SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

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. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the <u>Supplemental Sheet for Nonproject Actions (Part D)</u>. Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in "Part B: Environmental Elements" that do not contribute meaningfully to the analysis of the proposal.

A. Background Find help answering background questions

1. Name of proposed project, if applicable:

Middle Fork Spring Open Space Trail (MFSOST)

2. Name of applicant:

Paul Knippel, City of Bellingham Parks and Recreation Department

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

210 Lottie St., Bellingham, Washington, 98225, (360) 778-7021

4. Date checklist prepared:

December 17, 2024

5. Agency requesting checklist:

City of Bellingham

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

Construction is anticipated to occur between Spring 2026-Winter 2026, over a duration of 6 months.

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

A boardwalk trail connection may be designed and permitted in the future that would align within the West Stuart Road right-of-way to provide a trail connection between the western and eastern extents of improved West Stuart Road at the southeast corner of the Middle Fork Open Space Spring property.

The eastern portion of the project site was recently separated as a distinct parcel (tax parcel 380212-497460, address 4439 Meridian Street) and may be sold in the future.

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

- Critical Areas Report and Mitigation Plan (in progress) Herrera 2024
- Archeological Review for the Cordata Community Park Project Drayton Archaeology 2017
- Stormwater Management Report Herrera 2024
- Geotechnical Report AESI 2023 and update anticipated 2024

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

None known.

- 10. List any government approvals or permits that will be needed for your proposal, if known.
 - Critical Area Permit City of Bellingham
 - Fill and Grade Permit City of Bellingham
 - Building Permit City of Bellingham
 - Stormwater Permit City of Bellingham
- 11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The MFSOST project includes a 1,286-linear-foot multi-use trail that will connect West Stuart Road to Cordata Park. The project includes the following components:

- An 8-foot-wide crushed limestone trail with 1-foot-wide shoulders, and 10-foot-wide boardwalk segments. A six-inch depth of crushed surfacing base course material will be located below the limestone.
- A small segment of concrete will be added to extend the existing sidewalk on the north side of West Stuart Road to the trailhead.
- A small, concrete gathering space at the south end of the trail.
- Boardwalks will utilize a minimal excavation foundation (diamond piers) which will be installed
 by hand through wetlands to minimize soil compaction, vegetation/root disturbance, and
 wetland disturbance. Diamond piers will be made of precast concrete with galvanized steel pins
 and the boardwalk will be a fiberglass grating. Guardrails will be constructed along the
 boardwalk edges.
- Rock retaining walls are proposed for locations with relatively steep cross slopes.
- Multiple benches will be installed along the trail.
- Mitigation and restoration areas.

The project will include onsite compensatory mitigation for unavoidable buffer impacts and indirect wetland impacts associated with boardwalk shading over narrow wetland segments. Native growth protection easement signs will be installed along the trail corridor. Park property boundary markers may be installed along the north property line.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit

any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project area includes 200 West Stuart Road (tax parcel 380212-443440), the southeast corner of Cordata Park (tax parcel 380212-398520), and the unimproved portion of West Stuart Road right-of-way (ROW). 4439 Meridian Street (tax parcel 380212-497460), located east of 200 West Stuart Road, has been segregated as a distinct tax parcel, but was also reviewed for critical areas (see attached site plans). The MFSOST property is located in Section 12, Township 38 North, Range 02 East of the Willamette Meridian within Bellingham city limits, Whatcom County, Washington (See Sheet 1 of attached site plans).

The project area is in Water Resource Inventory Area (WRIA) 1: Nooksack. A majority of the project site is located in the Squalicum Creek watershed and the Squalicum Creek-Frontal Bellingham Bay subwatershed, which discharges into Bellingham Bay. The northwest portion of the project site is located in the Silver Creek watershed and the Nooksack River-Frontal Bellingham subwatershed, which drains to Bellingham Bay.

The MFSOST property is currently zoned light industrial. Parcels to the north and south of the project area are privately owned. Cordata Park and mixed-use properties are located west of the project area.

B. Environmental Elements

1. Earth Find help answering earth questions

a. General description of the site:

Historically, the project area included a farm with several outbuildings. The topography of the project area is rolling with a general slope down to the south except for the northwestern portion of the project area, which flows north-northwest. A ridge is located near the center of the project area that drains west towards Wetland L and Middle Fork Spring Creek, which is relatively flat. The entire project area contained encampments for many years. In 2023, the City cleared, removed trash, and hydroseeded a majority of encampments, although scattered trash, metal, and waste remains on-site. Buried trash was observed on portions of the property as well.

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

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

The steepest slope on site is approximately 30-35 percent.

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

Two NRCS soil types are mapped within the study area: Whatcom silt loam and Whatcom-Labounty silt loam. A geotechnical engineering report was prepared by Associated Earth Sciences, Inc. for the study area. This study identified brown to grayish brown, silty fine sand with gravel on site, interpreted to be Everson glaciomarine drift (Associated Earth Sciences, Inc. 2023).

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

There are no surface indications or history of unstable soils in the immediate vicinity.

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

In upland areas, construction of the trail involves stripping the existing terrain to a depth of 6 inches to remove organic matter and preparing the subgrade for crushed limestone trail segments. Boardwalk trail segments require clearing and grubbing in addition to the removal of material at each minimal excavation pier foundation location. Improvements within the West Stuart Road ROW at the proposed trailhead will require new cement concrete paving. Rock retaining walls will be installed where the proposed trail traverses steep cross slopes. All fill material will be obtained from a clean, permitted local source. Elevated boardwalks will be installed at wetland crossings and are not considered fill material. No soil disturbance will occur in wetland areas. Total areas and volumes are provided in Tables 1 and 2 below.

Table 1. Estimated Area of Fill Material for the MFSOST Project		
Activity	Estimated Area (Square Feet)	
Crushed Limestone Trail Segments	6,200	
Boardwalk Trail Segments	7,500	
Cement Concrete Paving ROW Improvements	750	
Rock Retaining Walls	200	
Estimated Total:	14,650	

Table 2. Estimated Cut, Fill, and Strip Volumes for the MFSOST Project		
Cut Volumes (Cubic Yards)	Fill Volumes (Cubic Yards)	Strip Volumes (Cubic Yards)
160	100	240

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

Erosion during construction could occur as a result of construction activities, particularly earthwork. TESC measures will be required to be in place before any construction activity or clearing occurs.

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

Cement concrete paving, ROW improvements and the crushed limestone trail segments will create approximately 7,150 square feet of impervious area. The boardwalk trail segments are considered pervious. No other impervious areas are proposed.

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

Rockery installed at steep slope crossings will prevent erosion at these locations. The potential for erosion during construction will be controlled with adherence to BMPs outlined in the Stormwater Pollution Prevention Plan (SWPPP) and Temporary Erosion and Sediment Control (TESC) plan, per the Department of Ecology's Stormwater Management Manual for Western Washington. Soils will remain undisturbed to the maximum extent possible.

2. Air Find help answering air questions

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

Construction equipment will generate emissions typical of small construction projects. Anticipated construction equipment includes backhoes, excavators, concrete mixer, trucks, jackhammers, chainsaws, and hand tools. The completed project will not produce emissions.

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

There are no known offsite sources of emissions or odor that will affect the proposal.

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

The following measures may be implemented for dust control: seeding and sodding, mulching, plastic covering, and early application of gravel base on limestone trail segments.

- **3. Water** Find help answering water questions
- a. Surface Water: Find help answering surface water questions
- 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 the headwaters of Middle Fork Spring Creek, which is mapped as a Type F, fish bearing stream on the SalmonScape Mapper (Washington State Department of Fish and Wildlife [WDFW] 2024). However, WDFW has determined that this upper portion of the stream is non-fish bearing, due to multiple piped stream segments (more than 1000 feet long) downgradient (Personal communication with Joel Ingram, June 13, 2024). The stream is mapped through the center of Wetland L. Several other wetlands have been documented on the MFSOST property. Wetlands in the project area are summarized in Table 3.

	Table 3. Wetlands	Delineated in the Study	Area.
Wetland Name	USFWS Classification ^a	Hydrogeomorphic Classification ^b	Wetland Rating Category (2014) ^c
Α	PFO	Depressional	III
В	PFO	Depressional	IV
C	PFO	Depressional	III
D	PFO	Depressional	Ш
E	PFO	Depressional	Ш
F	PFO	Depressional	III
G	PSS	Depressional	Ш
Н	PFO	Depressional	III

I	PFO	Depressional	III
J	PFO	Depressional	II
K	PFO	Depressional	≡
L	PAB, PEM, PSS, PFO	Depressional, Riverine	II
М	PSS	Depressional	III
T	PEM, PSS	Slope, Depressional	III

^a U.S. Fish and Wildlife Service classification is based on FGDC (2013): palustrine forested (PFO), palustrine scrub-shrub (PSS), palustrine emergent (PEM), and palustrine aquatic bed (PAB).

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 project will work over Wetlands L and T and wetland buffers. Work will occur within 200 feet of Wetlands A, B, C, D, E, J, K, and M. See attached site plans.

No direct, permanent or temporary wetland impacts are proposed with this project. Three narrow sections of wetland (two over Wetland L and one over Wetland T) will be crossed with boardwalks. Site preparation at the three wetland boardwalk crossings will be completed with hand tools to trim vegetation within the boardwalk footprint, but no grading will occur within wetlands. No equipment will be allowed to drive through wetlands, but trucks and other vehicles rated for the boardwalk trail segments may drive on constructed boardwalk segments. The boardwalks will be installed using hand tools where they cross wetland segments and in areas where vehicular access is restricted due to wetland crossings (within the 10-foot-wide boardwalk width). The minimal excavation foundations for the boardwalk segments will be installed with hand tools to minimize ground disturbance.

Permanent, indirect wetland impacts are anticipated due to shading from boardwalks over approximately 358 square feet of Wetlands L and T. The shading from the boardwalks could limit vegetation growth under the boardwalk. As compensation for the loss of vegetation function in these small wetland segments, a portion of Wetland T will be enhanced at a ratio of 6:1, per the Department of Ecology Wetland Mitigation in Washington State: Part 1 (Version 2) guidance for impacts to wetlands from shading. Buffer enhancement will occur adjacent to Wetland T, which is also near Wetland L and adjacent to the proposed wetland enhancement area. This area was determined to be an appropriate buffer enhancement area due to the predominance of herbaceous and invasive species with minimal tree and shrub vegetation. Adding native woody plants in this area will expand the existing forested habitat near Wetlands T and L, buffering disturbance between the trail and Wetlands T and L and improving ecological buffer functions of this area over existing conditions.

Approximately 12,790 square feet of wetland buffer will be permanently impacted by the project from the trail (concrete, limestone, and boardwalk) and retaining walls. These impacts will be offset at a 1.25:1 ratio by enhancing an area of buffer onsite (near Wetlands A,E, J and K) that is disturbed and overgrown with invasive species and is located close to a raptor nest tree.

Temporary wetland buffer impacts are estimated at 6,578 square feet from equipment access and

b Hydrogeomorphic classification is based on FGDC (2013).

^c Wetland Category is based on the Washington State Department of Ecology (Ecology) wetland rating system (Hruby 2014).

grading to achieve necessary slopes. All temporarily disturbed buffers will be restored to pre-disturbance conditions.

Approximately 2,796 square feet of permanent, partial wetland buffer impacts will occur due to a permanent conversion of forested buffer to mowed herbaceous vegetation along trail edges. This will include 2-3 feet of wetland buffer on both sides of the trail beyond the 1-foot shoulder side slopes that will need to be mowed to prevent vegetation encroachment over the trail. This area will still provide partial buffer functions, such as infiltration/groundwater recharge and water quality functions, but will provide reduced runoff interception, evapotranspiration, and habitat functions due to the loss of tree and shrub layer. Because only a partial buffer function loss will occur, a reduced mitigation ratio is proposed for this impact (0.5:1), which is similar to the ratio recommended by Ecology for partial wetland function loss from shading impacts.

Approximately 21 significant trees will be impacted which will be offset by planting trees on site at a 2:1 ratio.

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 fill or dredge material will be placed or removed from surface waters or wetlands.

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

No surface water withdrawals or diversions will be required.

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

There is a City Frequently Flooded Area associated with Middle Fork Spring Creek and Wetland L, but the proposed improvements do not lie within the 100-year floodplain.

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

No waste materials will be discharged to surface waters.

- **b. Ground Water:** Find help answering ground water questions
- Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a
 general description of the well, proposed uses and approximate quantities withdrawn from the
 well. Will water be discharged to groundwater? Give a general description, purpose, and
 approximate quantities if known.

The project will not require groundwater withdrawals.

2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals...; agricultural; etc.).

Describe the general size of the system, the number of such systems, the number of houses to be

served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste discharges into the ground are required for this project.

- c. Water Runoff (including stormwater):
- a) 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 MFSOST project area does not include any existing improvements, i.e., no hard surfaces are removed or replaced. The proposed project does not include any vehicular hard surfaces, i.e., no pollution-generating hard surfaces are proposed. Stormwater will be managed to meet the requirements of the Washington State Department of Ecology and City of Bellingham. The MFSOST project drains to Wetland L which discharges to Middle Fork Spring Creek within the Squalicum Creek watershed.

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

Spills from construction equipment could potentially occur but will be mitigated by a Spill Prevention, Control, and Countermeasures (SPCC) plan.

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

The project will not alter existing drainage patterns.

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

A SWPPP and TESC plan and associated best management practices will be implemented to prevent stormwater pollution and erosion.

4. Plants Find help answering plants questions

a.

Ch	eck the types of vegetation found on the site:
	☑ deciduous tree: alder, maple, aspen, other
	⊠ evergreen tree: fir, cedar, pine, other
	<u>⊠</u> shrubs
	<u>⊠</u> grass
	pasture
	crop or grain
	\square orchards, vineyards, or other permanent crops.
	other types of vegetation

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

Approximately 25,000 square feet of vegetation will be permanently or temporarily disturbed for this project. A majority of this vegetation is a second-growth, deciduous forest with scattered conifers. A small portion of this vegetation consists of mowed grass within the W. Stuart Road ROW. Approximately 21 significant trees (between 6-18" diameter at breast height) will be removed to complete this project. No landmark trees will be removed. Construction could temporarily alter 10,000 square feet for staging and access and will be located outside of wetlands and buffers.

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

There are no rare plants or ecosystem mapped by Washington Department of Natural Resources Natural Heritage Program in the vicinity. No listed or endangered plant species were observed during site visits.

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

All temporarily disturbed areas within wetland buffers and non-buffer uplands, will be restored with native vegetation or restored to grass where pre-disturbance conditions consisted of grass. Permanent loss of buffer area due to the trail will be compensated for by providing on-site buffer enhancement at a 1.25:1 ratio (12,886 square feet of new buffer and 3,102 square feet of buffer enhancement). Approximately 2,796 square feet of partial buffer impact (i.e. permanent buffer conversion from forest to herbaceous vegetation) will be compensated for by providing 1,398 square feet of buffer enhancement at a 0.5:1 ratio, in the buffer of Wetland T.

Indirect wetland impacts will occur to small segments of Wetlands L and T (358 square feet) due to shading over the wetland by boardwalk trail segments.

Shading caused by the 10-foot-wide boardwalk segments could result in a loss or conversion from scrub/shrub vegetation to emergent wetland vegetation over approximately 358 square feet of wetland area. These indirect impacts will be offset by enhancing a portion of Wetland L at a 6:1 ratio (approximately 2,148 square feet of wetland enhancement). The loss of 21 significant trees will be compensated for at a 2:1 ratio, which will be added near the trail corridor, in Wetland T and its buffer, and between the trail and the raptor nest tree.

- e. List all noxious weeds and invasive species known to be on or near the site.
 - Himalayan blackberry (*Rubus bifrons*)
 - Reed canarygrass (Phalaris arundinacea)
 - English ivy (Hedera helix)
 - English holly (*Ilex aquifolium*)

5. Animals Find help answering animal questions

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

Examples include:

- Birds: hawk, heron, eagle, songbirds, other:
- Mammals: deer, bear, elk, beaver, other:
- Fish: bass, salmon, trout, herring, shellfish, other:

Black-tailed deer (*Odocoileus hemionus columbianus*) have been observed on site. Based on the WDFW Priority Habitats and Species mapping, and Statewide Washington Integrated Fish Distribution mapping, Middle Fork Spring Creek is gradient accessible to several fish species including coastal cutthroat (*Oncorhynchus clarkii*), coho salmon (*Oncorhynchus kisutch*), and chum salmon (*Oncorhynchus keta*). However, a WDFW fish passage report from 2001 indicates a total fish barrier approximately 4,100 feet downstream of the project area near the confluence with West Fork Spring Creek rendering this site inaccessible to anadromous fish. Bird species observed in the study area during the field assessment consist of relatively common resident and migratory species.

A raptor nest, which could potentially be a bald eagle nest, is located in the north-center of MFSOST property. The nest was observed by biologists on August 19, 2024 and no eagles were observed in the nest at that time. However, if the nest was occupied in 2024, it's likely the eagles had fledged by August 19. Monitoring to verify use of the nest will occur during the 2025 breeding season. The project will apply for a Bald Eagle Permit and implement appropriate design and construction avoidance and minimization measures as needed. Upon discovery of the nest location, the trail was redesigned to be located further from the nest tree in order to minimize temporary construction disturbance and long-term disturbance from pedestrians and dogs utilizing the trail. The trail will be a minimum of 100 feet from the nest tree.

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

There are no ESA-listed species likely to occur in the study area. Middle Fork Spring Creek is gradient accessible to steelhead (*Oncorhynchus mykiss*) and bull trout (*Salvenlinus confluentus*), both of which are listed as threatened under the Endangered Species Act (ESA). However, the downstream fish barrier precludes fish access to the project area. U.S. Fish and Wildlife Service (USFWS) maps two threatened birds as possibly occurring in the study area; marbled murrelet (*Brachyramphus marmoratus*), and yellow-billed cuckoo (*Coccyzus americanus*). North American wolverine (*Gulo luscus*) is also mapped as potentially occurring in the study area by USFWS. There is no designated critical habitat in the area, and suitable habitat is not present for any of the above species in the project vicinity.

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

The project site is within the Pacific flyway, one of the four major north-south migration routes in the Americas for migratory birds. Washington State is part of the Pacific flyway.

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

Temporary vegetation and habitat impacts will be restored with native species. Additional buffer enhancement areas will remove invasive blackberry and provide a more diverse and natural habitat available to wildlife. Wetland enhancement will include removing invasive reed canary grass and planting native species preferred by native wildlife.

Dogs will be encouraged to stay on-leash to limit wildlife disturbance. Boardwalks and associated handrail will encourage pedestrians to stay on the trail which will limit impacts to the surrounding habitat.

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

There are no known invasive animal species on or near the site.

- 6. Energy and Natural Resources Find help answering energy and natural resource questions
- What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The complete project will not require energy.

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

The project will not affect the use of solar energy by adjacent properties.

3. 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.

None proposed.

7. Environmental Health Find help with answering environmental health questions

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

During construction, spills from construction equipment are possible.

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

There is no known contamination at the site.

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

There are no known existing hazardous conditions on the site or in the vicinity.

Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

During construction, lubricants, diesel, and/or gasoline used to operate construction equipment and other potentially hazardous building materials may be used.

4. Describe special emergency services that might be required.

None are required.

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

Documentation of a SWPPP and TESC will be prepared and implemented. Implementation of proper construction BMPs will be outlined in the SWPPP and TESC plan to avoid environmental health hazards. A Spill Control and Countermeasures Plan (SCCP) will be prepared and implemented to prevent and mitigate spills if necessary.

b. Noise

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

Traffic and noise typical of the adjacent residential and commercial areas are present but will not affect the project.

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

Temporary short-term noise will occur during construction equipment operations, which will be limited to normal construction hours as required by the City.

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

None are proposed.

- 8. Land and Shoreline Use Find help answering land and shoreline use questions
- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The project site is currently used as undeveloped open space and a public park (Cordata Park). Adjacent properties include high and moderate residential development, commercial development, open spaces, and parks.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Historically, the project area appears to have been a farm with livestock, based on aerial images from the 1970s. The project site is not known to have been used as forest lands. No existing agricultural or forest land of long-term commercial significance will be converted to other uses.

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

The proposal will not affect or be affected by surrounding working farm or forest land operations.

c. Describe any structures on the site.

There is an existing trail system and associated park structures in Cordata Park. There are no known structures on the MFSOST property.

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

No structures will be demolished.

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

The portion of the project site at 200 W Stuart Road is zoned Industrial, Light/Planned (I-31). The northwest portion of the project site (on Cordata Park) is zoned Public, Park.

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

The 2016 Comprehensive Plan shows the MFSOST and Cordata Park parcel as Industrial and Commercial/Industrial/Multifamily Residential, respectively.

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

Not applicable.

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

There are several critical areas identified on site:

- The City of Bellingham City IQ maps two types of Frequently Flooded Areas associated with Middle Fork Spring Creek including: "Elevation Modeled Depressional Area" and "Wetlands."
- Middle Fork Spring Creek is a Fish and Wildlife Habitat Conservation Area.
- Wetlands identified on site are regulated by the City as Wetland critical areas.
- The site is mapped by City IQ as occurring within an area of high Seismic Hazard potential. The 2023 Geotechnical report by AESI states no mitigations other than complying with 2018 International Building Code (IBC) seismic design recommendations are recommended.
- i. Approximately how many people would reside or work in the completed project?

No people will live or work in the completed project.

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

The project will not displace any people.

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

None proposed.

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

The project aims to improve trail connectivity between Cordata Park which will benefit existing surrounding land uses and allow for non-motorized transportation between the Cordata and Meridian neighborhoods. The proposed trail is part of a larger City effort to complete an east-west multi-use trail corridor across northern neighborhoods.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term

commercial significance, if any.

None proposed.

- 9. Housing Find help answering housing questions
- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

The project will not provide housing units.

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

No housing units will be eliminated.

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

None proposed.

- 10. Aesthetics Find help answering aesthetics questions
- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The tallest proposed structure will be the boardwalk handrails which will be approximately 16.5 feet above the finished grade.

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

No views will be altered or obstructed.

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

None proposed.

- 11. Light and Glare Find help answering light and glare questions
- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The proposal will not produce light or glare.

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

Not applicable.

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

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

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

None proposed.

12. Recreation Find help answering recreation questions

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

The project is located within and adjacent to Cordata Park which includes a includes trail network, a playground, picnic areas and shelters, pickleball and basketball courts, a parkour court, bike pump track, spray park, adult exercise equipment, and other park structures.

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

The project will not displace any existing recreational uses.

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

The project will improve recreational opportunities by providing a trail through an undeveloped open space, which will improve pedestrian access between Cordata Park and the Meridian neighborhood.

13. Historic and Cultural Preservation Find help answering historic and cultural preservation questions

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

No buildings or structures are located on the site. A cultural resource study for 200 W. Stuart Road and the W. Stuart Road ROW has not been completed.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

A cultural resources study was completed in 2017 by Drayton Archaeology for Cordata Park, including the northwest portion of the project site. This survey included background review and a subsurface survey. No evidence of precontact or historic archaeological deposits were encountered. The report recommended a "determination of No Historic Properties Affected to the SHPO and all other consulting parties."

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. The applicant will consult with local tribes and the Department of Archeology and Historic Preservation (DAHP) prior to initiating any site work to determine if additional measures are needed to assess potential impacts to cultural resources.

The project area within Cordata Park was reviewed by Drayton Archaeological in 2017 and this included a background review and field investigation with 34 shovel prove excavations. One of these shovel probe sites (JH3) was located within the Middle Fork Spring Open Space project area.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

If project activities result in the discovery of archaeological materials or human remains, project staff will follow an inadvertent discovery protocol. Upon discovery of archaeological materials, project staff will halt work in the immediate vicinity of the find and contact technical staff at DAHP and representatives of identified area tribes.

14. Transportation Find help with answering transportation questions

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The MFSOST site is currently served by Meridian Street and West Stuart Road. Cordata Park is currently accessed by Cordata Parkway.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Yes, the site is served by the Whatcom Transit Authority. The nearest bus stops to the proposed West Stuart Road trail entrance are located approximately 0.25 miles away on Meridian Street. The nearest bus stop to Cordata Park is located on Cordata Parkway at the southern park entrance.

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

Extension of the existing sidewalk within West Stuart Road ROW will connect the trailhead to the existing sidewalk. The proposed public trail will improve connectivity for pedestrians and bicycles.

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

The project will not use or occur in the immediate vicinity of water, rail, or air transportation.

e. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be

trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

The complete project is not anticipated to generate additional vehicular trips. Users are anticipated to access the trail mainly on foot or bike via Cordata Park or via the Meridian neighborhood to the east.

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

The proposal will not interfere with, affect, or be affected by the movement of agricultural and forest products.

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

None proposed.

15. Public Services Find help answering public service questions

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

The project will not result in an increased need for public services.

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

None proposed.

16. Utilities Find help answering utilities questions

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

None.

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 utilities are proposed for this project.

C. Signature Find help about who should sign

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.



Type name of signee: Paul Knippel

Position and agency/organization: Greenways Project Manager/City of Bellingham

Date submitted: 1/16/2025

D. Supplemental sheet for nonproject actions Find help for the nonproject actions worksheet

IT IS NOT REQUIRED to use this section for project actions.

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

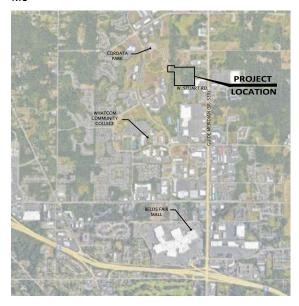
- 1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?
 - Proposed measures to avoid or reduce such increases are:
- 2. How would the proposal be likely to affect plants, animals, fish, or marine life?
 - Proposed measures to protect or conserve plants, animals, fish, or marine life are:
- 3. How would the proposal be likely to deplete energy or natural resources?
 - Proposed measures to protect or conserve energy and natural resources are:

- 4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?
 - Proposed measures to protect such resources or to avoid or reduce impacts are:
- 5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?
 - Proposed measures to avoid or reduce shoreline and land use impacts are:
- 6. How would the proposal be likely to increase demands on transportation or public services and utilities?
 - Proposed measures to reduce or respond to such demand(s) are:
- 7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

MIDDLE FORK SPRING OPEN SPACE TRAIL

BELLINGHAM PARKS AND RECREATION 60% PLAN SUBMITTAL

VICINITYMAP NTS



DRAWING INDEX

SHEET	APPR.	DRAWING TITLE
1	G1 0.1	COVER SHEET
2	EX 02	TOPOGRAPHIC SURVEY + EXISTING CONDITIONS
3	EX 03	TOPOGRAPHIC SURVEY + EXISTING CONDITIONS
4	EX 04	TOPOGRAPHIC SURVEY + EXISTING CONDITIONS
5	G1.02	OVERALL KEY PLAN
6	G2.01	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN
7	G2.02	TEMPORARY EROSION AND SEDIMENT CONTROL DETAILS
8	G3.01	TREE REMOVAL AND CLEARING PLAN
9	G3.02	TREE REMOVAL AND CLEARING PLAN
10	G3.03	TREE REMOVAL AND CLEARING PLAN
11	G4.01	CRITICAL AREAS IMPACTS PLAN
12	G4.02	MITIGATION PLAN
13	C1.01	DRAINAGE PLAN
14	C1.02	DRAINAGE PLAN
15	C1.03	DRAINAGE PLAN
16	L1.01	LAYOUT AND MATERIALS PLAN
17	L1.02	LAYOUT AND MATERIALS PLAN
18	L1.03	LAYOUT AND MATERIALS PLAN
19	L2.01	GRADING PLAN
20	L2.02	GRADING PLAN
21	L2.03	GRADING PLAN
22	L3.01	LANDSCAPE DETAILS
23	L3.02	LANDSCAPE DETAILS
24	L3.03	LANDSCAPE DETAILS
25	L3.04	LANDSCAPE DETAILS
26	L4.00	PLANTING SCHEDULE AND NOTES
27	L4.01	PLANTING PLAN
28	L4.02	PLANTING PLAN
29	L4.03	PLANTING PLAN
30	L4.04	PLANTING DETAILS
31	L4.05	PLANTING DETAILS

PROJECT DESCRIPTION

PARK IMPROVEMENT PLANS WHICH INCLUDE A PROPOSED TRAIL AND BOARDWALK SYSTEM TO PROVIDE PEDESTRIAN CONNECTION FROM W. STIJART ROAD TO CORDATA PARK

SITE ADDRESS

200 W STUART RD., BELLINGHAM, WA

LEGAL DESCRIPTION

LOTS 1, 2, 3 AND 4, BLOCK 52, "BAKER VIEW ADDITION TO THE CITY OF BELLINGHAM", ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 7 OF PLATS, PAGES 40 TO 45, INCLUSIVE.

SITUATE IN WHATCOM COUNTY, WASHINGTON.

CONTACTS

OWNER: DEPARTMENT OF PARKS & RECREATION CONTACT:

NICOLE OLIVER, PARKS DIRECTOR
PAUL T. KNIPPEL, PROJECT ENGINEER
PHONE: 360.778.7021
EMAIL: ptknippel@cob.org

LANDSCAPE ARCHITECT: BERGER PARTNERSHIP CONTACT(S): JASON HENRY

PHONE: 206.325.6877
EMAIL: jasonh@bergerpartnership.com

JENNINFER GARCIA PHONE: 206.325.6877 EMAIL: jenniferg@bergerpartnership.com

EMAIL: nschaner@herrerainc.com

CIVIL ENGINEER: HERRERA ENVIRONMENTAL CONSULTANTS

CONTACT:
NEIL SCHANER
PHONE: 360.684.1743

WETLANDS SPECIALIST: HERRERA ENVIRONMENTAL CONSULTANTS CONTACT:

LILIANA HANSEN
PHONE: 360.939.3755
EMAIL: lhansen@herrerainc.com

GEOTECHNICAL ENGINEER: ASSOCIATED EARTH SCIENCES INC.

JEFF LAUB PHONE: 425.827.7701 EMAIL: jlaub@aesgeo.com

SURVEYOR: WILSON ENGINEERING CONTACT: PAUL JONATHAN DARROW PHONE: 360.733.6100

EMAIL: pdarrow@wilsonengineering.com









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Date	No	Revision	Bv	_

PROJECT ENGINEER_______
DESIGNED/DRAWN______
INSPECTOR______

DIRECTOR PUBLIC WORKS E.C.J.

CITY ENGINEER ML.W.

ASSISTANT DIRECTOR M.A.O.

CITY OF BELLINGHAM, WASHINGTON PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION SCALE N.

Horiz. _

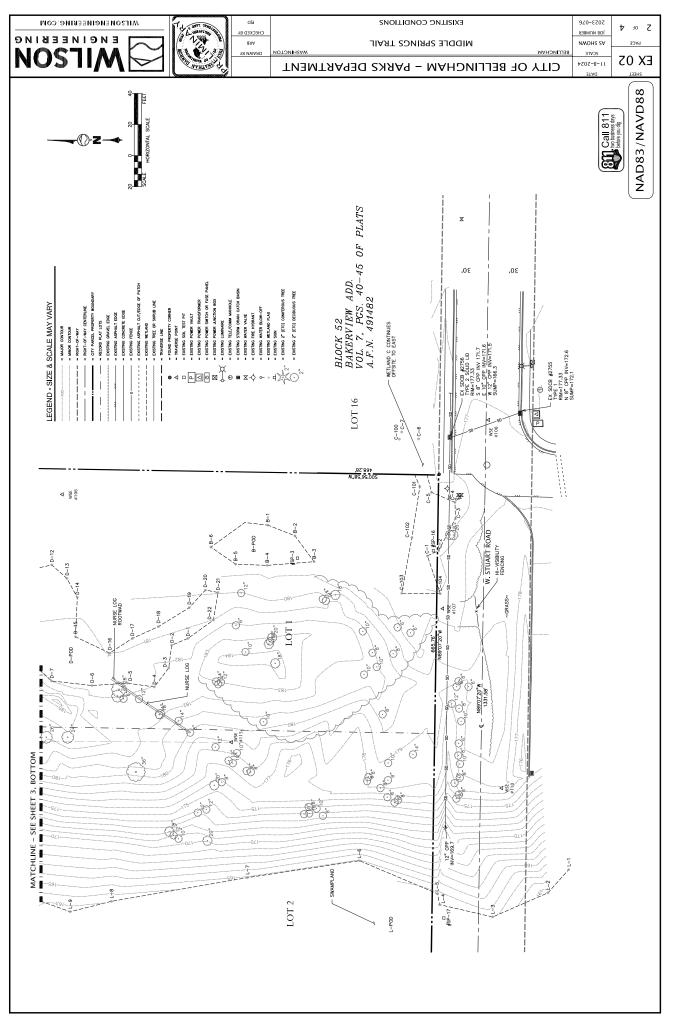
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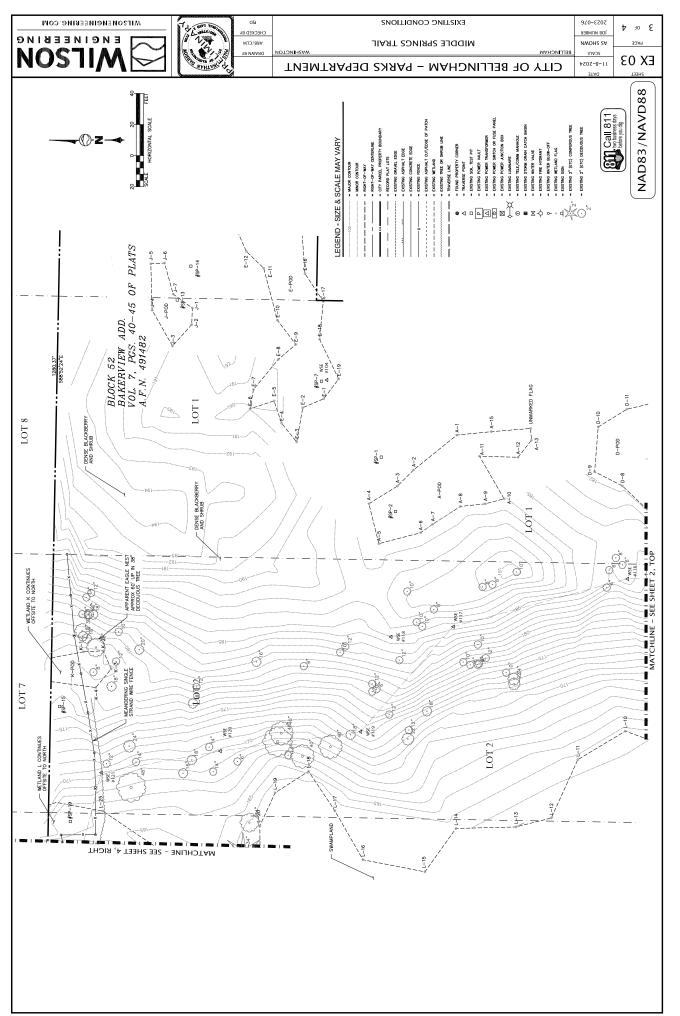
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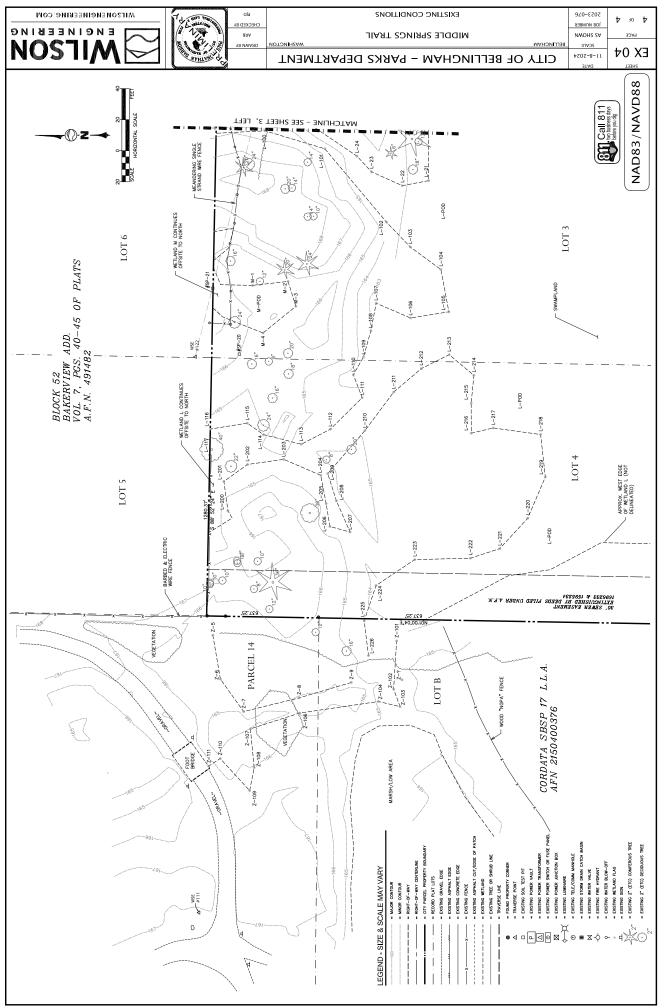
MIDDLE FORK SPRING OPEN SPACE TRAIL
G1.01

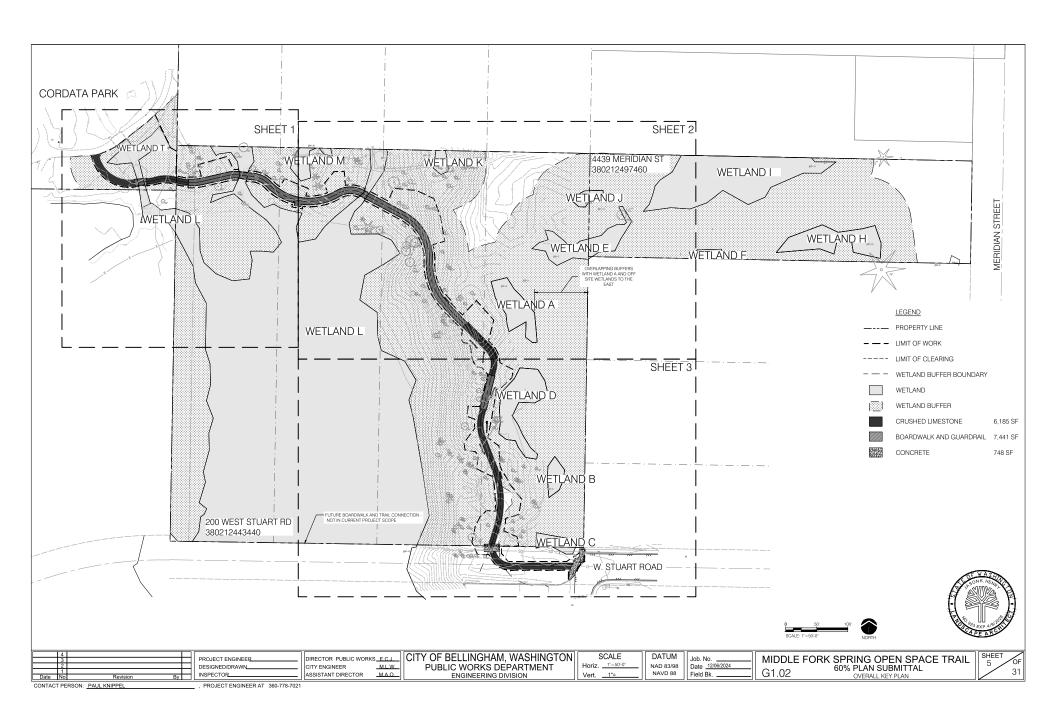
60% PLAN SUBMITTAL
COVER SHEET

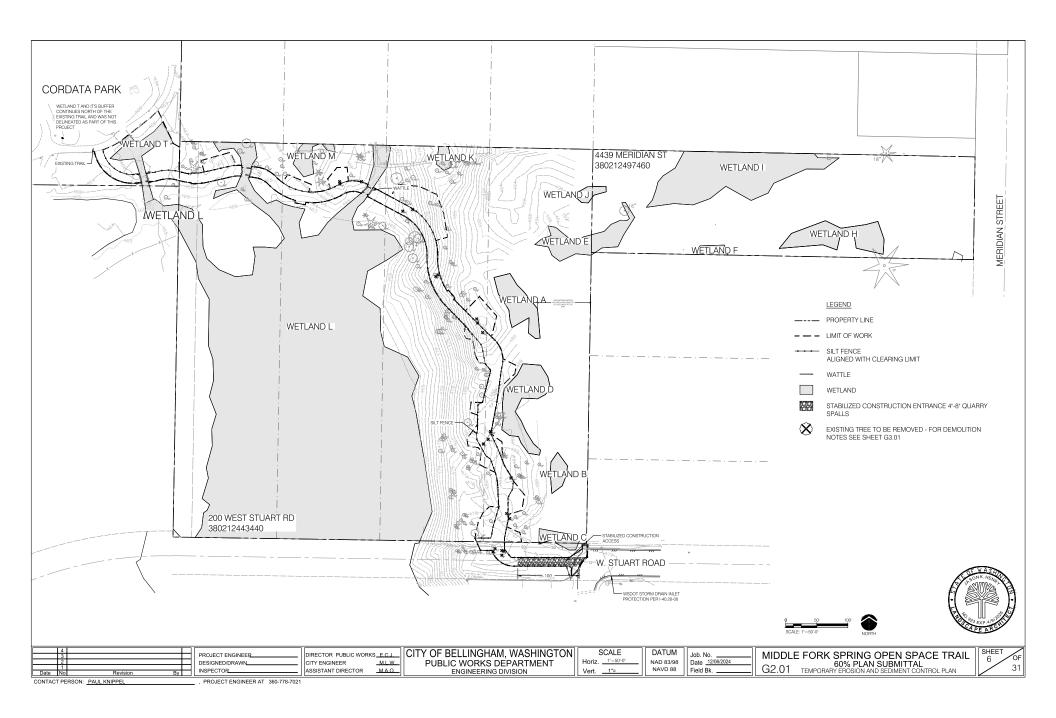












EMPORARY EROSION AND SEDIMENT CONTROL NOTES

- ALL CLEARING & GRADING CONSTRUCTION MUST BE IN ACCORDANCE WITH CITY OF BELLINGHAM (COB) CLEARING & GRADING 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 BELLINGHAM PRIOR TO CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND THE PROJECT ENGINEER TO CORRECT ANY ERROR, OMISSION OR VARIATION FROM THE ABOVE REQUIREMENTS FOUND IN THESE PLANS.
- APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTIONS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
 A COPY OF THE APPROVED PLANS AND DRAWINGS MUST BE ON SITE DURING THE CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER REQUIRED OR
- RELATED PERMITS PRIOR TO BEGINNING CONSTRUCTION.
- THE IMPLEMENTATIONS OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF
- THE APPLICANTICONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION ESTABLISHED.
 THE SEE FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL DELERING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER TO NOT SETTED THE DRAINAGE SYSTEM OR ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS, DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS, DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.
- 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 BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANTICONTRACTOR FOR THE DURATION OF CONSTRUCTION.
- CLEARING SHALL 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 1 THROUGH APRIL 30, FROM MAY 1 THROUGH SEPTEMBER 30, EXPOSED SOILS MUST BE COVERED AT THE END OF EACH CONSTRUCTION WEEK AND ALSO AT THE THREAT OF RAIN
- 10. AT NOT TIME SHALL MORE THAN ONE FOOT SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE
- CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.

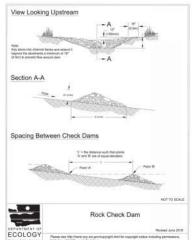
 11. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT.

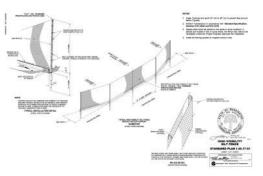
 12. THE CONTRACTOR MUST MAINTAIN A SWEEPER ON SITE DURING EARTHWORK AND IMMEDIATELY REMOVE SOIL THAT HAS BEEN TRACKED ONTO PAVED AREAS AS RESULT OF
- THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- 14. ANY EXCAVATED MATERIAL REMOVED FROM THE CONSTRUCTION SITE AND DEPOSITED ON PROPERTY WITHIN THE CITY LIMITS MUST BE DONE IN COMPLIANCE WITH A VALID CITY OF BELLINGHAM PERMIT. LOCATIONS FOR THE MOBILIZATION AREA AND STOCKPILED MATERIAL MUST BE APPROVED BY THE INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF ANY STOCKPILING
- 15. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 48 HOURS FOLLOWING A MAJOR STORM EVENT.

TREE PROTECTION DURING CONSTRUCTION NOTES

- ALL EXISTING TREES TO REMAIN SHOULD BE PROTECTED DURING CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF BELLINGHAM AND AS DEPICTED ON THE LANDSCAPE PLANS. KEEP ALL WORK AND EQUIPMENT OUT OF THE DRIP LINE. ALL TREE PROTECTION FENCING INCLUDING HIGH VISIBILITY FLAGGING ATTACHED TO THE TREE PROTECTION FENCING AS DEPICTED ON THE LANDSCAPE PLANS PRIOR TO STARTING CONSTRUCTION ACTIVITIES
- IN LIMITED AREAS IT MAY BE NECESSARY TO WORK INSIDE THE DRIP LINES OF EXISTING THESE TO REMAIN WHEN WORK INSIDE THE DRIP LINES IS NECESSARY, MINIMIZE THE EXTENT OF IMPACTS TO THE GREATEST DEGREE POSSIBLE BY USING HAND METHODS OR AN AIR SPADE, PROTECT IMPACTED AREAS UNDER THE DRIPLINE WITH A MINIMUM 6" DEPTH WOOD CHIP MULCH PLACED BENEATH 3/4" CONTINUOUS PLYWOOD TO PREVENT COMPACTION.
 THE CONTRACTOR SHALL COORDINATE SUPERVISION BY THE PROJECT ARBORIST OF ALL GROUNDWORK WITHIN THE TREE PROTECTION FENCING TO ASSESS ROOT IMPACTS
- AND GUIDE ROOT CUTTING AS NECESSARY THE CONTRACTOR SHALL ONLY CUT REQUIRED ROOTS LESS THAN 2" DIAMETER THAT INTERFERE WITH THE PROPOSED IMPROVEMENTS. EXPOSED ROOTS GREATER THAN 2" DIAMETER THAT ARE REQUIRED TO BE CUT IN ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS ARE SUBJECT TO RESULT IN CHANGES TO THE PROPOSED GRADING.
- EVEN WHEN THESE MEASURES ARE IN PLACE, MINIMIZE CONSTRUCTION ACTIVITIES INSIDE THE DRIPLINE AND DO NOT STORE OR STOCKPILE MATERIALS INSIDE THE DRIPLINE TO PREVENT SOIL COMPACTION, AVOID FOOT TRAFFIC IN THE ROOT ZONE.

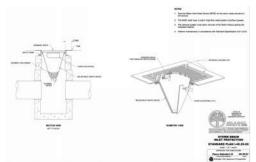
 5. REFER TO TREE REMOVAL AND CLEARING PLANS FOR ADDITIONAL TREE PROTECTION INFORMATION AND REQUIREMENTS.

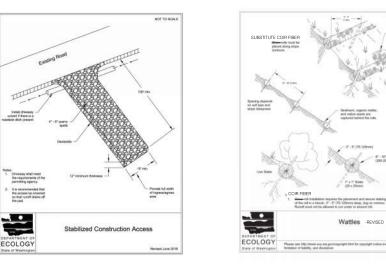


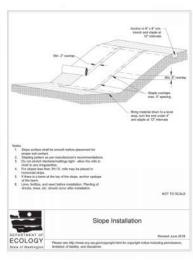


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T ENGINEER.	DIRECTOR PUBLIC WORK
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FOR	ASSISTANT DIRECTOR

CITY OF BELLINGHAM, WASHINGTON PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

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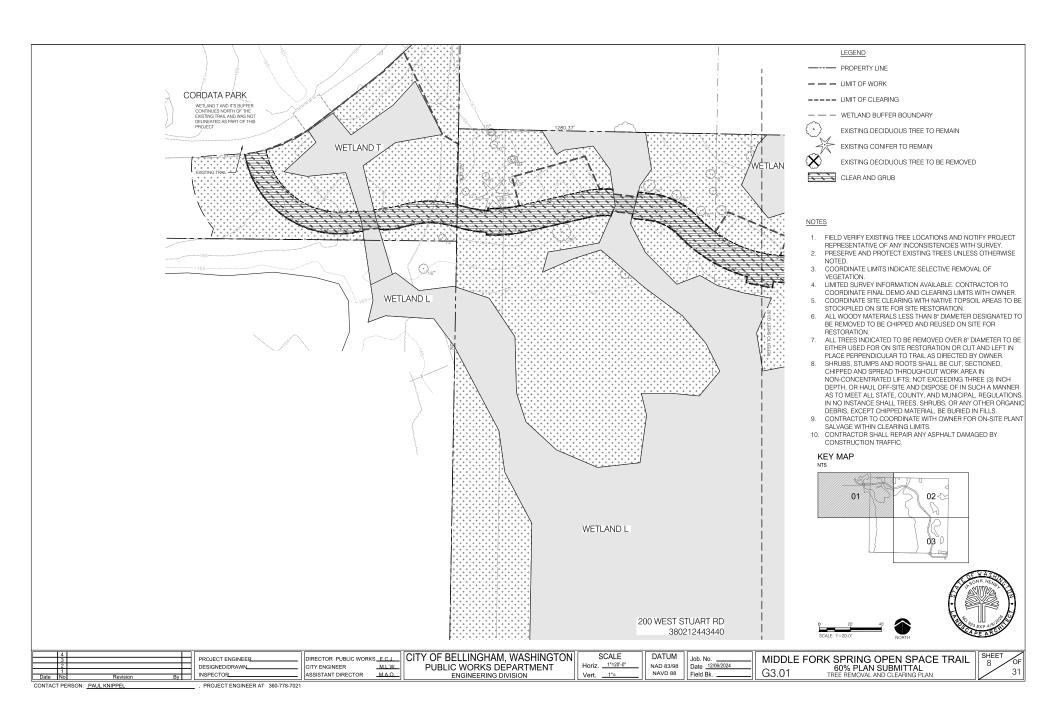
MIDDLE FORK SPRING OPEN SPACE TRAIL G2.02 TEMPORARY EROSION AND SEDIMENT CONTROL DETAILS

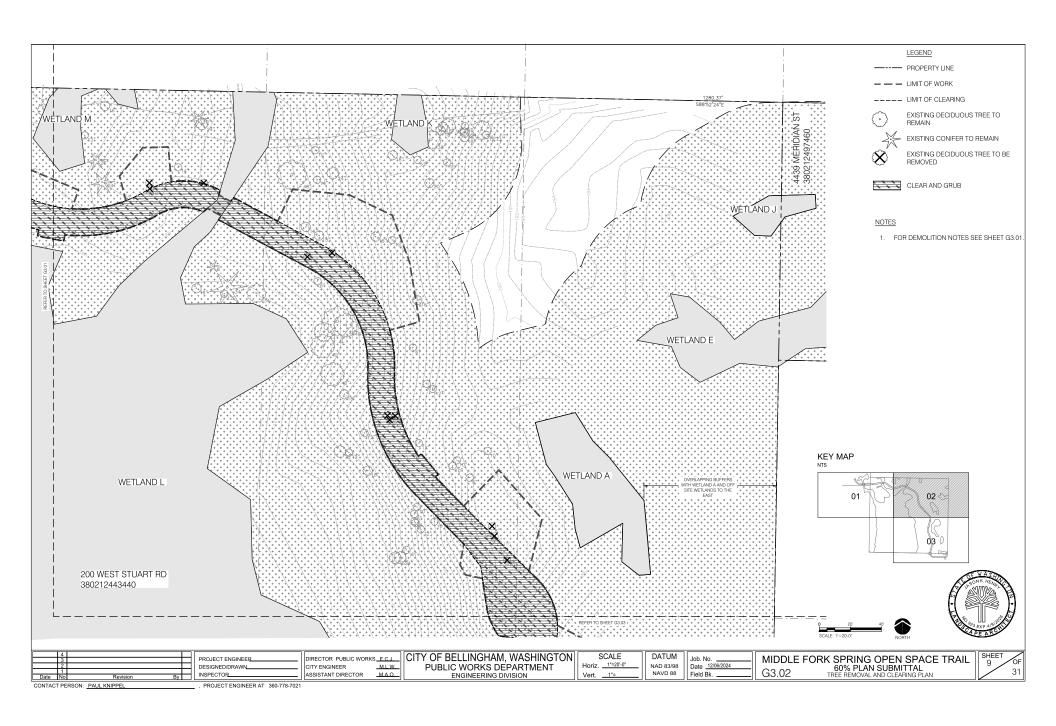


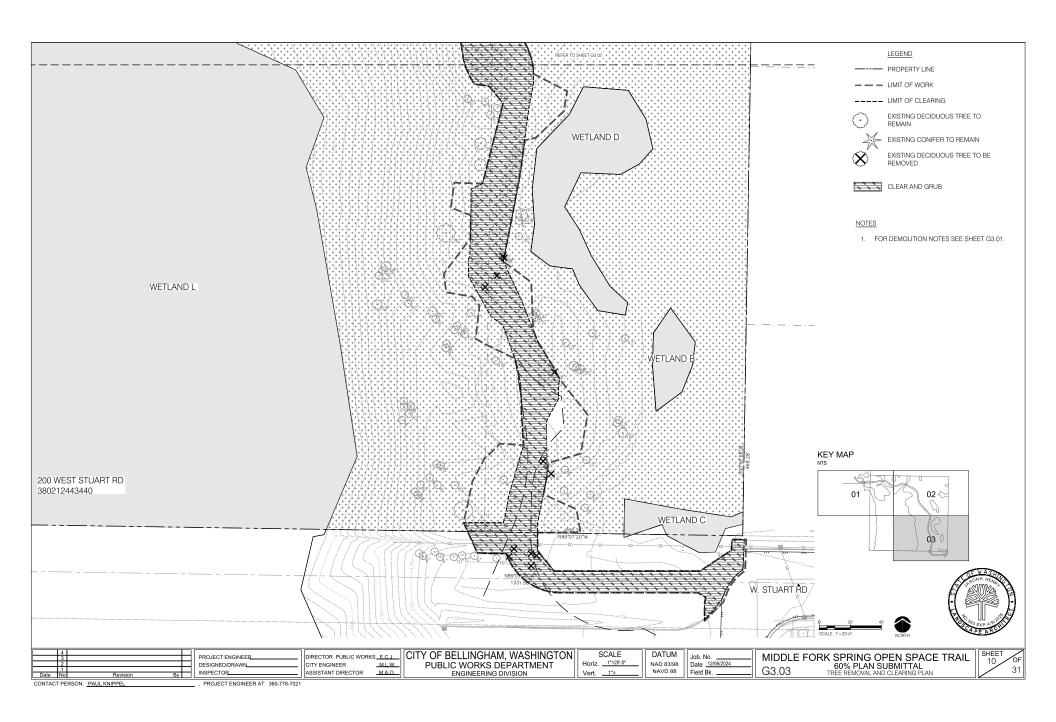
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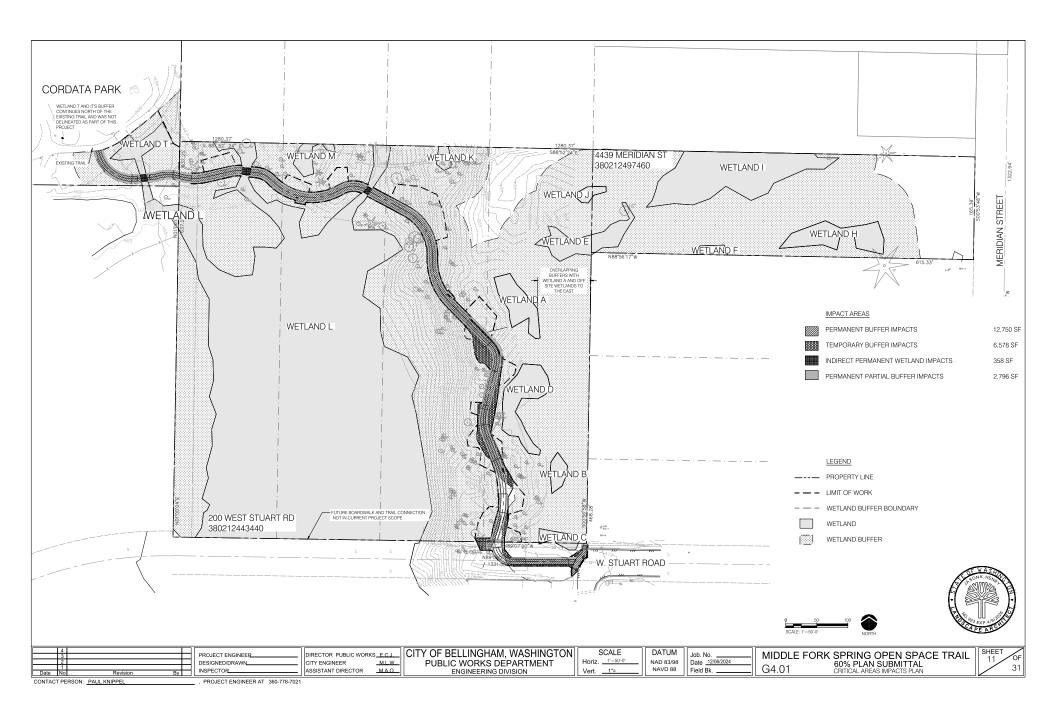
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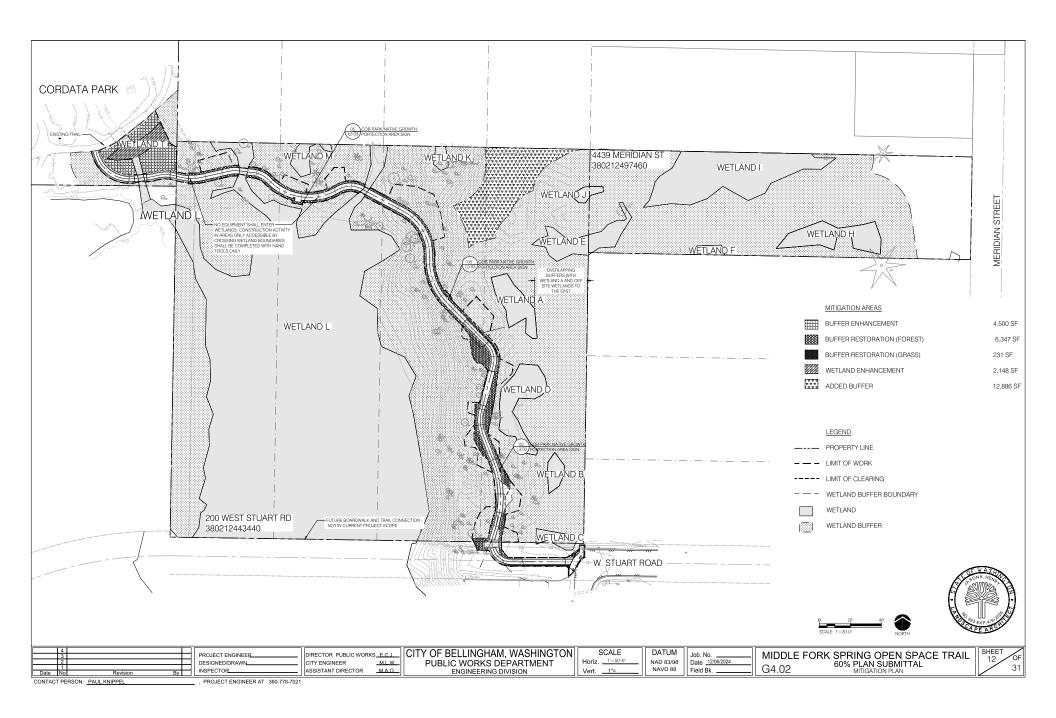
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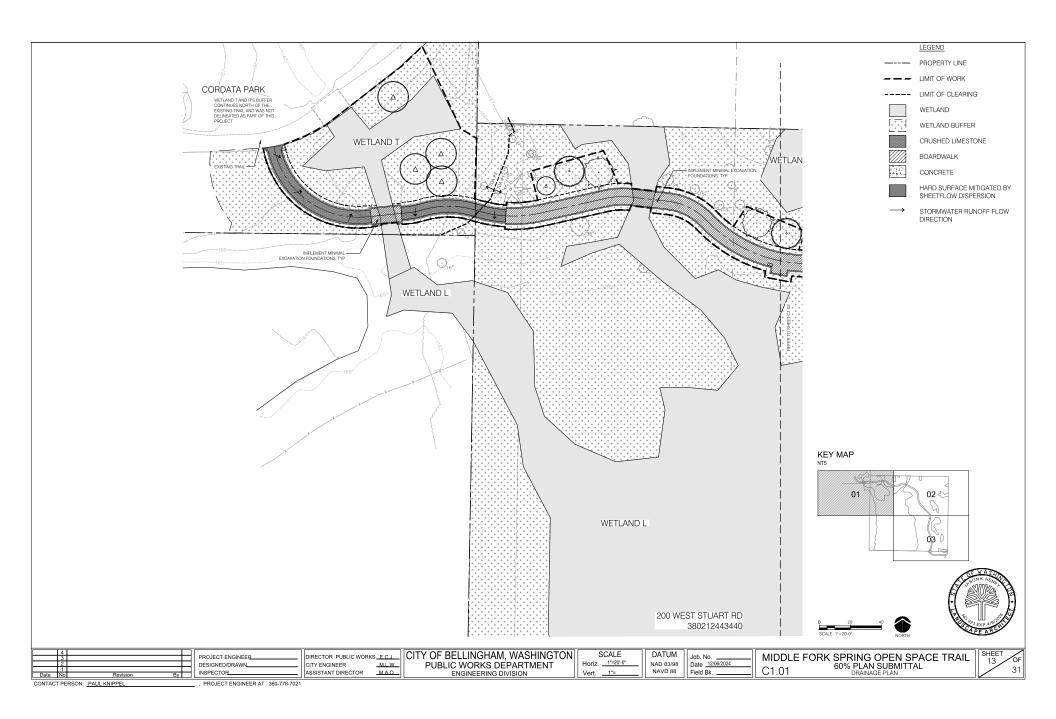


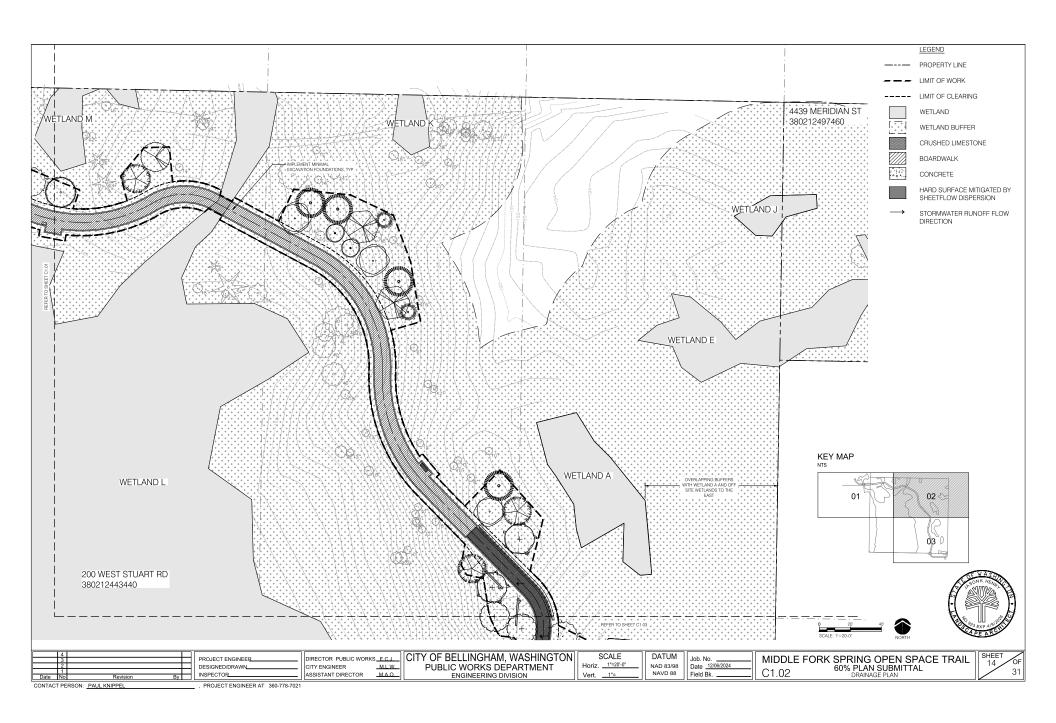


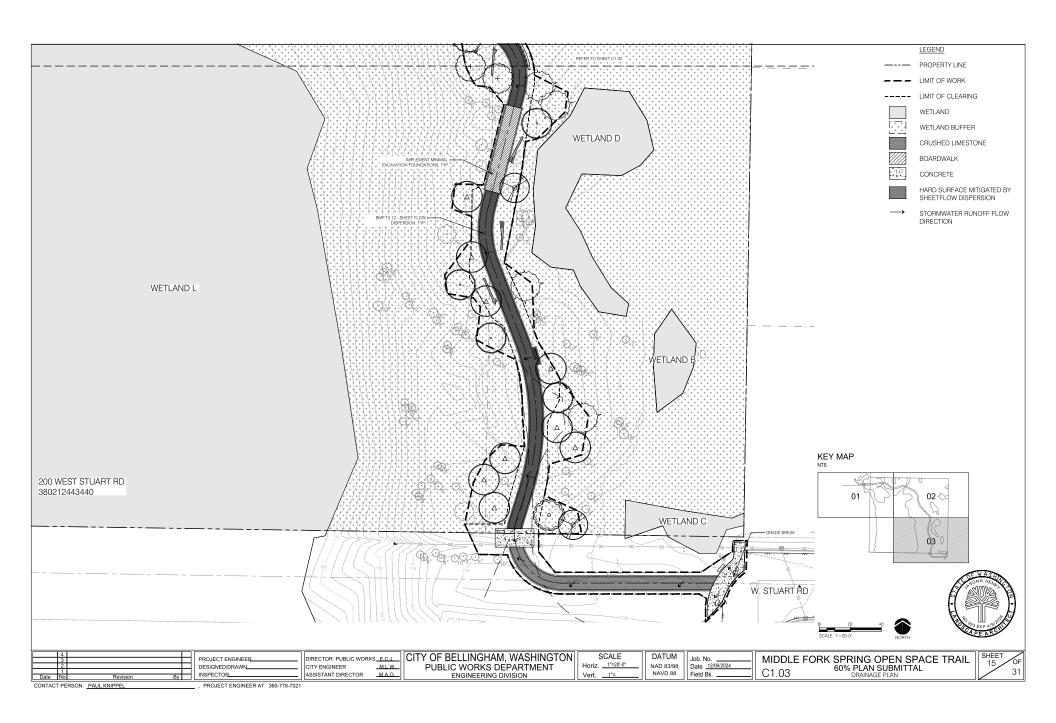


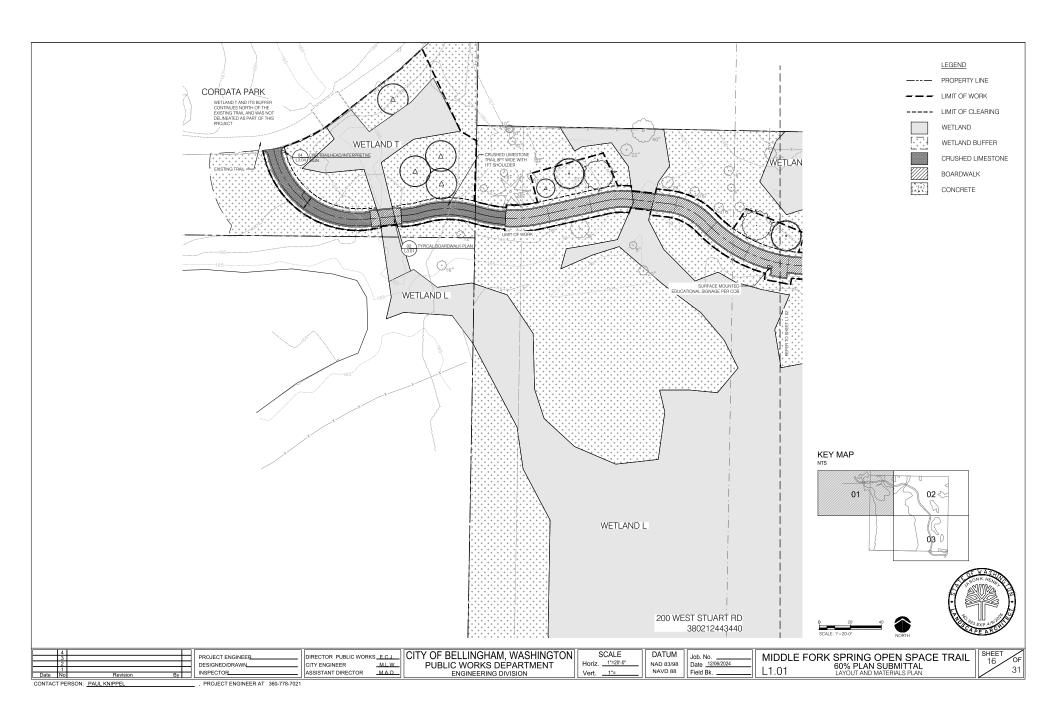


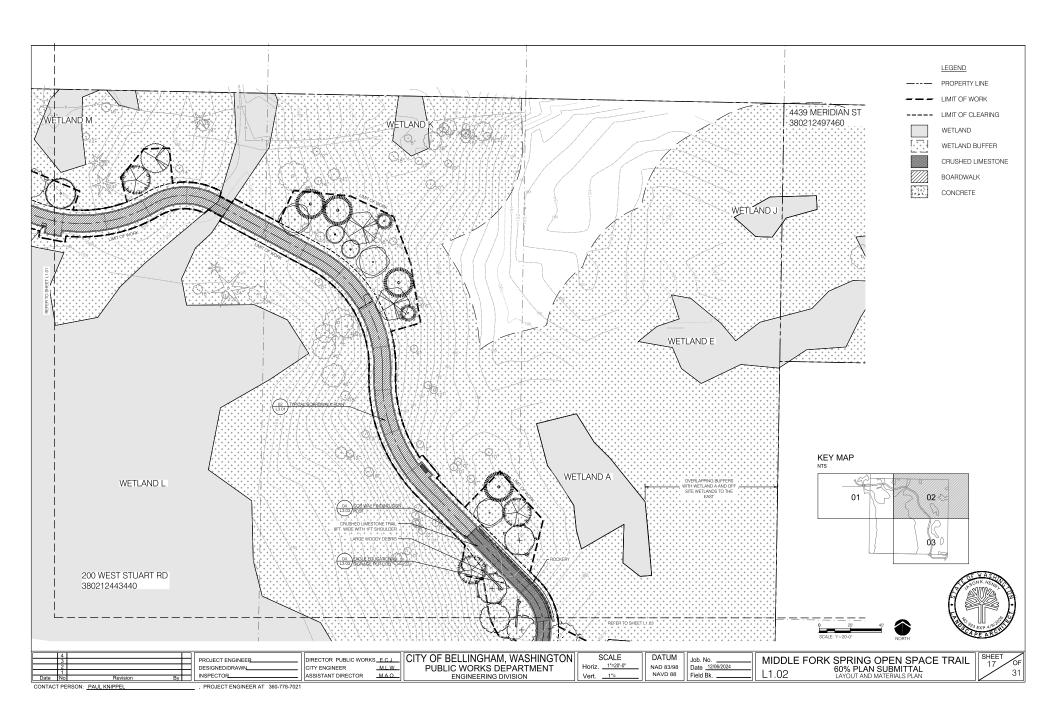


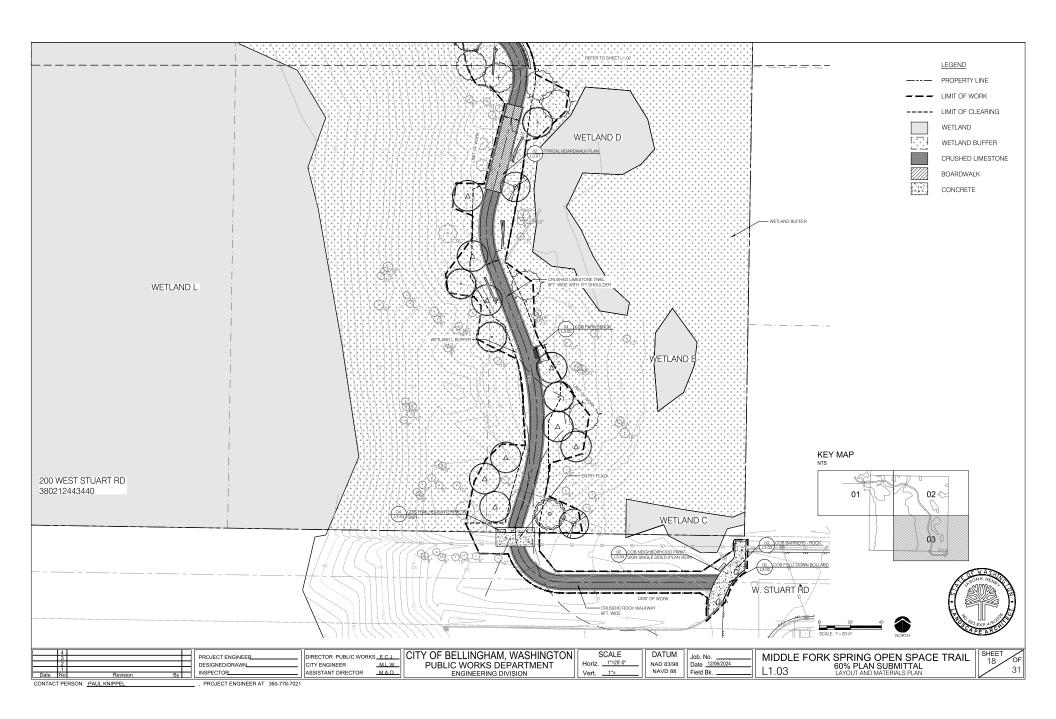


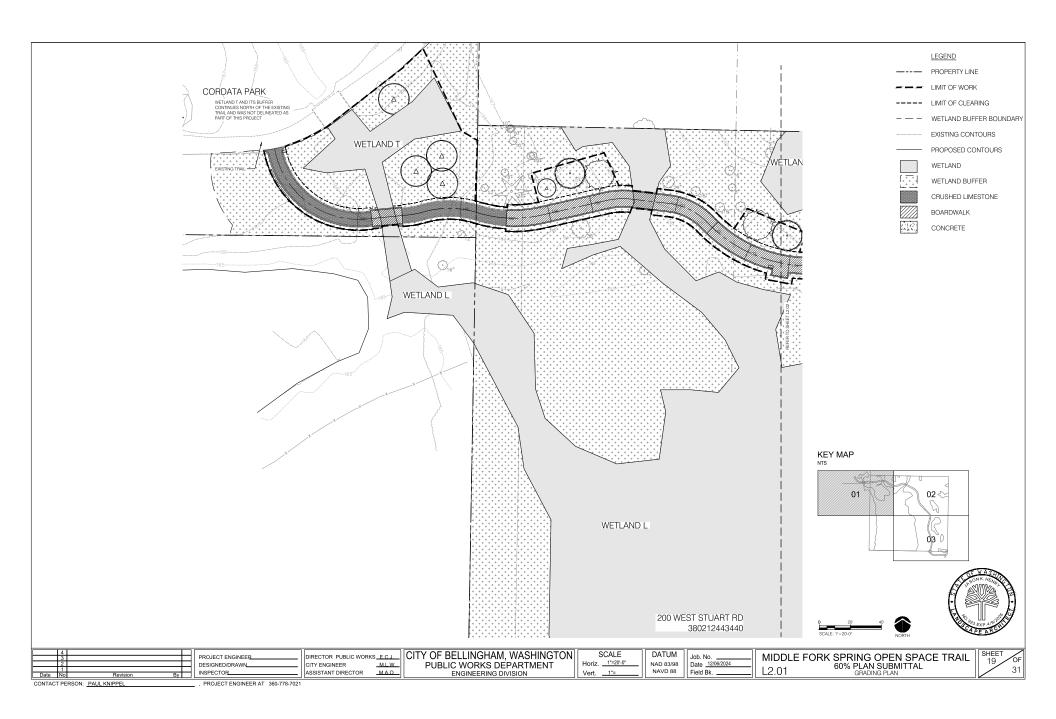


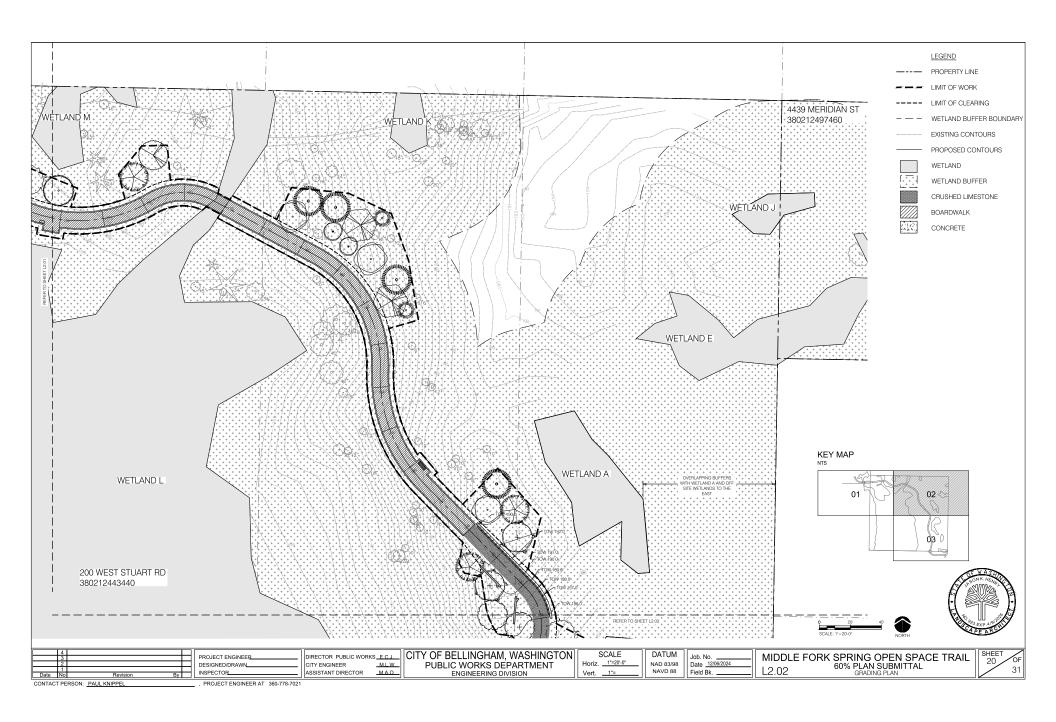


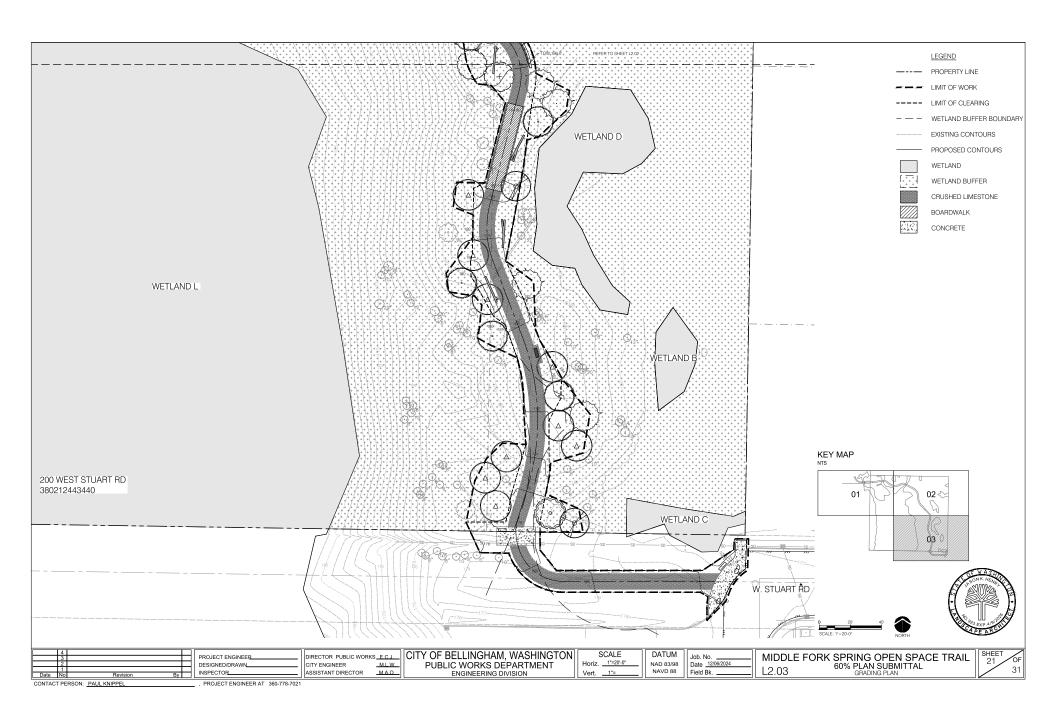


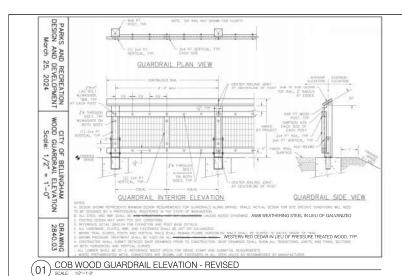






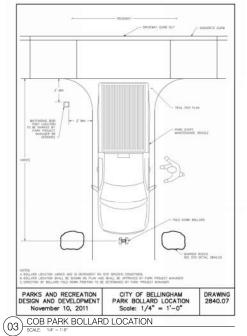


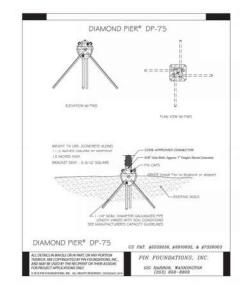


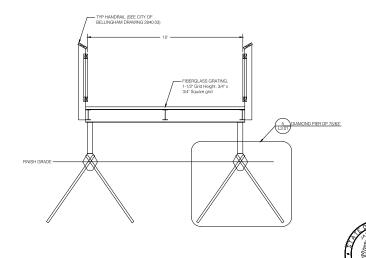


- 3" Ø STEEL PIPE - DIAMOND PIER DP 75/63* W8X10

TYPICAL BOARDWALK PLAN







DIAMOND PIER DP 75 (04)

TYPICAL BOARDWALK SECTION (05)

Revision CONTACT PERSON: PAUL KNIPPEL

PROJECT ENGINEER. DIRECTOR PUBLIC WORKS E.C.J. DESIGNED/DRAWN_ CITY ENGINEER INSPECTOR_ ASSISTANT DIRECTOR

CITY OF BELLINGHAM, WASHINGTON PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

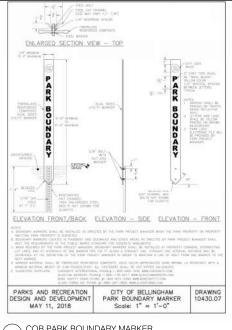
SCALE Horiz. __ Vert.

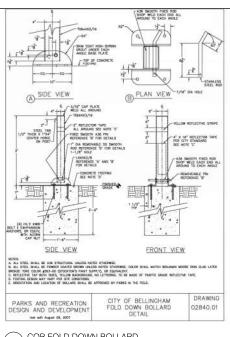
Job. No. NAD 83/98 Date 12/06/2024 NAVD 88

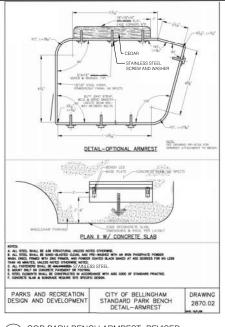
MIDDLE FORK SPRING OPEN SPACE TRAIL 60% PLAN SUBMITTAL L3.01 LANDSCAPE DETAILS

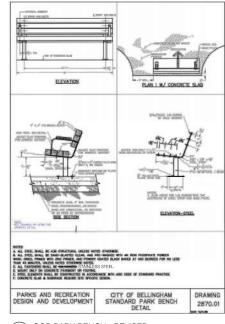
22

, PROJECT ENGINEER AT 360-778-7021









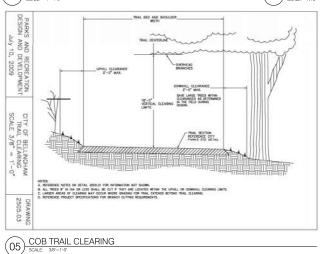
COB PARK BOUNDARY MARKER

SCALE: 1'=1'0"

COB FOLD DOWN BOLLARD

COB PARK BENCH ARMREST- REVISED
SCALE: NTS

COB PARK BENCH - REVISED



DESCRIVA AND DEPENDENT

OCHOOP 19, 2011

COB TRAIL SECTION - REVISED

Vert.

SONK HEAD

PROJECT ENGINEER DIRECTOR PUBLIC WORKS_E_C_L
DESIGNED/DRAWN_ CITY ENGINEER ML.W
INSPECTOR MA.O.

ASSISTANT DIRECTOR MA.O.

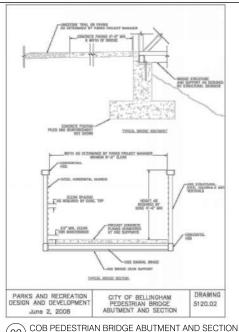
CITY OF BELLINGHAM, WASHINGTON PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION SCALE DATUM
NAD 83/98
NAVD 88

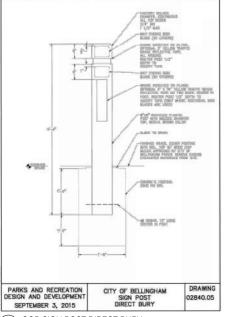
 MIDDLE FORK SPRING OPEN SPACE TRAIL 60% PLAN SUBMITTAL LANDSCAPE DETAILS

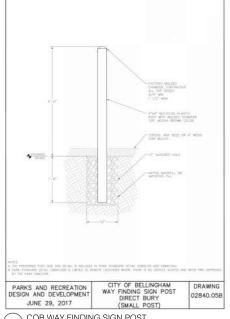
SHEET OF 31

, PROJECT ENGINEER AT 360-778-7021









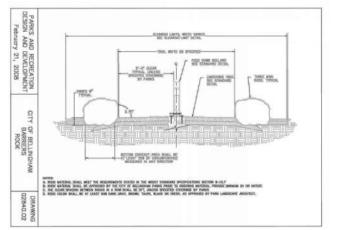
COB PEDESTRIAN BRIDGE GENERAL DESIGN AND NOTES 〔01〕

SCALE: NTS

COB SIGN POST DIRECT BURY

COB WAY FINDING SIGN POST





COB BARRIERS - ROCK

COB PARK NATIVE GROWTH PORTECTION AREA SIGN (05) SCALE: NTS

Revision CONTACT PERSON: PAUL KNIPPEL

PROJECT ENGINEER. DIRECTOR PUBLIC WORKS_E.C.J. DESIGNED/DRAWN_ CITY ENGINEER INSPECTOR_ ASSISTANT DIRECTOR

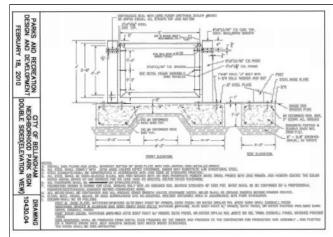
CITY OF BELLINGHAM, WASHINGTON PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

SCALE Horiz. _ NAD 83/98 NAVD 88 Vert.

Job. No. Date 12/06/2024 MIDDLE FORK SPRING OPEN SPACE TRAIL 60% PLAN SUBMITTAL L3.03

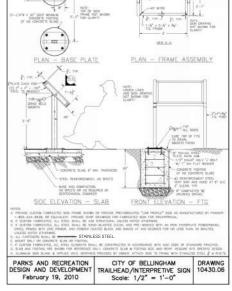
SHEET 24 31

PROJECT ENGINEER AT 360-778-7021



COB WOOD NEIGHBORHOOD PARK SIGN DOUBLE SIDED (ELEVATION VIEW) - REVISED



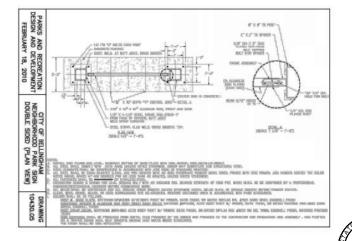


(m)

COB TRAILHEAD/INTERPRETIVE SIGN - REVISED (04)

848 TS F05 AND AND 3/9" (63,11 -63" 260 PG(65) HST-4550 (63,1" WIS MISHES 15/4" BM-200 (NAME INVO! T-07) NAV. NEE DEAL I/E - 1'-02 THE AN ARRESTS NOT REALIST EXPOSES OF THE PAR, WITH SHIEL HE BY DEPOSES BY A PROFESSIONAL. dor and all angula gives shooth ineres etherwise from welds should shooth setuphe powder osates of rece semanating but he secured, receive dottered area in altarohile, with pain ethicares. NAME AND ADDRESS AND BOOK PART OF PROPER SAME PARTY. OR LANCE WHAT WAS ADDRESS OF THE PARTY PARTY PARTY. ANGEL SHAL EL PRESACEI PARA NOTAL FIES PREMIEE ET DE GENER ANN PROVINCE IN THE EXPONENTIAL HIS PROCESSION ANN ASSENSE? ANN PROTECTION ANN ASSENSE? ANN PROTECTION ANN ASSENSE? ANN PROTECTION AND ASSENSE? ANN PROTECTION AND ASSENSE?

COB NEIGHBORHOOD PARK SIGN SINGLE SIDED (PLAN VIEW) - REVISED (02)



COB NEIGHBORHOOD PARK SIGN DOUBLE SIDED (PLAN VIEW)

(03)

CONTACT PERSON: PAUL KNIPPEL

COB STAY ON TRAIL SIGN

Revision

PROJECT ENGINEER. DESIGNED/DRAWN_ INSPECTOR_

DIRECTOR PUBLIC WORKS_E.C.J. CITY ENGINEER ASSISTANT DIRECTOR

CITY OF BELLINGHAM, WASHINGTON PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

SCALE Horiz. __ Vert.

Job. No. NAD 83/98 Date 12/06/2024 NAVD 88 Field Bk. .

MIDDLE FORK SPRING OPEN SPACE TRAIL 60% PLAN SUBMITTAL



PROJECT ENGINEER AT 360-778-7021

	4,463 SF	BUFFER ENHANCEMENT PLANTING				
	QTY	BOTANICAL NAME	COMMON NAME	CONDITION	GRADE (MIN. SIZE)	SPACING
	4	CORNUS SERICEA	RED TWIG DOGWOOD	B/C	2 YEARS 18" MINIMUM	5' O.C.
	4	DESCHAMPSIA CESPITOSA	PACIFIC HAIRGRASS	1	/ ONE GALLON	1
	4	HOLODISCUS DISCOLOR	OCEANSPRAY		1	
	4	MAHONIA AQUIFOLIUM	TALL OREGON GRAPE			
	4	PHYSOCARPUS DISCOLOR	PACIFIC NINEBARK			
	4	ROSA NUTKANA	NOOTKA ROSE			
	4	SAMBUCUS RACEMOSA	RED ELDERBERRY			
	4	SIDALCEA HENERSONII	HENDERSON'S CHECKERMALLO	ow		
	4	RUBUS SPECTABILIS	SALMONBERRY			
	6,848 SF QTY	BUFFER RESTORATION PLANTING BOTANICAL NAME	COMMON NAME	CONDITION	GRADE (MIN. SIZE)	SPACING
20000	<u> </u>	DO IN WORLD WINE	COMMONTONIA	00110111011	GIVEE (WIIV. GIZE)	017101140
	37	ACER CIRCINATUM	VINE MAPLE	B/C	2 YEARS 18" MINIMUM	5' O.C.
	40	DICENTRA FORMOSA	BLEEDING HEART		/ ONE GALLON	
	60	GAULTHERIA SHALLON	SALAL			
	60	POLYSTICHUM MUNITUM	WESTERN SWORD FERN			
	40	RANUNCULUS OCCIDENTALIS	WESTERN BUTTERCUP			
	40	RIBES SANGUINEUM	RED FLOWERING CURRENT			
	20	ROSA NUTKANA	NOOTKA ROSE			
	40	RUBUS SPECTABILIS	SALMONBERRY			
	20	SAMBUCUS RACEMOSA	RED ELDERBERRY			
	40	SISYRINCHIUM ANGUSTIFOLIUM	BLUE EYED GRASS			
	40	SYMPHORICARPOS ALBUS	SNOWBERRY		L	L
			_			
7777	2,148 SF	WETLAND ENHANCEMENT PLANTIN	G			

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TREES			
QTY	BOTANICAL NAME	COMMON NAME	SIZE/HT
4	ABIES GRANDIS	GRAND FIR	5 GAL / 4' HT. MIN.
2	ACER GLABRUM VAR. DOUGLASSII	DOUGLAS MAPLE	5 GAL / 4' HT. MIN.
2	ALNUS RUBRA	RED ALDER	5 GAL / 4' HT. MIN.
2	AMELANCHIER ALNIFOLIA	SERVICEBERRY	5 GAL / 4' HT. MIN.
2	CORYLUS CORNUTA	BEAKED HAZELNUT	5 GAL / 4' HT. MIN.
1	PICEA SITCHENSIS	SITKA SPRUCE	5 GAL / 4' HT. MIN.
13	POPULUS TREMULOIDES	QUAKING ASPEN	5 GAL / 4' HT. MIN.
3	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	5 GAL / 4' HT. MIN.
3	PRUNUS EMARGINATA	BITTER CHERRY	5 GAL / 4' HT. MIN.
2	SALIX IASIANDRA	PACIFIC WILLOW	5 GAL / 4' HT. MIN.
1	SALIX SITCHENSIS	SITKA WILLOW	5 GAL / 4' HT. MIN.
2	TAXUS BREVIFOLIA	WESTERN YEW	5 GAL / 4' HT. MIN.
4	THUJA PLICATA	WESTERN RED CEDAR	5 GAL / 4' HT. MIN.
6	TSUGA HETEROPHYLLA	WESTERN HEMLOCK	5 GAL / 4' HT. MIN.

ż	QTY	BOTANICAL NAME	COMMON NAME	SIZE/SPACIN	IG	DETAIL
	25	LONICERA INVOLUCRATA	BLACK TWINBERRY	B/C	2 YEARS 18" MINIMUM	5' O.C.
	10	ROSA NUTKANA	NOOTKA ROSE		/ ONE GALLON	
	25	ROSA PISOCARPA	PEA-FRUITED ROSE			
	10	SAMBUCUS RACEMOSA	RED ELDERBERRY			
	18	SPIRAEA DOUGLASII	HARDHACK			
				ν	V	V



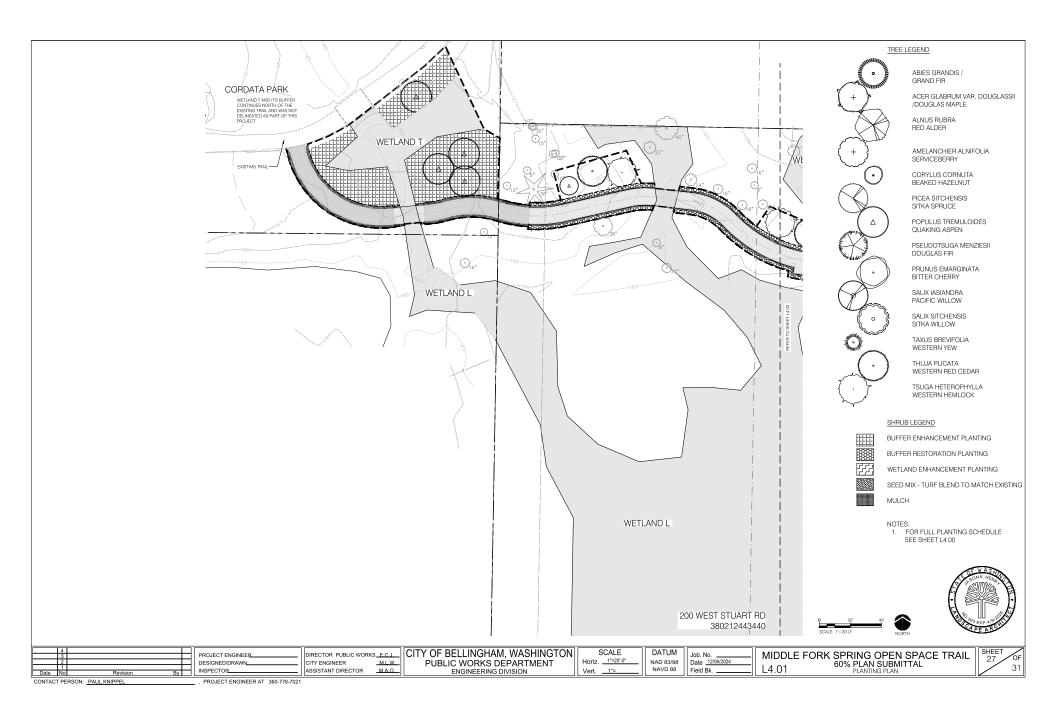
 PROPOSED TREE LOCATIONS WITHIN LIMITS OF WORK BUT OUTSIDE OF CLEARING LIMITS TO BE INSTALLED BY HAND AND ON FOOT, NO EQUIPMENT PERMITTED IN THIS ZONE. LOCATIONS FOR THESE TREES TO BE FLAGGED IN FIELD AS NEEDED TO AVOID EXISTING TREE ROOTS.

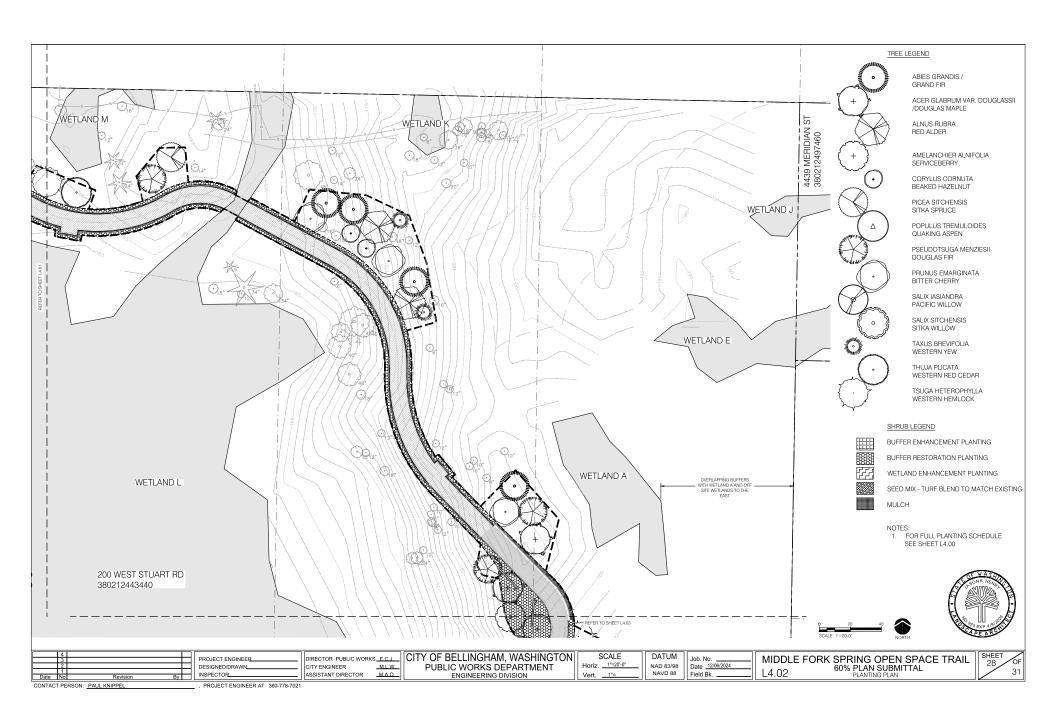
231 SF SEED MIX - TURF BLEND TO MATCH EXISTING



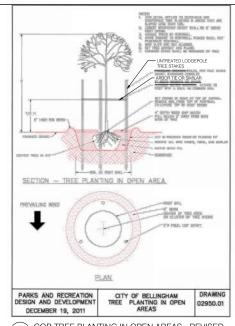


4 PROJECT ENGINEE	DIRECTOR PUBLIC WORKS_E.C.J.	CITY OF BELLINGHAM, WASHINGTON	SCALE	DATUM	Job. No.	MIDDLE FOR	K SPRING OPEN SPACE TRAIL	SHEET
2 DESIGNED/DRAWN	CITY ENGINEER MLW.	PUBLIC WORKS DEPARTMENT	Horiz1"=20'-0"	NAD 83/98	Date 12/06/2024		60% PLAN SUBMITTAL	7 26 OF
Date No Revision By INSPECTOR	ASSISTANT DIRECTOR M.A.O.	ENGINEERING DIVISION	Vert	NAVD 88	Field Bk	L4.00	PLANTING SCHEDULE AND NOTES	31





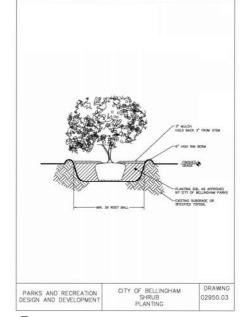








O2 COB TREE PLANTING IN OPEN AREAS - POLE SIZING CHART



COB SHRUB PLANTING
SCALE: NTS





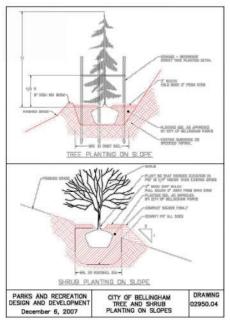
PROJECT ENGINEER_______
DESIGNED/DRAWN______
INSPECTOR______

DIRECTOR PUBLIC WORKS E.C.J.
CITY ENGINEER M.L.W.
ASSISTANT DIRECTOR M.A.O.

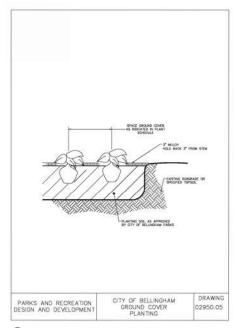
CITY OF BELLINGHAM, WASHINGTON PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION SCALE DATUM
Horiz. ______ NAD 83/98
Vert. __1"= NAVD 88

MIDDLE FORK SPRING OPEN SPACE TRAIL 60% PLAN SUBMITTAL PLANTING DETAILS





COB TREE AND SHRUB PLANTING ON SLOPES
SCALE: NTS



COB GROUND COVER PLANTING
SCALE: NTS



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	3			PROJECT EN
	2			DESIGNED/D
	1		П	
Date	No	Revision By		INSPECTOR
CONTAC	T PE	RSON: PAUL KNIPPEL		, PROJECT E

NGINEER_ CITY ENGINEER DRAWN ASSISTANT DIRECTOR

CITY OF BELLINGHAM, WASHINGTON DIRECTOR PUBLIC WORKS E.C.J. PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

SCALE Horiz. ___ NAD 83/98 Vert. __1"= NAVD 88

Job. No. Date 12/06/2024 MIDDLE FORK SPRING OPEN SPACE TRAIL L4.05 60% PLAN SUBMITTAL PLANTING DETAILS

