AFM
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ARBORIST REPORT
For
Scrivanich Parcels
Kirkland, WA

April 8th, 2014

Table of Contents

Appendix

1. Introduction

American Forest Management, Inc. was contacted by Larry Scrivanich, and was asked to compile an 'Arborist Report' for four parcels located within the City of Kirkland, WA.

The proposed development encompasses the properties located at 11431 and 11421 NE 116th St. Our assignment is to prepare a written report on present tree conditions, which is to be filed with the short plat permit application.

This report encompasses all the criteria set forth under the City of Kirkland's tree regulations. The required minimum tree density for the entire area (150,176 sq. ft. or 3.45 acres) is 104 tree credits.

Date of Field Examination: April 3rd and 4th, 2014

2. Description

The topography of the subject property is relatively flat. A small wetland exists in the south west corner. Two hundred and twenty-three significant trees were located and assessed on the property. A significant tree in the City of Kirkland is defined as having a diameter 6" or greater at DBH (diameter at breast height, 4 ½' above ground). Seven trees have been added to the original survey. Approximate locations have been plotted on a copy of the site plan, which is attached and part of this report.

The neighboring trees (with drip-lines impacting the subject parcels) were also assessed and are part of this report.

All of the significant trees on the subject property have been identified in the field with a numbered aluminum tag attached to the lower trunk. Tree tag numbers correspond with tree numbers on the attached tree summary tables and copy of the site plan.

3. Methodology

Each tree in this report was visited. Tree diameters were measured by tape. The tree heights were measured using a Spiegel Relaskop. Each tree was visually examined for defects and vigor. The tree assessment procedure involves the examination of many factors:

- The crown of the tree is examined for current vigor. This is comprised of inspecting the crown (foliage, buds and branches) for color, density, form, and annual shoot growth, limb dieback and disease. The percentage of live crown is estimated for coniferous species only and scored appropriately.

- The bole or main stem of the tree is inspected for decay, which includes cavities, wounds, fruiting bodies of decay (conks or mushrooms), seams, insects, bleeding, callus development, broken or dead tops, structural defects and unnatural leans. Structural defects include crooks, forks with V-shaped crotches, multiple attachments, and excessive sweep.

- The root collar and roots are inspected for the presence of decay, insects and/or damage, as well as if they have been injured, undermined or exposed, or original grade has been altered.

Based on these factors a determination of viability is made. Trees considered 'non-viable' are trees that are in poor condition due to disease, extensive decay and/or cumulative structural defects, which exacerbate failure potential. A 'viable' tree is a tree found to be in good health, in a sound condition with minimal defects and is suitable for its location. Also, it will be wind firm if isolated or left as part of a grouping or grove of trees. A 'borderline' viable tree is a tree where its viability is in question. These are trees that are beginning to display symptoms of decline due to age, species related problems and/or man caused problems. Borderline trees are not expected to positively contribute to the landscape for the long-term and are not recommended for retention.

4. Observations

The subject trees are comprised primarily of native species. These include in order of prevalence – Douglas-fir, bitter cherry, big leaf maple, red alder, western red cedar, black cottonwood, cascara and willow. The oldest trees on the property are in the 65 to 75 year range. For the most part, the native trees have developed typical form and structure and are in fair to good condition. Several ornamental coniferous and deciduous trees and shrubs have been planted on the property over recent years. Species include magnolia, Norway maple and Scots pine to name a few. Many of the ornamentals are of non-significant size.

The Douglas-fir trees are concentrated in large groupings along the east portion of the property. The groupings contain several smaller suppressed trees with poor trunk taper, low vigor and past broken tops. Tree #244 has died within the last couple years from root disease. Nearby trees #242 and #243 don't have any outward indications of being infected, but given how the disease spreads (via root contact below ground), there's a good chance they are infected to some degree. Tree #468 is also infected with Laminated root rot, evidenced by resin flows at the base and a thinning crown, see photos below. Tree #469 situated just to the north also has a good chance of being infected.

A small wetland exists in the southeast corner of the property. Tree composition in the wetland is primarily red alder and black cottonwood. The red alder here is in poor condition, evidenced by dead and broken tops. These are considered low risk and can be retained for wildlife habitat. Moderate to heavy concentrations of English ivy and Himalayan blackberry were observed within the wetland area and its buffer.

The bitter cherry has developed typical structure. Many trees have poor trunk taper and leans. Overall vigor appears good, even in more mature specimens.

The two mature black cottonwood trees (#452 and #453) in the southwest portion of the property are in poor condition. #452 has large codominant stems which fork low on the trunk. The buildup of included bark between the stems is vast associated with heavy pitching or bleeding. One of these stems is positioned to fall toward the proposed development. This tree is high risk and should be removed. #453 also has a high potential for failure, but leans heavily away from the property toward a vacant wooded area (no target). Retention is feasible so long as the adjacent property to the southwest remains vacant.

The grouping of cottonwood at the back of the property and which extends off of the property are considered semi-mature. These are situated on higher ground than the cottonwood in the wetland area. They are quite tall and have developed poor trunk taper from heavy competition for sunlight.

There are several volunteer European mountain ash trees, primarily at the back of the property and along the west portion. These have developed typical form with multiple stems. These are low risk and can be retained where feasible.

<u>Neighboring Trees</u>

Neighboring trees are primarily comprised of native species as well. On the adjoining property to the east, there are several Douglas-fir trees and big leaf maples trees with drip-lines that encroach upon the subject property. No outward indicators of disease or decline were observed. Trees appear sound and of good vigor.

There are also several Douglas-fir trees on the adjacent property to the west of Parcels A and B. Many have drip-lines that encroach upon the subject property. Again, no concerning conditions were observed in these trees. All appear healthy and of good vigor. These appear to be of the same age as the subject Douglas-fir trees.

A mix of native and deciduous species exists close to the north and west property lines of Parcel D. These are primarily young to semi-mature specimens. All appear to be of fairly good health and are structurally sound. No concerning conditions were observed with these trees.

5. Discussion

The extent of drip-lines (farthest reaching branches) for trees potentially impacted by development can be found in the tree summary tables at the back of this report. These have also been delineated on a copy of the site plan. The recommended Limits of Disturbance for viable trees potentially impacted by construction can be found on the tree summary tables. The information plotted on the attached site plan needs to be transferred to a final tree retention/protection plan to meet City submittal requirements. The Limits of disturbance information shall be used in the development of such plan. The trees that are to be removed shall be shown "X'd" out on the final plan. Trees to be retained outside the critical areas shall include the limits of disturbance line and tree protection fencing locations. Tree protection fencing shall be initially positioned just beyond the drip-line and only moved back to the Limits of Disturbance line when work is authorized.

The Limits of Disturbance measurements for the neighboring trees can also be found in the tables. Tree protection fencing shall be initially positioned at the drip-line, and only moved to allow work up to the Limits of Disturbance. No work shall be allowed within the recommended Limits of Disturbance as delineated on the attached plan. Include tree protection for neighboring trees on final drawing.

It is assumed all significant trees within the wetland area and within the 50' wetland buffer will be retained. Many of the red alder in the wetland and buffer is in poor condition. Most have prematurely declined, evidenced by broken tops and trunk decay. These trees are considered low risk due to size and can be safely retained as wildlife habitat. Many of these have cavity nesting inhabitants.

The wetland area has minimal tree cover, over 90% of which is deciduous. There is also a moderate to high component of invasive plant species in the wetland – English ivy and Himalayan blackberry. This area can be enhanced by the establishment of conifer trees and the removal of invasive plants. Western red cedar and Sitka spruce are the recommended species for restoration. If supplemental trees are required as part of the proposal, consider enhancing the wetland and buffer area. There is also a small area of planted bamboo near the wetland buffer. This bamboo should be eradicated before it has a chance to spread into the wetland.

It appears the existing access to the site will be used as the main access into the plat. The access road is in good condition. There is no evidence of lifting or broken pavement from the neighboring trees. In order to protect neighboring trees, the existing pavement should not be altered. New pavement can be laid on top of the existing pavement when the access drive is widened to the east. The 5' planter strip on the west side of the access drive should be maintained and not disturbed to protect neighboring trees. See photos below.

6. Tree Protection Measures

The following guidelines are recommended to ensure that the designated space set aside for the preserved trees are protected and construction impacts are kept to a minimum. Standards have been set forth under Kirkland Zoning Code 95.34 of Chapter 95. Please review these standards prior to any development activity.

1. Tree protection fencing shall be erected per prior to moving any heavy equipment on site. Doing this will set clearing limits and avoid compaction of soils within root zones of retained trees.
2. Excavation limits should be laid out in paint on the ground to avoid over excavating.
3. Excavations within the drip-lines of retained trees shall be monitored by a qualified tree professional so necessary precautions can be taken to decrease impacts to tree parts. A qualified tree professional shall monitor excavations when work is required and allowed up to the "limits of disturbance".
4. To establish sub grade for foundations, curbs and pavement sections near the trees, soil should be removed parallel to the roots and not at 90 degree angles to avoid breaking and tearing roots that lead back to the trunk within the drip-line. Any roots damaged during these excavations should be exposed to sound tissue and cut cleanly with a saw. Cutting tools should be sterilized with alcohol.
5. Areas excavated within the drip-line of retained trees should be thoroughly irrigated weekly during dry periods.
6. Preparations for final landscaping shall be accomplished by hand within the drip-lines of retained trees. Large equipment shall be kept outside of the tree protection zones.

7. Tree Replacement

Tree density requirements will be satisfied by tree retention within the wetland, wetland buffer and in the site's landscape perimeters.

New tree plantings may be preferred to enhance final landscaping. New tree plantings shall be given appropriate space for the species and their growing characteristics. Refer to the *Kirkland Plant List* on the City's website for a list of desirable species. For planting and maintenance specifications, refer to chapters 95.50 and 51 of the Kirkland Zoning Code.

If supplemental trees are required as part of the proposal, consider enhancing the wetland and buffer area, by the establishment of native coniferous species – western red cedar and Sitka spruce; and by removing the invasive plant species.

There is no warranty suggested for any of the trees subject to this report. Weather, latent tree conditions, and future man-caused activities could cause physiologic changes and deteriorating tree condition. Over time, deteriorating tree conditions may appear and there may be conditions, which are not now visible which, could cause tree failure. This report or the verbal comments made at the site in no way warrant the structural stability or long term condition of any tree, but represent my opinion based on the observations made. Nearly all trees in any condition standing within reach of improvements or human use areas represent hazards that could lead to damage or injury.

Please call if you have any questions or if we can be of further assistance.

Sincerely,

Bob Layton
ISA Certified Arborist #PN-2714A
ISA Tree Risk Assessment Qualified

Subject Lawson cypress trees (#214>#219) near north property line

Existing access road looking east to NE 116th ST

Existing access road looking south toward back parcel

Mature big leaf maples on adjacent property to east

Grove of Douglas-fir on Parcel B

Grove of Douglas-fir on Parcel B – northeast corner

East property line, looking toward the wetland

Wetland area

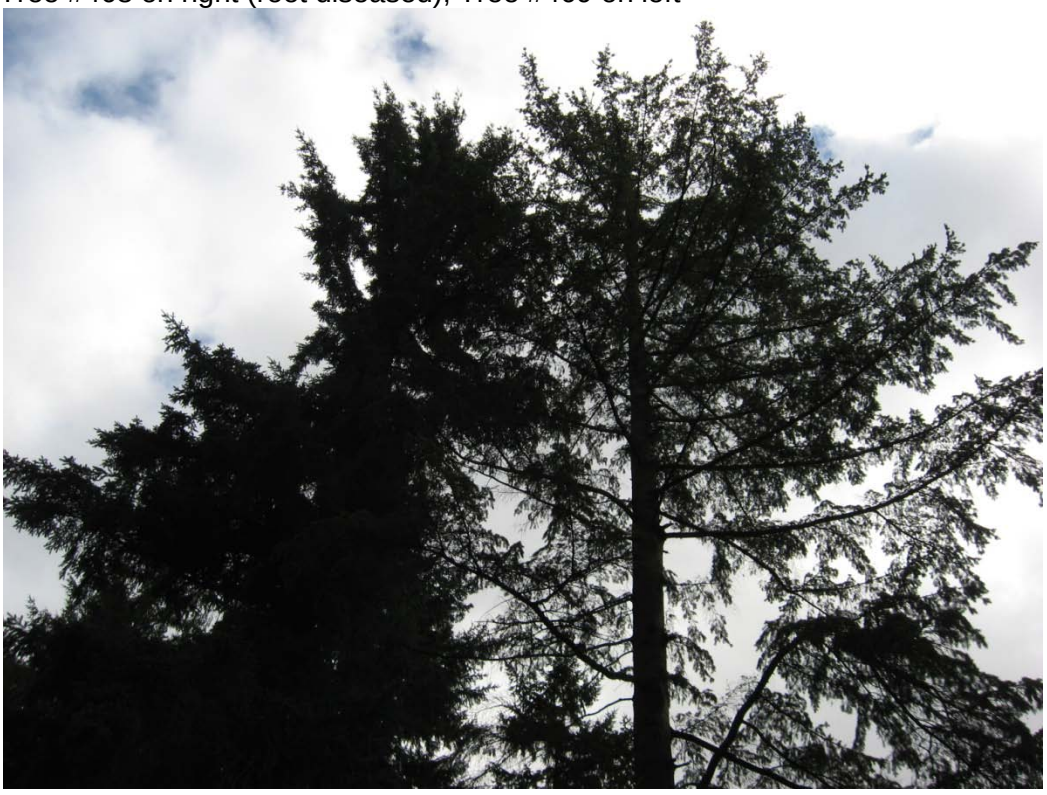
Grove of black cottonwood near south perimeter, most trees are off property

Clump of bitter cherry (#389>#395) outside wetland buffer

Tree #452, codominant stems, excessive included bark/bleeding at fork, high risk tree

Base of tree #468, infected with laminated root rot

Tree #468 on right (root diseased), Tree #469 on left



Bitter cherry on west side of parcel, typical form

City of Kirkland - Tree Protection Standards

1. Tree Protection Fencing shall be erected at prescribed distance per arborist report. Fences shall be constructed of chain link and be at least 4 feet high.
2. Install highly visible signs on protection fencing spaced no further than 15 feet apart. Signs shall state “Tree Protection Area-Entrance Prohibited”, and “City of Kirkland” code enforcement phone number.
3. No work shall be performed within protection fencing unless approved by Planning Official. In such cases, activities will be approved and supervised by a “Qualified Professional”.
4. The original grade shall not be elevated or reduced within protection fencing without the Planning Official authorization based on recommendations from a qualified professional.
5. No building materials, spoils, chemicals or substances of any kind will be permitted within protection fencing.
6. Protection Fencing shall be maintained until the Planning Official authorizes its removal.
7. Ensure that any approved landscaping within the protected zone subsequent to the approved removal of protection fencing be performed with hand labor.

In addition to the above, the Planning Official may require the following:

a. If equipment is authorized to operate within the root zone, the area will be mulched to a depth of 6” or covered with plywood or similar material to protect roots from damage caused by heavy equipment.
b. Minimize root damage by excavating a 2-foot deep trench, at edge of protection fencing to cleanly sever the roots of protected trees.
c. Corrective pruning to avoid damage from machinery or building activity.
d. Maintenance of trees throughout construction period by watering and fertilization.

Trees on Parcels

Tag #	Species	DBH	Condition	Proposal	Tree Credits
248	Japanese fl cherry	7	good		1
214	Lawson cypress	13,8	good		3.5
215	Lawson cypress	10,13	good		3.5
216	Lawson cypress	12	good		2
217	Lawson cypress	9,10,10	good		3
218	Lawson cypress	13	good		2.5
219	Lawson cypress	12,10	good		3
235	bitter cherry	16	fair	remove	na
226	apple	8	good		1
206	Japanese maple 7	4~6	fair-good		1
222	western red cedar	5	fair-good		0.5
223	big leaf maple	6	fair-poor	remove	na
225	Douglas-fir	15	fair		3.5
273	Douglas-fir	12	fair		2
272	Douglas-fir	19	good		5.5
275	Douglas-fir	20	good		6
274	Douglas-fir	9	poor	remove	na
276	Douglas-fir	6	fair		1
277	Pacific madrone	8	fair		1
278	Douglas-fir	6	fair		1
280	Douglas-fir	7	fair-poor	remove	na
279	Douglas-fir	6	fair-poor	remove	na
281	Douglas-fir	18	good		5
282	Douglas-fir	12	fair		2
285	Douglas-fir	11	fair-good		1.5
288	Douglas-fir	9	fair		1
286	Douglas-fir	5	fair		0.5
287	Douglas-fir	22	good		7
284	Douglas-fir	9	fair		1
283	Douglas-fir	17	good		4.5
268	Douglas-fir	13	fair-good		2.5
266	Douglas-fir	13	fair		2.5
267	Douglas-fir	7	poor	remove	na
250	Douglas-fir	28	fair-good		10
261	weeping beech	11	fair-good		1.5

Tag #	Species	DBH	Condition	Proposal	Tree Credits
249	Colorado blue spruce	12	fair-good		2
251	deciduous	10	fair-good		1
241	Douglas-fir	19	good		5.5
262	Douglas-fir	15	good		3.5
263	Douglas-fir	13	fair-good		2.5
264	Douglas-fir	24	good		8
244	Douglas-fir	21	dead		na
243	Douglas-fir	21	fair		6.5
242	Douglas-fir	23	fair		7.5
319	Douglas-fir	18	good		5
320	Douglas-fir	8	fair	remove	na
321	Douglas-fir	14	fair-good		3
334	Douglas-fir	11	fair		1.5
245	Douglas-fir	22	good		7
246	Douglas-fir	13	fair		2.5
247	Douglas-fir	14	fair-good		3
318	beaked hazelnut	2~6	fair-good		na
337	Douglas-fir	18	fair-good		5
340	Douglas-fir	8	fair		1
342	Douglas-fir	6	fair		1
344	bitter cherry	17	fair		4.5
341	Douglas-fir	6	fair		1
339	Douglas-fir	5	fair-poor	remove	na
336	Douglas-fir	6	fair		1
335	Douglas-fir	6	fair		1
338	bitter cherry	6	fair		1
314	Douglas-fir	7	fair		1
315	Douglas-fir	23	good		7.5
333	bitter cherry	9	fair		1
327	big leaf maple	15	poor	remove	na
332	Douglas-fir	26	good		9
325	Douglas-fir	17	fair-good		4.5
329	red alder	10	fair		1
362	bitter cherry	7	fair		1
363	bitter cherry	6	fair		1
361	bitter cherry	5	fair		0.5
365	Douglas-fir	8	good		1
367	Douglas-fir	19	good		5.5
369	western red cedar	10	good		1
360	Douglas-fir	6	fair		1
366	Douglas-fir	11	fair-good		1.5
368	red alder	8	fair		1
357	red alder	5	fair		0.5
345	bitter cherry	11	fair-good		1.5
349	bitter cherry	8	fair		1
350	bitter cherry	5	fair		0.5
352	Douglas-fir	8	fair		1
347	bitter cherry	9	fair-good		1
397	black cottonwood	12	fair		2
1003	black cottonwood	9	fair		1
1004	hawthorn	7	fair		1
1005	black cottonwood	6	fair		1
10	black cottonwood	27	fair		9.5
12	red alder	10	poor	Habitat tree	na
9	red alder	10	poor	Habitat tree	na
14	red alder	6	fair		1
15	red alder	6	fair		1
16	red alder	7	fair		1
17	red alder	9	fair		1
21	red alder	4	fair		0.5
22	red alder	6	fair		1
18	red alder	7	fair		1
19	red alder	9	fair		1
20	red alder	10	fair		1
13	black cottonwood	35	fair		13.5

Tag #	Species	DBH	Condition	Proposal	Tree Credits
23	red alder	11	fair		1.5
11	cascara	7	fair		1
7	black cottonwood	32	fair		12
8	red alder	12	fair		2
400	black cottonwood	9	fair		1
6	European mtn ash	5,4,4	fair		1
399	red alder	11	poor	Habitat tree	na
398	red alder	12	poor	Habitat tree	na
488	red alder	10	poor	Habitat tree	na
489	European mtn ash	8	fair		1
490	bitter cherry	10	fair		1
491	red alder	15	fair-poor	Habitat tree	na
1006	European mtn ash	7	fair		1
1007	Douglas-fir	7	fair		1
493	red alder	6	fair-poor	Habitat tree	na
492	red alder	13	fair		2.5
494	bitter cherry	6	fair		1
496	western red cedar	36	good		14
497	willow	8	fair		1
495	willow	11	fair		1.5
485	chestnut	12,12	fair-poor	remove	na
486	western red cedar	11	good		1.5
487	western red cedar	12	good		2
396	western red cedar	9	good		1
388	red alder	11	poor	remove	na
389	bitter cherry	9	fair		1
390	bitter cherry	6	fair		1
392	bitter cherry	8	fair		1
394	bitter cherry	8	fair		1
393	red alder	8	fair-poor	remove	na
395	bitter cherry	6	fair		1
391	bitter cherry	17	good		4.5
322	Scots pine	8	good		1
323	Norway maple	9	good		1
324	Douglas-fir	18	fair-good		5
371	Douglas-fir	25	good		8.5
372	Douglas-fir	18	good		5
373	Douglas-fir	21	good		6.5
374	Douglas-fir	25	good		8.5
378	Douglas-fir	20	fair-poor	remove	na
375	Douglas-fir	23	good		7.5
376	Douglas-fir	19	fair-good		5.5
383	Douglas-fir	13	fair		2.5
384	Douglas-fir	11	fair		1.5
377	Douglas-fir	10	fair		1
379	Douglas-fir	15	good		3.5
385	Douglas-fir	16	good		4
386	Douglas-fir	16	fair		4
387	Douglas-fir	17	fair-good		4.5
382	Douglas-fir	11	fair		1.5
381	Douglas-fir	21	good		6.5
380	Douglas-fir	26	good		9
446	bitter cherry	9	good		1
445	Douglas-fir	31	good		11.5
447	big leaf maple	15	good		3.5
451	bitter cherry	8	good		1
450	bitter cherry	7	good		1
448	cascara	6	poor		1
449	bitter cherry	7, 9	fair		2
452	black cottonwood	49	poor	remove	na
453	black cottonwood	35	fair-poor		13.5
457	Douglas-fir	27	fair		9.5
455	bitter cherry	6	good		1
456	black cottonwood	7	good		1
460	big leaf maple	21	fair		6.5

Tag #	Species	DBH	Condition	Proposal	Tree Credits
461	western red cedar	6	good		1
458	bitter cherry	9	good		1
459	Douglas-fir	23	good		7.5
479	Douglas-fir	9	good		1
482	bitter cherry	6	fair		1
483	bitter cherry	7	good		1
462	Douglas-fir	38	good		15
463	Douglas-fir	27	good		9.5
464	Douglas-fir	19	good		5.5
465	Douglas-fir	18	good		5
467	Douglas-fir	21	good		6.5
481	pacific madrone	6	good		1
240	weeping giant sequoia	10	fair		1
414	common pear	7, 5	good		1.5
417	bitter cherry	16	good		4
418	bitter cherry	6, 5	fair		1.5
422	bitter cherry	11	fair		1.5
423	bitter cherry	9	fair		1
425	Douglas-fir	28	good		10
427	western red cedar	6	good		1
426	western red cedar	45	good		18
428	bitter cherry	11	fair		1.5
439	western hemlock	6	good		1
429	bitter cherry	14	good		3
433	bitter cherry	8	good		1
432	bitter cherry	15	fair		3.5
431	bitter cherry	8	fair		1
430	bitter cherry	12	good		2
435	mountain ash	8	fair poor	remove	na
436	Douglas-fir	21	good		6.5
437	Douglas-fir	29	good		10
438	big leaf maple	23	fair		7.5
444	Douglas-fir	33	good		13
443	big leaf maple	14, 15	fair		6
480	western red cedar	6	good		1
466	Douglas-fir	32	good		12
476	Douglas-fir	18	good		5
477	Douglas-fir	16	fair		4
478	Douglas-fir	23	good		7.5
484	Douglas-fir	22	good		7
475	blue atlas cedar	8	fair		1
700	plum	6	good		1
2	black cottonwood	6	good		1
1	black cottonwood	12	good		2
500	black cottonwood	19	good		5.5
498	mountain ash	5-7	good		1
468	Douglas-fir	27	poor	remove	na
474	Saucer magnolia	6, 3	good		1
470	Saucer magnolia	6, 5	good		1
471	Douglas-fir	26	good		9
472	Douglas-fir	23	good		7.5
473	Douglas-fir	31	good		11.5
441	Scots pine	6	good		1
469	Douglas-fir	28	good		10
3	black cottonwood	4	fair		0.5
4	black cottonwood	4	fair		0.5
5	black cottonwood	4	fair		0.5
499	mountain ash	4	fair		0.5

Tree Density Calculation
Property Size – +/- 150,176 sq. ft.
150,176/43,560 X 30 = 103.4
Required Minimum Tree Density = 104 tree credits
Viable Tree Credits Existing = 670.5

Tree Summary Table

For: Scrivanich Property
Kirkland

American Forest Management, Inc.

Date: 4/3/2014
Inspector: Layton

Tree/Tag #	Species	Native/ Planted/ Volunteer	DBH	Height	Tree Credit	Drip-Line/Limits of Disturbance (feet) N	S	E	W	Condition	Viability	Comments
248	Japanese fl cherry	P	7	14	1	7/4	6/4	6/3	na	good	viable	no concerns
214	Lawson cypress	P	13,8	53	3.5	6/na	7/8	na	6/8	good	viable	no concerns
215	Lawson cypress	P	10,13	53	3.5	6/na	7/8	na	na	good	viable	no concerns
216	Lawson cypress	P	12	52	2	5/na	7/8	na	na	good	viable	no concerns
217	Lawson cypress	P	9,10,10	52	3	7/na	7/8	na	na	good	viable	no concerns
218	Lawson cypress	P	13	53	2.5	6/na	7/8	na	na	good	viable	no concerns
219	Lawson cypress	P	12,10	52	3	6/na	6/8	6/na	na	good	viable	no concerns
235	bitter cherry	N	16	44	na	22/na	0/na	na	12/na	fair	borderline	heavy lean north, mature
226	apple	P	8	12	1	na	na	na	na	good	viable	no concerns
206	Japanese maple 7	P	4~6	18	1	14/12	12/10	12/10	13/10	fair-good	viable	shrub form
222	western red cedar	N	5	23	0.5	na	na	na	8/5	fair-good	viable	suppressed
223	big leaf maple	N	6	36	na	na	na	na	na	fair-poor	borderline	growing off rotten maple stump
225	Douglas-fir	N	15	80	3.5	na	na	na	6/8	fair	viable	major crook at 30', stub
273	Douglas-fir	N	12	40	2	8/6	10/6	na	16/10	fair	viable	suppressed
272	Douglas-fir	N	19	98	5.5	16	4	13	14	good	viable	natural lean northwest
275	Douglas-fir	N	20	110	6	10	10	14	14	good	viable	no concerns
274	Douglas-fir	N	9	25	na	12	0	0	0	poor	non-viable	dead top, suppressed
276	Douglas-fir	N	6	32	1	9	7	4	4	fair	viable	supp, over topped
277	Pacific madrone	N	8	30	1	14	0	0	0	fair	viable	heavy lean, assymetric crown
278	Douglas-fir	N	6	34	1	6	5	6	2	fair	viable	suppressed
280	Douglas-fir	N	7	35	na	3	2	3	2	fair-poor	borderline	suppressed
279	Douglas-fir	N	6	28	na	4	3	2	6	fair-poor	borderline	suppressed
281	Douglas-fir	N	18	100	5	10/10	12/10	na	13/10	good	viable	no concerns
282	Douglas-fir	N	12	72	2	0/na	12/10	na	4/10	fair	viable	natural lean south
285	Douglas-fir	N	11	66	1.5	3/8	8/8	na	2/8	fair-good	viable	no concerns

49.5

Drip-Line and Limits of Disturbance measurements from face of trunk

Tree Summary Table

For: 11406 NE 112th Street

American Forest Management, Inc

Date: 8/14/2014

Inspector: Layton

Tree/Tag #	Species	Native/ Planted/ Volunteer	DBH	Height	Tree Credit	Drip-Line/Limits of Disturbance (feet) N	S	E	W	Condition	Viability	Comments
101	western red cedar	P	17	22	na	9/9	12/6	na	11/8	fair-poor	borderline	topped for power lines
102	western red cedar	P	10	20	na	5/6	8/6	na	6/6	fair-poor	borderline	topped for power lines
103	western red cedar	P	14	25	na	6/8	12/8	na	7/8	fair-poor	borderline	topped for power lines
104	Douglas-fir	P	18	55	na	9/8	12/10	na	8/8	fair-poor	borderline	topped, regen, fork
105	western red cedar	P	20	56	6	10/10	12/10	na	13/10	good	viable	no concerns
106	Douglas-fir	P	11	58	1.5	6/8	10/8	na	8/8	fair	viable	poor trunk taper, slight lean east
107	Douglas-fir	P	20	85	6	10/10	12/10	na	14/10	fair-good	viable	slight lean east, minor crooks
108	Atlas cedar	P	15	77	3.5	8/8	6/8	na	14/10	good	viable	no concerns
109	Atlas cedar	P	14	77	3	7/8	6/8	na	6/8	fair-good	viable	natural lean east
110	Atlas cedar	P	16	75	4	8/8	9/8	na	9/10	good	viable	no concerns
111	Atlas cedar	P	17	70	4.5	9/8	8/10	na	10/10	good	viable	no concerns
112	Lawson cypress	P	9	40	1	8/8	7/8	na	9/9	good	viable	somewhat suppressed
113	big leaf maple	N	16	44	4	12/10	28/12	na	24/10	fair	viable	fork, assymetric crown
114	western red cedar	P	13	38	2.5	7/10	9/10	na	13/10	fair	viable	dead top
115	western red cedar	P	10	38	1	6/6	5/6	na	9/8	fair	viable	dead top
116	western red cedar	P	15	38	2.5	14/10	7/6	na	13/10	fair	viable	dead top
117	black cottonwood	N	33	130	12.5	6/14	18/16	14/14	14/16	fair	viable	typical
118	black cottonwood	N	29	125	10.5	18/16	12/16	14/14	12/14	fair	viable	typical
119	black cottonwood	N	9	47	na	7/7	6/8	10/8	6/8	fair-poor	borderline	suppressed, mod decay column
120	bitter cherry	N	11	52	1.5	12/8	14/10	14/10	12/10	fair	viable	typical
121	Douglas-fir	N	32	115	12	10/14	16/14	14/12	14/14	fair	viable	heavy bleeding on lower trunk
122	Douglas-fir	N	23	101	7.5	6/10	6/12	10/10	12/12	fair	viable	broken top
123	Douglas-fir	N	18	74	na	14/14	12/14	10/12	14/14	fair-poor	borderline	broken top, suspect trunk decay
124	European Mtn. ash	V	6	25	1	6/8	10/8	9/8	7/8	fair	viable	typical
125	western red cedar	N	38	111	15	15/16	14/16	22/16	na	good	viable	next to creek - dry
126	western red cedar	N	25	89	8.5	8/12	12/14	10/14	10/14	good	viable	sl lean west
127	big leaf maple	N	8	60	1	8/8	18/10	18/10	8/8	fair	viable	young, natural lean, next to creek
128	Norway maple	P	14	59	3	12/10	17/14	18/14	12/10	fair	viable	fork, codominant stems
129	Douglas-fir	N	26	120	na	10/12	14/14	12/12	14/14	fair	borderline	evidence of schweinitzii, crook, crown raise
130	western red cedar	N	13	62	2.5	10/10	13/12	6/10	12/12	good	viable	no concerns
131	western red cedar	N	23	70	7.5	12/14	18/18	8/12	14/14	good	viable	no concerns

Parcel Trees - Drip-Line and Limits of Disturbance measurements from face of trunk