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SOUND URBAN FORESTRY, LLC

Appraisals ~ Site Planning ~ Urban Landscape Design Management
Environmental Education & Restoration ~ Risk Assessments ~ Diagnosis

1/6/2025

Barghausen Consulting Engineers, Inc.
Jason Hubbell, Senior Civil Project Manager
18215 72nd Ave S
Kent, WA 98032

RE: Puyallup Fred Meyer Distribution Center Arborist Report

Mr. Hubbell:

Upon your request and as a requirement of the City of Puyallup, Sound Urban Forestry has conducted a review within the Puyallup Fred Meyer Distribution Center property located at 349 Valley Ave NW. Per the City's Permit Review Corrections Letter dated December 11, 2024, regarding the proposed driveway modification project, I was asked to review the significant trees within the affected project area to establish the Critical Root Protection Zones (CRPZ) and conduct risk assessments of these trees. I visited the site on January 2, 2025. The following report presents my findings and comments.

Critical Root Protection Zones

A total of five significant trees were assessed that are within or near the project area. Please reference the attached site plan for the locations.

ID#	Common Name	DBH	Condition	CRPZ*
1	Red Oak	29"	Good	58'
2	Red Oak	28"	Fair	56'
3	Douglas Fir	22"	Good	44'
4	Douglas Fir	20"	Good	40'
5	Western Red Cedar	22"	Good	44'

*Per City of Puyallup guidelines

There are two non-significant trees in the area, a 14" Douglas fir and 13" western red cedar. Due to the close proximity to the project area and anticipated impacts to the critical root zone, I am recommending the cedar be removed.

Tree Risk Assessment

The tree risk assessment methodology used for this report was developed by the International Society of Arboriculture in 2013. It replaces the original method adopted in 2011.

Tree risk assessment can be conducted at different levels of intensity, each employing varying methods and providing the client with varied options of reporting and recommendations. The level selected should be appropriate for the assignment.

The ANSI standard for risk assessment and ISA's *Best Management Practices: Tree Risk Assessment* defines three levels of tree risk assessment:

- Level 1: Limited visual
- Level 2: Basic
- Level 3: Advanced

Level 1 assessment involves a visual assessment of an individual tree or populations of trees near specified targets, conducted from a specified perspective in order to identify certain obvious defects or specified conditions. A limited visual assessment typically focuses on identifying trees with *imminent* and/ or *probable* likelihood of failure.

A Level 2 or basic assessment is the standard assessment performed by arborists in response to most private client requests for tree risk assessments. It consists of a detailed visual inspection of a tree and its surrounding site and a synthesis of the information collected. A basic assessment requires walking completely around the tree – looking at the site, buttress roots, trunk and branches. Looking at the tree from some distance away, as well as close up, to consider crown shape and surroundings.

Level 3 is an advanced assessment and it is performed to provide detailed information about specific tree parts, defects, targets, or site conditions. It may be in conjunction with or after a basic assessment if additional information is needed and the client approves the additional 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.

After determining the likelihood of failure and the likelihood of impacting a target, the combined likelihood of a failure impacting a target can be categorized. Matrix 1 can be used as a guide in relating these likelihood factors within a given time frame. The resulting terms (unlikely, somewhat likely, likely, very likely) are defined by their use within the table and are used to represent this combination of occurrences in Matrix 2.

Matrix 1. Likelihood of Failure

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

Matrix 2. Risk Rating

Likelihood of Failure and 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

Field Data

Level 2 risk assessments were conducted on the five identified significant trees. Table 3 presents a complete summary of my findings.

Table 3. Complete Risk Assessment Summary

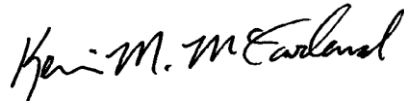
ID#	Common Name	DBH, Height, Live Canopy Ratio	Targets	Condition	Risk Rating	Comments/Recommendations
1	Red Oak	29" 70' 50%	Fence Entrance Street	Good	Low	
2	Red Oak	28" 60' 40%	Fence Parking Electrical Boxes	Fair	Moderate	Previously topped at 30'.
3	Douglas Fir	22" 100' 20%	Fence Drive Parking	Good	Low	This tree should remain stable and in good condition if protected during the project.
4	Douglas Fir	20" 90' 20%	Fence Drive Parking	Good	Low	This tree should remain stable and in good condition if protected during the project.
5	Western Red Cedar	22" 80' 20%	Fence Drive Parking	Good	Low	This tree should remain stable and in good condition if protected during the project.

Recommended Tree Protection

Due to the proximity of Trees #3-5, I am recommending that protection fencing be installed along the clearing limits near these trees. The location is noted in orange on the attached site plan. The fencing should remain in place for the entire duration of the project. No equipment or storage of materials should be allowed beyond the fencing.

Please contact me if you should have questions.

Professionally Submitted,



Kevin M. McFarland, Principal
 ISA Certified Arborist PN-0373 & ISA Tree Risk Assessment Qualified
 Sound Urban Forestry, LLC
 P.O. Box 489
 Tahuya, WA 98588

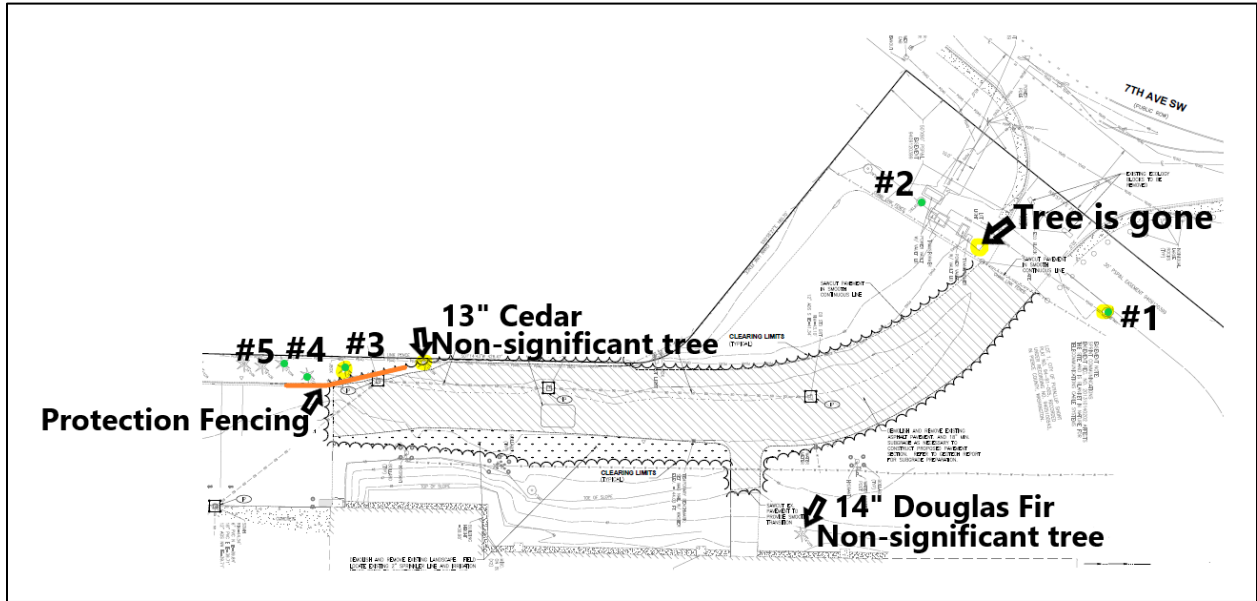
References

Dunster, Dr, Julian et al. 2013. *Tree Risk Assessment Manual*. International Society of Arboriculture. Champaign, IL.

Mattheck, C. & Brelor, H (1998). *The body language of trees. A handbook for failure Analysis*. Research for Amenity Trees No. 4. The Stationary Office, London.

Smiley, E. Thomas, Nelda Matheny and Sharon Lilly. 2011. *Best Management Practices – Tree Risk Assessment*. International Society of Arboriculture. Champaign, IL

Tree and Recommended Protection Fencing Locations



Photos





Non-significant 13" Cedar

Assumptions and Limitations of Tree Risk Assessment

1. Tree risk assessment is limited in scope to the specific risks(s) of interest, and does not include any and all risks.
2. Tree risk assessment considers significant known and/or assigned targets and visible or detectable tree conditions.
3. Tree risk assessments represent the condition of the tree and site at the time of inspection.
4. Only those trees specified in the scope of work were assessed, and assessments were performed within the limitations specified.
5. Any tree, whether it has visible weaknesses or not, will fail if the forces applied exceed the strength of the tree or its parts.
6. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others. Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownerships to any property are assumed to be good and marketable.
7. Loss or alteration of any part of this report invalidates the entire report.
8. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of Sound Urban Forestry, LLC.
9. Neither all or any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written or verbal consent of Sound Urban Forestry, LLC – particularly as to the value considerations, identity of Sound Urban Forestry, LLC, or any reference to any professional society or to any initialed designation conferred upon Sound Urban Forestry, LLC as stated in its qualifications.
10. This report and any values expressed herein represent the opinion of Sound Urban Forestry, LLC and the fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence neither of a subsequent event, nor upon any finding to be reported.
11. Diagrams, graphs, photographs and sketches in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
12. Sound Urban Forestry, LLC shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made.
13. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, drilling or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the tree or other plant or property in question may not arise in the future.
14. The time frame for risk categorization should not be considered a “guarantee period” for the risk assessment.