A.B.C Consulting Arborists LLC

Accurate *Balanced* *Certified*

1200 7th Ave SE Townhomes
Tree Risk Assessment

June 18, 2024

PREPARED FOR:

Dawn – CESNW
Vitaly Kravchishin / Seatac LLC.

PREPARED BY:

A.B.C. Consulting Arborists LLC

Daniel Maple, Consultant

Registered Consulting Arborist #627
Tree & Plant Appraisal Qualified (TPAQ)
ISA Municipal Specialist # PN-7970BM
ISA Tree Risk Assessment Qualified (TRAQ)
ISA Board Certified Master Arborist #PN-7970BM

TABLE OF CONTENTS

CONSULTING ARBORIST

Daniel J. Maple / A.B.C. Consulting Arborists, LLC
Westside (425) 999-0867 Daniel@AbcArborist.Com Eastside (509) 953-0293

Certifications

ASCA Registered Consulting Arborist (RCA)	# 627
ASCA Tree & Plant Appraisal Qualified (TPAQ)	December 15, 2024
ISA Board Certified Master Arborist	PN-7970BM
ISA Certified Arborist Municipal Specialist	PN-7970BM
ISA Tree Risk Assessment Qualified (TRAQ)	May 13, 2025
ATFS Qualified Tree Farm Inspector	# 169449
Commercial Applicator	# 92432
Commercial UAV Airman Pilot	# 4135495

ASSIGNMENT CLIENT REQUESTS:

- Level 2 Risk assessment of the trees on the property.
- Provide recommendations to mitigate any noted risks.
- Provide a written report of my observations, analysis, and recommendations.

Limitations

We took every reasonable effort to accurately determine the level of risk associated with the trees, however, it is possible that internal decay may exist and not been detected. This report is not a health assessment, nutrient analysis, or quote to provide services, it is limited to the scope of the assignment.

METHODOLOGY

To evaluate the trees, as well as to prepare this report, I drew upon my 30+ years of experience in the field of arboriculture and my formal education. I followed the protocol of the International Society of Arboriculture (ISA) and I performed my assessment using and/or considering the following Best Management Practices:

ANSI A300 Part 3 – *Supplemental Support Systems.*
ANSI A300 Part 9 – *Tree Risk Assessment* (Second Edition).

Best Management Practices were developed to aid in the interpretation of professional standards and guide work practices based upon current science and technology. Using this process, I performed my assessment, which included looking at the overall health of the tree as well as the site conditions.

SITE – TREES

Site : 1200 7th Ave SE- Puyallup

Parcel 7845001330. A .46-acre site. Pierce County GIS – No environmentally sensitive conditions were noted. The soil was moderate in depth, moderately compacted and well drained.

Trees

There were 2 trees on the site, they were geo-tagged 1 & 2. I also looked at 3 offsite trees near the property – all of the onsite trees were low risk and the offsite trees also appeared to be low risk.

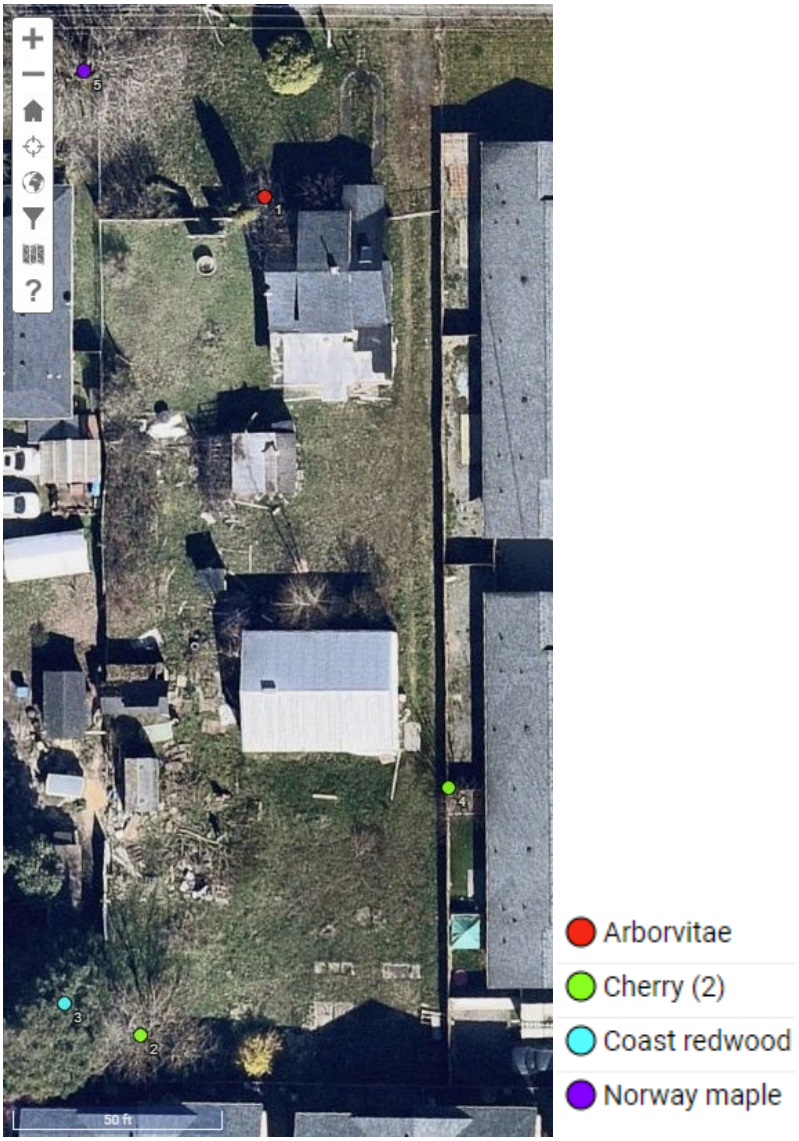
Sincerely,

Daniel Maple, Consulting Arborist

Registered Consulting Arborist #627
Tree & Plant Appraisal Qualified (TPAQ)
ISA Municipal Specialist # PN-7970BM
ISA Tree Risk Assessment Qualified (TRAQ)
ISA Board Certified Master Arborist #PN-7970BM

ATTACHMENTS

ATTACHMENT 1 - SITE IMAGES



TREEPLOTTER™ INVENTORY

Arborvitae Tree ID #31819

Details

ID:	1
Common Name:	Arborvitae
Latin Name:	Thuja occidentalis
DBH:	7.55
Condition - Health :	Good
Height:	14
Height Range:	<15ft

Tree Health and Species Profile

Health Concerns:	None

Site Factors

Site Factors:	Vacant Resident

Crown/Branches

Crown/Branch Issues:	
Main Issue - Crown/Branches:	None Noted
Fall Distance/Dead-Weak Branches:	15
Load on Branch Defect:	Minor
Likelihood of Failure - Crown/Branches:	Improbable
Likelihood of Impact - Crown/Branches:	Medium
Likelihood of Failure and Impact - Crown/Branches:	Unlikely
Consequences - Crown/Branches:	Negligible
Risk Rating - Crown/Branches:	Low

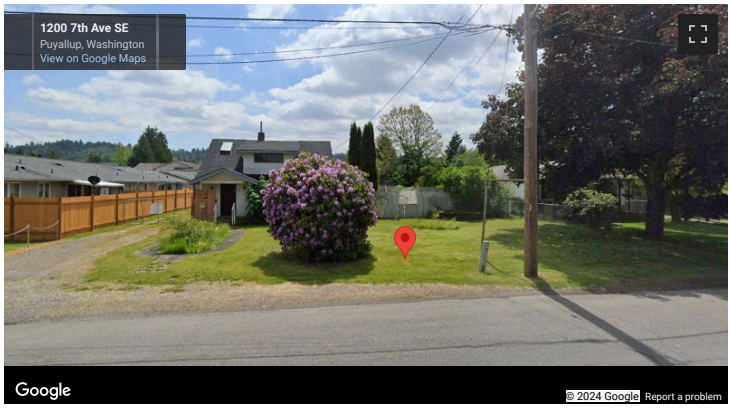
Trunk

Trunk Issues:	
Main Issue - Trunk:	None Noted
Load on Trunk Defect:	Moderate
Likelihood of Failure - Trunk:	Improbable

Photos

image.jpg
6/15/2024

Street View



Likelihood of Impact - Trunk:	Medium
Likelihood of Failure and Impact - Trunk:	Unlikely
Consequences - Trunk:	Negligible
Risk Rating - Trunk:	Low

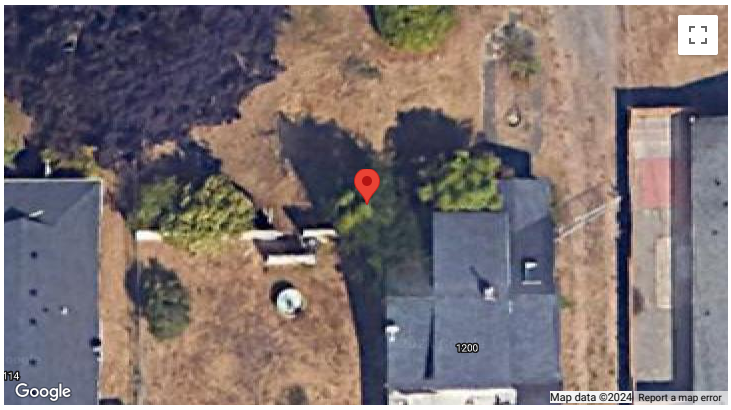
Roots

Root Issues:	
Main Issue - Root:	None Noted
Likelihood of Failure - Roots:	Improbable
Likelihood of Impact - Roots:	Medium
Likelihood of Failure and Impact - Roots:	Unlikely
Consequences - Roots:	Negligible
Risk Rating - Roots:	Low

Overall Rating

Mitigation Options:	None Needed
Residual Risk:	Low
Final/Preliminary?:	Final
Inspection Interval:	3-5 Years
Overall Risk Rating:	Low
Notes :	Three codominant stems tree is in good health and vigor. Starting to be overtaken by wisteria.

Map



TREEPLOTTER™ INVENTORY

Cherry Tree ID #31820

Details

ID:	2
Common Name:	Cherry
Latin Name:	Prunus ssp.
DBH:	19.81
Condition - Health :	Good
Height:	30
Height Range:	30ft-50ft

Tree Health and Species Profile

Health Concerns:	None

Site Factors

Site Factors:	Residential

Crown/Branches

Crown/Branch Issues:	
Main Issue - Crown/Branches:	None Noted
Fall Distance/Dead-Weak Branches:	
Load on Branch Defect:	
Likelihood of Failure - Crown/Branches:	Improbable
Likelihood of Impact - Crown/Branches:	Medium
Likelihood of Failure and Impact - Crown/Branches:	Unlikely
Consequences - Crown/Branches:	Minor
Risk Rating - Crown/Branches:	Low

Trunk

Trunk Issues:	
Main Issue - Trunk:	None Noted
Load on Trunk Defect:	
Likelihood of Failure - Trunk:	Improbable

Photos

image.jpg
6/15/2024

Street View

Street View is not available for this feature.

Map

Likelihood of Impact - Trunk:	Medium
Likelihood of Failure and Impact - Trunk:	Unlikely
Consequences - Trunk:	Minor
Risk Rating - Trunk:	Low

Roots

Root Issues:	
Main Issue - Root:	None Noted
Likelihood of Failure - Roots:	Improbable
Likelihood of Impact - Roots:	Medium
Likelihood of Failure and Impact - Roots:	Unlikely
Consequences - Roots:	Minor
Risk Rating - Roots:	Low

Overall Rating

Mitigation Options:	None Needed
Residual Risk:	Low
Final/Preliminary?:	Final
Inspection Interval:	3-5 Years
Overall Risk Rating:	Low
Notes :	It’s an older 5 stem cherry tree appears to be in pretty good health structurally sound a rope girdling the trunk needs to be removed

ATTACHMENT 2 - RISK ASSESMENT DEFINITIONS & PROCESS

Roles of Tree Risk Manager, Tree Risk Assessor, Arborist/Tree Worker, as outlined in ANSI A300 part 9 BMP.

Table P1. Guidance on the intended roles of the tree risk manager, tree risk assessor, and the arborist. In addition, legal counsel can provide advice on duty of care, professional responsibilities, negligence, title and boundary matters, and other issues. All recommendations should be made in accordance with industry standards and regulations.

Tree Risk Manager (tree owner, property manager, controlling authority)	Tree Risk Assessor (unless regulated by controlling authorities)	Arborist/Tree Worker
Duty of care responsibility	Develop or accept scope of work, including time frame (shared with risk manager)	Provide requested services:
Define and communicate tree risk management policies	Identify tree and site conditions to inspect	Tree work safety review
Determine the need to inspect the trees in question	Identify significant targets, estimate occupancy rates and target zone	Pruning
Establish the budget	Assess and classify the likelihood of a tree failure impacting a target	Removal
Identify the geographical limits of the tree inspection	Assess the potential consequences of a tree failure impacting a target	Support systems
Specify the desired level of assessment	Analyze tree risk	Lightning protection
Determine or accept the scope of work (shared with risk assessor)	Consider if advanced assessments are needed	Tree health treatments
Decide the level of acceptable risk	Develop options for treatments to mitigate risk	Transplanting
Establish the inspection frequency	Estimate residual risks after treatment	Tree replacement
Verify target zone uses and occupancy rates	Recommend an inspection frequency	Identify the need for follow-up treatments
Prioritize work	Develop report	
Choose among risk mitigation options	Send report to client and explain findings to the client, if needed	

Levels of Assessment

Level 1 Limited Visual Assessment: Involves a visual assessment of an individual tree or group of trees near specified targets, conducted from a specified perspective in order to identify obvious defects or specified conditions. A limited visual assessment typically focuses on identifying trees with *imminent* and/or *probable* likelihood of failure. Level 1 assessments do not always meet the criteria for a "risk assessment" if they do not include analysis and evaluation of individual trees.

Limited visual assessments are the fastest, but least thorough, means of assessment and are intended primarily for managing large populations of trees when time and resources are limited. The assessments may be done as walk-by, drive-by, aerial patrol, or LiDAR as requested by the tree owner or manager. The assessment is often done on a specified schedule and/or immediately after storms to rapidly assess a tree population.

A limited Visual Assessment, performed from one side or by an aerial flyover, typically looks for obvious defects such as dead trees, large cavity openings, cracks, and severe or uncorrected leans. In addition, the client may specify certain conditions of concern, such as lethal pests or symptoms associated with root decay.

Level 2 Basic Assessment: This is a detailed visual inspection of a tree and its surrounding site, and a synthesis of the information collected. It requires that a tree risk assessor inspect completely around the tree - looking at the site, and visible buttress roots, trunk, and branches. This is the level of assessment that is commonly performed by arborists in response to clients' requests for individual tree risk assessments.

A level 2 basic assessment may include the use of simple tools to gain additional information about the tree or defects. The use of simple tools maybe used to measure the tree and acquire more information about it or any potential defects, however, the use of these tools is not mandatory unless specified in the scope of work. Simple tools may include diameter tape, clinometer or hypsometer, level/plumb bob, binoculars, mallet, probe, and digging tools.

The primary limitation of a basic assessment is that it includes only conditions that are detected from a ground-based inspection on the day of the assessment. Internal, belowground, or upper-crown conditions, as well as certain types of decay, may be impossible to see or difficult to assess and may remain undetected.

Level 3 Advanced Assessment: Advanced assessments are performed to provide detailed information about specific tree parts, defects, targets or site conditions. They usually are conducted in conjunction with or after a basic assessment if the assessor needs additional information and the client approves the service. Specialized equipment, data collection and analysis, and/or expertise are usually required for advanced assessments. These assessments are therefore generally more time intensive and more expensive.

Procedures and methodologies should be selected and applied as appropriate, with consideration for what is reasonable and proportionate to the specific conditions and situations. The risk manager/property owner should consider the value of the tree to the owner and community, the possible consequences of failure, the time and expense needed to provide the advanced assessment. The tree risk assessor should identify what additional information is needed and recommend the appropriate technique(s).

Many techniques can be considered for advanced tree risk assessment. Some situations may be assessed with several techniques. Advanced assessment techniques may include but are not limited to: aerial inspection and evaluation of structural defects in high stems and branches, detailed target analysis, detailed site evaluation, decay testing, health evaluation, root inspection and evaluation, storm/wind load analysis, measuring and assessing the change in trunk lean, and load testing.

Risk Assessment

In qualitative tree risk assessment, assessors can use a matrix to help categorize risk. When categorizing tree risk, the factors to be considered are the likelihood of a tree failure impacting a target and the consequences of the failure. The likelihood of a tree failure impacting a target determined by considering the two factors:

1. The likelihood of a tree failure occurring within a specified time frame[1]. The likelihood of tree failure is determined by examining structural conditions, defects, response growth, and anticipated loads.
2. The likelihood of the failed tree or parts impacting the specified target. Impact may be the tree directly striking the target, or it may be a disruption of activities due to the failure.

These two factors are evaluated and categorized using a matrix to estimate the likelihood of the combined event; a tree failure occurring and the tree impacting the specified target = likelihood of an event occurring. The likelihood of an event occurring is then compared with the expected consequences of a failure impacting the target to determine the level of risk.

Likelihood of Failure

The likelihood of failure is the chance of a tree or tree part failure occurring within the specified timeframe is primarily determined by site factors, response growth, tree health, tree species, load, defects and conditions. The likelihood of failure is classified in one of four categories.

1. **Imminent**; failure has started or is most likely to occur in the near future, even if there is no significant wind or increased load. The eminent category overrides the stated timeframe.
2. **Probable**; failure may be expected under normal weather conditions[2] within the specified timeframe.
3. **Possible**; failure may be expected in extreme weather conditions[3], but it is unlikely during normal weather conditions within the specified timeframe.
4. **Improbable**; the tree or tree part is not likely to fail during normal weather conditions and may not fail in extreme weather conditions within the specified timeframe.

Likelihood of Impact

The likelihood of impact is the chance of a tree failure impacting a target during the specified timeframe it is determined by considering 1) occupancy rates, 2) location within the target zone,
3) protection factors, 4) direction of fall. The likelihood of impact is classified in one of four categories;

1. **High**; the failed tree or tree part is likely to impact the target.
2. **Medium**; the failed tree or tree part could impact the target but is not expected to do so.
3. **Low;** there is a slight chance that the failed tree or tree part will impact the target.
4. **Very low**; the chance of the failed three or tree part impacting the specified target is remote.

Likelihood of Failure and Impact

Using the likelihood of failure, the likelihood of impacting a target, and the likelihood matrix the likelihood of an event happening is categorized.

---

[1] In the weather events common to the region; based on 30-year weather history – minus the extreme events = "common" per TRAQ, ANSI.
[2] Historical data shows common winds for the region are 0 - 25 mph
[3] Based on historical data winds 47-55 mph would be considered extreme for the region.

Consequences of Failure

The consequences of failure; personal injury, property damage, or disruption of activities due to the failure of a tree or tree part are affected; by tree or tree part size, fall distance of tree or tree part, protection factors, target value/damage. Consequences of failure are classified into one of four categories.

1. **Severe**; serious personal injury or death, high value property damage, or major disruption of important activities.
2. **Significant;** substantial personal injury, moderate to high value property damage, or considerable disruption of activities.
3. **Minor;** minor personal property, low to moderate value property damage, or small disruption of activities.
4. **Negligible;** no personal injury, low value property damage, or disruptions I can be replaced or repaired.

Risk Rating

Using the likelihood of an event happening (steps 1-3), the consequences of failure, and the risk rating matrix, a risk rating is assigned to the tree or tree parts.

Matrix 1 & Matrix 2 as used in the risk assessment process.

Matrix I. Likelihood matrix.

likelihood of Failure	Likelihood of Impacting Target			
	Very low	**Low**	**Medium**	**High**
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure			
	Negligible	**Minor**	**Significant**	**Severe**
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

ATTACHMENT 3 - ASSUMPTIONS & LIMITING CONDITIONS

1. A field examination of the site was made for this report (date referenced in report). Reasonable care has been taken to obtain information from reliable sources, however, the certified/consulting arborist cannot guarantee the accuracy or validity of information provided by any outside sources.
2. Information provided in this report covers only tree's that were indicated for examination in the assignment and reflects the apparent condition of those tree(s) at the time of inspection. This inspection is limited to a visual method of the trees in question, excluding any core sampling, probing, dissection, aerial inspection, or excavation unless noted in writing and is contingent upon the appropriate fee for such services having been authorized in writing. There is no guarantee nor warranty, expressed or implied that any problems with any trees may not arise in the future.
3. All drawings, sketches, and photographs submitted with this report, are intended as visual aids only, and are not exact to scale. They should not be construed as engineering or architectural report or surveys unless noted and specified.
4. The certified/consulting arborist is not required to give any testimony or to attend meetings or dispute resolution proceedings relating this report unless subsequent contractual arrangements and fee agreements are made.
5. Any alterations made to this report automatically invalidates this report.
6.This document is protected by copy right laws©. Unless otherwise required by law, possession of this report or a copy of this report does not imply a right of publication or use for any purpose by anyone other than the person for whom it was created without prior expressed written permission and verbal consent of the certified/consulting arborist.
7. The report and values/opinions expressed, represent the work of the certified/consulting arborist, and the arborist's fees are in no way contingent upon the reporting of any specified values, stipulated results, or occurrence of a subsequent event.

ATTACHMENT 4 - REFERENCES

1. Dunster, Dr. Julian A., R.P.F., M.C.I.P. *Documenting Evidence, Practical Guidance for Arborists*, First Choice Books, Victoria, BC, Canada. 2014.
2. Dunster, Dr. Julian A., R.P.F., M.C.I.P. *Interpreting Resistograph Readings, A Manual for Users of the Resistograph Decay Detection Instrument*. Bowen Island, Canada: Dunster & Associates, 2000.
3. Eric Allen, et al. *Common Tree Diseases of British Columbia*. Victoria: Canadian Forest Service, 1996.
4. Harris, Richard W, James Clark, and Nelda Matheny. *Arboriculture, Integrated Management of Landscape Trees, Shrubs, and Vines*. 4th ed. Upper Saddle River: Prentice Hall, 2004.
5. Jacobson, Arthur Lee. *Trees of Seattle*. 2nd ed. Seattle, Washington: Arthur Lee Jacobson, 2006.
6. Johnson, Warren T. and Lyon, Howard H. *Insects That Feed on Trees and Shrubs*. Ithaca: Comstock Publishing Associates, 1991.
7. Matheny, Nelda P. and Clark, James R. *Evaluation of Hazard Trees*. 2nd ed. Savoy: The International Society of Arboriculture Press, 1994.
8. Mattheck, Claus and Breloer, Helge. *The Body Language of Trees, A Handbook for Failure Analysis.* London: HMSO, 1994.
9. Pacific Northwest Chapter-ISA. *Tree Risk Assessment in Urban Areas and the Urban/Rural Interface.* Course Manual. Release 1.5. PNW-ISA: Silverton, Oregon, 2011.
10. Smiley, E. Thomas, Nelda Matheny, and Sharon Lilly, *Tree Risk Assessment Best Management Practices, ANSI A300 Part 9: Tree, Shrub, and Other Woody Plant Management—Standard Practices (Tree Risk Assessment a. Tree Structure Assessment).* The International Society of Arboriculture Press. Champaign. IL. 2011.