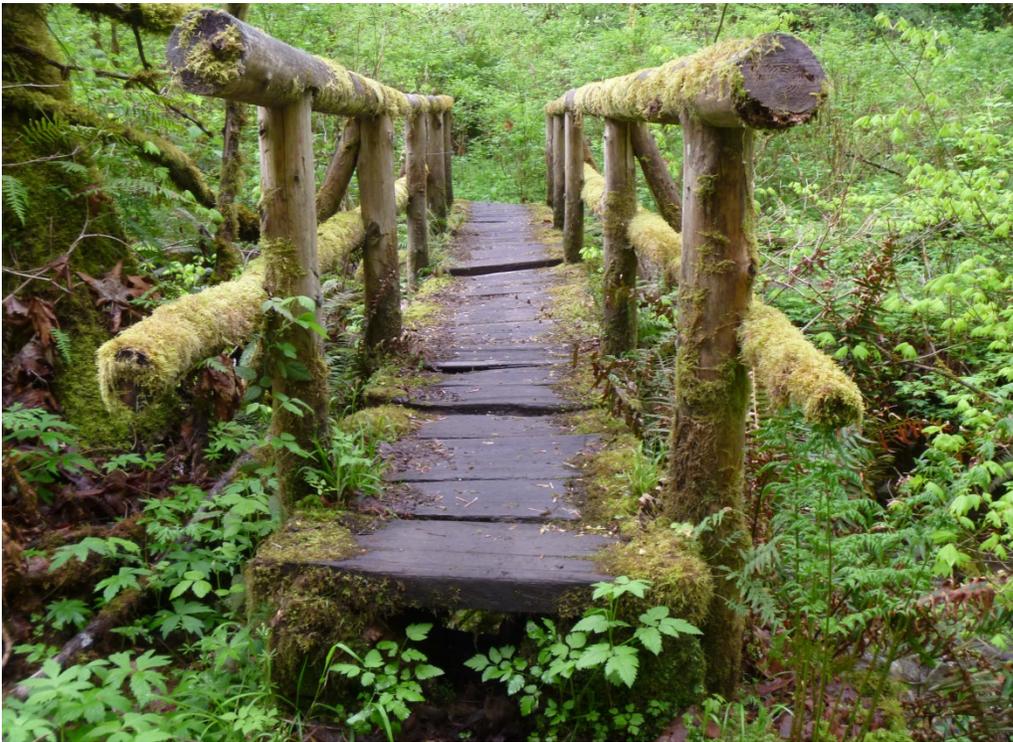


Figure 2. Bridge at Site 1, photo taken from the right bank (looking downstream) of Coal Creek.



Figure 3. Vegetation at Site 1 on left bank of Coal Creek

**Site 2:**

An existing wooden bridge consists of two logs spanning a tributary to Coal Creek (Figure 4). On the left bank of the tributary, the bridge is supported by a large log that extends approximately 30 feet landward of the streambank, where it functions as a nurse log for mature cedar trees (Figure 5). The log also extends approximately 10 feet into the tributary, downstream from the bridge crossing. Bank erosion landward of the support log has caused an approximately one-foot-wide gap to form between the ground and the bridge on the left bank of the tributary (Figure 4).

Vegetation at Site 2 consists of a bigleaf maple and western red cedar overstory, and understory vegetation predominantly consists of salmonberry, lady fern, sword fern, and giant horsetail.



Figure 4. Bridge 2 with gap shown between ground and bridge on left bank of tributary. Support log is also visible under bridge.



Figure 5. Upland end of log supporting bridge on the left bank at Site 2, note base of cedars growing out of the log.

**Site 3:**

An existing wooden bridge consists of two sections, forming a “V”. The bridge section on the right bank is similar in construction to the bridge at Site 1, with two logs spanning the length of the bridge, and planks lying across the logs (Figure 6). This section of the bridge is unstable, rotting, and in disrepair. The left bank bridge section consists of a single, solid, approximately 36-inch diameter log, with a wooden railing attached to one side (see upper photo on front page of plan set). The log is within the bankful channel, and it provides structural habitat diversity to the stream.

Vegetation overstory at Site 3 consists of bigleaf maple and western hemlock, and understory vegetation is dominated by red alder, vine maple, salmonberry, devil’s club, sword fern, red elderberry, and young western red cedar.



Figure 6. Right bank section of bridge at Site 3.

**Site 4:**

Site 4 is located on a steep slope, approximately 35 feet above the elevation of Coal Creek. Although this site is within the mapped floodplain of the Creek, given its elevation, it is highly unlikely that the site would ever be affected by floodwaters. The existing dirt footpath is narrow, and it has eroded in places.

Vegetation overstory at Site 4 consists of bigleaf maple and western hemlock, and understory vegetation is dominated by red alder, red elderberry, sword fern, and Solomon's seal.



Figure 7. Footpath at Site 4. Note Coal Creek at base of slope.

### **Project Description**

The proposed project will replace three existing pedestrian bridges, two across Coal Creek (Site 1 and 3) and one across a small tributary to Coal Creek (Site 2). Approximately 90 linear feet of existing trail that parallels Coal Creek will be upgraded to include a railing at Site 4. Detailed plans are attached.

The proposed project will not include in-water work, and it includes measures to minimize potential adverse impacts from trail improvements in the riparian habitat of Coal Creek. Specific minimization measures include stabilization of soils and replanting of disturbed areas.

### **Species Impacts**

Because listed species have not been identified as using the site, and because the projects will not involve work within the bankful channel, the proposed project will not have direct effects on listed salmonids. Indirect effects include the effects resulting from the activity that are later in time or caused by interrelated and interdependent activities. Interdependent activities that are likely related to the proposed project include increased

foot traffic on the established trails. Potential indirect effects of the proposed project are discussed in Table 1, below.

The proposed project could potentially affect chinook and coho salmon, bull trout and steelhead in generally similar manners. Unless otherwise noted, there will be no distinction between these species within the following discussion.

Table 1. Indirect effects of the proposed project and how project will avoid and minimize effects.

<b>Topic</b>	<b>Potential Indirect Effect</b>	<b>Minimization Measure</b>	<b>Effect on Listed Salmonids</b>
<b>Flood storage</b>	Reduction in floodplain storage could intensify flood levels and velocities downstream, resulting in redd scour and/or flushing juvenile salmon out of rearing habitats.	<ul style="list-style-type: none"> <li>• If any new floodplain fill is required, it will be offset by a cut within the floodplain.</li> </ul>	Not likely to adversely affect
<b>Floodplain Habitat</b>	Since listed salmonids are not expected to be present in the project area, the effect of changes to floodplain habitat structure on listed salmonids would be insignificant.	<ul style="list-style-type: none"> <li>• Large woody debris within the bankful channel width will not be removed.</li> <li>• All wood and plant material that is removed will remain in the area for ecological enhancement.</li> </ul>	Not likely to adversely affect
<b>Riparian Vegetation</b>	Removal of riparian vegetation would reduce allochthonous inputs to the stream.	<ul style="list-style-type: none"> <li>• Disturbed areas will be revegetated immediately upon project completion.</li> <li>• No significant trees will be removed.</li> </ul>	Not likely to adversely affect
<b>Water Quality</b>	Construction and sediment disturbance could increase turbidity and stream sedimentation.	<ul style="list-style-type: none"> <li>• No in-water work will be conducted.</li> <li>• The area of disturbance will be minimized.</li> <li>• All work will be conducted using hand-tools, and no heavy equipment will be used.</li> <li>• Disturbed areas will be stabilized and revegetated immediately upon project completion.</li> </ul>	Not likely to adversely affect

**Determination of Effect**

In summary, the project may affect, but is not likely to adversely affect listed salmonids, and the project is not likely to jeopardize Puget Sound-Strait of Georgia coho salmon. Given the direct, indirect, interrelated, and interdependent effects from the proposed action, the proposed project would have no effect on critical habitat of Puget Sound

Chinook salmon or Coastal-Puget Sound bull trout or proposed critical habitat for Puget Sound steelhead. The collective impact of the proposed project is also not likely to adversely affect Pacific salmon essential fish habitat (EFH), which includes coho and Chinook salmon. Please call if you have any questions or if we can provide you with any additional information.

Sincerely,

A handwritten signature in blue ink that reads "Sarah Sandstrom". The signature is written in a cursive, flowing style.

Sarah Sandstrom, M.S.  
Fisheries Biologist

References:

Ward, B. 2013. Email to G. Bradley re: Primrose Trail Bridges-Floodplains. March 29, 2013.

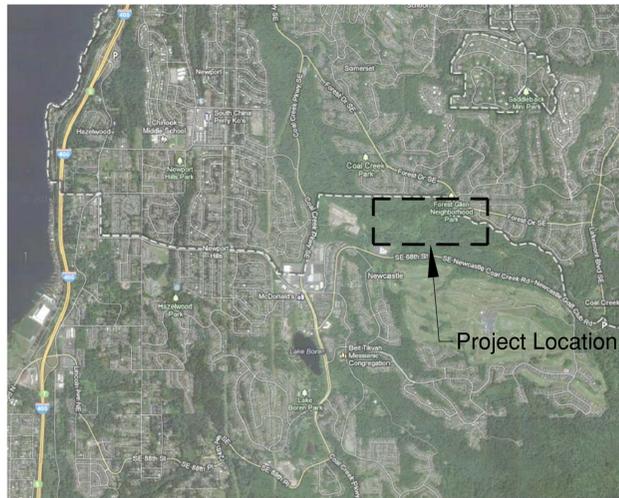
WRIA 8. 2005. Known Freshwater Distribution of Salmon and Trout for Water Resource Inventory Area (WRIA) 8.  
<http://www.govlink.org/watersheds/8/reports/fish-maps/default.aspx> [Accessed May 21, 2013]

# Primrose Loop Trail

# City of Bellevue, WA



**EXISTING CONDITIONS**



**CONTEXT MAP**  
NTS

## PROJECT DESCRIPTION:

Contracted work includes: site preparation, environmental protection, minor earthwork, (3) bridges, a steep slope railing system, trail construction and removal, and site restoration. Project is to be implemented under Critical Areas Land Use Permit # \_\_\_\_\_-LO. For technical questions, call Barker Landscape Architects, (Nicolas) 206-783-2870.

## CONTACTS:

### Client:

Bellevue Parks and  
Community Services  
Geoff Bradley, Project Manager  
450 110th Ave. NE,  
P.O. Box 90012  
Bellevue, WA 98009  
tel: 425-452-6885

### Landscape Architect:

Barker Landscape Architects  
Contact: Nic Morin  
3002 NW 68th Street  
Seattle, WA 98117  
phone 206-783-2870  
fax 206-783-8312  
nicolas@barkerla.com

### Structural Engineer (Sites 1-3):

Western Wood Structures, Inc.  
Contact: Jaime Agidius  
20675 SW 105th Avenue  
Tualatin, OR 97062  
503-692-6900 (p)  
503-692-6434 (f)

### Geotechnical Engineer:

Stantec  
Contact: Phil Haberman, PG, PEG  
12034 134th Court NE  
Redmond, WA 98052  
425-298-1000 (p)  
425-298-1019 (f)

### Structural Engineer (Site 4 only):

Reid Middleton  
Contact: Paul Crocker, PE, SE  
728 134th Street SW  
Suite 200  
Everett, WA 98204  
425-741-3800 (p)  
425-741-3900 (f)

## GENERAL NOTES:

- All construction must be in accordance with the City of Bellevue's Development Standards; the City of Bellevue's Engineering and Utility Standards; the Bellevue City Code; the Uniform Building Codes; permit conditions; and all other applicable codes, ordinances, standards and policies. Applicable installation details are incorporated by reference to Bellevue's Engineering and Utilities published Standards. All applicable erosion control measures must be taken.
- A copy of the approved plans must be on-site whenever construction is in progress.
- The Contractor is responsible for obtaining any mechanical, electrical or other required permits prior to beginning construction.
- All locations of existing utilities have been established by field survey or obtained from available records and should, therefore, be considered approximate only and not necessarily complete. It is the sole responsibility of the contractor (1) to independently verify the accuracy of all utility locations and (2) to discover and avoid any other utilities not shown which may be affected by the implementation of this plan. Note that no existing utilities have been researched or verified in any areas between proposed work limits up to, and including, the staging area.
- Site shall be restored to better or equal condition in any areas affected by this work.
- Scheduling: All work shall be coordinated with Owner to achieve minimal disturbance to roadway operation.
- Contractor shall have proven experience in similar projects and be thoroughly familiar with City of Bellevue applicable standards and codes prior to commencement of work.
- This layout is diagrammatic. Contractor shall coordinate exact location of points of connection to existing systems with Owner prior to beginning any work.
- Prior to commencing work, the Contractor, the City's Inspectors and the Owner's Representatives shall meet on the site to review existing site conditions. Logistical items will be determined at the pre-construction meeting and subsequent construction meetings, including the specific locations and methods to be used for staging, trail closure locations and timing, fencing materials, and coordination of boardwalk and trail work with Western Wood Structure Bridge work (NIC). The Contractor is to coordinate with Owner's representative on all construction logistical items not explicitly described in the drawings and specifications.

## LEGAL DESCRIPTION:

PORTION OF THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 24 NORTH,  
RANGE 5 EAST, W.M., IN KING COUNTY, WASHINGTON.

## CLEARING AND GRADING STANDARD NOTES:

- All clearing & grading construction must be in accordance with City of Bellevue (COB) Clearing & Grading Code; Clearing & Grading Erosion Control Standard Details (EC-1 through EC-23); Development Standards; Land Use Code; Uniform Building Code; permit conditions; and all other applicable codes, ordinances, and standards. The design elements within these plans have been reviewed according to these requirements. Any variance from adopted erosion control standards is not allowed unless specifically approved by the City of Bellevue Development Services Department (DSD) prior to construction.
- A copy of the approved plans must be on-site during construction. The applicant is responsible for obtaining any other required or related permits prior to beginning construction.
- All locations of existing utilities have been established by field survey or obtained from available records and should, therefore, be considered only approximate and not necessarily complete. It is the sole responsibility of the contractor to independently verify the accuracy of all utility locations and to discover and avoid any other utilities not shown which may be affected by the implementation of this plan.
- The area to be cleared and graded must be flagged by the contractor and approved by the clearing & grading inspector prior to beginning any work on the site.
- Clearing will be limited to the areas within the approved disturbance limits. Exposed soils must be covered at the end of each working day when working from October 1st through April 30th. From May 1st through September 30th, exposed soils must be covered at the end of each construction week and also at the threat of rain.
- Any excavated material removed from the construction site and deposited on property within the City limits must be done in compliance with a valid clearing & grading permit. Locations for the mobilization area and stockpiled material must be approved by the clearing & grading inspector at least 24 hours in advance of any stockpiling.
- To reduce the potential for erosion of exposed soils, or when rainy season construction is permitted, the following Best Management Practices (BMPs) are required: Preserve natural vegetation for as long as possible or as required by the clearing & grading inspector. Protect exposed soil using plastic (EC-14), erosion control blankets, straw or mulch (COB Guide to Mulch Materials, Rates, and Use Chart), or as directed by the clearing & grading inspector. Install catch basin inserts as required by the clearing & grading inspector or permit conditions of approval. Install a temporary sediment pond, a series of sedimentation tanks, temporary filter vaults, or other sediment control facilities. Installation of exposed aggregate surfaces requires a separate effluent collection pond on-site.
- Final site grading must direct drainage away from all building structures at a minimum 2% slope, per the Uniform Building Code, if applicable.
- The contractor must maintain a sweeper on-site during earthwork and immediately remove soil that has been tracked onto paved areas as result of construction.
- A public information sign listing 24-hour emergency phone numbers for the city and the contractor may be provided to the applicant at the time the clearing & grading permit is issued. The applicant must post the sign at the project site in full view of the public and the contractors, and it must remain posted until final sign-off by the clearing & grading inspector.
- Turbidity monitoring may be required as a condition of clearing & grading permit approval. If required, turbidity monitoring must be performed in accordance with the approved turbidity monitoring plan and as directed by the clearing & grading inspector. Monitoring must continue during site (earthwork) construction until the final sign-off by the clearing & grading inspector.
- Any project that is subject to Rainy Season Restrictions will not be allowed to perform clearing & grading activities without written approval from the DSD director. The rainy season extends from November 1st through April 30th, as defined in section 23.76.093A of the Clearing & Grading Code.

## CALCULATIONS:

PROJECT AREA: (PARCELS 2724059005 & 2724059002)	3,028,726 square feet
TOTAL PROPOSED IMPERVIOUS AREA:	0 square feet
EXISTING IMPERVIOUS AREA:	0 square feet
EXISTING IMPERVIOUS COVERAGE:	0 %

NEW IMPERVIOUS AREA:	0 square feet
REPLACED IMPERVIOUS AREA:	+ 0 square feet
NEW + REPLACED IMPERVIOUS AREA:	0 square feet
CONVERTED PERVIOUS: (native vegetation converted to landscape and/or pasture)	0 square feet

TOTAL AREA OF LAND DISTURBING ACTIVITY:	864 square feet
---	-----------------

MATERIAL EXPORT/IMPORT:  
Estimated Cut: 13.6 cubic yards  
Estimated Fill: 0 cubic yards

## DRAWING INDEX

- L1 COVER
- L2 LOCATION PLAN
- L3 SITE 1: EXG CONDS, TESC / DEMO
- L4 SITE 1: LAYOUT / GRADING
- L5 SITE 2: EXG CONDS, TESC / DEMO
- L6 SITE 2: LAYOUT / GRADING
- L7 SITE 3: EXG CONDS, TESC / DEMO
- L8 SITE 3: LAYOUT / GRADING
- L9 SITE 4: EXG CONDS, TESC / DEMO
- L10 SITE 4: LAYOUT / GRADING
- L11 SITE 1: PLANTING / RESTORATION PLAN
- L12 SITE 2: PLANTING / RESTORATION PLAN
- L13 SITE 3: PLANTING / RESTORATION PLAN
- L14 DETAILS
- S1 --
- S2 --
- S3 --
- S4 --



NO.	DATE	BY	APPR.	REVISIONS
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Approved By	
TRANSPORTATION DESIGN MANAGER	DATE
PROJECT MANAGER	DATE
	DATE

NM_JB	05/20/13
DESIGNED BY	DATE
NM_SW	05/20/13
DRAWN BY	DATE
JB	05/20/13
CHECKED BY	DATE



City of  
Bellevue



BARKER  
LANDSCAPE  
ARCHITECTS  
3002 NW 68th St.  
Seattle, WA 98117  
tel: 206.783.2870  
fax: 206.783.3212

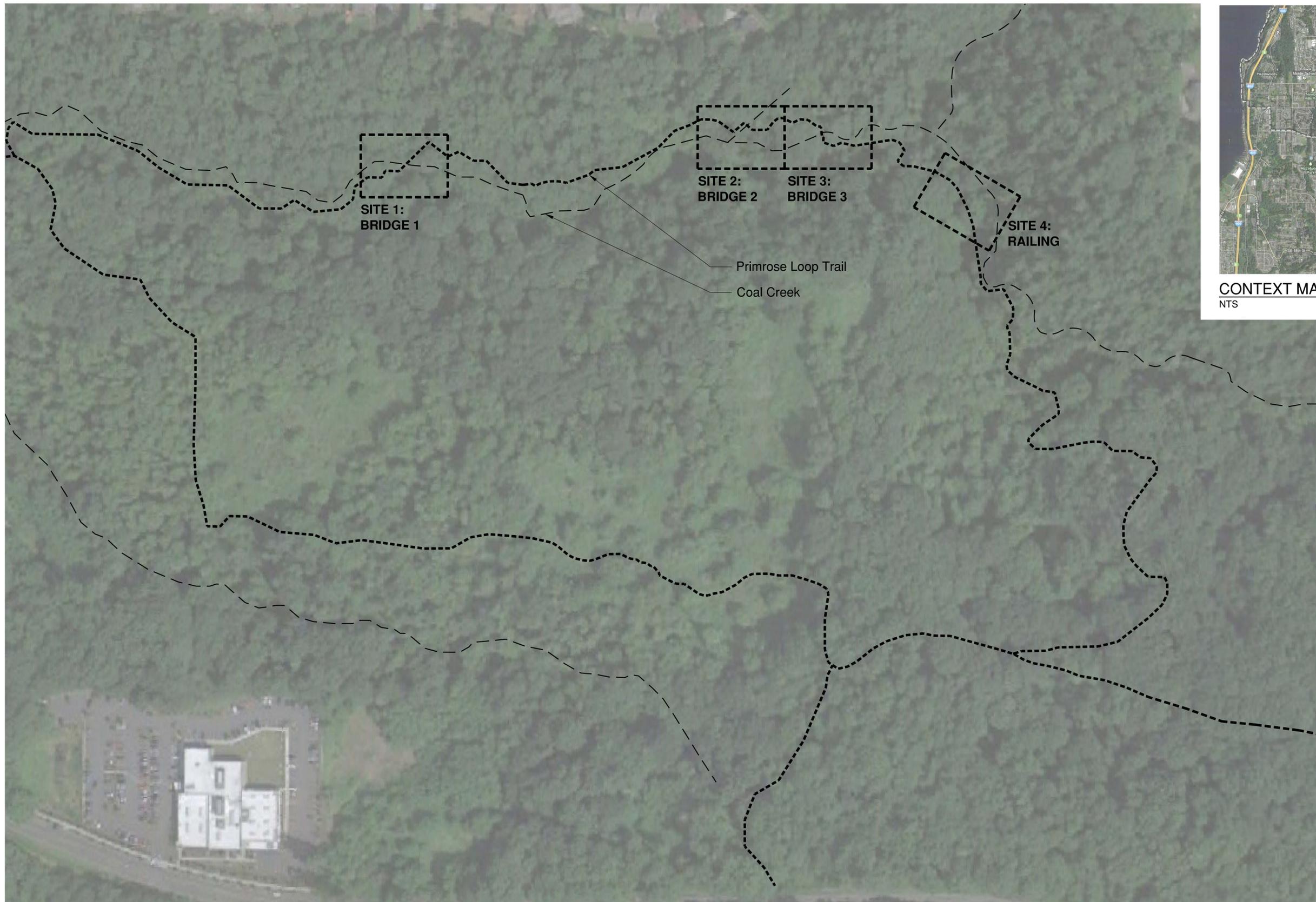
**Primrose Loop Trail**

**LO / SEPA  
PERMIT SET**

COVERSHEET

**L1**

SHEET 1 OF 18



CONTEXT MAP  
NTS



NOTE: INFORMATION DEPICTED IN THIS EXISTING CONDITIONS MAP IS NOT EXACT, AND DOES NOT CONSTITUTE A SURVEY BY A LICENSED SURVEYOR. IT IS MEANT TO CONVEY GENERAL SITE CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS ON SITE AND MAKING FIELD ADJUSTMENTS AS NECESSARY TO FIT ACTUAL SITE CONDITIONS.

NO COAL MINE HAZARD AREAS EXIST WITHIN THE PROJECT AREA. SOURCE: BELLEVUE ENVIRONMENTAL/CRITICAL AREA GIS MAP

CERTAIN IMPROVEMENTS ARE WITHIN FEMA 100-YEAR FLOODPLAIN. SOURCE: BELLEVUE ENVIRONMENTAL/CRITICAL AREA GIS MAP

PROJECT AREA IS DESIGNATED AN EROSION HAZARD AREA. SOURCE: BELLEVUE ENVIRONMENTAL/CRITICAL AREA GIS MAP



# PROJECT LOCATION PLAN

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**City of Bellevue**



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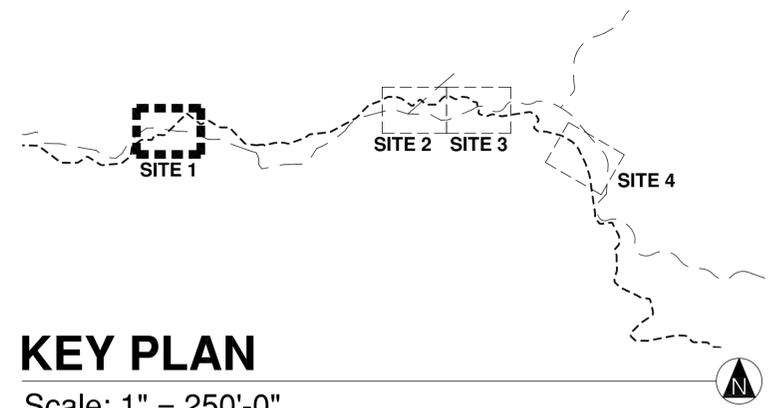
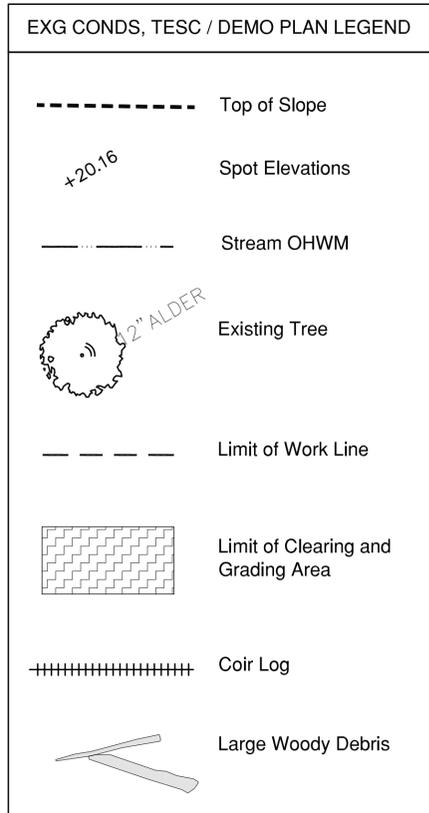
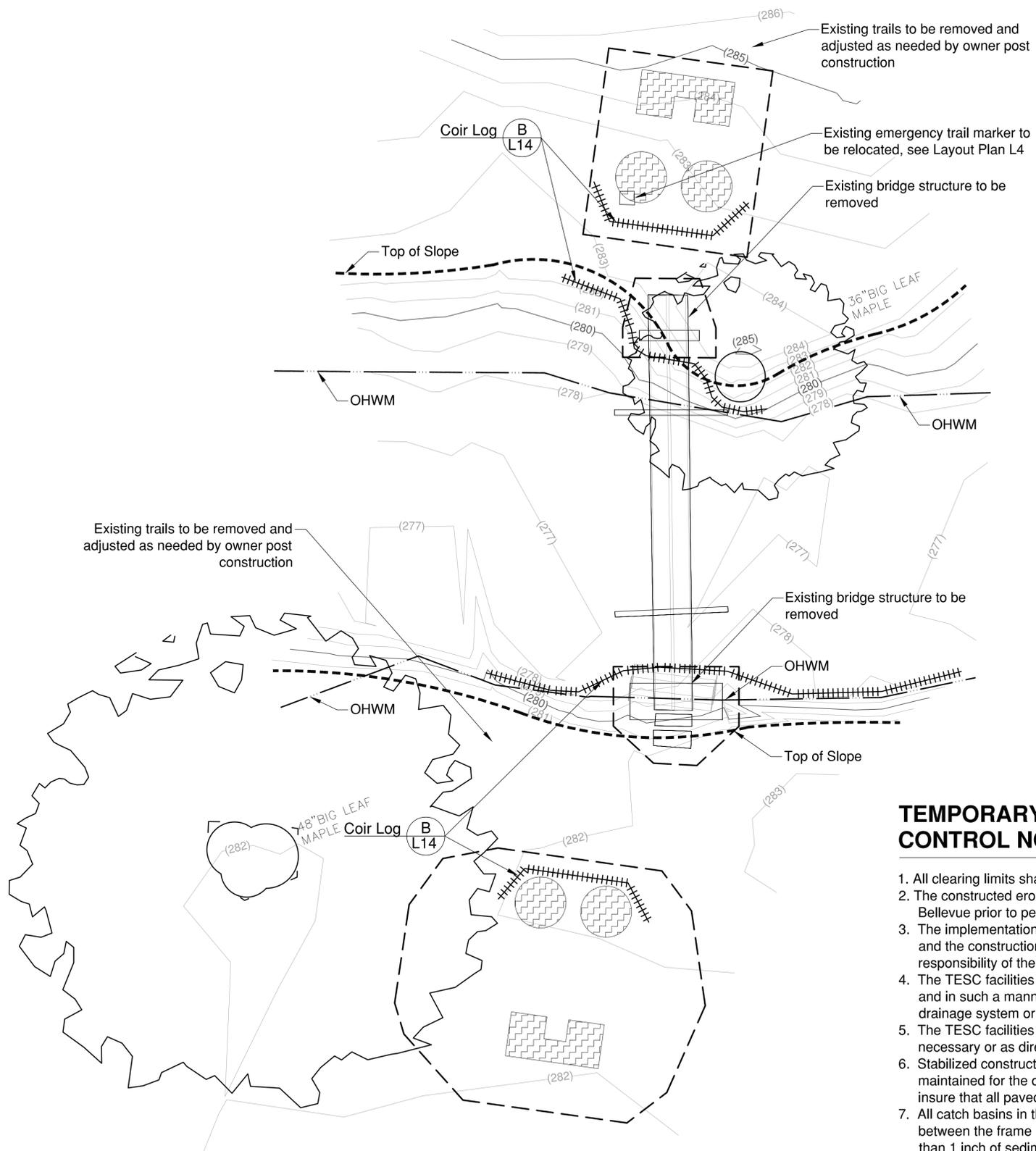
## Primrose Loop Trail

## LO / SEPA PERMIT SET

PROJECT LOCATION PLAN

# L2

SHEET 2 OF 18



## KEY PLAN

Scale: 1" = 250'-0"

### TRAIL REMOVAL NOTES:

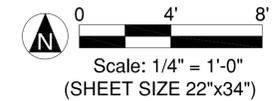
- Existing trail to be removed varies in width. See Existing Conditions this set.
- Limit negative impacts such as soil compaction, erosion, and sedimentation as required in the Western Washington Stormwater Manual.
- Existing Trail Removal and Site Enhancement: Scarify trail soil to a 2" depth before placing cut soil, and plants. Do not scarify where tree roots greater than 1/2" diameter occur. Where mechanized equipment cannot access areas to scarify existing trails the Contractor shall employ other means and methods such as hand tools (forks, hoe-dads, and pulaski) to scarify soil.
- Scarification shall begin at the point where the user foot path departs the edge of the proposed trail shoulder, thence 50 horizontal feet along the user foot path, where scarification ends. Other trail removal and site enhancement activities extend past this point.
- Plants that are being relocated in this project shall be heeled in and roots and rhizomes protected from drying out. Maintain an even moisture content in root masses and root balls.
- Install all plants transplanted at the same depth they were dug.
- All logs 6" DBH and larger shall be kept on site and used for trail removal and enhancement. Logs smaller than 6" DBH may be either disposed of off site or chipped on to areas identified to receive wood chips on site, as directed by the Owner.
- Remove or chip branches 3" diameter and greater, as measured from the branch collar, from logs used in the removal of existing user paths.
- Plant shrubs as directed in the field by the Owner.
- New plants will be planted within the work limits will be maintained for a period of 3 years. See Planting Plan this set for species, quantities, and locations.

### TEMPORARY EROSION & SEDIMENTATION CONTROL NOTES:

- All clearing limits shall be visibly marked prior to clearing.
- The constructed erosion control and sedimentation plan shall be approved by the City of Bellevue prior to performing any site grading or clearing.
- The implementation of temporary erosion and sedimentation control (TESC) measures and the construction, maintenance, and replacement of these facilities is the responsibility of the contractor.
- The TESC facilities must be constructed in conjunction with all construction activities and in such a manner as to ensure that sediment laden water does not enter the public drainage system or flow off site.
- The TESC facilities shall be inspected daily by the contractor and maintained as necessary or as directed by the engineer to ensure continuous functioning.
- Stabilized construction entrances shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures may be required to insure that all paved areas are kept clean for the duration of the project.
- All catch basins in the vicinity of construction shall be protected with filter fabric placed between the frame and grate or as directed by the engineer. Clean regularly: no more than 1 inch of sediment will be allowed to accumulate over filter fabric.
- Any area stripped of vegetation where no further work is anticipated for a period of 15 days shall be immediately stabilized with approved TESC methods such as mulching, erosion blankets, plastic sheeting or as directed by the engineer.
- All steep slope excavations greater than 2:1 shall be covered at the end of each working day.
- All disturbed areas shall be covered with 7" depth woodchip mulch.
- Any vegetation not in the construction area shall be left undisturbed.
- Field verify location of existing trees & boulders.
- The TESC facilities are the minimum requirements for anticipated site conditions. During the construction period, these TESC facilities shall be upgraded by contractor as directed by the engineer for unexpected storm events.
- All storm drain facilities within the project boundary are to be cleared of sediment and debris prior to final acceptance of the project.
- All significant existing trees to be protected and preserved. Tree protection fencing for all trees is not feasible due to site terrain / vegetation density.

## SITE 1: EXISTING CONDITIONS, TESC / DEMO PLAN

Scale: 1/4" = 1'-0"



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Approved By	
TRANSPORTATION DESIGN MANAGER	DATE
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NM, JB	05/20/13
DESIGNED BY	DATE
NM, SW	05/20/13
DRAWN BY	DATE
JB	05/20/13
CHECKED BY	DATE



**City of Bellevue**



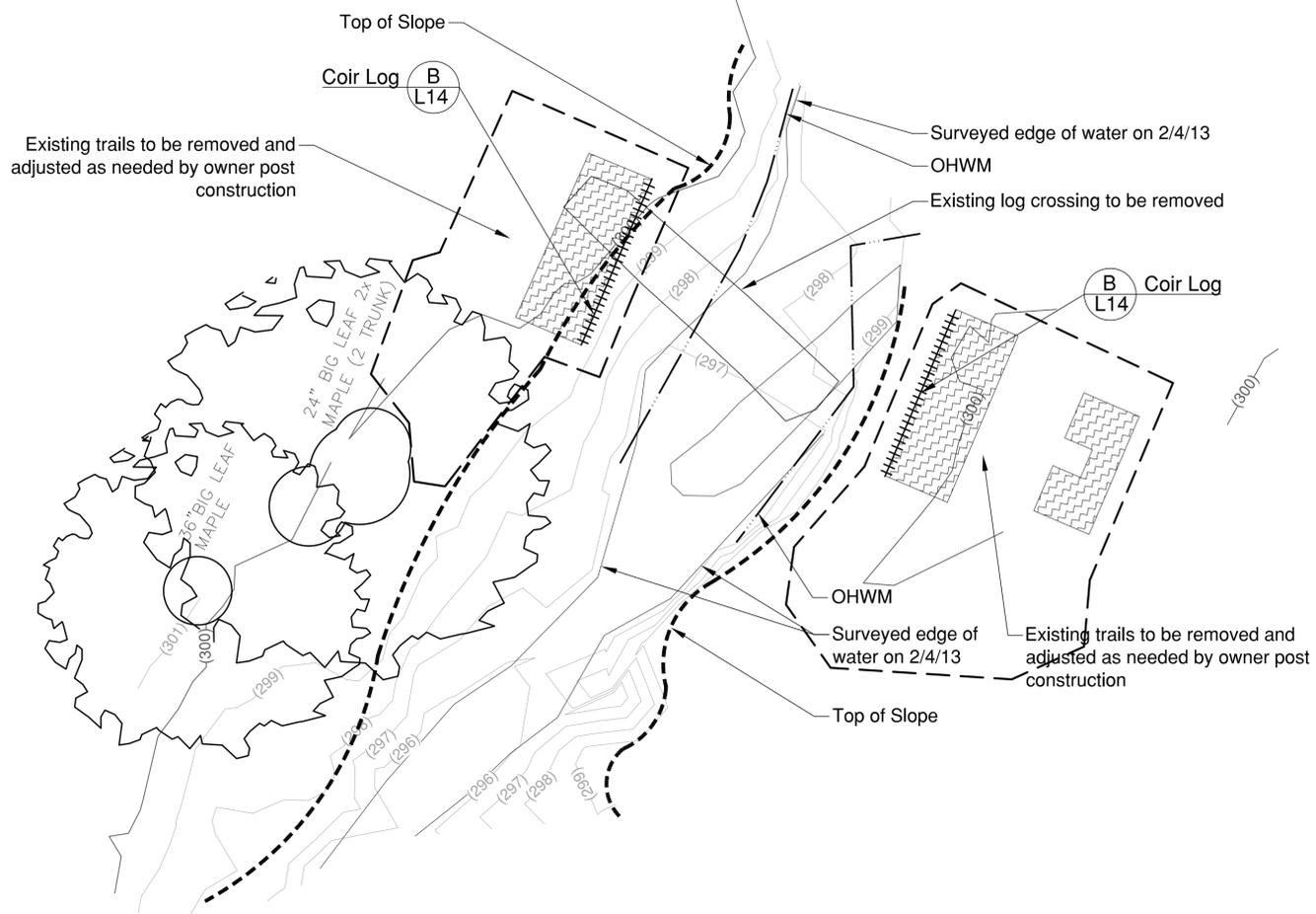
**BARKER LANDSCAPE ARCHITECTS**  
3002 NW 68th St.  
Seattle, WA 98117  
tel: 206.783.2870  
fax: 206.783.3212

## Primrose Loop Trail

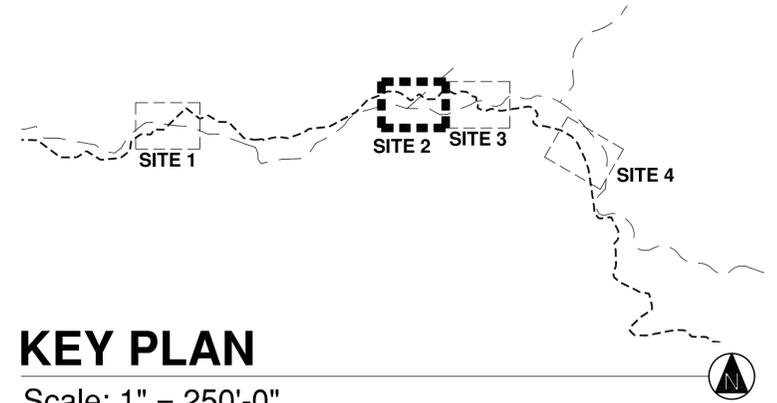
## LO / SEPA PERMIT SET

SITE 1 : EXISTING CONDITIONS  
TESC / DEMO PLAN  
**L3**  
SHEET 3 OF 18





EXG CONDS, TESC / DEMO PLAN LEGEND	
	Top of Slope
	Spot Elevations
	Stream OHWM
	Existing Tree
	Limit of Work Line
	Limit of Clearing and Grading Area
	Coir Log
	Large Woody Debris



### KEY PLAN

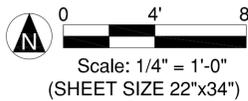
Scale: 1" = 250'-0"

### NOTES:

1. For Temporary Erosion & Sedimentation Control Notes see sheet L3.
2. For Trail Removal Notes see sheet L3.

## SITE 2: EXISTING CONDITIONS, TESC / DEMO

Scale: 1/4" = 1'-0"



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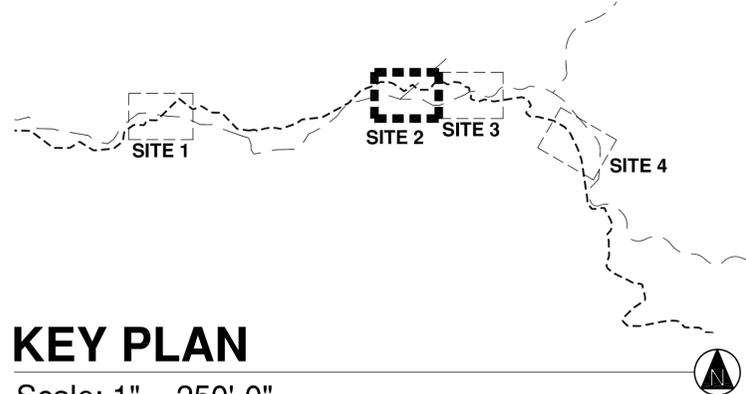
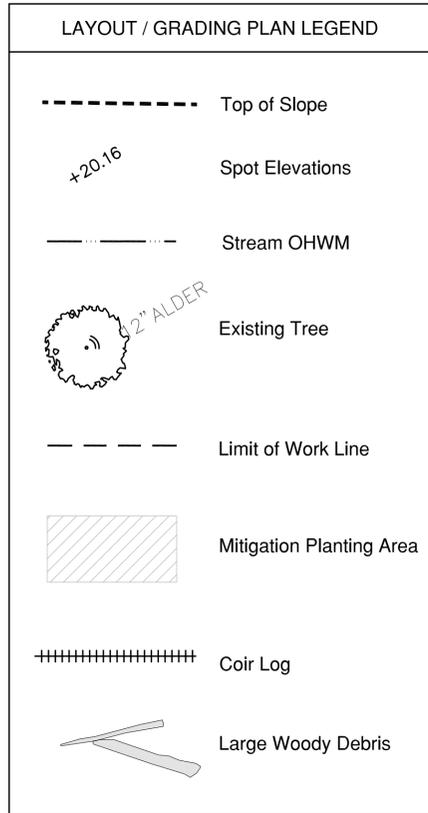
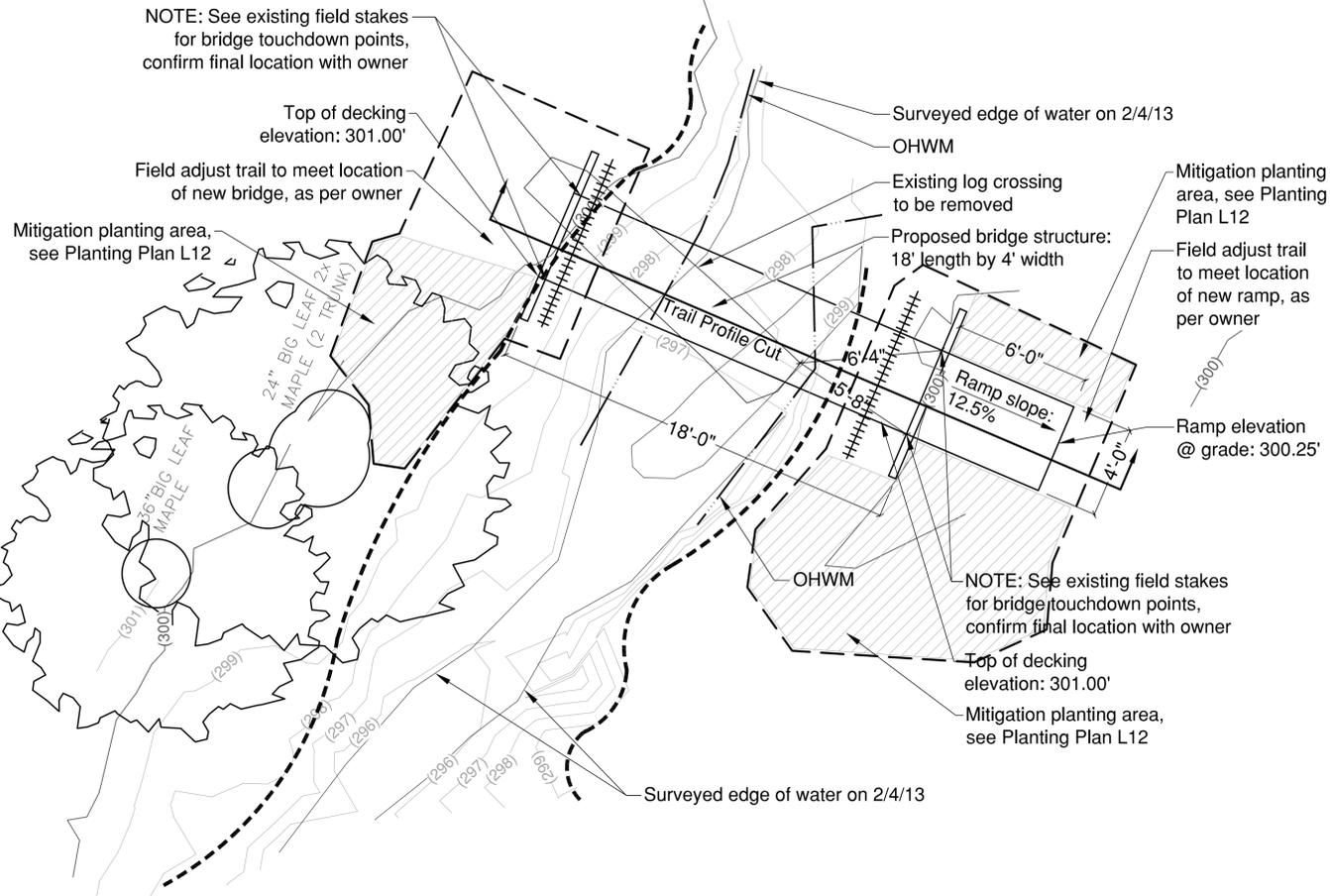
### Primrose Loop Trail

### LO / SEPA PERMIT SET

SITE 2: EXISTING CONDITIONS  
TESC / DEMO PLAN

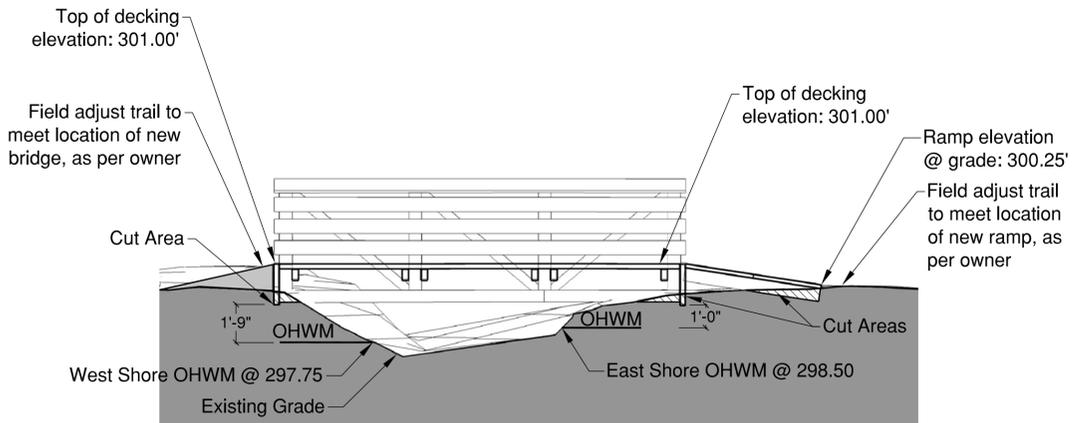
## L5

SHEET 5 OF 18



## SITE 2: LAYOUT / GRADING PLAN

Scale: 1/4" = 1'-0"



## TRAIL PROFILE

Scale: 1/4" = 1'-0"

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City of Bellevue



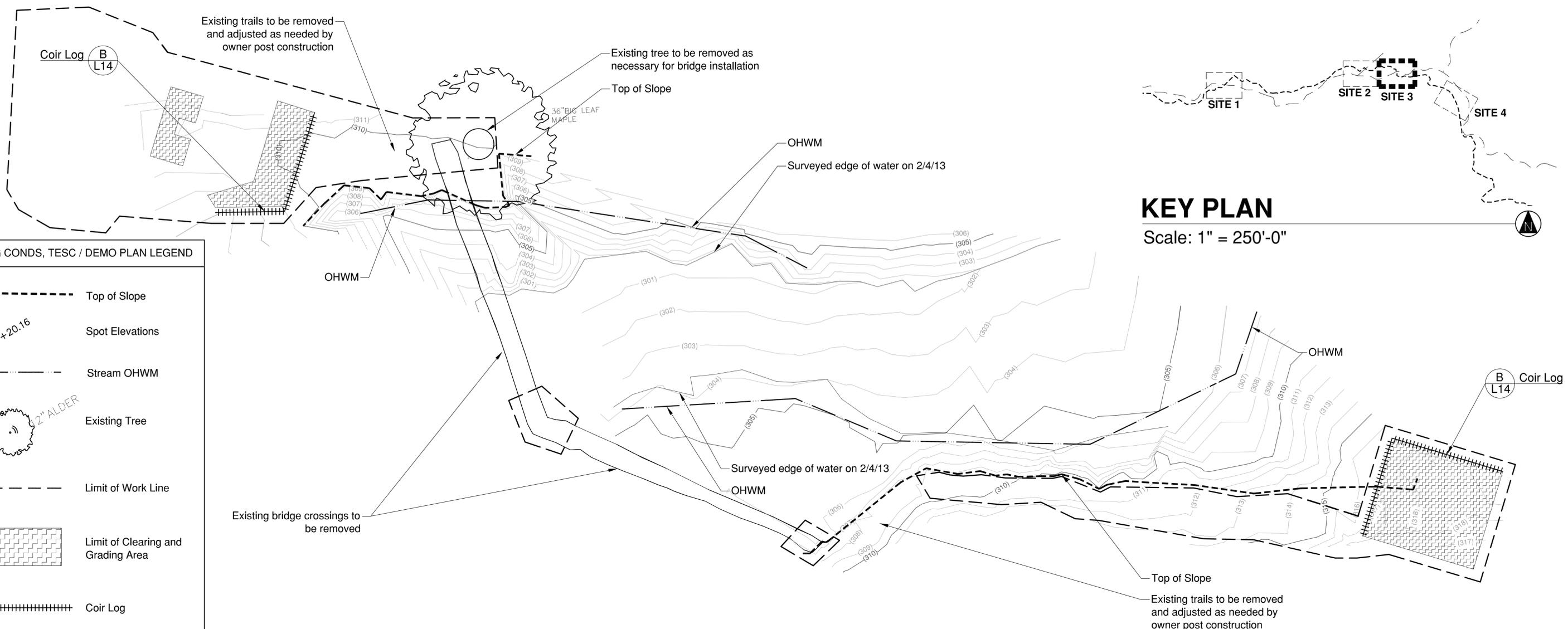
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Primrose Loop Trail

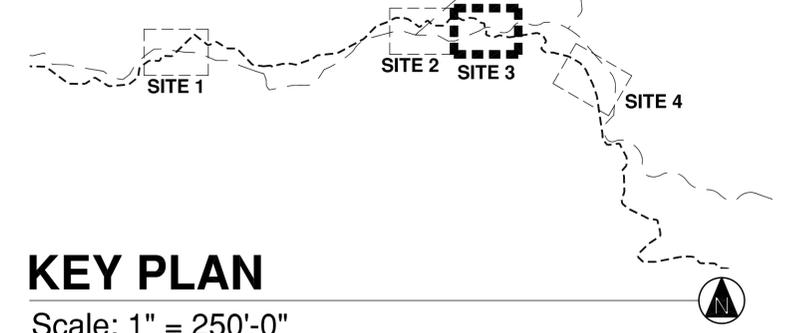
LO / SEPA PERMIT SET



SITE 2: LAYOUT / GRADING PLAN  
**L6**



**KEY PLAN**  
Scale: 1" = 250'-0"

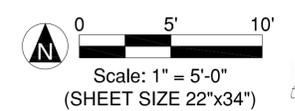


**EXG CONDS, TESC / DEMO PLAN LEGEND**

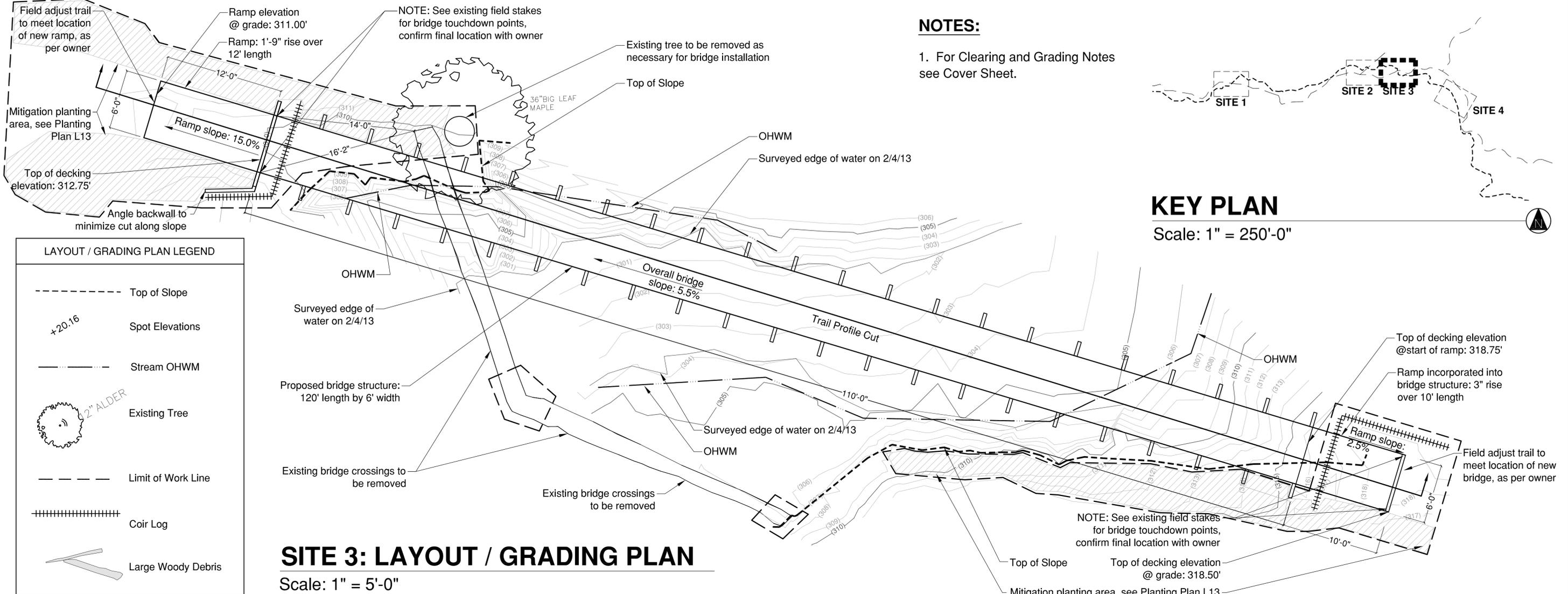
	Top of Slope
	Spot Elevations
	Stream OHWM
	Existing Tree
	Limit of Work Line
	Limit of Clearing and Grading Area
	Coir Log
	Large Woody Debris

**SITE 3: EXISTING CONDITIONS, TESC / DEMO**  
Scale: 1" = 5'-0"

- NOTES:**
1. For Temporary Erosion & Sedimentation Control Notes see sheet L3.
  2. For Trail Removal Notes see sheet L3.

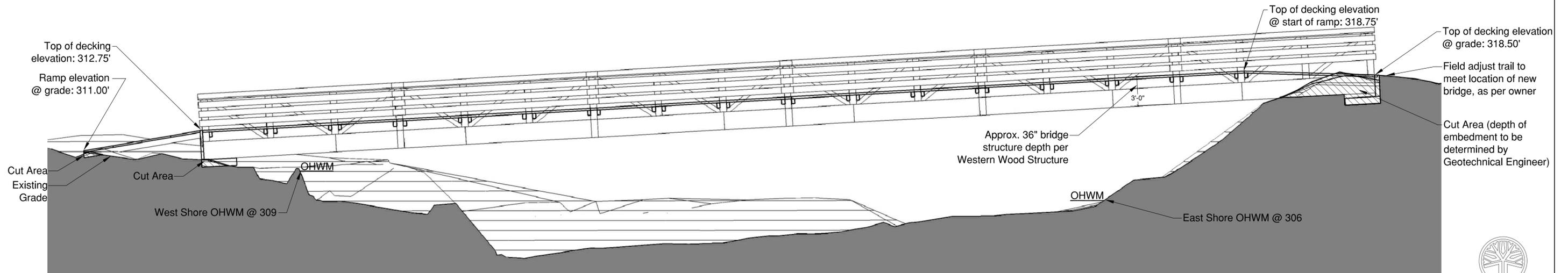


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**SITE 3: LAYOUT / GRADING PLAN**

Scale: 1" = 5'-0"



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Approved By

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**City of Bellevue**



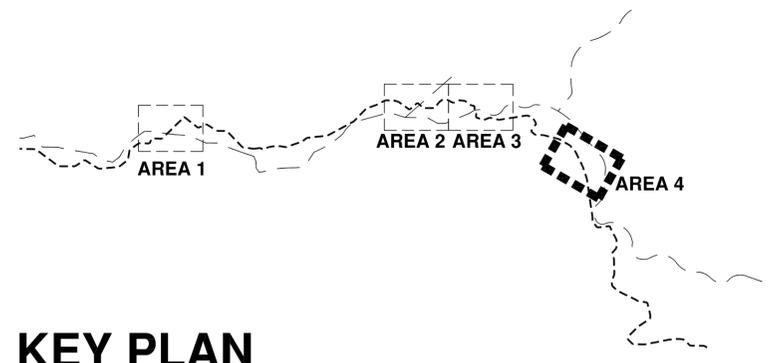
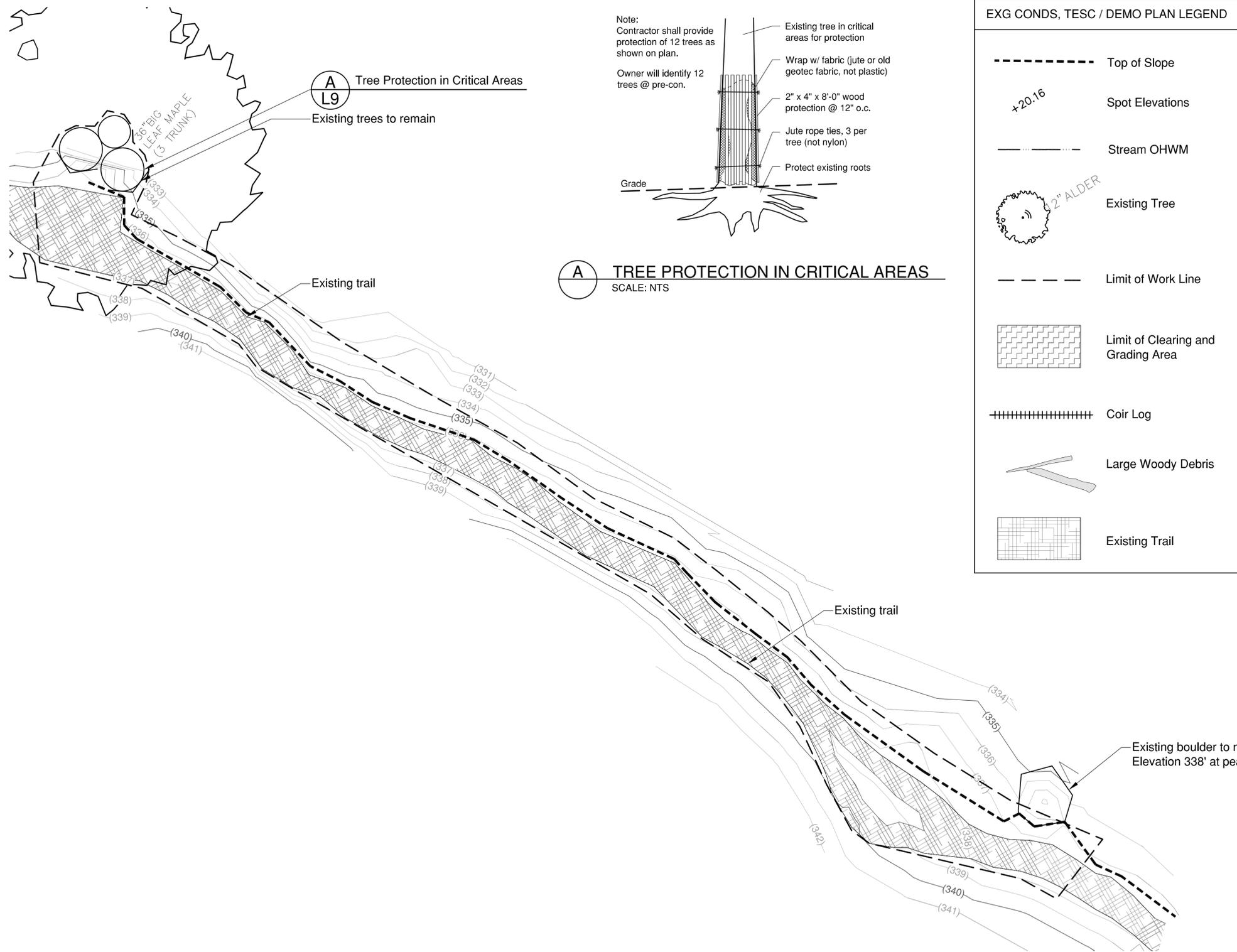
**BARKER LANDSCAPE ARCHITECTS**  
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**Primrose Loop Trail**

**LO / SEPA PERMIT SET**

SITE 3: LAYOUT / GRADING PLAN  
**L8**  
SHEET 8 OF 18



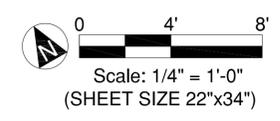


**NOTES:**

1. For Temporary Erosion & Sedimentation Control Notes see sheet L3.
2. For Trail Removal Notes see sheet L3.

**SITE 4: RAILING EXG. CONDS / TESC / DEMO PLAN**

Scale: 1/4" = 1'-0"



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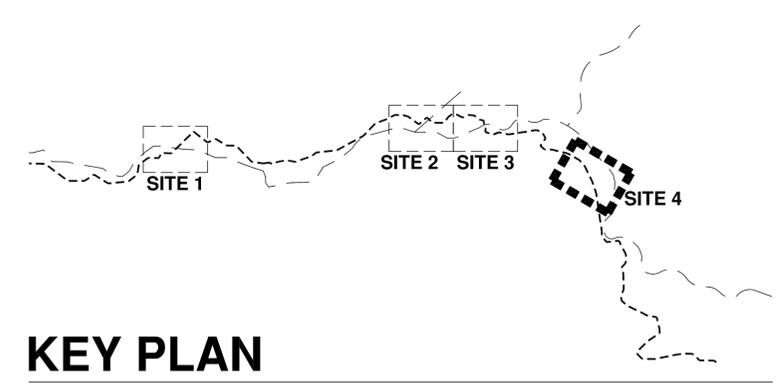
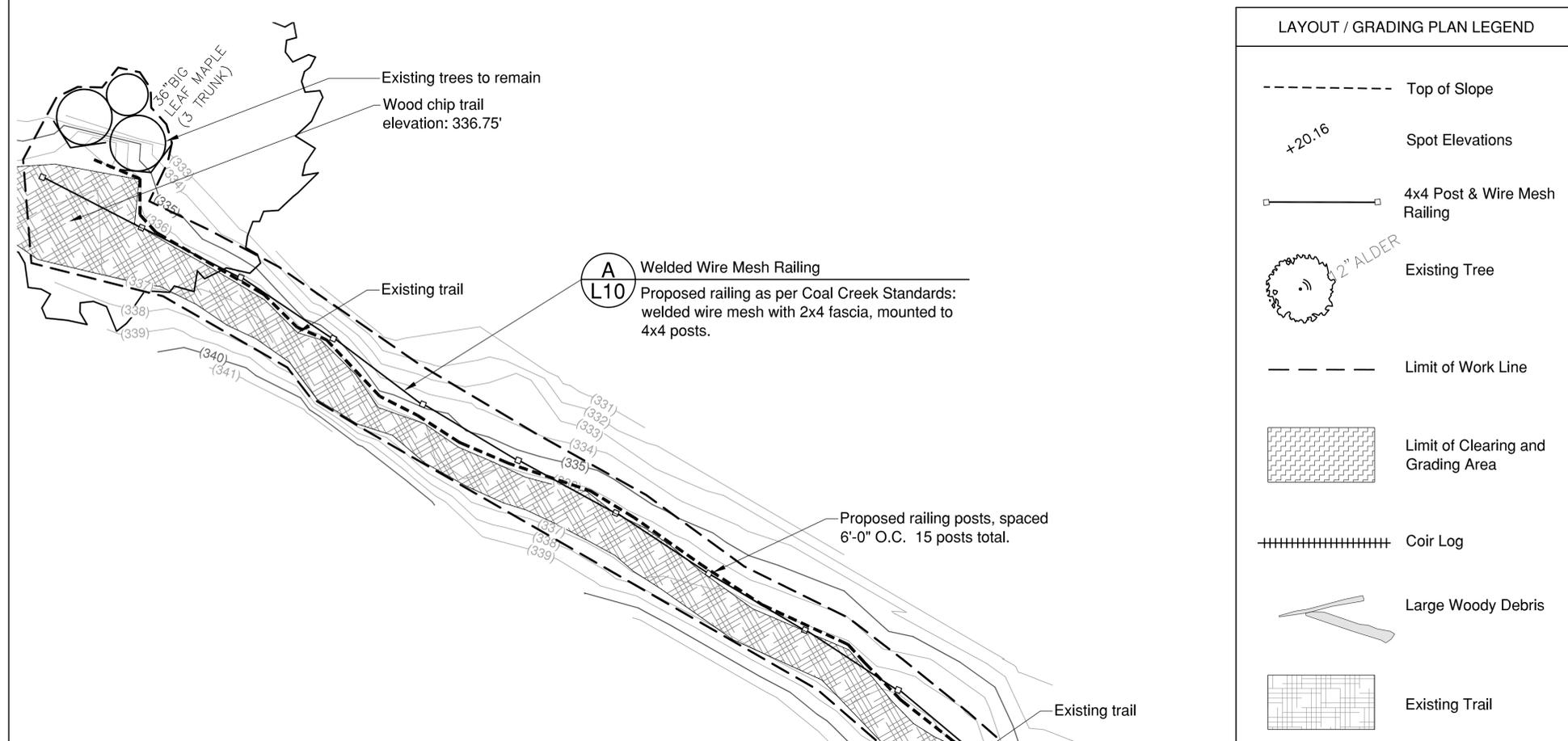
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**Primrose Loop Trail**

**LO / SEPA PERMIT SET**



### KEY PLAN

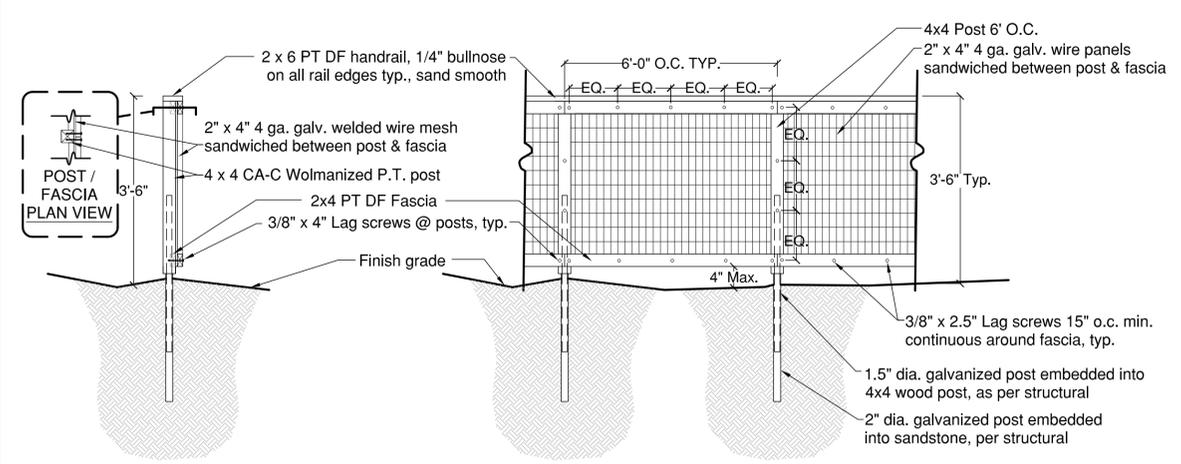
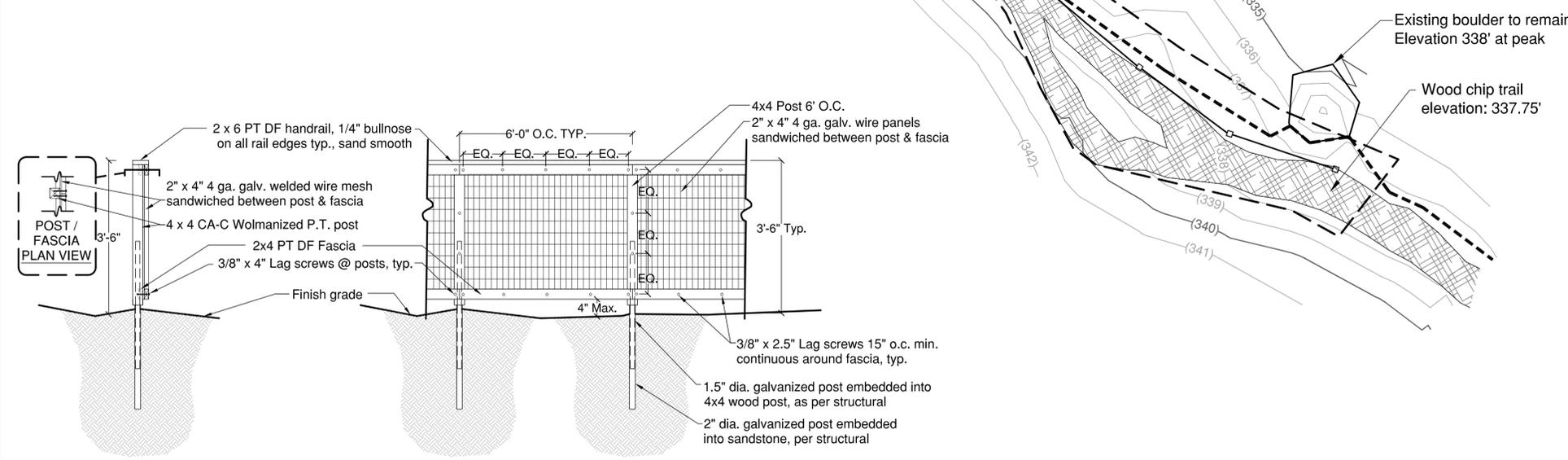
Scale: 1" = 250'-0"

### NOTES:

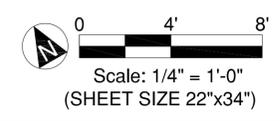
1. For Clearing and Grading Notes see Cover Sheet.

### SITE 4: RAILING LAYOUT / GRADING

Scale: 1/4" = 1'-0"



**A WELDED WIRE MESH RAILING SECTION & ELEVATION**  
SCALE: NTS



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**City of Bellevue**

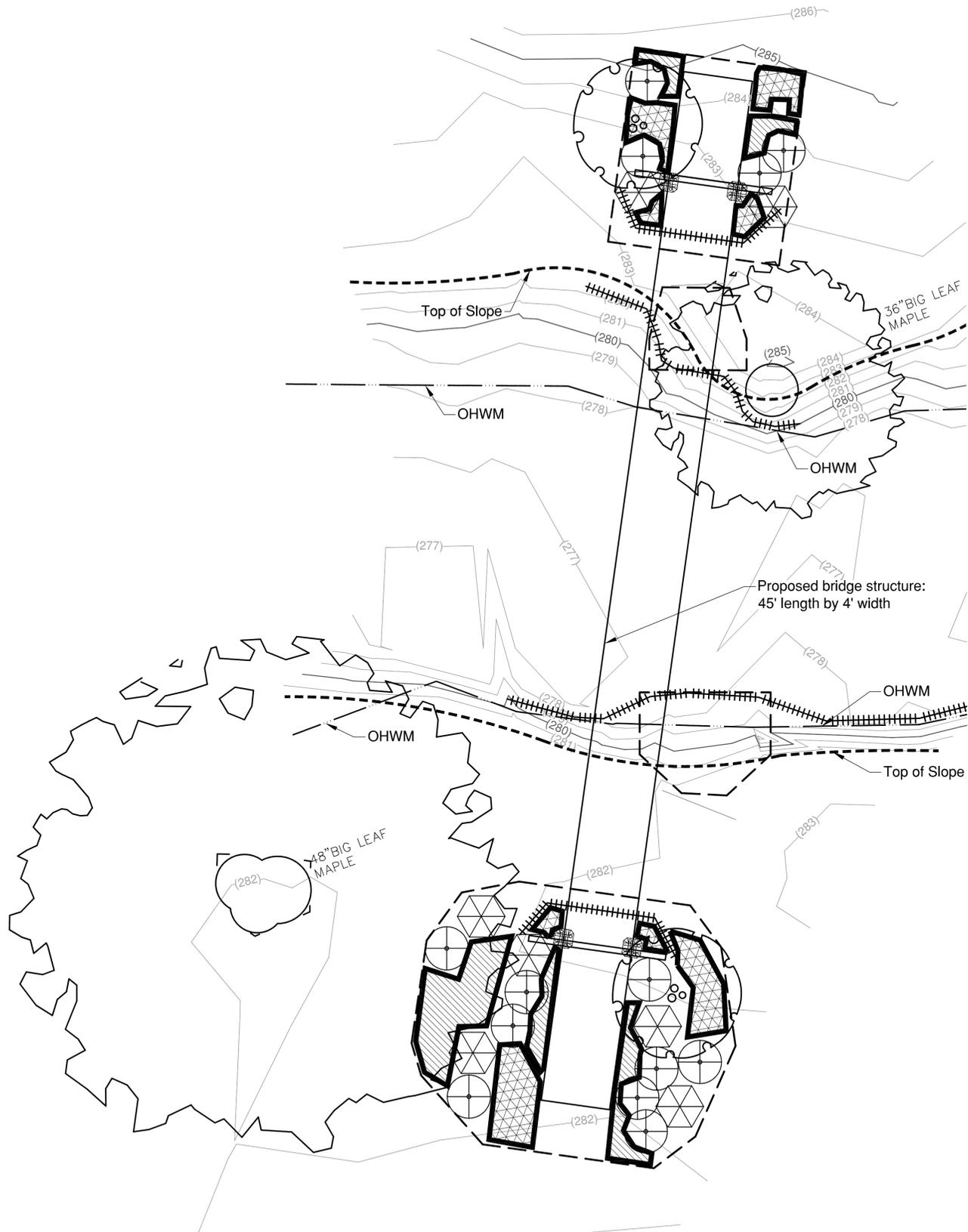


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**Primrose Loop Trail**

**LO / SEPA PERMIT SET**

SITE 4: LAYOUT / GRADING PLAN  
**L10**  
SHEET 10 OF 18



**GENERAL PLANTING NOTES:**

1. Plant selection shall be consistent with the Bellevue Land Use Code, Section 20.20.520, Landscape Development.
2. Plants shall be selected and sited to produce a hardy and drought-resistant landscape area. Selection shall consider soil type and depth, the amount of maintenance required, spacing, exposure to sun and wind, the slope and contours of the site, and compatibility with existing native vegetation preserved on the site. Preservation of existing vegetation is strongly encouraged.
3. Prohibited materials. Plants listed as prohibited in the Bellevue Land Use Code are prohibited in required landscape areas. Additionally, there are other plants that may not be used if identified in Bellevue Land Use Code as potentially damaging to sidewalks, roads, underground utilities, drainage improvements, foundations, or when not provided with enough growing space.
4. All plants shall conform to American Association of Nurserymen (AAN) grades and standards as published in the "American Standard for Nursery Stock" manual.
5. Plants shall meet the minimum size standards established in other sections of Bellevue Land use Code, Section 20.20.520 Landscape Development.
6. Multiple-stemmed trees may be permitted as an option to single-stemmed trees for required landscaping provided that such multiple-stemmed trees are at least ten (10) feet in height and that they are approved by the Planning Official prior to installation.
7. Soils in planting areas shall have adequate porosity to allow root growth. Soils which have been compacted to a density greater than one and three-tenths (1.3) grams per cubic centimeters shall be loosened to increase aeration to a minimum depth of twenty-four (24) inches or to the depth of the largest plant root ball, whichever is greater. Imported topsoils shall be tilled into existing soils to prevent a distinct soil interface from forming After soil preparation is completed, motorized vehicles shall be kept off to prevent excessive compaction and underground pipe damage. The organic content of soils in any landscape area shall be as necessary to provide adequate nutrient and moisture-retention levels for the establishment of plantings. See Bellevue Clearing and Grading Development Standards for mulch requirements.
8. Required plantings, except turf or areas of established ground cover, shall be covered with two inches or more of organic mulch to minimize evaporation and runoff. Mulch shall consist of materials such as yard waste, sawdust, and/or manure that are fully composted.
9. All mulches used in planter beds shall be kept at least six (6) inches away from the trunks of shrubs and trees.
10. All required landscaped areas, particularly trees and shrubs, must be protected from potential damage by adjacent uses and development, including parking and storage areas. Protective devices such as bollards, wheel stops, trunk guards, root guards, etc., may be required in some situations.

PLANT SCHEDULE (FOR SITE 1 ONLY)						
SMALL TREES						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Acer circinatum</i>	Vine Maple	-	As shown	Min. (3) 1" r stems, B&B, ball dia. 24" min.	2
SHRUBS						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Polystichum munitum</i>	Sword Fern	1 Gallon	As shown	container	13
	<i>Symphoricarpos albus</i>	Snowberry	-	As shown	-	7
GROUNDCOVERS & PERENNIALS						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Gaultheria shallon</i>	Salal	1 Gallon	18" o.c.	tri-spacing, container	20
	<i>Asarum caudatum</i>	Wild Ginger	1 Gallon	18" o.c.	tri-spacing, container	18

**SITE 1: PLANTING / RESTORATION PLAN**

Scale: 1/4" = 1'-0"



NO.	DATE	BY	APPR.	REVISIONS
1	02-25-13			30% DRAFT SCHEMATIC DESIGN
2	03-11-13			75% COORDINATION SET
3	04-24-13			90% COORDINATION SET
4	05-20-13			LO / SEPA PERMIT SET

Approved By	
TRANSPORTATION DESIGN MANAGER	DATE
PROJECT MANAGER	DATE
	DATE

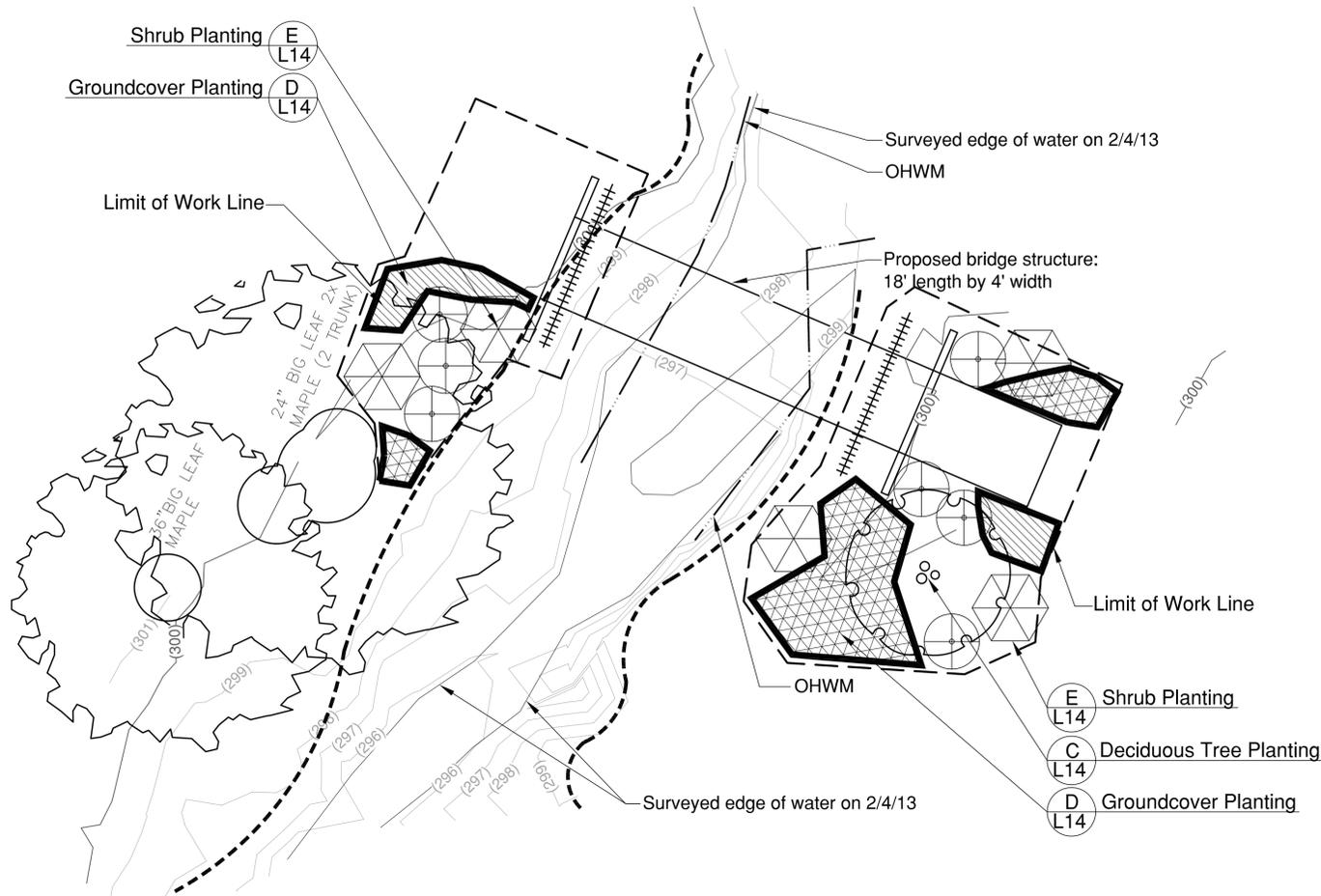
NM, JB	05/20/13
DESIGNED BY	DATE
NM, SW	05/20/13
DRAWN BY	DATE
JB	05/20/13
CHECKED BY	DATE



**Primrose Loop Trail**

**LO / SEPA PERMIT SET**

SITE 1 : PLANTING / RESTORATION PLAN  
**L11**  
SHEET 11 OF 18



**NOTES:**

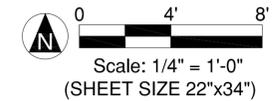
1. For Planting Notes see Site 1: Planting/Restoration Plan, sheet L11.

**PLANT SCHEDULE (FOR SITE 2 ONLY)**

SMALL TREES						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Acer circinatum</i>	Vine Maple	-	As shown	Min. (3) 1" r stems, B&B, ball dia. 24" min.	1
SHRUBS						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Polystichum munitum</i>	Sword Fern	1 Gallon	As shown	container	7
	<i>Symphoricarpos albus</i>	Snowberry	-	As shown	-	5
GROUNDCOVERS & PERENNIALS						
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Gaultheria shallon</i>	Salal	1 Gallon	18" o.c.	tri-spacing, container	18
	<i>Asarum caudatum</i>	Wild Ginger	1 Gallon	18" o.c.	tri-spacing, container	9

**SITE 2: PLANTING / RESTORATION PLAN**

Scale: 1/4" = 1'-0"



NO.	DATE	BY	APPR.	REVISIONS
1	02-25-13			30% DRAFT SCHEMATIC DESIGN
2	03-11-13			75% COORDINATION SET
3	04-24-13			90% COORDINATION SET
4	05-20-13			LO / SEPA PERMIT SET

Approved By

TRANSPORTATION DESIGN MANAGER DATE

PROJECT MANAGER DATE

NM, JB DESIGNED BY 05/20/13 DATE

NM, SW DRAWN BY 05/20/13 DATE

JB CHECKED BY 05/20/13 DATE



**Primrose Loop Trail**

**LO / SEPA PERMIT SET**

SITE 2: PLANTING / RESTORATION PLAN  
**L12**  
SHEET 12 OF 18

**PLANT SCHEDULE (FOR SITE 3 ONLY)**

**SMALL TREES**

SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Acer circinatum</i>	Vine Maple	-	As shown	Min. (3) 1" r stems, B&B, ball dia. 24" min.	5

**SHRUBS**

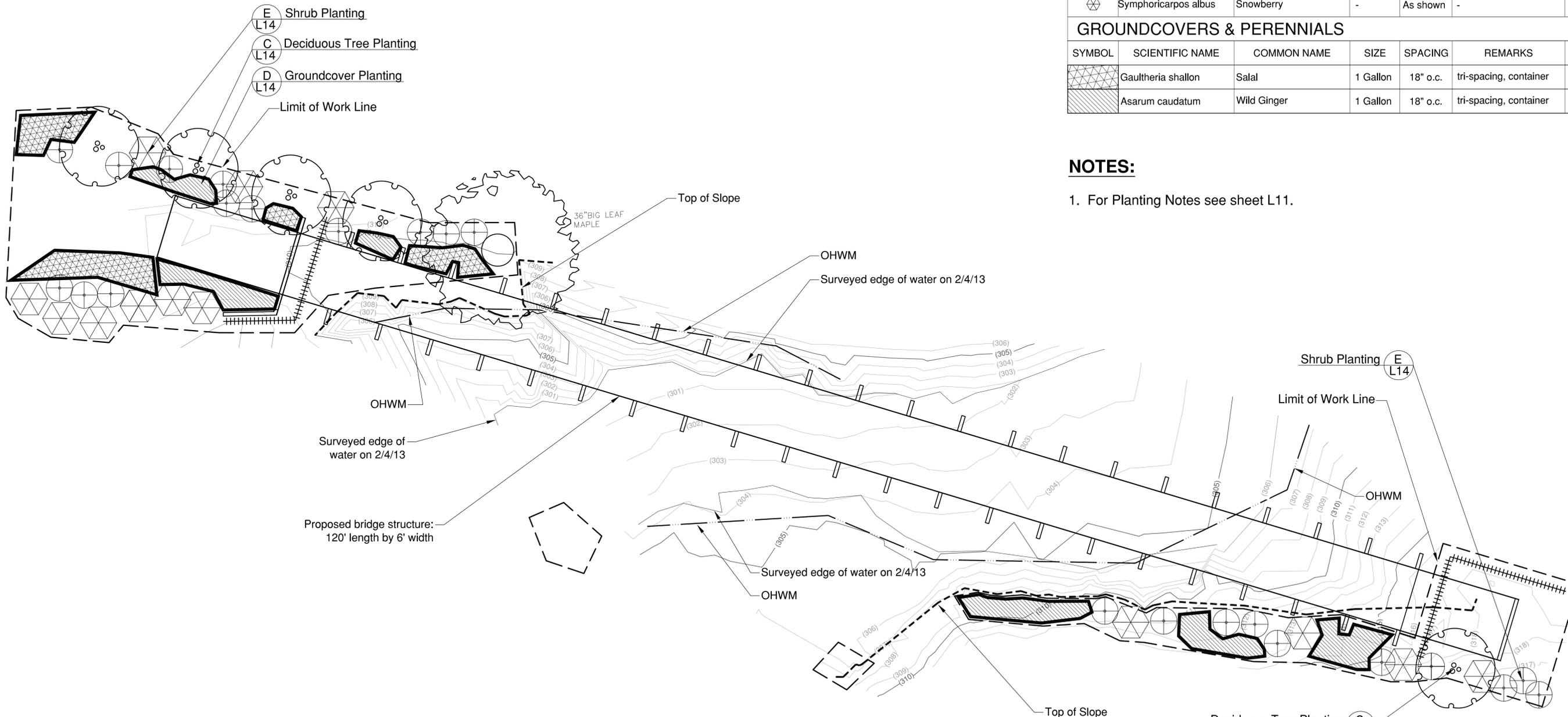
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Polystichum munitum</i>	Sword Fern	1 Gallon	As shown	container	23
	<i>Symphoricarpos albus</i>	Snowberry	-	As shown	-	13

**GROUNDCOVERS & PERENNIALS**

SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	REMARKS	TOTAL QUANT.
	<i>Gaultheria shallon</i>	Salal	1 Gallon	18" o.c.	tri-spacing, container	33
	<i>Asarum caudatum</i>	Wild Ginger	1 Gallon	18" o.c.	tri-spacing, container	47

**NOTES:**

1. For Planting Notes see sheet L11.



**SITE 3: PLANTING / RESTORATION PLAN**

Scale: 1" = 5'-0"



NO.	DATE	BY	APPR.	REVISIONS
1	02-25-13			30% DRAFT SCHEMATIC DESIGN
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3	04-24-13			90% COORDINATION SET
4	05-20-13			LO / SEPA PERMIT SET

Approved By	
TRANSPORTATION DESIGN MANAGER	DATE
PROJECT MANAGER	DATE
	DATE

NM, JB	05/20/13
DESIGNED BY	DATE
NM, SW	05/20/13
DRAWN BY	DATE
JB	05/20/13
CHECKED BY	DATE



**City of Bellevue**



**BARKER LANDSCAPE ARCHITECTS**  
3002 NW 68th St.  
Seattle, WA 98117  
tel: 206.783.2870  
fax: 206.783.3212

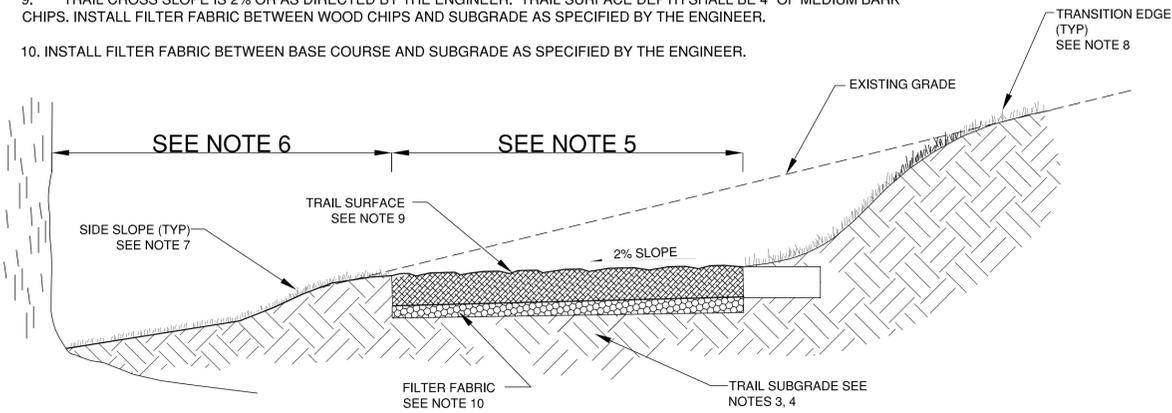
**Primrose Loop Trail**

**LO / SEPA PERMIT SET**

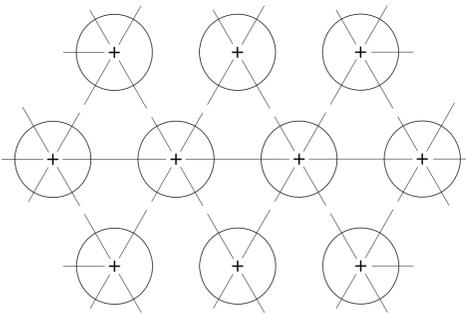
SITE 3: PLANTING / RESTORATION PLAN  
**L13**  
SHEET 13 OF 18

**NOTES**

1. APPROPRIATE DRAINAGE SHALL BE PROVIDED PER CITY OF BELLEVUE REQUIREMENTS.
2. TRAIL ALIGNMENTS SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO START OF CONSTRUCTION OF TRAIL.
3. TRAIL SUBGRADE TO BE COMPACTED TO 95% DENSITY. SUBGRADE SHALL CONSIST OF UNDISTURBED NATIVE SOIL.
4. TRAIL SUBGRADE TO BE TREATED WITH APPROVED HERBICIDE PRIOR TO FINAL INSTALLATION OF WOOD CHIP SURFACE.
5. TRAIL WIDTH TO BE SPECIFIED BY THE ENGINEER. GENERAL WIDTHS RANGE BETWEEN 4' TO 6'.
6. TRAIL SHALL HAVE A 2' MINIMUM HORIZONTAL CLEARANCE TO ANY OBSTRUCTION AND A 7' MINIMUM VERTICAL (BRANCH) CLEARANCE FROM TRAIL SURFACE. OBSTRUCTION CLEARANCE REQUIRED BOTH SIDES OF TRAIL.
7. TRAIL SIDESLOPE SHALL BE GRADED WITH TOPSOIL BACKFILL AT A 3:1 SLOPE. GRADING SHALL BE DONE SO THAT ACCUMULATION OF RUN-OFF DOES NOT COLLECT AT BOTTOM OF SLOPE. COMPACT AS REQUIRED.
8. MINIMUM 2' WIDE TRANSITION EDGE REQUIRED PRIOR TO START OF SIDE SLOPE. COVER WITH TOPSOIL AND SEED AS REQUIRED BY THE ENGINEER.
9. TRAIL CROSS SLOPE IS 2% OR AS DIRECTED BY THE ENGINEER. TRAIL SURFACE DEPTH SHALL BE 4" OF MEDIUM BARK CHIPS. INSTALL FILTER FABRIC BETWEEN WOOD CHIPS AND SUBGRADE AS SPECIFIED BY THE ENGINEER.
10. INSTALL FILTER FABRIC BETWEEN BASE COURSE AND SUBGRADE AS SPECIFIED BY THE ENGINEER.

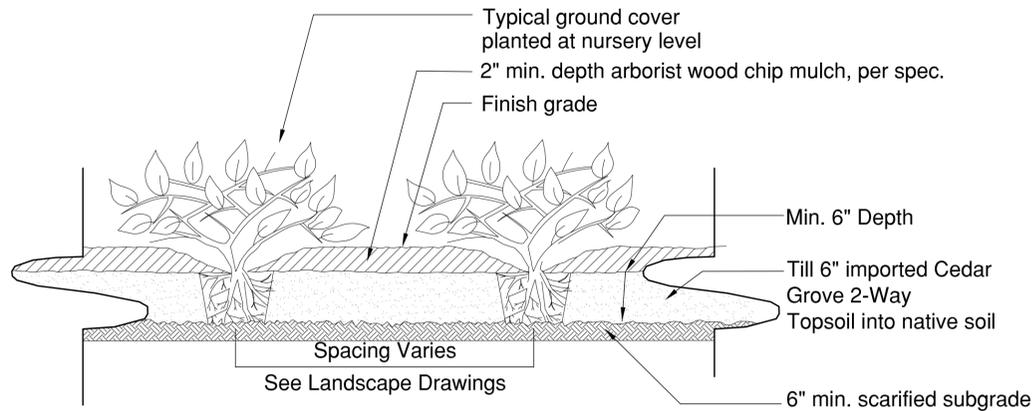


**A WOOD CHIP PATH**  
SCALE: NTS

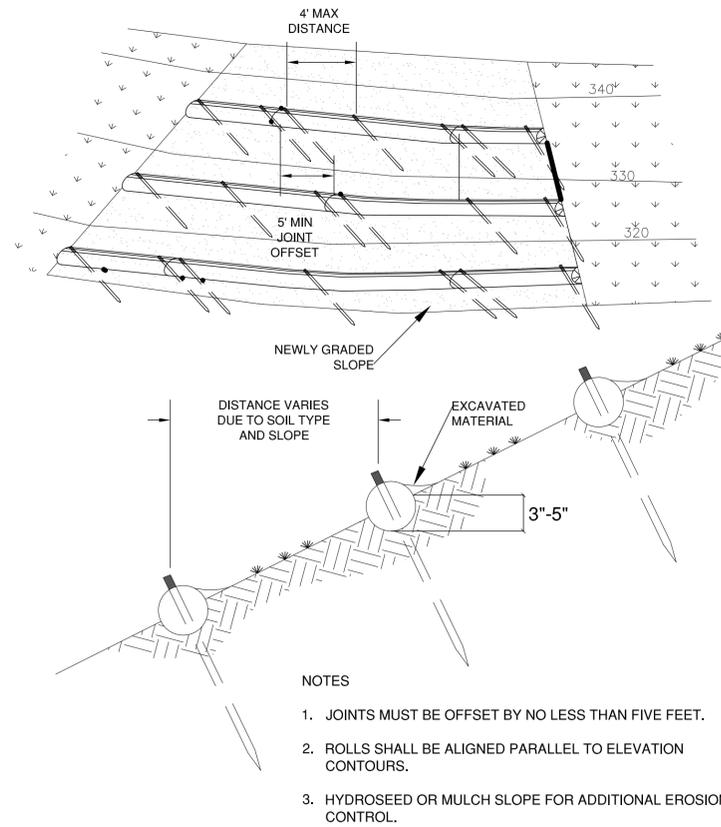


- (1) All groundcover shall be planted at equal triangular spacing or on center spacing as specified on planting plan
- (2) Locate groundcover one half of specified spacing distance from any curb, sidewalk, or other hard surface, unless otherwise specified

**D GROUNDCOVER PLANTING**  
SCALE: NTS

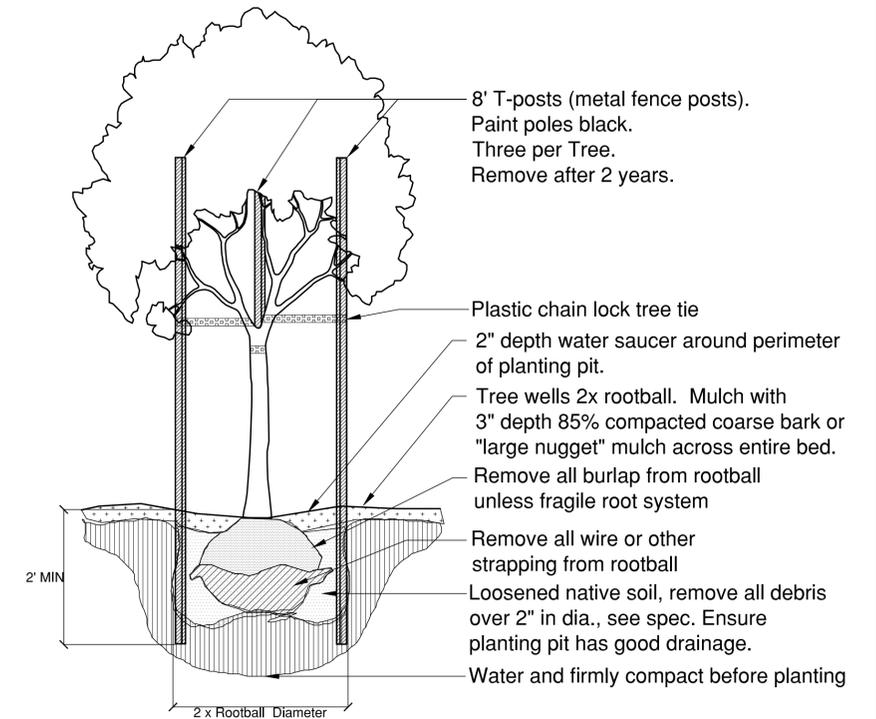


**D GROUNDCOVER PLANTING**  
SCALE: NTS

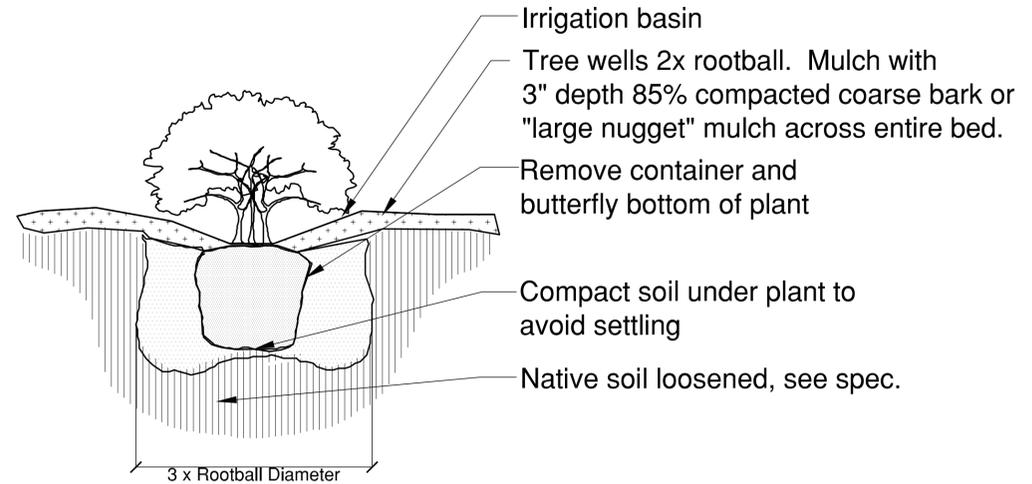


**B COIR LOG**  
SCALE: NTS

- NOTES**
1. JOINTS MUST BE OFFSET BY NO LESS THAN FIVE FEET.
  2. ROLLS SHALL BE ALIGNED PARALLEL TO ELEVATION CONTOURS.
  3. HYDROSEED OR MULCH SLOPE FOR ADDITIONAL EROSION CONTROL.



**C DECIDUOUS TREE PLANTING**  
SCALE: NTS



**E SHRUB PLANTING**  
SCALE: NTS

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**Primrose Loop Trail**

**LO / SEPA PERMIT SET**

DETAILS

**L14**

SHEET 14 OF 18

