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July 13, 2016

Planning Dept.  
City of Lake Forest Park  
17425 Ballinger Way NE  
Lake Forest Park, WA 98155

**Re:** Tree Removal Permit 2016-ACP-0015, Review and Recommendations  
**Site Address:** Barnes residence, 18215 Ballinger Way NE, Lake Forest Park, WA 98155

The tree removal application was checked for compliance with the standards and requirements pursuant to Chapter 16.14 LFPMC. On July 8, I conducted my site and tree inspection and had a conversation with Mr. and Mrs. Barnes regarding the proposed tree removal. This report outlines my inspection and includes my findings, conclusions, and recommendations.

### **Proposed Activity**

One landmark tree (a tree that is 28 inches in diameter and larger) is proposed for removal. There are plans for some work to the garage foundation that will occur within the critical root zone of the tree. Mr. and Mrs. Barnes are also concerned that the tree has out grown its space and may pose a risk. The location of the proposed tree removal is shown on the *Attachment: 2013 Aerial Site Photo*.

### **Methods**

I conducted my tree inspection and evaluation for the trees following the protocol of the International Society of Arboriculture (ISA) for Visual Tree Assessment (VTA) that employs a visual and non invasive inspection of the overall health and external condition of each tree and site conditions. I also conducted a basic level tree risk assessment, adhering to tree care industry standards, protocols and practices set by the American National Standards Institute (ANSI), and the International Society of Arboriculture (ISA), that employs a 360-degree, ground- based detailed visual and non-invasive inspection of a tree, including tree crown, trunk, trunk flare, above ground roots and site conditions around the tree in relation to targets. The time frame for tree risk assessments, the period in which estimating the likelihood of failure, is generally 1-5

years, unless otherwise noted. The time frame for risk categorization should not be considered a guarantee period for the risk assessment.

## **Findings**

### Site

The site is a developed single family residential lot, 20,215 square feet in size. The tree canopy coverage goal for this size lot, pursuant to Chapters 16.14.080, is 58 % (11,725 sq. ft.). The current canopy coverage is approximately 53% (10,705 sq. ft.), as determined either by collected tree data and/or interpretation of high resolution aerial photography, see *Attachment: 2013 Aerial Site Photo*.

### Subject Trees

The tree proposed for removal is a Western Red cedar/*Thuja plicata* located 6 feet from the south side of the house. The tree is 34 inches in diameter at breast height (DBH), measured 4.5 feet above grade and is approximately 105 feet in height. The live crown ratio (LCR), which is the amount of live canopy expressed as a percentage of the entire tree height, is 90%. The average drip line (the radius distance from the trunk to the furthest branch tips) is 14 feet. The current tree canopy spread area is approximately 650 sq. ft. There is positive indication of some butt and trunk decay. There are no obvious other tree defects. The overall health and condition of the tree is fair and it is wind firm.

### Tree Risk Analysis:

Tree risk assessment is a systematic process used to identify, analyze and evaluate tree risk. While no one can predict with absolute certainty which trees will or will not fail, we can, by using this scientific process, assess which trees are most likely to fail and take appropriate action to minimize injury and damage. The level of risk is based on the combination of the likelihood of a tree failing and impacting a specified target, and severity of the associated consequences. In tree risk assessment, targets are people, property, or activities that could be injured, damaged, or disrupted by a tree failure or failure of tree parts.

- The likelihood of a complete tree failure or failure of large tree parts and impact to a target (subject house or adjacent residences) is "unlikely"; therefore the overall level of risk is 'low'.

### Tree Canopy Replacement

The current tree canopy coverage for the entire lot is approximately 10,705 sq. ft. (53%). Removal of the tree will reduce the total tree canopy coverage by approximately 650 sq. ft. The remaining canopy coverage would be 10,055 (50%). Therefore, pursuant to Chapters 16.14.080 LFPMC, a Tree Replacement Plan would be required to replace removed canopy coverage. Trees are required to be planted in sufficient numbers to replace 650 sq. ft. of tree canopy coverage, in 30 years.

**Conclusion**

The overall level of risk posed by the subject tree is low. Tree risk assessment can determine the level of risk that a tree poses and the likelihood for harm should the tree fail or tree parts fail, but tolerance to risk, whatever the level, is the decision of the tree owner or risk manager.

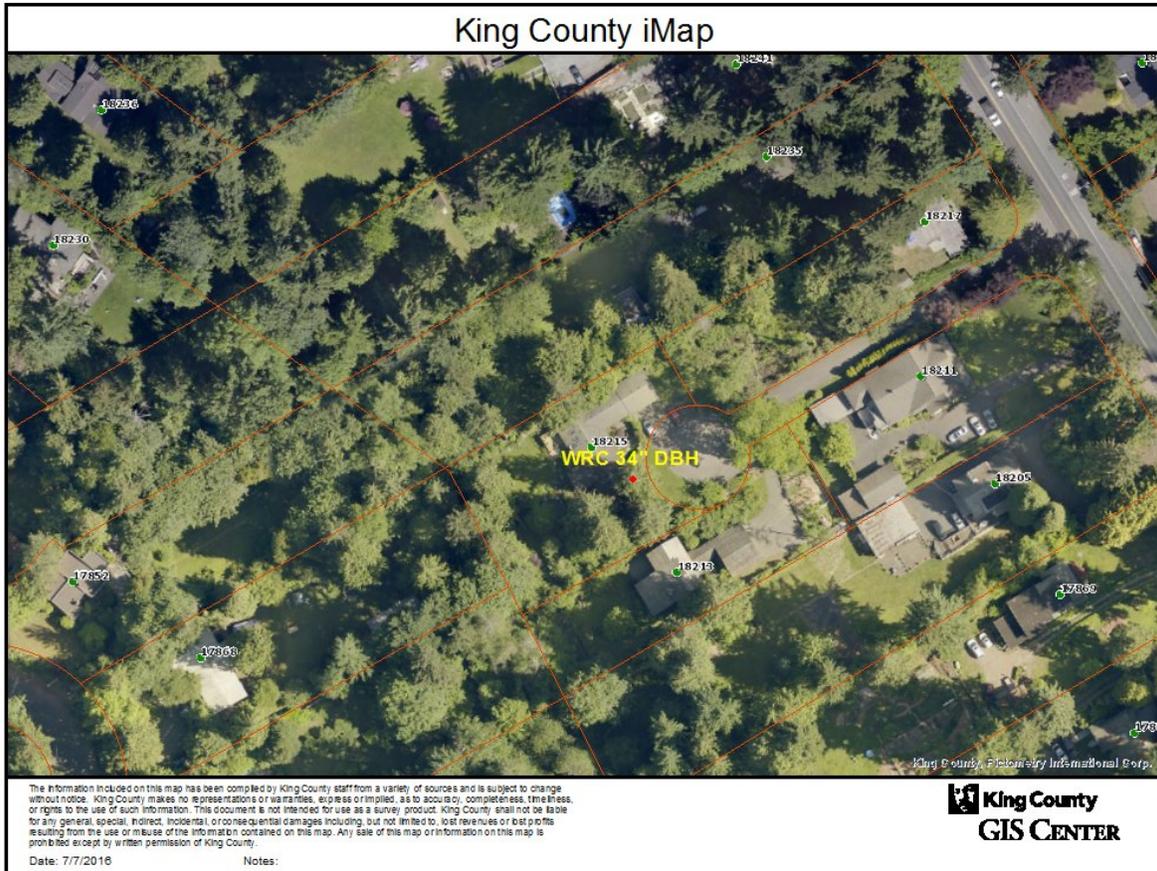
**Limitations**

Tree risk assessment considers known targets and visible or detectable tree conditions. Unless expressed otherwise, information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection. The time period for risk categorization should not be considered a "guarantee period" for the risk assessment. It must be realized that trees are living organisms and their health and vigor constantly change over time. They are not immune to changes in the site conditions or seasonal variations in the weather. There is no warranty or guarantee expressed or implied that problems or deficiencies of the trees in question may not arise in the future. The report and conclusions expressed herein represent the opinion of Michael Woodbury d/b/a M. Woodbury Consulting Arborist. Please contact me should you have questions regarding this report.

Respectfully submitted,  
Michael A. Woodbury

Michael A. Woodbury, Consulting Arborist  
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**ATTACHMENT: 2013 AERIAL SITE PHOTO**  
**18215 Ballinger Way NE**  
**Lake Forest Park, WA**



Location of the proposed tree removal.