



ARBOR INFO LLC

2406 N Castle Way Brier, WA, 98036

**Tree Assessment
For
The Pavilion Company
At
2412 – 60th Ave SE
Mercer Island, Washington**



**Date
1/23/2022**

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- I. Tree Location Map
- II. Tree Assessment Summary Table
- III. Mercer Island Check list
- IV. Mercer Island Tree Inventory Form

1. Introduction

I was contacted by Chad Koontz at The Pavillion Company to describe and assess the condition and viability of trees on and adjacent to 2412 – 60th Ave SE, Mercer Island, WA. This report summarizes my observations and conclusions.

2. Competence

- Certified Arborist (International Society of Arboriculture, ISA #23136, PN 0426 A)
- Registered Consulting Arborist (American Society of Consulting Arborists #499).
- Tree Risk Assessment Qualified (ISA).
- Certified forester (Society of American Foresters #951)
- Bachelor of Science degree in Forest Management from the University of Washington
- Licensed Washington State Real Estate Managing Broker #11534

3. Client

The client to whom this report is addressed is:

Chad Koontz
The Pavilion Company
4128 SW Alaska St. #204H
Seattle, WA 98136
Chad@koontzarch.com

4. Assignment, Purpose and Use of Report

The assignment is to describe and assess the condition and viability of on-site and off-site trees adjacent to the subject parcel and to provide protection recommendations in conformance with the City of Mercer Island “Tree Submittal Check List”, attached.

5. Limits of Assignment

The assignment is limited to the information gathered during the site visit December 20, 2021 (date of assessment) and references noted in this report. No excavation or sampling was undertaken to determine unseen defects. No inspection of trees not reported herein was made.

A site plan indicating the current condition of the property was provided and is included in the Addenda with tree locations noted.

6. Site Description

2412 – 60th Ave SE Mercer Island, WA,
King County Parcel No. 4099500150, 6,750 square feet.

The subject property contains foundation for single-family residence on near level ground.

A new single-family replacement residence is planned for the site.

7. Methodology

Each tree was measured for diameter at 4.5-feet above ground, (or equivalent) total height, percentage of live green crown, and dripline (extent of live limbs).

Each tree was assessed as to its condition, or vigor and viability:

Vigor or condition:

Health: Biotic

- Good: No evidence of fungal infection or decay; expected to survive without disturbance to its normal life expectancy. (40-100 years in this case)
- Fair: Tree has initial fungal decay or evidence of insect habitat and is less likely to survive to normal life expectancy. Some with minor defects, are rated viable,
- Poor: Tree has significant fungal decay and defects that render it not likely to survive three years.

Structural: Abiotic

- Good: no significant abiotic or mechanical defects
- Fair: less than preferred form, defects such as breaks in the bole, poor limb attachments, included bark, poor root contact, etc.
- Poor: Broken or cracked bole or limbs; root plate compromised

Viability:

- A measure of whether the tree is likely to live to its “normal” life span or has defects limiting that potential or poses a risk to the residence or proposed development is a simple ‘yes/no’ rating.

8. Tree Description

Refer to the attached Tree Assessment Summary Form. There are a total of nineteen on-site trees and there are three off-site. The on-site trees include sixteen Leyland Cypress (*Cupressus x leylandii*) that have all been topped and grown as a hedge. Two other onsite trees are grand fir (*Abies grandis*) that have been topped or are enveloped in vines and with bole decay throughout. None of the trees are viable due to close spacing, weak limb attachments due to topping and/or bole decay. They are classified by the City Municipal Code (MICC) 19.10 –“Trees” as indicated following, however the cypress are clearly non-viable hedge and the two grand fir are not viable.

Table 1- Tree Category Summary – On site

<u>Category</u>	<u>Number</u>
24”+	0
Exceptional	0
Large Regulated	0
Large Regulated to be Removed	0
Percentage Retention	0%

Table 2- Tree Category Summary – Off site

<u>Category</u>	<u>Number</u>
24”+	1
Exceptional	1
Large Regulated	3
Large Regulated to be Removed	0
Percentage Retention	100%

9. Replacement Trees

None of the on-site trees are planned for retention, however none are viable. It appears that no replacements are required per the Mercer Island Tree Inventory & Replacement Submittal Information Form, attached.

There is no planned activity within the root zones of the three offsite trees.

10. Summary

The on-site trees are all non-viable and or hedged and therefore no replacements are required in the event of removal. The off-site trees are well away from planned construction activities.

11. Assumptions and Limiting Conditions

1. Any legal description provided to the consultant is assumed to be correct. Ownership of the subject trees as provided by the client is assumed to be correct. No responsibility is assumed for legal matters. No opinion as to the property line location is made.
2. Care has been taken to obtain all information from reliable sources. The consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
3. The consultant shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including additional fees.
4. This report and any values expressed herein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
5. The exhibits in this report are included to assist the reader and are not necessarily to scale.
6. Unless expressed otherwise, information in this report covers only items that were examined, and reflects the condition of those items at the time of inspection. The subject site was cleared of all vegetation at the time of inspection therefore the extent of removals is inferred from adjacent undisturbed areas. The inspection is limited to visual examination of accessible portions of the trees and plants.
7. Loss or alteration of any part of the report invalidates the entire report. Ownership of any documents related to this report passes to the client only.
8. The liability of ArborInfo LLC its contractors and employees is limited to the client only and only up to the amount of the fee actually received for the assignment.
9. *There is no warranty suggested for any of the trees subject to this report. Weather, latent tree conditions, and future man-caused activities could cause physiologic changes and deteriorating tree condition. Over time, deteriorating tree conditions may appear and there may be conditions, which are not now visible which, could cause tree failure. This report or the verbal comments made at the site in no way warrant the structural stability or long-term condition of any tree, but represent my opinion based on the observations made.*

2412 – 60th Ave SE, Mercer Island

10. *NEARLY ALL TREES IN ANY CONDITION STANDING WITHIN REACH OF IMPROVEMENTS OR HUMAN USE AREAS REPRESENT HAZARDS THAT COULD LEAD TO DAMAGE OR INJURY. THE ASSESSMENT IS VALID FOR TWO YEARS FROM THE DATE OF INSPECTION, ONLY.*

11. PERTINENT JURISDICTION RULES AND REGULATIONS SHOULD BE CONSULTED PRIOR TO THE REMOVAL OF ANY TREE.

Respectfully Submitted,

A handwritten signature in cursive script that reads "Tom Hanson".

Thomas M. Hanson, CA, RCA

Addenda

- I. Tree Location Map
- II. Tree Assessment Summary Table
- III. Mercer Island Check list
- IV. Mercer Island Tree Inventory Form

Tree Assessment																	
Site: Pavilion Homes -- 2412 - 60th Ave SE, Mercer Island, WA										Date: 12/19/2021		Project - 2021-145					
Tree #	Common	Scientific	DBH (inches)	Height (feet)	Crown Ratio (%)	Diameter (ft)			Root Zone Outer Radius (feet)	Root Zone Inner Radius (feet)	Vigor	Health	Structure	Visible	Large Regulated**	Exceptional	Comments
						N	S	E									
On Site																	
1	Leyland Cypress	<i>Cupressus × leylandii</i>	17.3	45	95	4	16	6	19	29	14	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
2	Leyland Cypress	<i>Cupressus × leylandii</i>	8.6	45	95	3	3	7	17	16	8	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
3	Leyland Cypress	<i>Cupressus × leylandii</i>	10.6	45	95	3	3	7	17	18	9	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
4	Leyland Cypress	<i>Cupressus × leylandii</i>	8.2	45	95	3	3	7	17	16	8	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
5	Leyland Cypress	<i>Cupressus × leylandii</i>	11.1	45	95	3	3	7	17	19	9	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
6	Leyland Cypress	<i>Cupressus × leylandii</i>	9.3	45	95	3	3	7	17	17	8	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
7	Leyland Cypress	<i>Cupressus × leylandii</i>	9.9	45	95	3	3	7	17	17	9	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
8*	Leyland Cypress	<i>Cupressus × leylandii</i>	13.5	45	95	3	3	7	17	21	11	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
9	Leyland Cypress	<i>Cupressus × leylandii</i>	9.1	45	95	3	3	7	17	17	8	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
10	Leyland Cypress	<i>Cupressus × leylandii</i>	11.1	45	95	3	3	7	17	19	9	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
11	Leyland Cypress	<i>Cupressus × leylandii</i>	12.3	45	95	3	3	7	17	20	10	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
12	Leyland Cypress	<i>Cupressus × leylandii</i>	11.3	45	95	3	3	7	17	19	9	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
13	Leyland Cypress	<i>Cupressus × leylandii</i>	11.5	45	95	3	3	7	17	19	10	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
14	Leyland Cypress	<i>Cupressus × leylandii</i>	12.3	45	95	3	3	7	17	20	10	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
15*	Leyland Cypress	<i>Cupressus × leylandii</i>	12.1	45	95	3	3	7	17	12	6	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
16	Leyland Cypress	<i>Cupressus × leylandii</i>	10.9	45	95	3	3	7	17	11	5	Good	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
17	Grand fir	<i>Abies grandis</i>	19.5	40	70	12	12	12	12	20	10	Good	Fair	No	No	No	Topped at 20-feet, weak limb attachments
18	Grand fir	<i>Abies grandis</i>	20.6	45	80	12	12	12	12	21	10	Good	Fair	No	No	No	Enveloped in vines--low vigor
19	Leyland Cypress	<i>Cupressus × leylandii</i>	19.4	45	90	9	4	4	8	19	10	Fair	Poor	No	No	No	Hedge: Topped at 12-feet, weak limb attachments
Off site-Private																	
A	Apple	<i>Malus sp.</i>	19.5	12	50	12	12	12	12	12	6	Good	Good				No
B	Austrian pine	<i>Pinus nigra</i>	12	35	70	14	14	18	12	15	7	Good	Fair				No
C	Sequoia	<i>Sequoiadendron giganteum</i>	58.9	102	80	22	20	18	22	21	10	Good	Good				Yes
* Multiple stems adjusted to single																	
** Trees that are not viable or those that are considered a hedge do meet the Large Regulated or Exceptional Definition of Mercer Island Code.																	

CITY OF MERCER ISLAND

COMMUNITY PLANNING & DEVELOPMENT

9611 SE 36TH STREET | MERCER ISLAND, WA 98040

PHONE: 206.275.7605 | www.mercergov.org



MERCER ISLAND TREE INVENTORY & REPLACEMENT SUBMITTAL INFORMATION

EXCEPTIONAL TREES

Exceptional Trees- means a tree or group of trees that because of its unique historical, ecological or aesthetic value constitutes an important community resource. A tree that is rare or exceptional by virtue of its size, species, condition, cultural/historical importance, age, and/or contribution as part of a tree grove. Trees with a diameter of more than 36 inches, or with a diameter that is equal to or greater than the diameter listed in the Exceptional Tree Table shown in MICC 19.16 under Tree, Exceptional.

List the total number of trees for each category and the tree identification numbers from the arborist report.

Number of trees 36" or greater _____

List tree numbers: _____

Number of trees 24" or greater (including 36" or greater) _____

List tree numbers: _____

Number of trees from Exceptional Tree Table (MICC 19.16) _____

List tree numbers: _____

LARGE REGULATED TREES

Large Regulated Trees- means any tree with a diameter of 10 inches or more, and any tree that meets the definition of an Exceptional Tree.

Number of Large Regulated Trees on site _____ (A)

List tree numbers: _____

Number of Large Regulated Trees on site proposed for removal _____ (B)

List tree numbers: _____

Percentage of trees to be retained ((A-B)/Ax100) note: must be at least 30% _____ %

RIGHT OF WAY TREES

Right of Way Trees- means a tree that is located in the street right of way adjacent to the project property.

Number of Large Regulated Trees in right of way _____

List tree numbers: _____

Number of Large Regulated Trees in right of way proposed for removal _____

List tree numbers: _____

Reason for removal: _____

TREE REPLACEMENT

Tree replacement- removed trees must be replaced based on the ratio in the table below. Replacement trees shall be conifers at least six feet tall and or deciduous at least one and one-half inches in diameter at base.

Diameter of Removed Tree (measured 4.5' above ground)	Tree replacement Ratio	Number of Trees Proposed for Removal	Number of Tree Required for Replacement Based on Size/Type
Less than 10"*	1		
10" up to 24"	2		
Greater than 24" up to 36"	3		
Greater than 36" and any Exceptional Tree	6		
TOTAL TREE REPLACEMENTS			

**no replacement tree is needed if the tree fits all of the following;
Less than 10 inches in diameter, not an exceptional tree, and not a replacement tree from another tree permit. **

CITY OF MERCER ISLAND

COMMUNITY PLANNING & DEVELOPMENT

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PHONE: 206.275.7605 | www.mercergov.org

Inspection Requests: Online: www.mybuildingpermit.com VM: 206.275.7730



TREE SUBMITTAL CHECKLIST

If a box is checked, please provide the information in your next submittal

SUBMITTAL ITEMS

1. The Mercer Island Tree Inventory Form

- Provide the City's Mercer Island Tree Inventory Form

2. Arborist report/tree inventory

- Provide an Arborist report, prepared by a qualified Arborist. Include the following information in the arborist report.
 - 1. Description of how the arborist meets the threshold requirements for Qualified Arborist.
 - 2. A complete description of each tree's diameter, species, critical root zone, limits of allowable disturbance, health, condition, and viability.
 - 3. A description of the method(s) used to determine the limits of allowable disturbance (i.e., critical root zone, root plate diameter, or a case-by-case basis description for individual trees).
 - 4. Any special instructions specifically outlining any work proposed within the limits of disturbance protection areas (i.e. hand-digging, air space, tunneling, root pruning, any grade changes, clearing, monitoring, and aftercare).
 - 5. For trees not viable for retention, a description of the reason(s) for removal based on poor health, high risk of failure due to structure, defects, unavoidable isolation, windfirmness, unsuitability species, etc. If there is no reasonable alternative action (pruning, cabling, etc.) possible, replacement recommendations must be given.
 - 6. Describe the impact of necessary tree removal on the remaining trees, including those in a grove or on adjacent properties.
 - 7. Describe timing and installation of tree protection measures. Such measures must include fencing and be in accordance with the tree protection standards as outlined in MICC 19.10.
 - 8. The suggested location and species of replacement trees to be used when required. The report shall include planting and maintenance specifications to ensure long term survival.
 - 9. **A Tree Inventory** containing the following:
 - a. A numbering system of all existing large trees on the property (with corresponding tags on trees). The inventory shall also include large trees on adjacent property with driplines or critical root zones extending into the property.
 - b. Tree size (diameter).
 - c. Proposed tree status (retained or proposed for removal).
 - d. Tree type or species.
 - e. Identify all Exceptional trees and differentiate between those less than 24 inches and those greater than or equal to 24 inches in diameter.
 - f. Brief general health or condition rating of each tree (i.e. poor, fair, good, etc.).

3. Site/tree retention plan

Indicate the following on all civil/utility and grading sheets. If there are no civil sheets indicate on the architectural site plan

- 1. Location of all proposed improvements (building footprint, access, utilities, buffers, required landscape areas).
- 2. Surveyed location of all large trees and Exceptional trees on the property
- 3. Show the critical root zone of Large trees on adjacent properties if driplines extend over the subject property line.
- 4. Trees labeled corresponding to the tree inventory numbering system on the Mercer Island Tree Inventory Form.
- 5. Identify Exceptional trees using different symbols for trees less than 24 inches and trees greater than or equal to 24 inches.
- 6. Location of tree protection measures.
- 7. Limits of excavation near potential saved trees (e.g. excavation limits for building foundation).
- 8. Indicate clearing limits/limits of disturbance (LOD) around all trees potentially impacted by site disturbances - grading, demolition, construction activities (including approximate LOD of off-site trees with overhanging driplines), etc.
- 9. Proposed tree status (trees to be removed or retained) noted by an 'X' for removal.

4. Replanting plan

- Provide the Replanting plan showing proposed locations of any required replacement trees.

PEER REVIEW AND CONFLICT OF INTEREST

A peer review of the tree permit application by a qualified arborist may be required to verify the adequacy of the information and analysis. **The applicant shall bear the cost of the peer review.**

The City Arborist may require the applicant retain a replacement qualified arborist or may require a peer review where the City Arborist believes a conflict of interest may exist.

For example, if an otherwise qualified arborist is employed by a tree removal company and prepares the arborist report for a development proposal, a replacement qualified arborist or peer review may be required.

ARBORIST QUALIFICATION

For tree reviews associated with a development proposal, a qualified arborist must have

- A minimum of three (3) years' experience working directly with the protection of trees during construction
- Have experience with the likelihood of tree survival after construction
- Be able to prescribe appropriate measures for the preservation of trees during land development
- ISA Tree Risk Assessment Qualification
- Your qualified arborists must have at least one (1) of the following credentials:
 - ISA Certified Arborist;
 - ISA Certified Arborist Municipal Specialist;
 - ISA Board Certified Master Arborist;
 - American Society of Consulting Arborists (ASCA) registered Consulting Arborist;
 - Society of American Foresters (SAF) Certified Forester for Forest Management Plans;

ADDITIONAL INFORMATION

Additional Information. The City Arborist or Code Official may require additional documentation, plans, or information as needed to ensure compliance with applicable City regulations.
