

Arborist Report

TO: Maple Multi-Family Land TX L.P.

SITE: Marymoor Park Apartments,
6081 East Lake Sammamish Parkway NE, Redmond, WA 98052

RE: Tree Inventory & Assessment

DATE: July 24, 2015

PREPARED BY: Haley Galbraith, Casey Clapp,
ISA Certified Arborist PN-7512A ISA Certified Arborist PN-7475A
ISA Qualified Tree Risk Assessor ISA Qualified Tree Risk Assessor

Summary

Forty-one (41) trees were assessed at the above addressed job site. Thirty-seven (37) of the trees assessed meet the City definition of a Significant or Landmark tree; thirteen (13) of these are Landmark trees, twenty-four (24) meet the definition of a healthy Significant tree. Four (4) of the trees assessed were found to be in poor health condition, therefore, mitigation is not required following their removal.

Forty (40) site trees will require removal based on proposed site development plans; thirteen (13) of these are Landmark trees. Provide the City with an exception request for the removal or impact of any Landmark tree, as well as the removal of greater than the minimum percentage of significant trees that need to be retained. Twelve (12) significant trees will be removed beyond the 35-percent retention limit. The City requires all removed trees exceeding 35-percent be replaced at a 3:1 ratio, if exception is approved. Eighty-six (86) new trees will be required to replace the removed Landmark and healthy Significant trees on site.

No (0) trees will be impacted and one (1) will be retained. Both impacted and retained trees should have protection measures applied to them before the commencement of site work. Trees on adjacent properties and in the Right-of-Way (ROW) can be removed if appropriate permissions are obtained, but will need to be replaced as indicated by the Redmond Zoning Code (RZC).

Assignment & Scope of Report

This report outlines the site inspection by Haley Galbraith and Casey Clapp, of Tree Solutions Inc., made on July 17, 2015.

We were asked to evaluate the significant trees on site and adjacent properties, as necessary, with reference to site plans for proposed development dated July 10, 2015, produced by Jackson Main Architecture. We were asked to review the RZC requirements as they pertain to the project. We were asked to produce an Arborist Report including the identifier, species, size, health and structural condition, and designation of each tree as it relates to City code. Maple Multi-Family Land TX L.P. requested these services to acquire information for project planning purposes.

Specifics for each tree can be found in the attached [Table of Trees](#). A description of the number and percentages of each tree scheduled to be removed, impacted, or retained can be found in [Figure 1: Tree Inventory - Proposed Actions](#). A map showing tree identifiers and corresponding locations can be found as [Figure 2: Tree Map](#). Provided plans for site development are included as [Figure 3: Site Plans](#). Photographs, Glossary and References follow the maps. Limits of Assignment can be found in [Appendix A](#). Methods can be found in [Appendix B](#). Additional Assumptions and Limiting Conditions can be found in [Appendix C](#).

Observations

The site is located west of East Lake Sammamish Parkway NE and the East Lake Sammamish trail. The southwestern portion of the property borders Marymoor Park, and to the south is the Marymoor Connector Trail. The roughly four-acre property is currently under consideration for development. At the time of our visit, there were multiple existing structures, but only one appeared to be occupied. There are no critical areas on the site; topography is mostly flat. The extent of the site can be seen on the maps below.

Forty-one (41) trees were tagged and assessed for health and structural condition. Four (4) trees were found to be in poor health condition. None of the trees on site currently present a high level of risk to the surrounding targets, due to a lack of targets being present. If usage of the site was increased, several of the trees would likely present elevated risk, as we found many trees that were damaged or diseased.

Thirty-seven (37) trees were found to be in fair to good health condition, although, five (5) of these had poor structural form. Thirteen (13) of these meet the City definition of Landmark, having a DSH of greater than 30-inches. Twenty-four (24) trees meet the City definition of a healthy Significant tree.

Significant and Landmark tree species were primarily natives, such as Douglas-fir (*Pseudotsuga menziesii*), bigleaf maple (*Acer macrophyllum*), and black cottonwood (*Populus trichocarpa*). Near the existing structures, we observed non-native, planted species as well, such as Colorado blue spruce (*Picea pungens*). Understory vegetation on site had formerly been dominated by Himalayan blackberry (*Rubus bifrons*), but was previously cleared using heavy equipment. We noted that this clearing activity throughout the site had caused minor to severe root disturbance by a combination of soil displacement and physical root injury. Most notably, the line of large cottonwood trees along the western property boundary all had root injury to various degrees. In addition to the root injuries we observed on the row of cottonwoods, we also noted that the majority of these trees had hollow stems and large past failures.

During our visit, a gentleman named Leon provided us with a historical account of the site, including information on the cottonwood row. He claimed that many of the largest trees were planted around 1930. Some of the oldest trees had been removed over the years for risk mitigation, but as space was cleared, smaller individuals would quickly grow to fill in the row again. This information agreed with our assessment of the row, which straddles the western property boundary, where a fire lane is planned.

Discussion

Retained, Impacted, & Removed Trees

The RZC states that the tree protection area shall be a minimum of the drip line plus five additional radial feet added to the furthest extent of the drip line. Trees that are proposed to be retained, removed, or may be impacted, should be shown on a Tree Preservation Plan.

The trees on the adjacent properties were mostly found to be in fair to good health and structural condition. These trees and any located in ROW that are removed to accommodate development of the site will need to be replaced at a 1:1 ratio for significant trees and Landmark trees at a 3:1 ratio, or as otherwise agreed upon with the City of Redmond and the King County Parks department in the permitting process.

The RZC states that a minimum of 35-percent of all significant trees on site shall be retained on any new development site, along with all Landmark trees, unless exception requests have been applied for and granted. If the 35-percent retention level for significant trees is not achieved, each significant tree removed beyond 35-percent must be replaced at a 3:1 ratio.

Figure 1 provides a description of the number and percentages of each tree scheduled to be removed, impacted, or retained, based on tree classification and site development schematics.

Figure 1: Tree Inventory - Proposed Action & Brief Definition

	Removal	Impacted	Retained	Total
Landmark (>30")	13 = 35.1%	0 = 0%	0 = 0%	13 = 35.1%
Significant (6" - 30")	23 = 62.2%	0 = 0%	1 = 2.7%	24 = 64.9%
Totals	36 = 97.3%	0 = 0%	1 = 2.7%	37 = 100%
Replacement Trees	86	0	0	86

Numbers are generated based on site conditions, proposed development, and City requirements. Significant trees are to be replaced at a 1:1 ratio; Landmark trees at a 3:1 ratio. Each significant tree removed beyond 35-percent retention must be replaced at a 3:1 ratio.

Replacement Tree Calculations

Landmark trees to be replaced at 3:1 = 13 x 3 = **39 replacement trees.**

Significant trees removed beyond the 35% minimum threshold to be replaced 3:1 = 12 x 3 = **36 replacement trees.**

Significant trees removed to be replaced at 1:1 minus trees to replaced at 3:1 = 23 - 12 = 11 x 1 = **11 replacement trees.**

Replacement Trees

The RZC states the following:

Replacement trees are to be a minimum of:

- Two-and-one-half-inch caliper at breast height for deciduous trees
- Six feet in height for evergreen trees

- The Administrator may consider smaller-sized replacement trees if the applicant can demonstrate that smaller trees are more suited to the species, the site conditions, and the purposes of this section, and that such trees will be planted in sufficient quantities to meet the intent of this section.
- Replacement trees shall be primarily native species in order to restore and enhance the site as nearly as practicable to its pre-development character.
- The condition of replacement trees shall meet or exceed current American Nursery and Landscape Association or equivalent organization's standards for nursery stock.
- Installation of required replacement trees shall be in accordance with best management practices for landscaping which ensure the tree's long-term health and survival.
- All required tree removal and other required mitigation shall be bonded or completed prior to issuance of a building permit.

Recommendations

- Provide the city with a written exception request for the removal of each of the 13 Landmark trees on site.
- Provide the city with a written exception request for the removal of 12 trees greater than the 35-percent minimum threshold for significant tree retention.
- Obtain the necessary tree removal permission from the City before developing the site development.

Tree Map & Site Plan

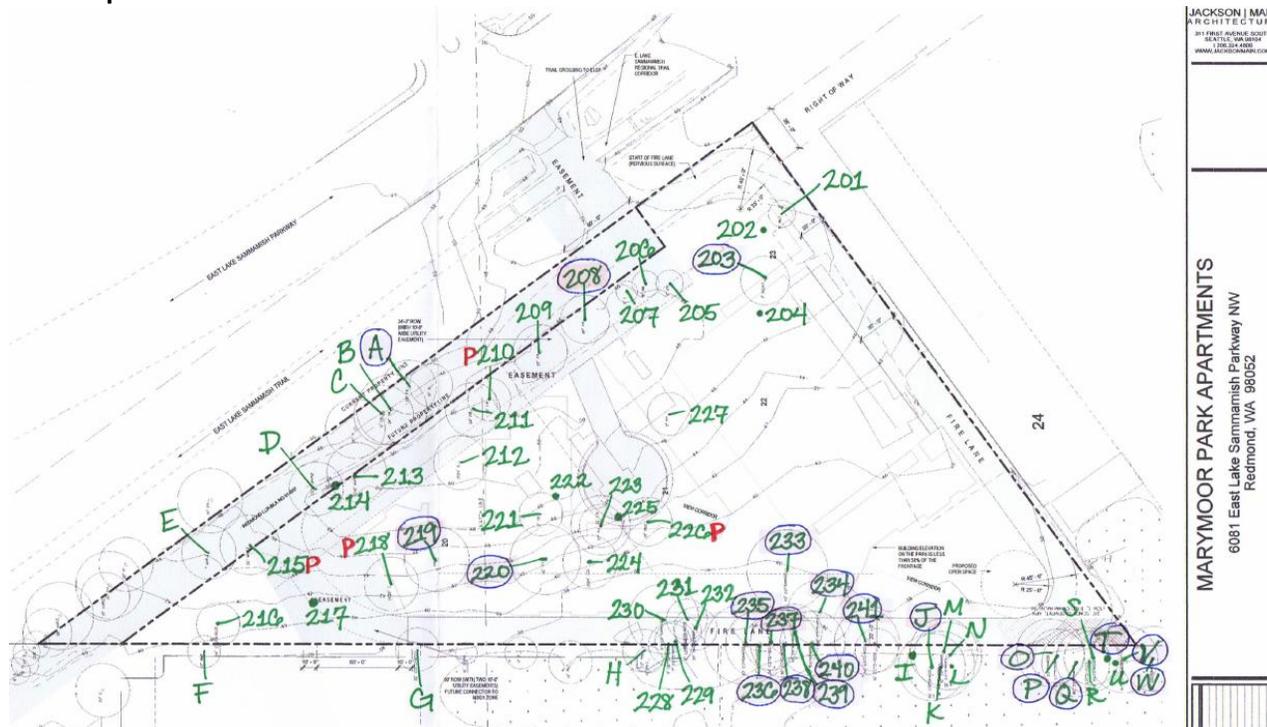


Figure 2: Tree Map – site trees have number identifier, adjacent property trees have letter identifier; Landmark trees have blue circle around identifier, trees in poor health condition have red “P” next to identifier.

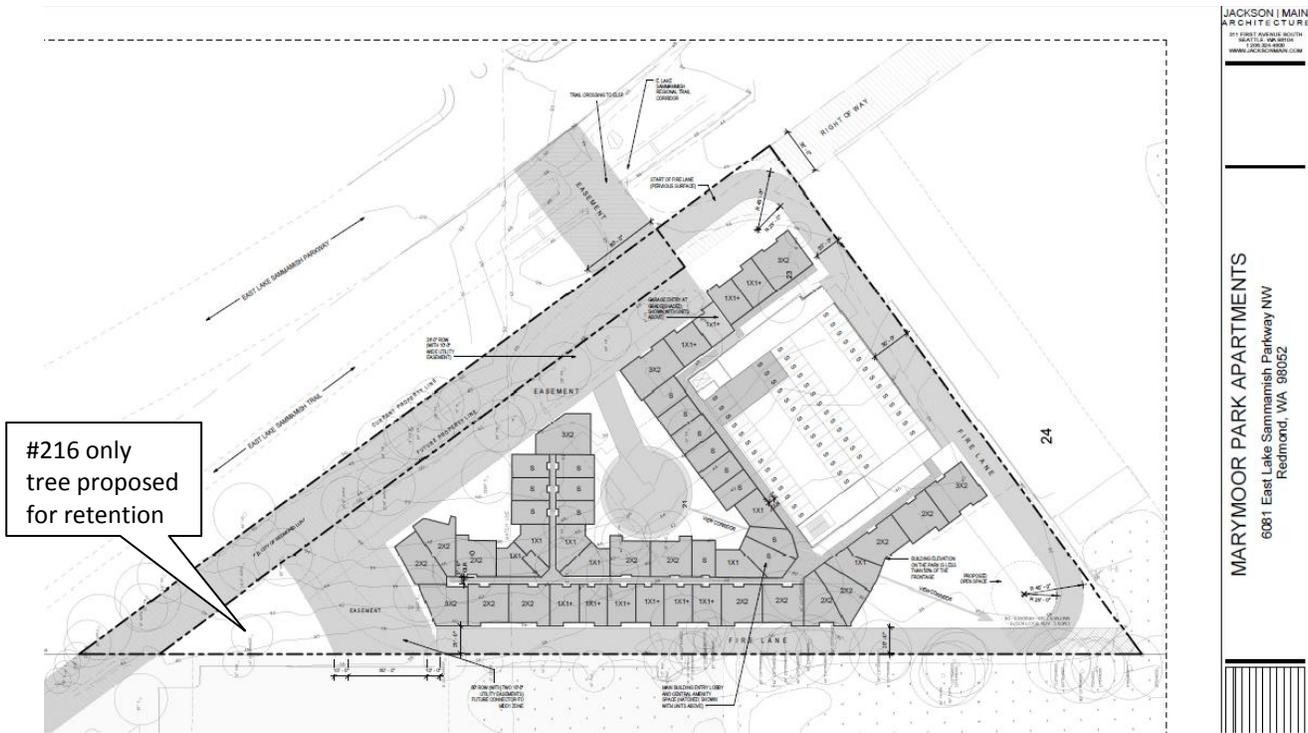


Figure 3: Site Plan

Photographs



Photo 1: Looking east from western property line toward center of site where existing structures are present.



Photo 2: Looking north along western property line at row of large cottonwoods – notice root damage

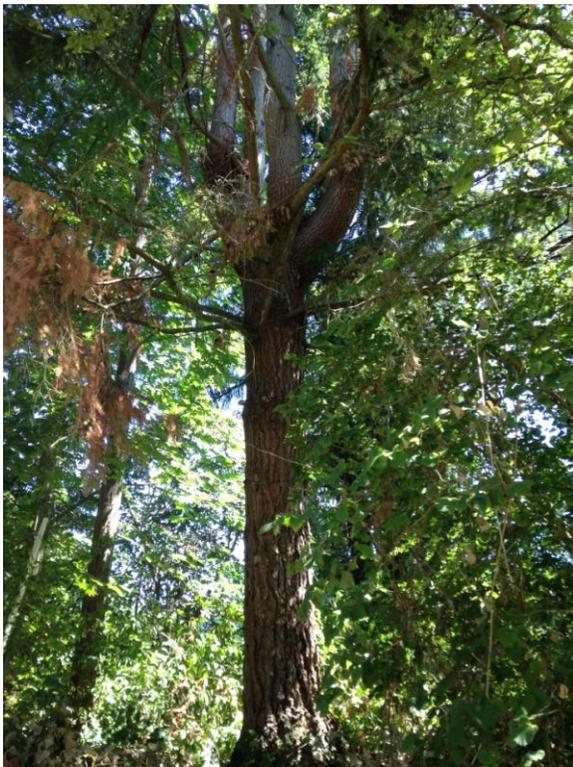


Photo 3: Adjacent site tree A, noted due to structural form resulting from past topping, which may be problematic



Photo 4: Adjacent site tree D, just beyond northeastern property line, also has problematic form with multiple stems crowded at basal attachment – several of the bigleaf maple trees on site have similar issues.`

Glossary

co-dominant stems: stems or branches of nearly equal diameter, often weakly attached (Matheny *et al.* 1998)

crown/canopy: the aboveground portions of a tree (Lilly 2001)

DSH: diameter at standard height; the diameter of the trunk measured 54 inches (4.5 feet) above grade (Matheny *et al.* 1998)

ISA: International Society of Arboriculture

included bark: bark that becomes embedded in a crotch between branch and trunk or between co-dominant stems and causes a weak structure (Lilly 2001)

Landmark tree: A healthy tree with a DSH greater than 30-inches. (RZC)

significant size: a tree measuring 6" DSH or greater (RZC)

structural defects: flaws, decay, or other faults in the trunk, branches, or root collar of a tree, which may lead to failure (Lilly 2001)

References

ANSI A300 (Part 1) – 2008 American National Standards Institute. American National Standard for Tree Care Operations: Tree, Shrub, and Other Woody Plant Maintenance: Standard Practices (Pruning). New York: Tree Care Industry Association, 2008.

Dunster & Associates Environmental Consultants Ltd. Assessing Trees in Urban Areas and the Urban-Rural Interface, US Release 1.0. Silverton: Pacific Northwest Chapter ISA, 2006

Lilly, Sharon. Arborists' Certification Study Guide. Champaign, IL: The International Society of Arboriculture, 2001.

Matheny, Nelda and James R. Clark. Trees and Development: A Technical Guide to Preservation of Trees During Land Development. Champaign, IL: International Society of Arboriculture, 1998.

Mattheck, Claus and Helge Breloer, The Body Language of Trees.: A Handbook for Failure Analysis. London: HMSO, 1994.

Redmond Zoning Code. <http://www.codepublishing.com/WA/redmond.html> (Accessed November 13, 2013)

Appendix A - Limits of Assignment

Unless stated otherwise: 1) information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of inspection; and 2) the inspection is limited to visual examination of the subject trees without dissection, excavation, probing, climbing, or coring unless explicitly specified. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.

Tree Solutions did not review any reports or perform any tests related to the soil located on the subject property unless outlined in the scope of services. Tree Solutions staff are not and do not claim to be soils experts. An independent inventory and evaluation of the soils on site should be obtained by a qualified professional if additional understanding of site characteristics is needed to make an informed decision.

Appendix B - Methods

We evaluated tree health and structure utilizing **visual tree assessment (VTA)** methods. The basis behind VTA is the identification of symptoms, which trees produce in reaction to weak spots or areas of mechanical stress. Trees react to mechanical and physiological stresses by growing more vigorously to re-enforce weak areas, while depriving less stressed parts (Mattheck & Breloer 1994). Understanding uniform stress allows us to make informed judgments about the condition of a tree.

We measured the diameter of each tree at 54 inches above grade, **diameter at standard height (DSH)**.

If a tree had multiple stems, we measured each stem individually at standard height and determined a single-stem equivalent diameter by taking the average of the stem diameters, per Redmond Zoning Code.

Appendix C - Assumptions & Limiting Conditions

1. Consultant assumes that any legal description provided to Consultant is correct and that title to property is good and marketable. Consultant assumes no responsibility for legal matters. Consultant assumes all property appraised or evaluated is free and clear, and is under responsible ownership and competent management.
2. Consultant assumes that the property and its use do not violate applicable codes, ordinances, statutes or regulations.
3. Although Consultant has taken care to obtain all information from reliable sources and to verify the data insofar as possible, Consultant does not guarantee and is not responsible for the accuracy of information provided by others.
4. Client may not require Consultant to testify or attend court by reason of any report unless mutually satisfactory contractual arrangements are made, including payment of an additional fee for such Services as described in the Consulting Arborist Agreement.
5. Unless otherwise required by law, possession of this report does not imply right of publication or use for any purpose by any person other than the person to whom it is addressed, without the prior express written consent of the Consultant.
6. Unless otherwise required by law, no part of this report shall be conveyed by any person, including the Client, the public through advertising, public relations, news, sales or other media without the Consultant's prior express written consent.
7. 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 specific value, a stipulated result, the occurrence of a subsequent event or upon any finding to be reported.
8. All photographs included in this report were taken by Tree Solutions Inc. during the documented site visit, unless otherwise noted.
9. Sketches, drawings and photographs 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. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by Consultant as to the sufficiency or accuracy of the information.
10. Unless otherwise agreed, (1) information contained in this report covers only the items examined and reflects the condition of the those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring. Consultant makes no warranty or guarantee, express or implied, that the problems or deficiencies of the plans or property in question may not arise in the future.
11. Loss or alteration of any part of this Agreement invalidates the entire report.

Tree ID	Scientific Name	Common Name	DSH (inches)	DSH (multi-stem)	Health Condition	Structural Condition	Drip Line (feet)	Proposed Action	Notes
201	<i>Pinus aristata</i>	Bristlecone pine	8.0	9.0, 7.0	Good	Good	7	Remove	Has a needle disease, co-dominant rom ground; planted in 1980
202	<i>Acer palmatum</i>	Japanese maple	6.7	7.1, 6.7, 4.3, 8.2, 7.0	Good	Good	11	Remove	Measured at six inches above grade; 100% live crown ratio; planted in 1980
203	<i>Thuja plicata</i>	Western redcedar	31.1	47.0, 15.1	Good	Fair	18	Remove	Multiple leads at DSH; crown raised in past, stub cuts present; co-dominant from ground; 100% live crown ratio
204	<i>Pseudotsuga menziesii</i>	Douglas-fir	8.3		Good	Good	13	Remove	
205	<i>Pseudotsuga menziesii</i>	Douglas-fir	8.3		Good	Good	7	Remove	Winged elm (<i>Ulmus alata</i>) growing at base; power lines in canopy
206	<i>Pseudotsuga menziesii</i>	Douglas-fir	6.8	9.0, 4.5	Good	Fair	12	Remove	Co-dominant at base; sparse crown; canopy in cable drops
207	<i>Pseudotsuga menziesii</i>	Douglas-fir	6.2		Good	Good	9	Remove	Canopy in cable drops
208	<i>Pseudotsuga menziesii</i>	Douglas-fir	30.3		Good	Good	24	Remove	root disturbance on west side
209	<i>Pseudotsuga menziesii</i>	Douglas-fir	29.0		Good	Good	20	Remove	Root disturbance on all sides
210	<i>Abies concolor</i>	White fir	17.4		Poor	Good	10	Remove	Insect damage on needles, root disturbance, very sparse crown
211	<i>Abies concolor</i>	White fir	26.3		Good	Good	15	Remove	
212	<i>Prunus emarginata</i>	Bitter cherry	26.3	26.5, 26.0	Fair	Fair	22	Remove	Root damage on three structural roots; both leads split into two co-dominant scaffolds at 8 feet; narrow angle of attachment; dead parts throughout canopy
213	<i>Acer macrophyllum</i>	Bigleaf maple	19.7	18.4, 21.0	Good	Fair	27	Remove	Root damage by excavator; dead parts throughout canopy; shared tree
214	<i>Acer macrophyllum</i>	Bigleaf maple	19.6	26.2, 18.1, 12.0, 22.2	Fair	Poor	32	Remove	Damage to trunk and roots from excavator; <i>Kretzschmaria deusta</i> in lower trunk; one main leader hollow
215	<i>Acer macrophyllum</i>	Bigleaf maple	21.6		Poor	Poor	20	Remove	Basal trunk wounds; <i>Kretzschmaria deusta</i> in wounds; tree is in decline

Tree ID	Scientific Name	Common Name	DSH (inches)	DSH (multi-stem)	Health Condition	Structural Condition	Drip Line (feet)	Proposed Action	Notes
216	<i>Fraxinus latifolia</i>	Oregon ash	9.0	11.7, 6.3	Good	Good	12	Retain	Co-dominant at DSH; root damage; drought stress
217	<i>Acer macrophyllum</i>	Bigleaf maple	16.5	12.7, 13.2, 38.7, 12.7, 10.3, 11.3	Fair	Poor	28	Remove	Lots of dead wood and hangers in canopy; <i>Ganoderma applanatum</i> and <i>Kretzschmaria deusta</i> found in lower trunk; tree in severe decline
218	<i>Acer macrophyllum</i>	Bigleaf maple	26.5	15.8, 45.8, 18.0	Poor	Poor	16	Remove	Central decay column present; advanced <i>Kretzschmaria deusta</i> found in lower stem
219	<i>Pseudotsuga menziesii</i>	Douglas-fir	32.0		Good	Good	27	Remove	
220	<i>Pseudotsuga menziesii</i>	Douglas-fir	31.6		Good	Good	23	Remove	
221	<i>Picea pungens</i>	Colorado blue spruce	12.1		Fair	Good	10	Remove	
222	<i>Picea pungens</i>	Colorado blue spruce	14.7		Good	Good	13	Remove	
223	<i>Pseudotsuga menziesii</i>	Douglas-fir	25.2		Good	Good	23	Remove	
224	<i>Thuja plicata</i>	Western redcedar	26.9	22.0, 31.8	Good	Fair	16	Remove	Co-dominant from base; 100% live crown ratio; showing signs of drought stress
225	<i>Pseudotsuga menziesii</i>	Douglas-fir	22.9		Good	Good	18	Remove	
226	<i>Pinus monticola</i>	Western white pine	23.4		Poor	Poor	15	Remove	Significant trunk crack and decay; bark is sloughing off stem; bird and insect holes; topped in the past
227	<i>Picea pungens</i>	Colorado blue spruce	16.4		Good	Good	15	Remove	
228	<i>Populus trichocarpa</i>	Black cottonwood	15.5		Good	Good	11	Remove	Large surface roots
229	<i>Populus trichocarpa</i>	Black cottonwood	10.2		Good	Good	99	Remove	Large surface roots
230	<i>Populus trichocarpa</i>	Black cottonwood	27.0		Good	Good	25	Remove	Major roots at surface damaged on all sides due to excavator activity

Tree ID	Scientific Name	Common Name	DSH (inches)	DSH (multi-stem)	Health Condition	Structural Condition	Drip Line (feet)	Proposed Action	Notes
231	<i>Populus trichocarpa</i>	Black cottonwood	16.7		Good	Good	23	Remove	Major roots at surface damaged on south side due to excavator activity
232	<i>Populus trichocarpa</i>	Black cottonwood	14.3	7.4, 21.2	Good	Good	31	Remove	Major roots at surface damaged on south side due to excavator activity; roots previously hollowed
233	<i>Populus trichocarpa</i>	Black cottonwood	41.7		Good	Good	33	Remove	Major roots at surface damaged on south side due to excavator activity; open grown tree
234	<i>Populus trichocarpa</i>	Black cottonwood	33.7		Good	Fair	35	Remove	Major roots at surface damaged on south side due to excavator activity; hollow base
235	<i>Populus trichocarpa</i>	Black cottonwood	39.5	14.5, 64.5	Good	Poor	23	Remove	Major roots at surface damaged on south side due to excavator activity; large part failure recently; large wounds on side; hollow stem and roots
236	<i>Populus trichocarpa</i>	Black cottonwood	55.1		Good	Fair	23	Remove	Major roots at surface damaged on south side due to excavator activity; roots previously hollowed
237	<i>Populus trichocarpa</i>	Black cottonwood	32.2		Fair	Poor	23	Remove	Roots damage by excavator activity; roots previously hollow; barbed wire at base
238	<i>Populus trichocarpa</i>	Black cottonwood	56.7		Good	Fair	23	Remove	Damaged roots; roots previously hollow; trunk hollow
239	<i>Populus trichocarpa</i>	Black cottonwood	42.1		Good	Fair	23	Remove	Damaged roots; roots previously hollow; trunk hollow
240	<i>Populus trichocarpa</i>	Black cottonwood	37.5		Good	Fair	23	Remove	Damaged roots; roots previously hollow
241	<i>Populus trichocarpa</i>	Black cottonwood	67.5		Fair	Poor	23	Remove	Hollow stem

Adjacent property trees:

Tree ID	Scientific Name	Common Name	DSH (inches)	DSH (multi-stem)	Health Condition	Structural Condition	Drip Line (feet)	Proposed Action	Notes
A	<i>Pseudotsuga menziesii</i>	Douglas-fir	30.5		Good	Fair	26	Remove	Previously topped at 20 feet; three re-iterations; no follow-up management was completed; attachment are stable currently, but advanced testing in recommended if retained; overhangs subject property by 2 feet
B	<i>Pseudotsuga menziesii</i>	Douglas-fir	25.6		Good	Fair	27	Remove	Previously topped at 20 feet; three re-iterations; no follow-up management was completed; attachment are stable currently, but advanced testing in recommended if retained; overhangs subject property by 3 feet
C	<i>Pseudotsuga menziesii</i>	Douglas-fir	16.2		Good	Fair	26	Remove	Topped previously; overhangs site by 2 feet
D	<i>Acer macrophyllum</i>	Bigleaf maple	13.8	15.5, 12.0, 15.0, 12.5	Fair	Poor	32	Remove	Co-dominant from based with 7 stems; three large dead stems and unstable; Kretschmaria deusta found at base; dead parts throughout; overhangs site by 8 feet
E	<i>Acer macrophyllum</i>	Bigleaf maple	14.2	7.7, 17.4, 16.2, 15.5	Poor	Poor	21	Remove	Five co-dominant leaders from the base; dead wood throughout; Kretschmaris deusta found in base; overhangs site by 2 feet
F	<i>Pinus nigra</i>	Austrian pine	12.2		Good	Good	6	Remove	Overhangs site by 2 feet
G	<i>Populus trichocarpa</i>	Black cottonwood	19.3		Fair	Good	10	Remove	Many trunk sprouts; overhangs site by 5 feet
H	<i>Pinus nigra</i>	Austrian pine	13.4		Fair	Fair	13	Remove	Canopy and roots on site; another tree is located further west with roots that are likely on site; overhangs site by 6 feet
I	<i>Populus trichocarpa</i>	Black cottonwood	29.2		Good	Good	26	Remove	Overhangs site by 5 feet
J	<i>Populus trichocarpa</i>	Black cottonwood	36.4		Good	Good	26	Remove	Overhangs site by 6 feet

Tree ID	Scientific Name	Common Name	DSH (inches)	DSH (multi-stem)	Health Condition	Structural Condition	Drip Line (feet)	Proposed Action	Notes
K	<i>Populus trichocarpa</i>	Black cottonwood	29.8		Good	Good	26	Remove	Overhangs site by 7 feet
L	<i>Populus trichocarpa</i>	Black cottonwood	29.9	28.3, 31.4	Good	Fair	32	Remove	Overhangs site by 18 feet
M	<i>Populus trichocarpa</i>	Black cottonwood	29.9		Good	Fair	39	Remove	Overhangs site by 30 feet
N	<i>Populus trichocarpa</i>	Black cottonwood	29.7		Good	Fair	30	Remove	Large burl on west side; decay in base and root damage; overhangs site by 10 feet
O	<i>Populus trichocarpa</i>	Black cottonwood	43.4		Good	Good	24	Remove	Overhangs site by 13 feet
P	<i>Populus trichocarpa</i>	Black cottonwood	40.3		Good	Good	25	Remove	Overhangs site by 13 feet
Q	<i>Populus trichocarpa</i>	Black cottonwood	42.0		Good	Good	31	Remove	Overhangs site by 15 feet
R	<i>Populus trichocarpa</i>	Black cottonwood	28.1		Good	Good	36	Remove	Root disturbance; overhangs site by 20 feet
S	<i>Populus trichocarpa</i>	Black cottonwood	22.6		Good	Good	29	Remove	Root disturbance; overhangs site by 20 feet
T	<i>Populus trichocarpa</i>	Black cottonwood	37.8		Good	Good	28	Remove	Root disturbance; overhangs site by 18 feet
U	<i>Populus trichocarpa</i>	Black cottonwood	18.2	19.5, 27.5, 7.5	Good	Good	37	Remove	Root disturbance; overhangs site by 29 feet
V	<i>Populus trichocarpa</i>	Black cottonwood	44.8		Good	Good	33	Remove	Root disturbance; overhangs site by 28 feet
W	<i>Populus trichocarpa</i>	Black cottonwood	46.6		Good	Good	26	Remove	Root disturbance; overhangs site by 10 feet

Additional Notes:

DSH (Diameter at Standard Height) is measured 4.5 feet above grade.

Multi-stem trees are noted, and a single stem equivalent is calculated by averaging all stem diameters together, per City of Redmond Code

Drip line is measured from the center of the tree to the outermost extent of the canopy

Highlighted DSH indicates Landmark tree