

City Hall 555 Israel Road SW Tumwater, WA 98501-6515 Phone: 360-754-5855

Fax: 360-754-4138

# DETERMINATION OF NON-SIGNIFICANCE (DNS) TUM-23-0377 RAINIER DODGE

<u>Description of proposal:</u> Construction of an 8,715 square-foot automobile service building with associated parking.

Proponent: Eugene Johnson Family Investments, LLC, PO Box 11486, Olympia, WA 98508

Location: 2520 Mottman Ct SW, Tumwater, WA 98512, Tax Parcel 63050000401

<u>Lead agency:</u> City of Tumwater, Community Development Department.

As provided by RCW 43.21C.240 and WAC 197-11-158, the lead agency has determined that the requirements for environmental analysis, protection, and mitigation measures have been adequately addressed in the applicable development regulations and comprehensive plan adopted under RCW 36.70A and in other local, state, or federal laws or rules. Therefore, this proposal is not likely to have a probable significant adverse impact on the environment. An Environmental Impact Statement is not required under RCW 43.21C.030(2)(c), and the lead agency will not require additional mitigation measures under SEPA. This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request. The lead agency will not act on this proposal for 14 days from the date below. Comments must be submitted no later than May 31, 2023, by 5:00 p.m.

Date: May 17, 2023

Responsible official:

Mike Matlock, AICP

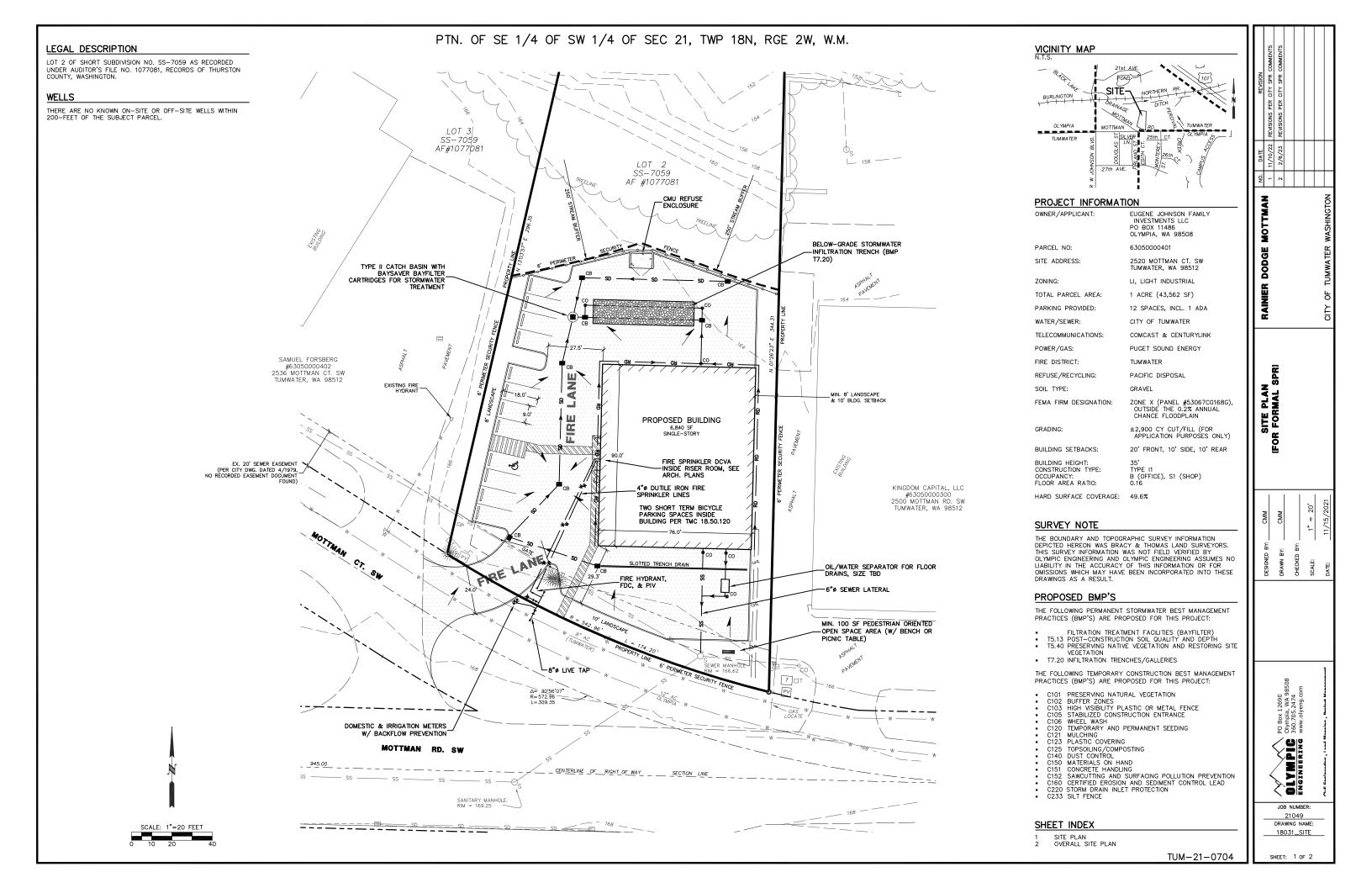
Community Development Director

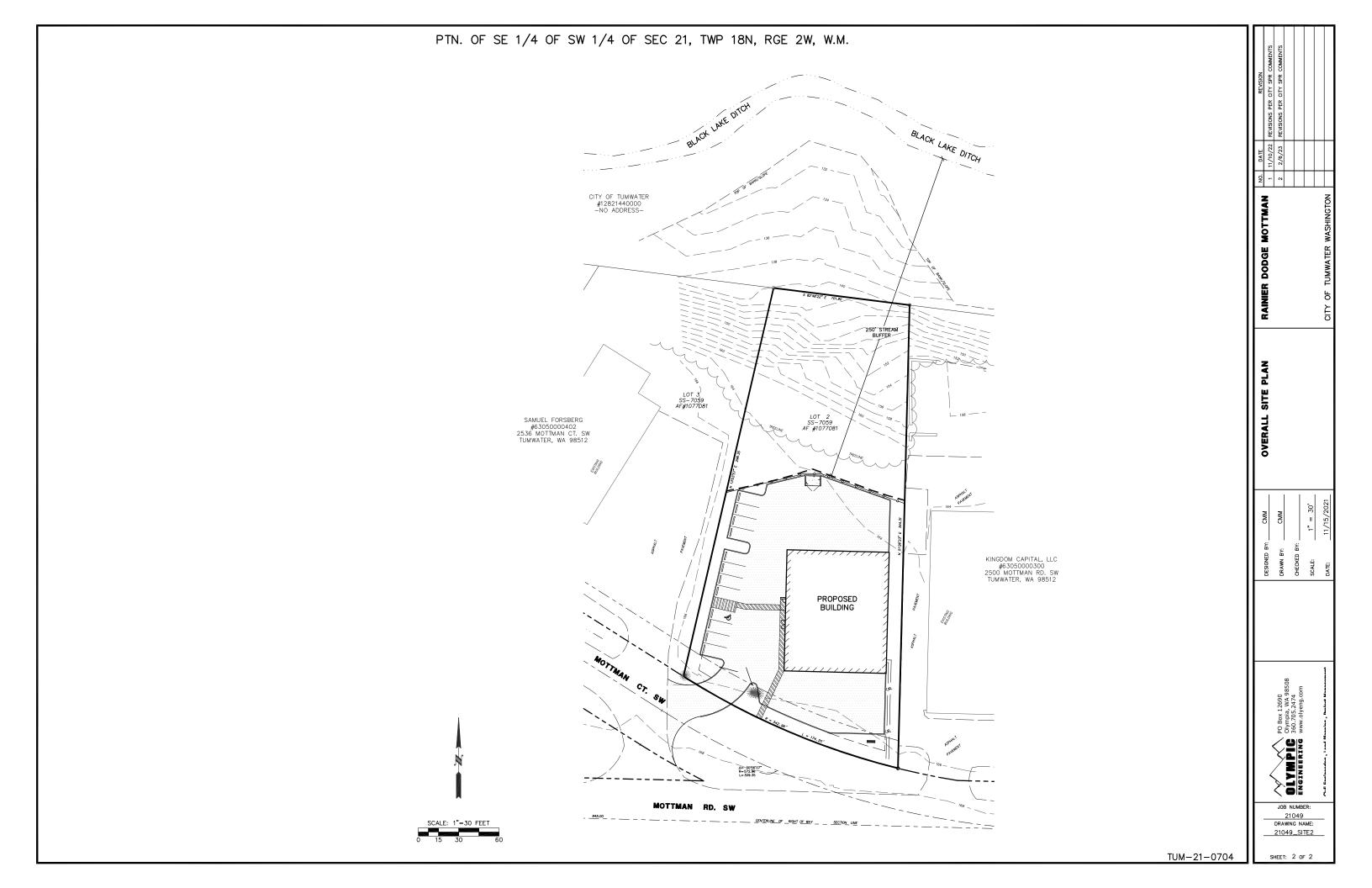
Contact person: Tami Merriman, Permit Manager, 360-754-4180

555 Israel Road SW Tumwater, WA 98501

tmerriman@ci.tumwater.wa.us

Appeals of this DNS must be made to the City Clerk, no later than June 6, 2023, by 5:00 p.m. All appeals shall be in writing, be signed by the appellant, be accompanied by a filing fee of \$175, and set forth the specific basis for such appeal, error alleged and relief requested.







## CITY OF TUMWATER

555 ISRAEL RD. SW, TUMWATER, WA 98501

(360) 754-4180

Email: <a href="mailto:cdd@ci.tumwater.wa.us">cdd@ci.tumwater.wa.us</a>

TUM-23 - 0377

03-15-2023

RECEIVED BY: Unknown

Any person proposing to develop in the incorporated limits of the City of Tumwater is required to submit an environmental checklist unless the project is exempt as specified in WAC 197-11-800 (Categorical Exemptions) of the State Environmental Policy Act Rules. SUBMITTAL REQUIREMENTS are as follows:

- 1. A COMPLETE ENVIRONMENTAL CHECKLIST. If the project is located within the Port of Olympia property, the checklist must also be signed by a representative of the Port.
- 2. FEE OF \$880.00 TO BE PAID UPON SUBMITTAL. This includes the Public Notice fee.
- 3. NAME AND ADDRESS LIST OF PROPERTY OWNERS WITHIN 300 FEET OF THE SUBJECT PROPERTY.

# SEPA ENVIRONMENTAL CHECKLIST UPDATED 2015

#### 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: [help]

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 <u>all parts of your proposal</u>, 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 impacts.

#### 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: [help]

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 [help]	EVALUATION FOR AGENCY USE ONLY
1.	Name of proposed project, if applicable: [help]	ACENOT GOL GIVET
2.	Name of applicant: [help]	
3.	Address and phone number of applicant and contact person: [help]	
4.	Date checklist prepared: [help]	
5.	Agency requesting checklist: [help]	
6.	Proposed timing or schedule (including phasing, if applicable): [help]	
7.	Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. <a href="[help]">[help]</a>	
8.	List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [help]	
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. [help]	

10.	List any government approvals or permits that will be needed for your proposal, if known. <a href="mailto:[help]">[help]</a>	EVALUATION FOR AGENCY USE ONLY
11.	Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [help]	8,715 sq. ft. w mezzanine
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. [help]	
В.	ENVIRONMENTAL ELEMENTS [help]	
1.	Earth	
a.	General description of the site [help] Flat Rolling Hilly Steep Slopes Mountainous	
	Other:	
b.	What is the steepest slope on the site (approximate percent slope)?  [help]	

What general types of soils are found on the site (for example, clay, C. **EVALUATION FOR** sand, gravel, peat, muck)? If you know the classification of AGENCY USE ONLY agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results Development area in removing any of these soils. [help] gravel, development outside shoreline jurisdiction area which is sloped with trees. d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [help] 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. [help] f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [help] About what percent of the site will be covered with impervious g. surfaces after project construction (for example, asphalt or buildings)? [help] h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [help] 2. Air What types of emissions to the air would result from the proposal a. during construction, operation, and maintenance when the project is completed?

		ny, generally describe and give approximate quantities if wn. [help]	EVALUATION FOR AGENCY USE ONLY
b.		there any off-site sources of emissions or odor that may affect r proposal? If so, generally describe. [help]	
C.		posed measures to reduce or control emissions or other impacts ir, if any: [help]	BMP's During construction
3.	Wat	ter	
a.	Sur	face Water: [help]	
	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. [help]	
	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. [help]	<b>✓</b>
	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. [help]	
	4)	Will the proposal require surface water withdrawals or	

	diversions? Give general description, purpose, and approximate quantities if known. [help]	EVALUATION FOR AGENCY USE ONLY	
5)	Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [help]	<b>✓</b>	
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. [help]	<b>✓</b>	
Gro	wind Water:  Will groundwater be withdrawn from a well for drinking water or		
	other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [help]		
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. [help]	Project will be served by City of Tumwater water and sewer service.	
Wa	ter 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?		

b.

C.

Will this water flow into other waters? If so, describe. [help] **EVALUATION FOR AGENCY USE ONLY** 2) Could waste materials enter ground or surface waters? If so, generally describe. [help] 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. Must meet City of Tumwater 2022 Drainage Proposed measures to reduce or control surface, ground, and Design and runoff water, and drainage pattern impacts, if any: **Erosion Control Manual** Plants [help] Check the types of vegetation found on the site: [help] deciduous tree: alder, maple, aspen, other evergreen tree: fir, cedar, pine, other shrubs grass pasture crop or grain orchards, vineyards or other permanent crops. wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other water plants: water lily, eelgrass, milfoil, other other types of vegetation: What kind and amount of vegetation will be removed or altered? [help] Onsite trees do not meet 12 tree per acre, required landscape List threatened and endangered species known to be on or near the does provide site. [help] minimum tree retention standards.

d.

4.

a.

b.

C.

d.	Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: <a href="[help]">[help]</a>	EVALUATION FOR AGENCY USE ONLY
e.	List all noxious weeds and invasive species known to be on or near the site.	
5.	Animals	
a.	List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include: [help] - birds: hawk, heron, eagle, songbirds, other: - mammals: deer, bear, elk, beaver, other: - fish: bass, salmon, trout, herring, shellfish - other:	
b.	List any threatened and endangered species known to be on or near the site. [help]	<b>✓</b>
C.	Is the site part of a migration route? If so, explain. [help]	
d.	Proposed measures to preserve or enhance wildlife, if any: [help]	
e.	List any invasive animal species known to be on or near the site.	
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. [help]	

<b>EVALUA</b>	TION	FOR
<b>AGENCY</b>	USE	ONLY

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [help]
- 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: <a href="[help]">[help]</a>



#### 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. [help]
  - 1) Describe any known or possible contamination at the site from present or past uses.
  - 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.
  - 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.
  - 4) Describe special emergency services that might be required.
  - 5) Proposed measures to reduce or control environmental health hazards, if any:



#### b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [help]
- EVALUATION FOR AGENCY USE ONLY
- 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. [help]



Proposed measures to reduce or control noise impacts, if any: <a href="mailto:lhelp">[help]</a>

#### 8. Land and shoreline use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [help]
- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [help]
  - 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:
- c. Describe any structures on the site. [help]

d.	Will any structures be demolished? If so, what? [help]	EVALUATION FOR AGENCY USE ONLY
e.	What is the current zoning classification of the site? [help]	
f.	What is the current comprehensive plan designation of the site? [help]	
g.	If applicable, what is the current shoreline master program designation of the site? [help]	Urban Intensity designation
h.	Has any part of the site been classified as a critical area by the city or county? If so, specify. [help]	All development is located outside of shoreline jurisdiction and stream buffers.
i.	Approximately how many people would reside or work in the completed project? [help]	
j.	Approximately how many people would the completed project displace? [help]	
k.	Proposed measures to avoid or reduce displacement impacts, if any: <a href="https://example.com/help]">[help]</a>	
L.	Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: <a href="[help]">[help]</a>	
m.	Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:	

9.	Housing	
a.	Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [help]	EVALUATION FOR AGENCY USE ONLY
b.	Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [help]	
C.	Proposed measures to reduce or control housing impacts, if any: <a href="https://example.com/help">[help]</a>	
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? <a href="[help]">[help]</a>	<b>✓</b>
b.	What views in the immediate vicinity would be altered or obstructed?  [help]	
C.	Proposed measures to reduce or control aesthetic impacts, if any: <a href="https://example.com/help">[help]</a>	
11.	Light and glare	
a.	What type of light or glare will the proposal produce? What time of day would it mainly occur? <a href="[help]">[help]</a>	
b.	Could light or glare from the finished project be a safety hazard or interfere with views? [help]	
c.	What existing off-site sources of light or glare may affect your proposal? [help]	

d. Proposed measures to reduce or control light and glare impacts, if **EVALUATION FOR** any: [help] AGENCY USE ONLY 12. Recreation What designated and informal recreational opportunities are in the a. immediate vicinity? [help] Would the proposed project displace any existing recreational uses? b. If so, describe, [help] Proposed measures to reduce or control impacts on recreation, C. including recreation opportunities to be provided by the project or applicant, if any: [help] Historic and cultural preservation a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [help] Are there any landmarks, features, or other evidence of Indian or b. 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. [help] Describe the methods used to assess the potential impacts to cultural C. 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, Comments from etc. [help] Squaxin Island and Nisqually Tribes, not cultural concerns.

d. Proposed measures to avoid, minimize, or compensate for loss, **EVALUATION FOR** changes to, and disturbance to resources. Please include plans for AGENCY USE ONLY the above and any permits that may be required. 14. **Transportation** Identify public streets and highways serving the site or affected a. geographic area and describe proposed access to the existing street system. Show on site plans, if any. [help] Is the site or affected geographic area currently served by public b. transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [help] How many additional parking spaces would the completed project C. or non-project proposal have? How many would the project or proposal eliminate? [help] Will the proposal require any new or improvements to existing roads, d. streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help] e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [help] f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles).

	What data or transportation models were used to make these estimates? [help]	EVALUATION FOR AGENCY USE ONLY
g.	Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe:	
h.	Proposed measures to reduce or control transportation impacts, if any: [help]	<b>✓</b>
15.	Public services	
a.	Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [help]	
b.	Proposed measures to reduce or control direct impacts on public services, if any. <a href="[help]">[help]</a>	
16.	Utilities	
a.	Circle utilities currently available at the site: [help]  electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:	
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. [help]	

### C. Signature [HELP]

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.

EVALUATION FOR AGENCY USE ONLY

Signature:
Name of signee:
Position:
Agency/Organization:
Date Submitted:

# D. Signature – Property Owner's Review, Port of Olympia (if applicable)

I certify that I have reviewed the above environmental checklist prepared by the applicant and that the project is consistent with the tenant's lease for Port property. The Port's comments have been incorporated in the document as submitted or as noted.

Port of Olympia – Please Print: _	
Port of Olympia Signature:	
Port of Olympia – Signature:	

#### E. CITY OF TUMWATER

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

Reviewed by:		Гаті	Merriman
Date: M	ay 8,	, 202	3

# F. Supplemental sheet for nonproject actions [help] (IT IS NOT NECESSARY to use this sheet 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.

**EVALUATION FOR** or the types of activities likely to result from the proposal, would affect AGENCY USE ONLY the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms. How would the proposal be likely to increase discharge to water; 1. 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:

When answering these questions, be aware of the extent the proposal,

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?	EVALUATION FOR AGENCY USE ONL
Proposed measures to avoid or reduce shoreline and land use impacts are:	
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:	
Identify, if possible, whether the proposal may conflict with local state, or federal laws or requirements for the protection of the environment.	

# Critical Area Report

Site Address: 2520 Mottman Ct SW, Tumwater, WA



Prepared For:
Eugene Johnson Family Investments, LLC
Tax Parcel Number:
63050000401

Prepared By:
West Fork Environmental
2350 Mottman Road SW, Tumwater, WA 98512
(360) 753-0485

Report Date: January 3, 2022



#### Contents

1.0 SUMMARY	1
2.0 SITE DESCRIPTION AND LAND USE	1
3.0 METHODS	2
3.1 Background materials	2
3.2 Stream Assessment	2
3.3 Wetland Assessment	3
4.0 RESULTS	4
4.1 Background Results	4
4.1.1 Soils	4
4.1.2 USFWS NWI	4
4.1.3 Washington Department of Natural Resources	4
4.1.4 WDFW PHS Database	4
4.1.5 Precipitation	5
4.2 Field Results	5
5.0 REGULATORY CONSIDERATIONS	5
5.1 Riparian Buffer and Management Zone	5
6.0 CLOSING	6
7.0 REFERENCES	7

Appendix A: Report Figures
Appendix B: Site Photos

Appendix C: Wetland Test Plot Forms

#### 1.0 SUMMARY

West Fork Environmental (WFE) conducted a critical areas study to delineate and establish appropriate buffer widths for observed wetland and stream habitat on parcel 63050000401. The site address is 2520 Mottman Ct SW, Tumwater, WA (Figure 1). The applicant requested this study to support permitting requirements. This evaluation identified wetlands and streams that occur on or within 300 feet of the proposed project that could be impacted. The parcel is currently fenced and used as parking. During our assessment, we delineated the ordinary high water mark (OHWM) on Black Lake Ditch (Type S) that runs west north of the subject parcel. No wetland habitat was identified.

#### 2.0 SITE DESCRIPTION AND LAND USE

The parcel totals 1.0 acres and is located between Mottman Road and Black Lake Ditch (Figure 1). The parcel is currently used as a parking lot and is fenced. The legal description is Section 21 of Township 18 North, Range 02 West. Habitat along Black Lake Ditch is forested with slopes dropping steeply into the stream (Figure 2).



Figure 1. Vicinity Map (parcel is outlined in red) – located south of I-5 on Mottman Road, west of South Puget Sound Community College.



Figure 2. Current conditions on the subject parcel along Mottman Road. Black Lake Ditch flows west and is off-site to the north of the parcel.

#### 3.0 METHODS

On December 17, 2021, West Fork marked the OHWM on Black Lake Ditch and conducted a routine wetland determination on the subject parcels within 300 feet of the proposed development footprint. West Fork walked the property and tested areas with a common vegetation character to determine the presence of wetland habitat.

#### 3.1 Background materials

Background data on the subject parcel was collected from the following sources before the site assessment.

- Thurston County GeoData Center parcel boundaries, 2-foot contour, existing potential wetland and streams and building footprint,
- United States Department of Agriculture NRCS Soil Map,
- USFWS Fish and Wildlife Service National Wetland Inventory (NWI) mapper,
- Washington Department of Natural Resources FPARS Map,
- > Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species Database,
- > USGS stream flow data.

#### 3.2 Stream Assessment

The OHWM was determined using Washington State Department of Ecology guidance (2016) regarding field indicators used to establish the location along streams. West Fork recorded GPS waypoints using a handheld Garmin GPSMap 64 along the OHWM of Black Lake Ditch north of the project area to provide the basis for assessing required buffer distance.

#### 3.3 Wetland Assessment

West Fork assessed areas within 300 feet of the project development area that could contain wetland characteristics utilizing the Routine Determination Method described in the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region* (US Army Corps of Engineers 2008) and *Washington State Wetland Identification and Delineation Manual* (Washington Department of Ecology 1997) by staff trained in evaluating these areas. Potential wetland features were examined for the presence of indicators of hydrophytic vegetation, hydric soils, and wetland hydrology. In addition to the on-site visit, National Resource Conservation Service (NRCS) soil survey data, National Wetland Inventory (NWI) maps, and GIS data from the Thurston County GIS site were utilized to aid in the determination.

#### Under City of Tumwater municipal code:

"" Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate conversion of wetlands. The approved federal wetland delineation manual and applicable regional supplements shall be used for identifying and delineating a wetland."

Plant species were identified using taxonomy in a *Field Guide to the Common Wetland Plants of Western Washington & Northwestern Oregon* by Sarah Spear Cooke, Editor and the U.S. ACOE State of Washington Wetland plant list (<a href="https://wetland-nat/">http://wetland-nat/nat/</a>

plants.usace.army.mil/nwpl\_static/data/DOC/lists\_2016/States/pdf/WA\_2016v1.pdf) and Plants of the Pacific Northwest Coast by Jim Pojar and Andy MacKinnon, Editors. Our assessment used the 1987 federal method, where a series of vegetation indicators and tests were conducted to determine if the wetland criteria for hydrophytic vegetation was met. Vegetative indicator status is listed below:

- > Obligate Wetland (OBL) highly likely to be in a natural wetland
- Facultative Wetland (FACW)—most likely to be present in a natural wetland
- > Facultative (FAC)—can be present in both a natural wetland and non-wetland environment
- Facultative Upland (FACU)—may be present in a natural wetland, but most likely to be seen in non-wetland conditions
- ➤ Obligate Upland (UPL)—most likely to occur in non-wetland conditions

Soil test pits were excavated to 16-20 inches below the surface to evaluate soil characteristics and hydrological conditions throughout the property. Soil color was evaluated using the *Munsell Color Chart* (Munsell Color, 1988). We characterized the soil profile and assessed hydric soil indicators as outlined in the Regional Supplement datasheets.

#### 4.0 RESULTS

#### 4.1 Background Results

#### 4.1.1 Soils

NRCS Soil Map showed the following soil types on the parcel: Everett very gravelly sandy loam 0 to 8 percent slopes, Everett very gravelly sandy loam 30 to 50 percent slopes, and pits gravel near Mottman Road (USDA Soil Mapping Tool, Figure 4).

#### **EVERETT SERIES**

Landscape--glacial drift plains; Landform--outwash terraces and escarpments, kames, moraines, eskers Slope--0 to 65 percent; Parent material--glacial outwash; Mean annual precipitation--about 1050 mm Mean annual temperature--about 10°C; Depth class--very deep; Drainage class--somewhat excessively drained; Soil moisture regime—xeric; Soil temperature regime—mesic; Soil moisture subclass--typic TAXONOMIC CLASS: Sandy-skeletal, isotic, mesic Humic Dystroxerepts

TYPICAL PEDON: Everett very gravelly sandy loam on a forested north-facing slope of 3 percent at 150 meters elevation.

RANGE IN CHARACTERISTICS: Mean annual soil temperature--9 to 12°C; Soil Moisture control section-dry 60 to 75 days following the summer solstice; Reaction (pH)-- 4.5 to 6.0; Base Saturation (by NH4OAc)--less than 60 percent in all horizons at a depth between 25 and 75 cm from the mineral soil surface

GEOGRAPHIC SETTING: Elevation--10 to 280 m; Mean annual precipitation--900 to 1800 mm; Mean annual air temperature--10°C; Frost free period--180 to 240

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Drainage class--somewhat excessively drained; Flooding—none; Ponding—none; Saturated hydraulic conductivity (Ksat)--high in the A horizon and high to very high in the Bw and C horizons

USE AND VEGETATION: Use--livestock grazing, timber production, urban development; Potential natural vegetation-- bigleaf maple, red alder, Douglas-fir, western redcedar, western hemlock, salal, hairy brackenfern, red huckleberry, Nootka rose, oceanspray, Cascade Oregongrape, and orange honeysuckle.

#### 4.1.2 USFWS NWI

NWI wetlands mapper showed a forested/shrub wetland along Black Lake Ditch (Figure 6).

#### 4.1.3 Washington Department of Natural Resources

The WADNR Forest Practices Application Mapping Tool shows that Black Lake Ditch is categorized as Type S water (Figure 7).

#### 4.1.4 WDFW PHS Database

The Washington Department of Fish and Wildlife maintains a database of Priority Habitat and Species. The database indicated that no priority species or habitats occur on the subject parcel. When the search was expanded to 100 meters around the parcel, species included coho, cutthroat, fall chum, fall chinook, freshwater forested/shrub wetland, big brown bat, little brown bat and Yuma myotis (Figure 8). The habitat mosaic of instream, riparian, and upland forest habitat provides habitat for a range of animals but is located north of the proposed project area.

#### 4.1.5 Precipitation

The NOAA accumulated daily precipitation graph showed above normal precipitation for the fall of 2021 (Figure 9). These data indicated that recent streamflow conditions would have left clear field indicators to assess the OHWM on Black Lake Ditch. As an estimate, the OHWM typically falls between the 1-yr and 2-yr peak flow.

#### 4.2 Field Results

On December 17, 2021, West Fork assessed the location of the OHWM of Black Lake Ditch along the right bank (nearest the proposed project site) using guidance from the Washington Department of Ecology's 2016 – Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State. Transects were walked through upland habitat and no wetlands were identified within 300 feet of the parcel. The soils appear well drained and pits were characterized at two locations north of the subject parcel (forms in Appendix).

<u>Black Lake Ditch</u>: The bank is relatively steep along Black Lake Ditch and the OHWM was generally identified by evidence of:

- vegetation changes from streamside salmonberry to a Douglas-fir, Big leaf maple sword fern community
- bank erosion/channel scour
- hillslope toe
- scour line
- exposed roots/root scour

#### 5.0 REGULATORY CONSIDERATIONS

5.1 Riparian Buffer and Management Zone

Black Lake Ditch is categorized as a Type S stream and requires a standard 250-foot buffer (TCC, Table 24.25-1). Tumwater municipal code 16.32.065 Riparian habitat areas—Buffers, states that

"Recommended riparian habitat area widths are shown in the table below. A riparian habitat shall have the width recommended, unless a greater width is required pursuant to subsection A of this section, or a lesser width is allowed pursuant to subsection B of this section. Widths shall be measured outward in each direction, from the ordinary high water mark or the top of the bank if the ordinary high water mark cannot be identified. Riparian areas should be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions. Such functions include but are not limited to protection of instream fish habitat through control of temperature and sedimentation in streams; preservation of fish and wildlife habitat; and connection of riparian habitat to other habitats."

**Table 1: Riparian Habitat Areas** 

Stream Type	Recommended RHA Widths
Type 1 and 2; or shorelines of the state, or shorelines of statewide significance	250 feet
Type 3; or other perennial or fish bearing streams, 5 – 20 feet wide	200 feet
Type 3; or other perennial or fish bearing streams, < 5 feet wide	100 feet
Type 4 and 5	50 feet

The 250-foot required riparian habitat buffer was applied to the OHWM on Black Lake Ditch and considered in project planning. The surveyed location of Black Lake Ditch and the 250-foot buffer relative to parcel boundaries is in Figure 4. The proposed construction footprint is outside the stream buffer.

#### 6.0 CLOSING

West Fork Environmental concludes that a 250-foot buffer is required measured from the OHWM on Black Lake Ditch. The applicant has proposed all development south of this buffer (plus 15-foot construction setback) to protect habitat.

The critical areas evaluation detailed in this report were performed consistent with generally accepted professional consulting practices. WFE completed the determination of wetlands reported in this document for use by the Eugene Johnson Family Investments LLC. This determination is based on scientific methods and our best professional judgement. Final approval of conclusions detailed in this report are dependent on review with local, state, and federal regulatory agencies. The content and data put forth in this report were collected and prepared by the undersigned. Please call our office at (360) 753-0485 with questions or if you require any additional information.

Heid Rows	Sau
Heidy Barnett	Sean Olsen
Professional Biologist	Professional Biologist
to ut	
Gavin Nishiyori	
Professional Biologist	

#### 7.0 REFERENCES

- Thurston County Critical Areas Map, Online Geodata Map. <a href="http://www.co.thurston.wa.us">http://www.co.thurston.wa.us</a>. (December 2021)
- U.S. Army Corps of Engineers, Environmental Laboratory. 1987. Army Corps of Engineers Wetlands
  Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment
  Station, Vicksburg, Mississippi.
- U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0). ERDC/EL TR-10-3, Vicksburg, MS.
- U.S. Department of Agriculture NRCS Soilweb. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. (December 2021)
- U.S. Fish and Wildlife Service. National Wetlands Inventory Wetland Mapper. https://www.fws.gov/wetlands/data/mapper.html. (December 2021)
- Washington State Department of Ecology. 1997. Washington State Wetland Identification and Delineation Manual. Publication Number 96-94, Olympia, Washington.
- Washington State Department of Ecology. 2016. Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State, Publication No. 16-06-029, Olympia, Washington. (https://apps.ecology.wa.gov/publications/documents/1606029.pdf)
- Washington State Department of Fish and Wildlife. Priority Habitat and Species Database (PHS Online). <a href="http://apps.wdfw.wa.gov/phsontheweb/">http://apps.wdfw.wa.gov/phsontheweb/</a>. (December 2021)

Figure 3. Test plot locations, ordinary high-water mark GPS waypoints along Black Lake Ditch. The edge of Black Lake Ditch was surveyed and is shown in Figure 4 with the 250-foot regulatory buffer.

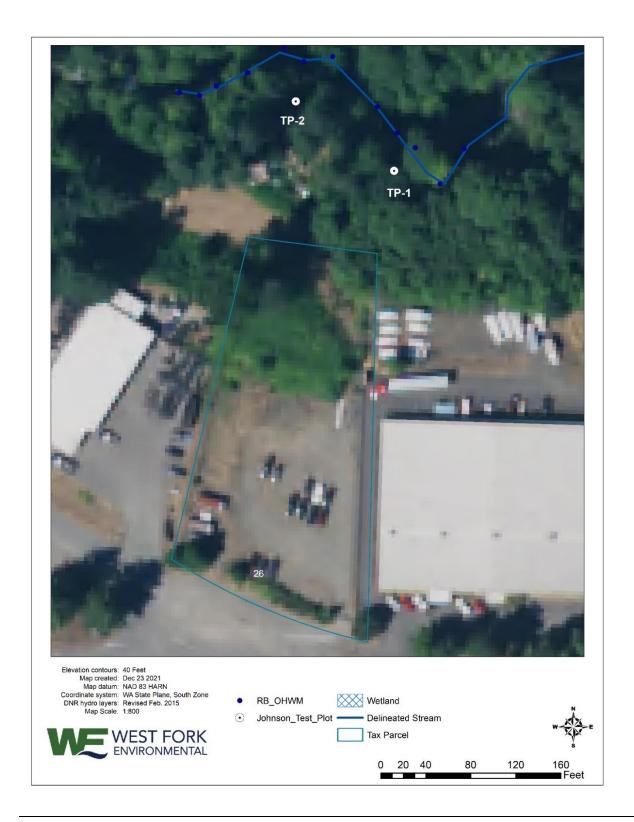


Figure 4. Site plan with the surveyed edge of Black Lake Ditch and required 250 foot buffer.

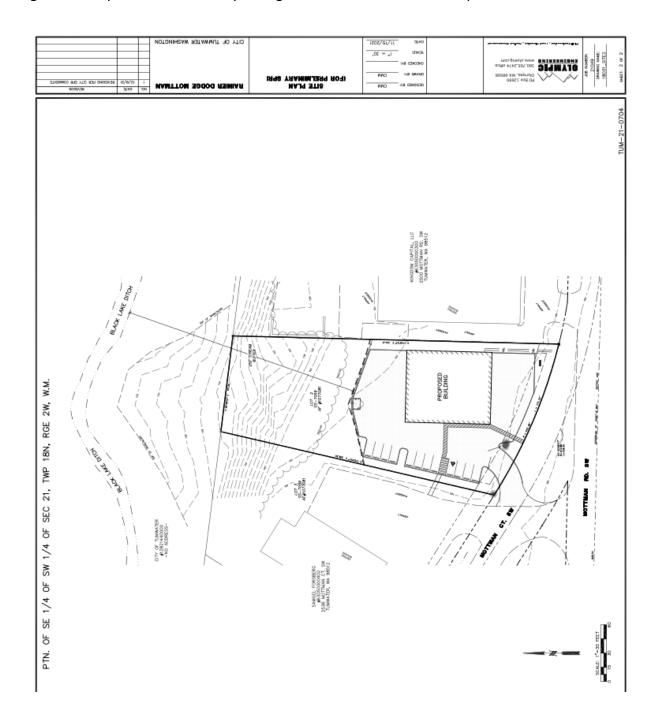


Figure 5. Soils map for subject parcel.



#### Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI					
32	Everett very gravelly sandy loam, 0 to 8 percent slopes	0.1	13.4%					
35	Everett very gravelly sandy loam, 30 to 50 percent slopes	0.2	17.0%					
85	Pits, gravel	0.7	69.6%					
Totals for Area of Interest		1.0	100.0%					

Figure 6. Thurston County Geodata Map of subject parcel with 2-foot contour lines.

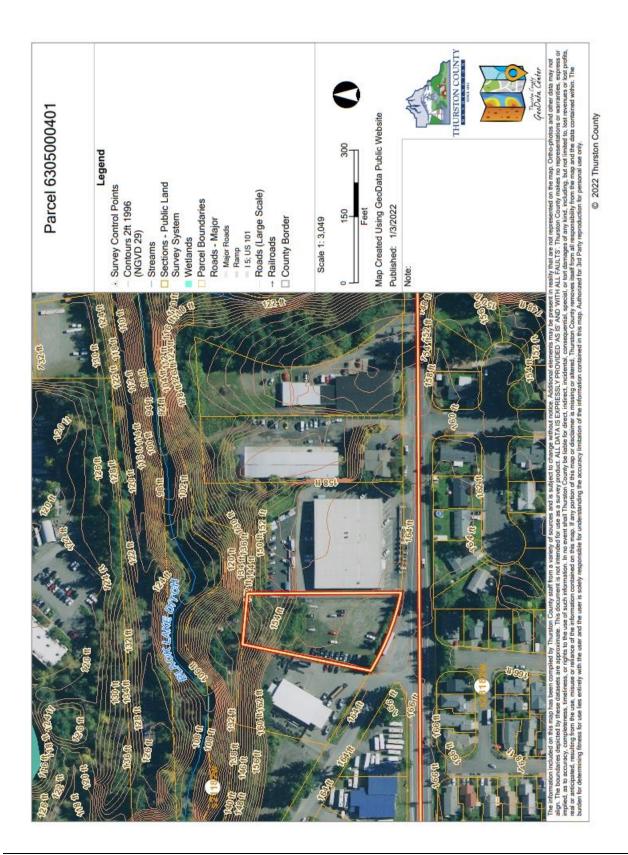
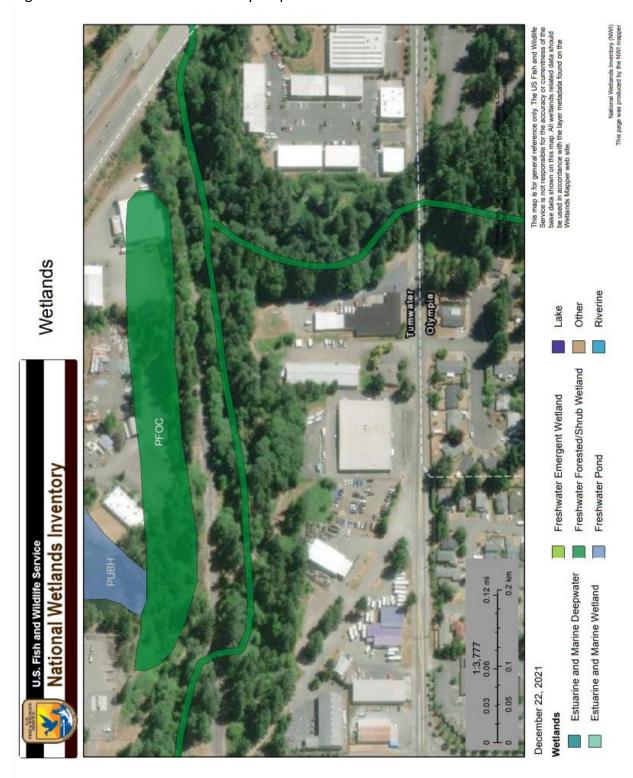


Figure 7. National Wetland Inventory Map.



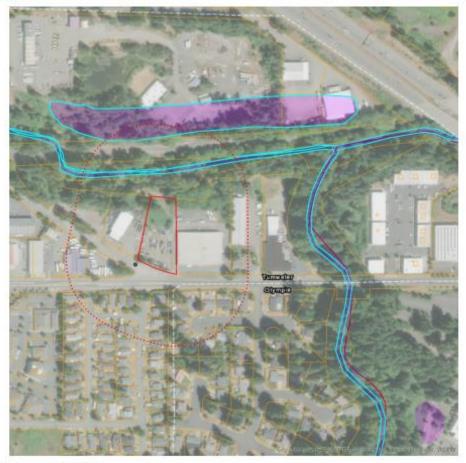
NATURAL RESOURCES 00 00 # 3 & Forest Practices Application Mapping Tool + | + • •

Figure 8. Washington State Department of Natural Resources Stream Type. The subject parcel is circled in red. Black Lake Ditch is a Type S stream.

Figure 9. Washington Department of Fish and Wildlife Priority Habitat and Species Report for area within 100 meters of the subject parcel.



## Priority Habitats and Species on the Web



Buffer radius: 100 Meters

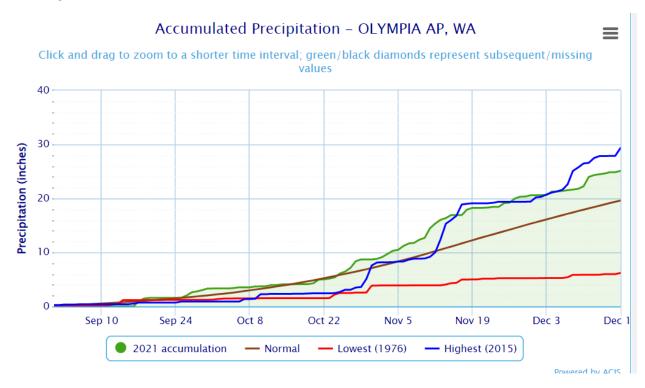
Report Date: 12/22/2021, Parcel ID: 63050000401

PHS Species/Habitats Overview:

Occurence Name	Federal Status	State Status	Sensitive Location
Coho	Candidate	N/A	No
Resident Coastal Cutthroat	N/A	N/A	No
Fall Chum	N/A	N/A	No
Fall Chinook	N/A	N/A	No
Cutthroat Not Warranted		N/A	No
Coho	N/A	N/A	No
Freshwater Forested/Shrub Wetland	N/A	N/A	No
Big brown bat	N/A	N/A	Yes
Little Brown Bat	N/A	N/A	Yes
Yuma myotis	N/A	N/A	Yes

PHS Species/Habitats Details:

Figure 10. NOAA Accumulated precipitation recorded at the Olympia Regional Airport, Olympia, Washington (9/1/21 - 12/17/21).



# **Site Photos**





View of parking are where proposed building will be placed (left) and Black Lake Ditch (right).





TP-1: upland test plot.





TP-2: upland test plot.



Black Lake Ditch – example of stream habitat. OHWM determined by indicators like exposed roots, toe of slope, scour.



Example of slope habitat between Black Lake Ditch and the proposed project area.

# **Appendix C:**

Western Washington Wetland Determination Data Forms (Test Plots 1-2)

### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: 2520 Mottman Ct SW		City/Coun	ty: Tumw	ater, Thurston	Sampling Date:	12-16-21
Applicant/Owner: Johnson Family Trust			,	١٨/٨	Sampling Point:	
Investigator(s): Gavin Nishiyori, Sean Olsen		Section, T	ownship, Rar	nge: Section 21, 7	Γ18N R02W	
Landform (hillslope, terrace, etc.): hillslope		Local reli	ef (concave, o	convex, none): <u>CONV</u>	' <b>ex</b> Sic	pe (%): 10%
Subregion (LRR): LRRA						
Soil Map Unit Name: Everett very gravelly san						
Are climatic / hydrologic conditions on the site typical for	•					
Are Vegetation, Soil, or Hydrology	_			Normal Circumstances'		( <sub>No</sub>
Are Vegetation, Soil, or Hydrology				eded, explain any answ		
SUMMARY OF FINDINGS – Attach site ma						eatures, etc.
Hydrophytic Vegetation Present? Yes	No X			·		
Hydric Soil Present? Yes	No X		the Sampled	Area	NoX	
Wetland Hydrology Present? Yes	No <u>X</u>	Wit	thin a Wetlan	id? Yes	No	_
Remarks:						
VEGETATION – Use scientific names of pl	lanta					
sample plant	Absolute	Dominor	nt Indicator	Dominance Test wo	rkshoot:	
Tree Stratum (Plot size: community )			? Status	Number of Dominant	Casaisa	
Pseudotsuga menziesii	15	<u>N</u>	<u>FACU</u>	That Are OBL, FACW		1(A)
2. Acer macrophyllum	80	_ <u>Y</u>	<u>FACU</u>	Total Number of Dom	inant	,
3				Species Across All St	rata: 3	(B)
4sample plant	95			Percent of Dominant		0/
Sapling/Shrub Stratum (Plot size: community )		_ = Total C	over	That Are OBL, FACW	·	70 (A/B)
Rubus spectabilis	5	<u>N</u>	FAC	Prevalence Index wo		
2. Acer circinatum	20	Y	FAC	Total % Cover of		0
3. Oemleria cerasiformis	10	<u>N</u>	<u>FACU</u>	OBL species CFACW species		10
4. Ilex aquifolium		N	FACU		25 x 3 =	75
5	37			FACU species 18	82 x 4 =	728
sample plant <u>Herb Stratum</u> (Plot size: <u>community</u> )		_ = Total C	over	UPL species	0 x 5 =	0
Polystichum munitum	75	Y	FACU	Column Totals: 20	07 <sub>(A)</sub>	813 (B)
2 Phalaris arundinacea	5	<u>N</u> _	_ <u>FACW</u>	Prevalence Inde	ex = B/A = 3	.9
3				Hydrophytic Vegeta	tion Indicators:	
4				1 - Rapid Test for	Hydrophytic Vege	tation
5				2 - Dominance Te		
6				3 - Prevalence In		
7 8				4 - Morphological	l Adaptations' (Prov rks or on a separate	
9				5 - Wetland Non-	·	,
10.				Problematic Hydr		<sup>1</sup> (Explain)
11.				<sup>1</sup> Indicators of hydric s		
sample plant	80	_= Total C	over	be present, unless dis	sturbed or problema	itic.
Woody Vine Stratum (Plot size: community )						
1. none				Hydrophytic Vegetation		
2	0	= Total C		Present? Y	'es No _	X
% Bare Ground in Herb Stratum0		TOTAL O				
Remarks:						

SOIL	Sampling Point: TP-1

		e to the dep	th needed to document the indicator or d	commin u	ie absence	or indicators.)
Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist) % Type <sup>1</sup> L	_oc²	Texture	Remarks
0-24"	10YR 3/2	100			LoSa	
<u>U-24</u>	10111012				<u> </u>	
		_				
						<u> </u>
·						<del></del> -
	-					
			Reduced Matrix, CS=Covered or Coated S	Sand Grain		ation: PL=Pore Lining, M=Matrix.
Hydric Soil	ndicators: (Appl	icable to all	LRRs, unless otherwise noted.)			rs for Problematic Hydric Soils <sup>3</sup> :
Histosol	• •		Sandy Redox (S5)			Muck (A10)
	pipedon (A2)		Stripped Matrix (S6)			Parent Material (TF2)
Black Hi	` '		Loamy Mucky Mineral (F1) (except ML	LRA 1)		Shallow Dark Surface (TF12)
	n Sulfide (A4)	noo (A11)	<ul><li>Loamy Gleyed Matrix (F2)</li><li>Depleted Matrix (F3)</li></ul>		Otne	er (Explain in Remarks)
	l Below Dark Surfa ark Surface (A12)	ice (ATT)	Redox Dark Surface (F6)		3Indicato	rs of hydrophytic vegetation and
	lucky Mineral (S1)		Depleted Dark Surface (F7)			nd hydrology must be present,
	leyed Matrix (S4)		Redox Depressions (F8)			s disturbed or problematic.
-	ayer (if present):					·
Type:						
Depth (inc	ches):				Hydric Soil	Present? Yes No X
Remarks:	, -					
	ic coil indicator	s word ab	comind			
NO Hyur	ic soil indicator	2 were on:	serveu.			
HYDROLO	GY					
Wetland Hyd	drology Indicators	<b>S</b> :				
Primary India	ators (minimum of	one required	l; check all that apply)		Secon	dary Indicators (2 or more required)
Surface	Water (A1)		Water-Stained Leaves (B9) (exce	ept	W	ater-Stained Leaves (B9) (MLRA 1, 2,
High Wa	ter Table (A2)		MLRA 1, 2, 4A, and 4B)			4A, and 4B)
Saturation	on (A3)		Salt Crust (B11)		Dı	rainage Patterns (B10)
Water M	arks (B1)		Aquatic Invertebrates (B13)		Dı	ry-Season Water Table (C2)
Sedimer	t Deposits (B2)		Hydrogen Sulfide Odor (C1)		Sa	aturation Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Oxidized Rhizospheres along Living	ing Roots	(C3) G	eomorphic Position (D2)
Algal Ma	t or Crust (B4)		Presence of Reduced Iron (C4)		Sh	nallow Aquitard (D3)
Iron Dep	osits (B5)		Recent Iron Reduction in Tilled So	oils (C6)	FA	AC-Neutral Test (D5)
Surface	Soil Cracks (B6)		Stunted or Stressed Plants (D1) (I	LRR A)	R	aised Ant Mounds (D6) (LRR A)
	on Visible on Aeria				Fr	ost-Heave Hummocks (D7)
	Vegetated Conca	ve Surface (E	38)			
Field Obser			V 0.411			
Surface Water			No X Depth (inches): >24"			
Water Table	Present?		No X Depth (inches): >24"			
Saturation P		Yes 1	No X Depth (inches): >24"	Wetland	d Hydrology	Present? Yes No X
(includes cap	oillary fringe)	m gaugo mo	nitoring well, aerial photos, previous inspec	etions) if s	available:	
PESCURE KE	orueu Dala (Silea	ııı yauy <del>e</del> , III0	mitoring well, aerial priotos, previous ilispec	, 11 o	avanabic.	
Donamire						
Remarks:						
No wet	land hydrology	indicators	s were observed.			

### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: 2520 Mottman Ct SW	C	City/County	: Tumw	ater, Thurston	_ Sampling Date	e: 12-16-21
Applicant/Owner: Johnson Family Trust				١٨/٨	_ Sampling Poin	
Investigator(s): Gavin Nishiyori, Sean Olsen						
Landform (hillslope, terrace, etc.): hillslope				=		
Subregion (LRR): LRRA						
Soil Map Unit Name: Everett very gravelly sand						
Are climatic / hydrologic conditions on the site typical for the	his time of yea	ır? Yes	KNo	(If no, explain in l	Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly d	disturbed?	Are "l	Normal Circumstances"	present? Yes_	X No
Are Vegetation, Soil, or Hydrology	naturally prob	olematic?	(If ne	eded, explain any answ	ers in Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point lo	ocations, transect	s, important	features, etc.
Hydrophytic Vegetation Present? Yes	No X					
Hydric Soil Present? Yes	No X		e Sampled	Area	NoX	,
Wetland Hydrology Present? Yes	No <u>X</u>	With	in a Wetlan	iu! Tes	NO	
Remarks:						
VEGETATION – Use scientific names of pla	nts.				-	
sample plant		Dominant		Dominance Test wor	ksheet:	
Tree Stratum (Plot size: community )  1. Pseudotsuga menziesii	<u>% Cover</u> 20	Y	FACU	Number of Dominant S That Are OBL, FACW		0 <sub>(A)</sub>
2. Acer macrophyllum	60	<u>'</u>	FACU			(^)
3.				Total Number of Domi Species Across All Str		5 <sub>(B)</sub>
4.	<u> </u>			•		
sample plant	80	= Total Co	ver	Percent of Dominant S That Are OBL, FACW		% (A/B)
Sapling/Shrub Stratum (Plot size: community )  1. Oemleria cerasiformis	5	Υ	FACU	Prevalence Index wo	rksheet:	
2				Total % Cover of:		tiply by:
3				OBL species 0		0
4.				FACW species	x z =	0
5					x 3 = 35	740
sample plant	5	= Total Co	ver		) x 5 = _	0
Herb Stratum (Plot size: community )  1. Polystichum munitum	80	Υ	FACU	. 40	35 (A)	740 (B)
Polypodium glycyrrhiza		<u> </u>	FACU			4.0
3				Prevalence Inde  Hydrophytic Vegetat	X - D/A	
4				1 - Rapid Test for		retation
5				2 - Dominance Te		,0
6				3 - Prevalence Inc		
7				4 - Morphological		
8					ks or on a separa	ate sheet)
9				5 - Wetland Non-\		1 ( <b>-</b> 1-i)
10				Problematic Hydro		
11sample plant				be present, unless dis		
Woody Vine Stratum (Plot size: community )	<u>100</u> =	= Total Cov	/er			
1. none				Hydrophytic		
2				Vegetation	es No	x
% Para Ground in Horb Stratum	=	= Total Cov	/er	Present? Yo	55 NO	
% Bare Ground in Herb Stratum0  Remarks:						
1						

SOIL	Sampling Point: _	TP-2
------	-------------------	------

Profile Desc	ription: (Descri	be to the dep	th need	led to document t	he indicator or c	onfirm t	the absence of	of indicato	rs.)	
Depth	Matrix		0-1-	Redox Feat	ures	2	T 4		Damada	
(inches)	Color (moist)		Cold	or (moist) %	Type <sup>1</sup> L	.oc²	Texture		Remarks	
0-24"	10YR 3/2						LoSa			
							<u>.</u>			
<del></del>							<u> </u>			
<u> </u>										
¹Type: C=Co	ncentration D=0	Depletion RM	=Reduce	ed Matrix, CS=Cov	ered or Coated S	and Grai	ins <sup>2</sup> l oca	ation: PI =F	Pore Lining, N	/=Matrix
				unless otherwise		and Oral			lematic Hydr	
Histosol				ndy Redox (S5)	,			Muck (A10	•	
	ipedon (A2)			ipped Matrix (S6)				Parent Mat	•	
Black His				amy Mucky Mineral	(F1) (except ML	RA 1)			ark Surface (1	ΓF12)
Hydroge	n Sulfide (A4)			amy Gleyed Matrix		·	Othe	r (Explain iı	n Remarks)	,
Depleted	Below Dark Sur	face (A11)	De	pleted Matrix (F3)						
	rk Surface (A12)			dox Dark Surface (	•				hytic vegetat	
	ucky Mineral (S1			pleted Dark Surfac				-	y must be pre	
	leyed Matrix (S4)		Re	dox Depressions (F	-8)		unless	s disturbed	or problemati	C
	ayer (if present	•								
Type:										No. X
Depth (inc	hes):						Hydric Soil I	Present?	Yes	No
Remarks:										
No hydri	c soil indicate	ors were ob	served	d.						
HYDROLO	3V									
_	Irology Indicato						0			
	ators (minimum o	of one require	a; cneck					•	tors (2 or mor	
	Water (A1)				eaves (B9) (exce	pt	Wa			) (MLRA 1, 2,
_	ter Table (A2)			MLRA 1, 2, 4	A, and 4B)		_	4A, and 4	•	
Saturatio	. ,			_ Salt Crust (B11)				-	terns (B10)	
Water Ma	, ,			_ Aquatic Inverteb			· · · · · · · · · · · · · · · · · · ·	-	Vater Table (	•
· · · · · · · · · · · · · · · · · · ·	t Deposits (B2)			_ Hydrogen Sulfide			· · · · · · · · · · · · · · · · · · ·			I Imagery (C9)
-	osits (B3)		_	_ Oxidized Rhizos	_	ng Roots				
<u> </u>	t or Crust (B4)			_ Presence of Red	, ,	-:!- (00)		nallow Aquit	` ,	
-	osits (B5)			_ Recent Iron Red				AC-Neutral		
	Soil Cracks (B6)	: - I I / <b>-</b>		_ Stunted or Stress	, , ,	LRR A)			lounds (D6) (I	
· · · · · · · · · · · · · · · · · · ·	on Visible on Aeri			_ Other (Explain in	Remarks)		Fr	ost-Heave I	Hummocks ([	)/)
	Vegetated Cond	ave Surface	188)			ı				
Field Observ			X	Depth (inches):	<b>&gt;24"</b>					
Surface Water										
Water Table I				Depth (inches):						V
Saturation Pr		Yes	No <u>X</u>	Depth (inches):	>24"	Wetlar	nd Hydrology	Present?	Yes	No <u></u>
(includes cap Describe Rec	inary minge) orded Data (stre	am gauge, m	onitorina	well, aerial photos	, previous inspec	tions). if	available:			
	222 _ 222 (3110		9	,, p	, <sub>[-</sub>	, , , , ,				
Remarks:										
No wetl	and hydrolog	gy indicator	s were	observed.						