Corinne R. Hollister

ISA CERTIFIED ARBORIST — *PN-6981A*
ISA TREE RISK ASSESSMENT QUALIFIED

To:	Sam Franklin
Reference:	Tree Inventory Report
Date:	November 18, 2022
Site Address:	3064 68th Ave SE, Mercer Island, 98040
Parcel:	2175100020

Earth Dance Design
gardens inspired by nature

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ATA Horticulture-Landscape Design
ISA Certified Arborist

Dear Mr. Franklin,

You contacted me and subsequently contracted my services to develop a tree inventory report for the property referenced above. You sent me a topographic survey developed by Site Surveying, Inc., dated May 5, 2022. I visited the site and inspected the trees on November 8, 2022.

This report does not include tree retention, tree replacement, plan review, tree risk assessment or tree protection measures.

Summary:

The property corners were not marked and the eastern boundary was difficult to determine. There is one (1) tree on the survey – indicated as offsite across the NE property corner – which I could not locate. I visually inspected five (5) regulated trees on the property. Two (2) of those trees are located on the southwest corner. The other three (3) trees are located above the retaining wall on the east side of the parcel. I counted one (1) small tree west of the existing home and twelve (12) small trees on the upper slope. I also saw four (4) dead trees on the upper east end of the property. Most of the trees on the east portion of the parcel – predominantly native Douglas-fir (*Pseudotsuga menziesii*) – have been routinely topped, compromising long-term viability. Tree Risk Assessment under current conditions would indicate moderate to low risk.

The property is designated by the city of Mercer Island as a critical area.

Total onsite regulated trees	5
Exceptional trees onsite	0
Trees onsite 24 inches & larger	0
Large trees onsite (10 inches to 24 inches)	5
Total regulated trees	5

Contents

Introduction

This report establishes the condition of the regulated trees and provides a significant tree inventory report per MICC 19.10.060 – 19.10.090, including:

1. A numbering system of all existing significant/large trees on the property (with corresponding tags on trees);
2. Tree type or species.
3. Size (DBH) – diameter measured at 4.5 feet, unless indicated otherwise;
4. Dripline measured as radius from trunk center;
5. General health and structure condition ratings (i.e.: poor, fair, good, excellent, etc.)
6. Notes on visible defects or concerns

The trees on the property are a mix of predominantly evergreen species – mostly Douglas-fir, plus two (2) Sarwara cypress (*Chamaecyparis pisifera*). As mentioned, the parcel is designated as an environmental critical area by the City of Mercer Island.

Note on Mercer Island Tree Code: Requirements of tree removal and replacement will be determined by city arborist. Because the topped trees on the east end of the parcel are outside construction, removing trees in critical areas not associated with construction may apply.

Limitations and Use of this Report

This tree report establishes existing conditions of the trees on the property, utilizing the most practical means available. This report is based solely on what is readily visible and observable, without any invasive means. Ratings for health and structure, as well as any recommendations, are valid only through project development and construction, and within a reasonable amount of time.

There are several factors that can affect a tree's condition, which may be pre-existing and indeterminable with only a visual analysis. No attempt was made to establish the presence of hidden or concealed conditions which may contribute to the risk or failure potential of trees on the site. These conditions include root and stem (trunk) rot, internal cracks, structural defects or construction damage to roots, which may be hidden beneath the soil. In addition, construction and post-construction circumstances can cause a relatively rapid deterioration of a tree's condition.

Tree Inspection Methods – Tree Health, Structure and Viability

I will return to the site and mark each regulated with a 1 x 3.5-inch aluminum tag indicating the tree number.

I visually inspected each tree from the ground. I performed the equivalent of a Level 1 tree risk assessment.[1] This is the standard assessment for populations of trees near specified targets, conducted in order to identify obvious defects or specified conditions such as a pre-development inventory. This is a limited visual assessment focused on identifying trees with imminent and/or probable likelihood of failure, and/or other visible conditions that will affect tree retention.

I recorded tree species and size (DBH). I measured and/or estimated the average dripline of each tree.

I rated the condition of each tree, both health and structure. It is important to consider that high-risk trees can appear healthy, sometimes with a dense, green canopy. This may occur when there is sufficient sapwood or adventitious roots present to maintain tree health, but inadequate strength for structural support. On the other hand, trees in poor health may, or may not be stable structurally. Tree decline due to root disease, for example, is likely to compromise a tree's structure, while decline due to drought or insect attack may not. Tree health and structure are linked in that healthy trees are more capable of compensating for any structural defects. A healthy tree often develops adaptive growth that adds strength to parts weakened by decay, cracks, and wounds.

The intent of this report is to identify any unhealthy trees based on existing health conditions and tree structure, and to specify which trees are most suitable for preservation[2]. No invasive procedures were performed on any trees. The results of this inspection are based on what was visible at the time of the inspection.

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[1] Smiley, Matheny, Lilly: Companion publication to the ANSI A300 Part 9: Tree Shrub and Other Woody Plant Management – Standard Practices, Tree Risk Assessment. 2017. ISA.
[2] Fite, Smiley: Companion publication to the ANSI A300 Part 5: Tree Shrub and Other woody Plant Maintenance – Standard Practices, Managing Trees During Construction. 2008. ISA.

The attached inventory summarizes my inspection results and provides the following information for each significant tree:

- Tree number – As shown on tag in the field, and on attached annotated survey.
- DBH – Stem diameter in inches measured 4.5 feet from the ground. Multiple-stemmed trees are reported as a single integer, using a quadratic mean calculation (industry standard).
- Tree Species – Common and Latin names provided.
- Dripline – Average branch extension from the trunk measured as radius in feet from trunk center.
- Health and Structure ratings – '1' indicates no to minor visible health-related problems or structural defects, '2' indicates minor to moderate visible problems or defects that may require attention if the tree is retained, and '3' indicates significant visible problems or defects and tree removal is recommended.
- Notes – Obvious structural defects or diseases visible at time of inspection, including[3]:

  Cracked or abnormal bark – separation of wood fibers and/or signs of decay on trunk.

  Decay – a substance undergoing decomposition or a process of degradation by microorganisms.

  Foliage vigor – low foliage density may indicate stress, or early infection and/or declining health.

  Ivy – dense ivy prevents a thorough inspection, and other defects may be present.

  Multiple-leaders – the tree has multiple stem attachments, which may lead to tree failure ad require maintenance or monitoring over time.

  Suppressed – tree crowded by adjacent trees or buildings, with defective structure and/or low vigor. Retain tree only as a grove tree, no stand-alone.

  Topped – the tree is previously topped and has poor structure and potential stem decay. In this case, routine topping has compromised long-term viability.

- Viability – A determination by the arborist whether the tree is viable for retention; tree removal recommended on unviable trees. Final analysis on viability rests with city arborist.

[3] Many from: Glossary of Arboricultural Terms, ISA, 2015

Attachment 1: Assumptions and Limiting Conditions

1. I conducted a field examination of the site on November 8, 2022. My observations and conclusions are as of that later date.

2. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/arborist can neither guarantee nor be responsible for the accuracy of information provided by others.

3. I am not a qualified land surveyor, and reasonable care was used to match trees indicated on the survey – developed by Site Surveying, Inc. – and with those growing in the field. The trees may not be located accurately on the survey.

4. Unless stated otherwise: 1) information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of inspection; and 2) the inspection is limited to visual examination of the subject trees without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied that problems or deficiencies of the subject trees may not arise in the future.

5. All trees possess the risk of failure. Trees can fail at any time, with or without obvious defects, and with or without applied stress. Risk management is the sole responsibility of the property owner.

6. Construction activities can impact trees in unpredictable ways. Tree protection measures will be established as design progresses. All retained trees should be inspected at the completion of construction, and regularly thereafter as part of ongoing maintenance.

7. The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made.

8. The consultant does not assume any liability for the subject trees and does not represent the transfer of such for any risks associated with the tree from the landowner to the consultant.

Attachment 2: Certificate of Performance

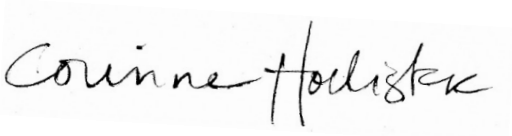
I, Corinne Hollister, certify that:

- I have personally inspected the trees and the property referred to in this report and have stated my findings accurately.
- I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.
- The analysis, opinion, and conclusions stated herein are my own and are based on current industry standards, scientific procedures and facts.
- My analysis, opinion, and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices.
- No one provided significant professional assistance to me, except as indicated within the report.
- My compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a member in good standing of the International Society of Arboriculture (ISA), and the ISA PNW Chapter, I am an ISA Certified Arborist (#PN-6981A) and am Tree Risk Assessment Qualified. I also am a member of the American Society of Consulting Arborists (ASCA).

Corinne Hollister Digitally signed by Corinne Hollister Date: 2022.11.18 11:00:30 -08'00'

Signed,



Corinne Hollister

Date: November 18, 2022

Attachment 3: Tree Inventory

Tree #	Species	DBH	Dripline	Health	Structure	Replacement	Category	Notes
1	*Chamaecyparis pisifera* Sawara cypress	12	10.5	2	2	2	Large tree	Low foliage vigor, topped
2	*Chamaecyparis pisifera* Sawara cypress	12.5	12	2	2	2	Large tree	Low foliage vigor, topped
3	*Pseutotsuga menziesii* Douglas-fir	15.5	12	2	2	2	Large tree	Topped, abnormal bark, resin on trunk, will not recover structurally (not viable)
4	*Pseutotsuga menziesii* Douglas-fir	15	10	2	2	2	Large tree	Topped, will not recover structurally (not viable)
5	*Pseutotsuga menziesii* Douglas-fir	17	18	2	2	2	Large tree	Topped, will not recover structurally (not viable)
Small Trees – 13 trees measuring less than 10 inches								
NA	*Thuja plicata* Western red cedar	6 to 8					Small tree	5 – located close to the north property line, east of Tree #5, topped
NA	*Craetegus monogyna* Common hawthorn	8					Small tree	1 – Located close to Tree #3, Ivy and Blackberry, DBH estimated
NA	*Pseutotsuga menziesii* Douglas-fir	6.5 to 9.5					Small tree	6 – Located throughout upper lot
NA	*Pseutotsuga menziesii* Douglas-fir	7					Small tree	1 – Located in front of house
Dead Trees								
NA	*Thuja plicata* Western red cedar							3 – Located at NE property corner
NA	*Pseutotsuga menziesii* Douglas-fir							1 - Located near Tree #5

See Definitions on page 4

Attachment 4: Mercer Island Tree Code

TREE REMOVAL ASSOCIATED WITH CONSTRUCTION (MICC 19.10.060(A))

The tree regulations allow removal of trees associated with property development when done in a way that minimizes tree removal and retains at least 30% of the regulated trees on site. Large and Exceptional Trees are prioritized for retention. Development proposals must retain trees as follows:

A. A minimum of 30% of large trees must be retained over a rolling 5-year period. Refer to MICC 19.10.050(A)4 & 5 for more information about the calculation and application of the rolling 5-year period.
B. The project design must minimize the removal of Large trees and maximize onsite tree retention as follows:

    2. Trees shall not be removed outside the area of land disturbance except where necessary to install site improvements (e.g. driveways, utilities, etc.).
    3. Tree removal for the purpose of site landscaping should be limited to those trees that will pose a future safety hazard to existing or proposed site improvements as documented in the arborist's report.

Tree Removal in Critical Areas

Tree removal that is not associated with a development project is not allowed in a critical area (wetlands, watercourses, landslide hazard areas and buffers). One or more of the following criteria must apply and documentation must be prepared by a qualified Arborist showing that:

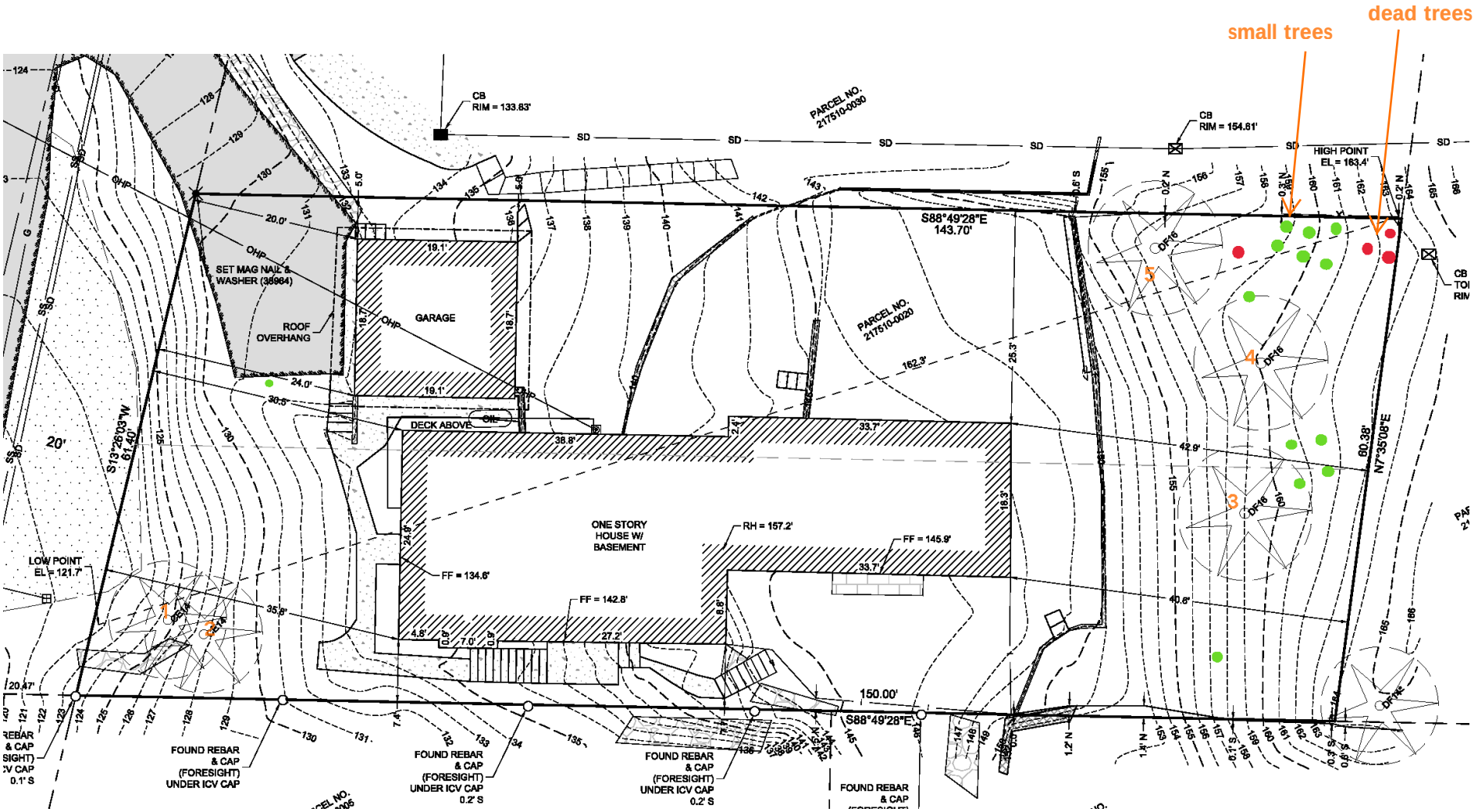
1. The tree is a hazard;
2. The tree is diseased, in decline, or not viable for retention; or
3. The removal of the tree will enhance the ecosystem functions and values and/ or promote slope stability (this report may be prepared by a qualified professional)

If one of the above conditions apply to the tree(s) you wish to remove please prepare the following with your tree permit application:

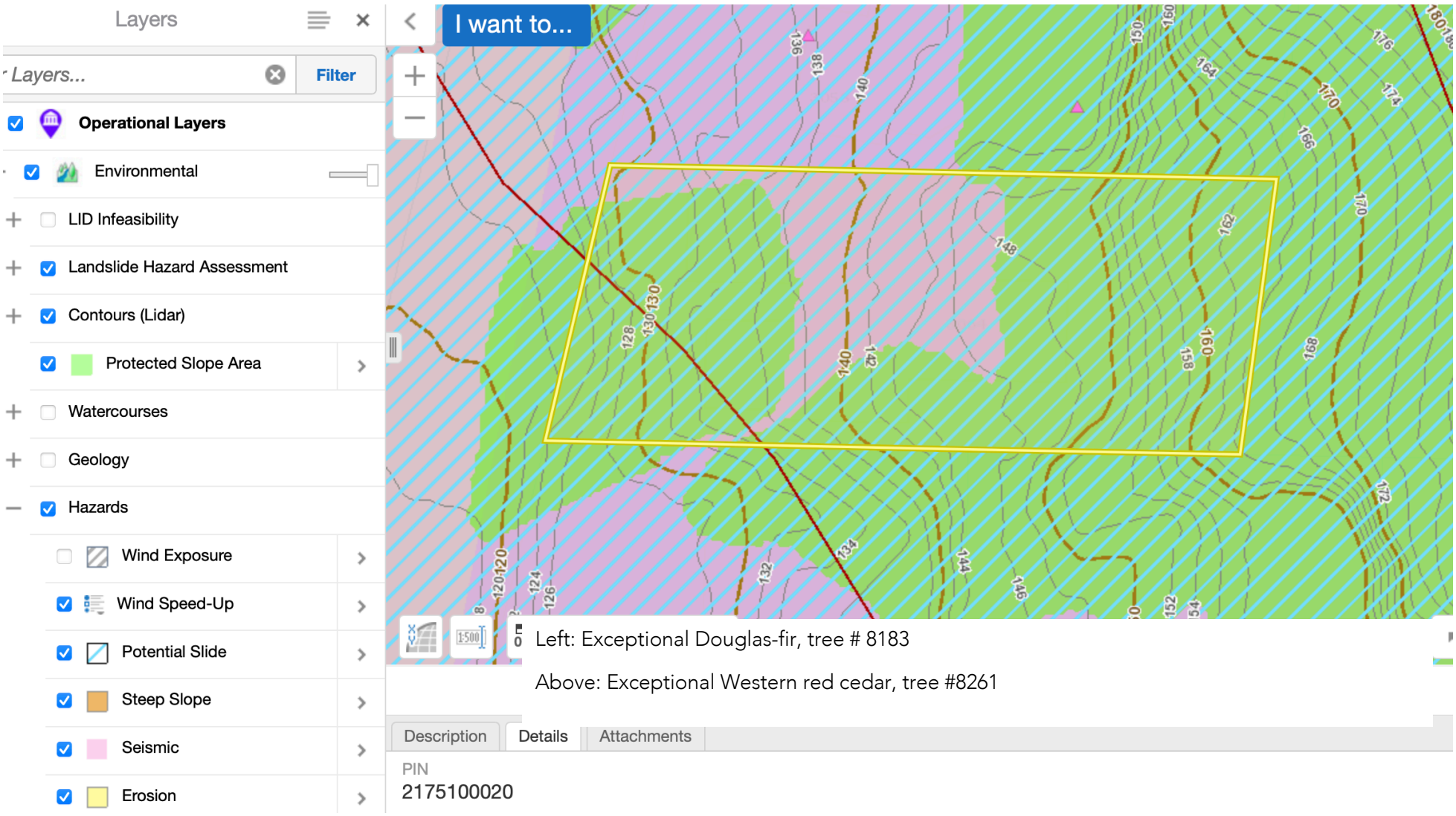
1. A restoration plan prepared by a qualified professional that contains the following:
    1. Analysis demonstrating how the ecological functions and values including but not limited to slope stabilization, hydrologic function, and habitat value are being preserved by the proposed plan.
    2. Proposed removal of all noxious weeds, as defined in Chapter 19.16 MICC.
    3. Removed trees shown as made into snages at a safe height, where feasible.
2. Confirmation that the approved restoration plans shall be complete by a qualified professional.
3. Competed Tree Permit Application (for more information about tree removal on private property click here).

Please email your application to epermittech@mercerisland.gov. If you have questions please contact our Permit Techs at 206-275-7605.

Attachment 5: Annotated Survey



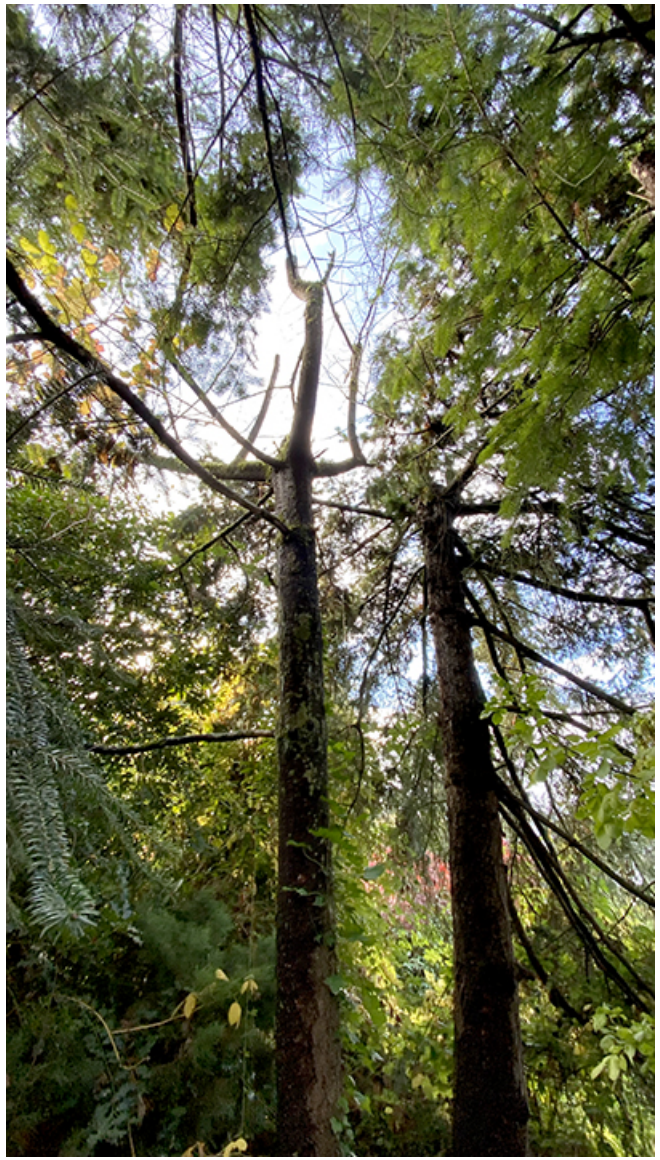
Attachment 6: Mercer Island GIS Map



Attachment 7: Site Photos

Right: Looking east from 68th Avenue SE, Tree #1 and #2.

Below: Looking northeast from back of exiting home, below retaining wall. Topped Douglas-fir in foreground. Tree #5 is to the left in photo. Taller trees are offsite.



Left: Tree #3 and #4, typical of all trees located on upper east section of parcel.

Below: Resin and abnormal bark on Tree #3.