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City of Lake Forest Park

ARBORIST REPORT

DATE:

August 1, 2023

PREPARED FOR:

Marin Caba

2022 - REGP - 0016

SITE ADDRESS:

xxxxx 33rd Ave NE Lake Forest Park, WA 98155 / Lot # 4023501234

PREPARED BY:

Kim Ettari - ISA Certified Arborist PN1301A / TRAQ

Laughing Trees Landscapes

5607 40th Ave NE Seattle, WA 98105

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NARRATIVE

SCOPE OF WORK

You have asked me to complete a tree retention and management plan in preparation for the construction of a new driveway and residence on the above property.

All documentation below should comply with the requirements for a major tree removal application set forth in the Lake Forest Park Municipal Code (16.14).

METHODOLOGY

The methods used for this assessment are as outlined in *Tree Risk Assessment* by Julian Dunster and as adopted by the International Society of Arboriculture (ISA). The end goal of most assessments is to provide the owner or manager of the tree(s) with factual information, enabling them to make decisions about the management of the tree(s). For this particular assessment, I used a Level II Assessment that includes inspection of the root collar, lower trunk, upper limbs and canopy of the tree as can be seen from the ground. Basic assessment does not include climbing the tree or excavation of soils to inspect root structure or condition. *(See attached tree risk assessment forms.)*

I measured 9 signficant trees (6"or greater) for their diameter at breast height (DBH), an industry standard of measuring trees at 4.5' above grade. Each tree was tagged with a small, round numbered metal tag. Trees that were multi-stemmed or branched below the standard 4.5' point of measurement were measured in some other way and noted as such in the findings notes of the appropriate tree.

A tree inventory and assessment spreadsheet was created that details each tree by tag reference number, species/ common name, size (DBH), drip line or canopy extension, condition and risk level with remarks as needed. (*See attached inventory.)*

A tree map was created indicating the locations, drip lines, interior crucial root zones (ICRZ) of each tree along with the possible locations of replacement trees and required tree protection fences (*See attached map created by surveyor then marked-up as needed.)*

FINDINGS AND OBSERVATIONS

The subject site is a steeply-sloped, wooded lot in Lake Forest Park, WA. Due to the critical slope this parcel has been designated an Environmentally Critical Area (ECA) and will require further compliance with regulations for a major tree permit application and a Reasonable Use Exception (RUE.)

The following trees were inventoried and assessed (Note - Two trees on the survey were not found):

Tree # 640 - Acer macrophyllum / Big Leaf Maple - 17" DBH - FAIR CONDITION - LOW RISK - REMOVE

Tree # 641 - Acer macrophyllum / Big Leaf Maple - 22" DBH - FAIR CONDITION - LOW RISK - REMOVE

Tree # 642 - Acer macrophyllum / Big Leaf Maple - 11" DBH - FAIR CONDITION - LOW RISK - REMOVE

Tree # 643 - Acer macrophyllum / Big Leaf Maple - 8" DBH - FAIR CONDITION - LOW RISK - REMOVE

Tree # 644 - Acer macrophyllum / Big Leaf Maple - 13" DBH - FAIR CONDITION - LOW RISK - REMOVE

Tree # 645 - misc deciduous - 8" DBH - POOR CONDITION - LOW RISK - REMOVE

Tree # 646 - Acer macrophyllum / Big Leaf Maple - 18" DBH - FAIR CONDITION - LOW RISK - RETAIN

Tree # 647 - Acer macrophyllum / Big Leaf Maple - 22" DBH - FAIR CONDITION - LOW RISK - RETAIN

Tree # 648 - Acer macrophyllum / Big Leaf Maple - 20" DBH - FAIR CONDITION - LOW RISK - RETAIN

RECOMMENDATIONS & CONSIDERATIONS

As per Lake Forest Park Municipal Code (16.14.070) any single-family lot less than 10,000 sq ft requires a 28% canopy coverage and that "tree canopy coverage is measured by the percentage of canopy provided by existing trees or the projected canopy coverage to be provided by newly planted or immature trees (when such trees reach 30 years of age)."

TREE CANOPY CALCULATIONS

Total lot area for parcel	=	8,627 sq ft
Total canopy required (8,627 x .28)	=	2,416 sq ft
Total existing canopy (30%)	=	2,588 sq ft (per visual assessment by arborist)
Total removed canopy coverage (50%)	=	1,294 sq ft (per visual assessment by arborist)
Existing canopy to be retained	=	1,294 sq ft (per visual assessment by arborist)
Total existing trees	=	9 trees
Total removal of trees	=	6 trees
Total trees retained	=	3 trees (33%)

TREE REPLACEMENT CANOPY CALCULATIONS:

2,416 sq ft required - 1,294 sq ft retained	=	1,122 sq ft additional canopy required

Proposed planting of 3 Douglas Fir & 3 Vine Maple to satisfy ECA tree replacement requirements

	=	3 x 600 sq ft = 1,800 sq ft additional canopy
	=	3 x 300 sq ft = 900 sq ft additional canopy
1,294 sq ft retained + 2,700 sq ft added	=	3,994 sq ft (46%) = meets requirement
Total trees	=	3 + 6 replacements = 9 (100%) > requirement

Tree protection fencing is to be installed prior to the commencement of any construction activities on site and is to remain until after project completion. Absolutely no encroachment or mechanized equipment is permitted within the tree protection zone unless the project arborist is on site.

Any disturbance for the new construction wil remain at least 5' out side the critical root zone of the three protected retained trees as indicated on the tree protection plan.

As per LFPMC 16.14.080 none of the six trees slated for removal meet the criteria for removal within the ECA as they are viable and at low risk of failure. A RUE application will, therefore, be required for construction on this property.

Trees removed within the ECA normally require a 3:1 replacement but as a proposed RUE will be in force I have suggested replacements at a 1:1 ratio to meet the mininum canopy coverage requirement. The site will support the planting of more replacement trees if that is required by the city.

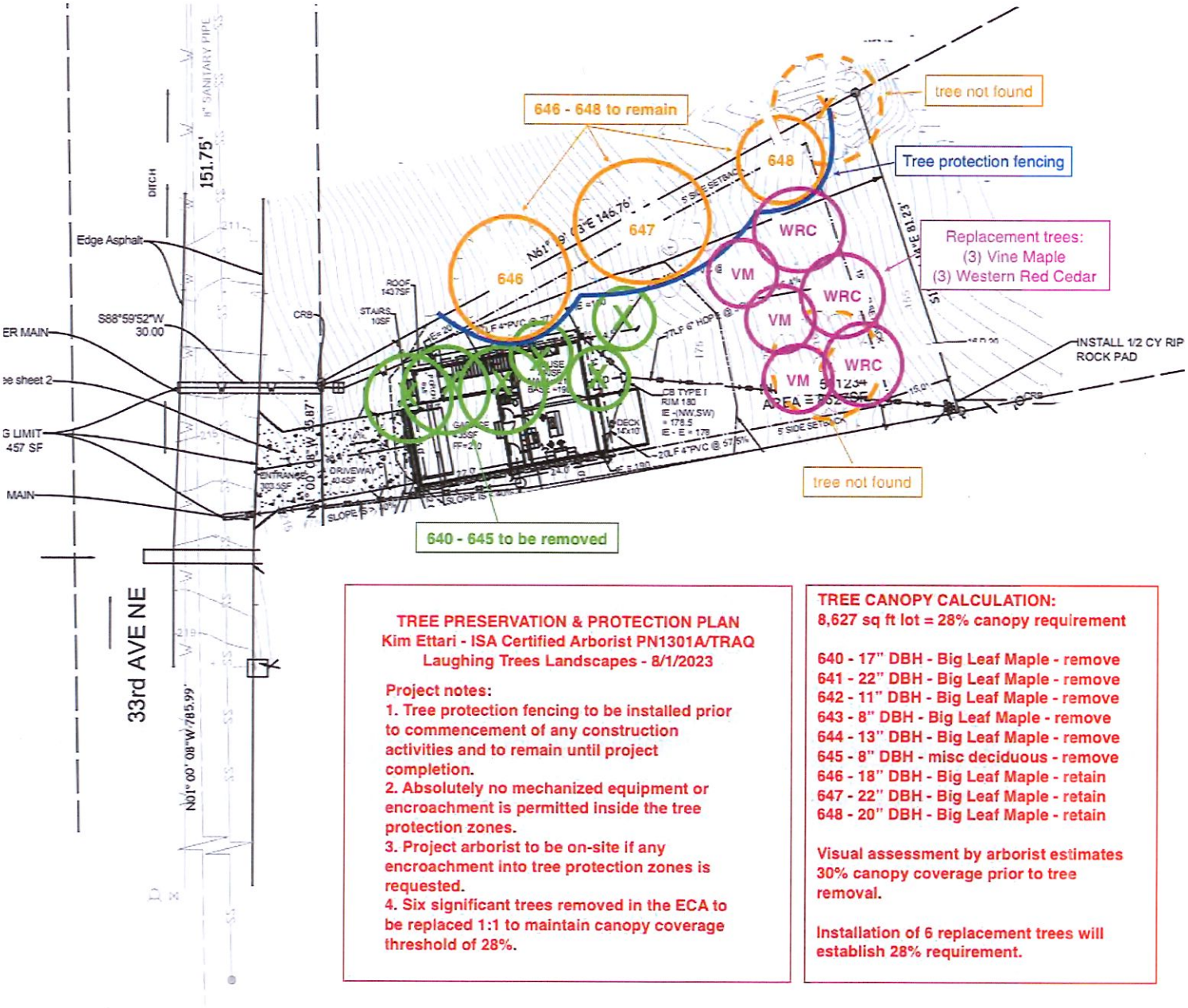
LIMITATIONS

This report was based on the conditions of the trees and site at the time the report was written. Weather and site changes can alter the conditions at any time. Trees inherently pose a certain degree of hazard and risk from breakage, failure or other causes and conditions. Recommendations that are made by Laughing Trees Landscapes are intended to minimize or reduce hazardous conditions that may be associated with trees. However, there is and there can be no guarantee or certainty that efforts to correct unsafe conditions will prevent breakage or failure of the tree. Any recommendations made should reduce the risk of tree failure but they cannot eliminate such risk, especially in the event of a storm or any act of God. There can be no guarantee or certainty that all hazardous conditions will be detected.

Marin Caba Tree Inventory - xxxxx 33rd Ave NE Lake Forest Park, WA 98155

Tree #	Botanical Name	Common Name	DBH	Drip line	Condition	Notes	Action
640	Acer macropyllum	Big Leaf Maple	17"	30'	FAIR	80' tall	REMOVE
641	Acer macropyllum	Big Leaf Maple	22"	20'	FAIR	80' tall, co-dominant at 2'	REMOVE
642	Acer macropyllum	Big Leaf Maple	11"	10'	FAIR	40' tall	REMOVE
643	Acer macropyllum	Big Leaf Maple	8"	6'	FAIR	50' tall	REMOVE
644	Acer macropyllum	Big Leaf Maple	13"	10'	FAIR	40' tall, bow in trunk, co-dominant at 25'	REMOVE
645	----	misc deciduous	8"	8'	POOR	8' tall, horizontal habit	REMOVE
646	Acer macropyllum	Big Leaf Maple	18"	20'	FAIR	70' tall	RETAIN
647	Acer macropyllum	Big Leaf Maple	22"**	20'	FAIR	80' tall, co-dominant at base	RETAIN
648	Acer macropyllum	Big Leaf Maple	20"	20'	FAIR	70' tall	RETAIN

Inventory completed on 8/1/2023 by Laughing Trees Landscapes - Kim Ettari (ISA Certified Arborist PN1301A/TRAQ)
*DBH = diameter at breast height / 4.5' from base *Drip line = measured in radius



TREE PRESERVATION & PROTECTION PLAN
Kim Ettari - ISA Certified Arborist PN1301A/TRAQ
Laughing Trees Landscapes - 8/1/2023

Project notes:

1. Tree protection fencing to be installed prior to commencement of any construction activities and to remain until project completion.
2. Absolutely no mechanized equipment or encroachment is permitted inside the tree protection zones.
3. Project arborist to be on-site if any encroachment into tree protection zones is requested.
4. Six significant trees removed in the ECA to be replaced 1:1 to maintain canopy coverage threshold of 28%.

TREE CANOPY CALCULATION:
8,627 sq ft lot = 28% canopy requirement

640 - 17" DBH - Big Leaf Maple - remove
641 - 22" DBH - Big Leaf Maple - remove
642 - 11" DBH - Big Leaf Maple - remove
643 - 8" DBH - Big Leaf Maple - remove
644 - 13" DBH - Big Leaf Maple - remove
645 - 8" DBH - misc deciduous - remove
646 - 18" DBH - Big Leaf Maple - retain
647 - 22" DBH - Big Leaf Maple - retain
648 - 20" DBH - Big Leaf Maple - retain

Visual assessment by arborist estimates 30% canopy coverage prior to tree removal.

Installation of 6 replacement trees will establish 28% requirement.