February 7, 2019

Erik Enstrom
Bonnie Geers
Manager Land Development
Quadrant Homes
14725 SE 36th Suite 200
Bellevue, WA 98006

Site: Willows Northwest I, LLC
Parcel number: 272605-9026
15.4 acre

Dear Erik and Bonnie:

Thank you for requesting my services. On August 15th, 2016, I was contacted by Corey Watson and asked to perform a Visual Tree Assessment (VTA) for all Significant* and Landmark* trees growing on the 15.4-acre site located on the corner of Willows Road and NE 124th St. The information gathered and included in this report is a necessary part of the City of Redmond's requirement for a Tree Preservation Plan to be included in the submittal for proposed site development.

During the weeks between August 22, 2016 and September 10th, 2016, we spent seven (7) days on the property measuring the diameter of each tree at breast height (DBH), the dripline, and assessing the health of the 710 trees. Every effort was made to be as thorough as possible on the unmaintained site, which includes critical slope and wetlands areas.

In summary:

Updated Tree Density Calculation	
Total number of trees onsite	710
Total number of significant trees	294
Required 35% Tree retention	103
Total number of retained trees proposed	132
Number of trees over requirement	29

I have included a detailed report of my findings, if you have any questions please contact me. I can be reached on my cell phone: 425.890.3808 or by email: sprince202@aol.com.

Warm regards,

Susan Prince
Creative Landscape Solutions
ISA Certified Arborist #1481
TRAQ Certified Arborist #481
Landscape Designer
425.890.3808

*Significant tree is any tree with a DBH between 6"-29"; a Landmark tree is any tree with a DBH>30"

Assignment:
To assess all significant and landmark trees on site and to prepare a Tree Preservation Plan to be included with the proposed plat improvements.

Personal qualifications, scope of work and methodology:
To evaluate the trees and prepare the report, I drew on my formal college education in botany and the preparation and training used to obtain my ISA certification. In addition to my education and certification, I relied heavily on my training to obtain my certification as a Tree Risk Assessor. I have worked in the field of arboriculture since 1995, have been ISA Certified since 1999, and have been TRACE/TRAQ certified since 2009.

I followed protocol delineated by the International Society of Arboriculture (ISA) for Visual Risk Assessment (VRA). By doing so, I am examining each tree independently as well as collectively as groups or stands of trees provide stability and can lower risk of independent tree failure. This scientific process examines tree health (e.g. size, vigor, and insect and disease process) as well as site conditions (soil moisture and composition, amount of impervious surfaces surrounding the tree etc.)

Introduction:
Identifying and managing the risks associated with trees is still largely a subjective process. Since the exact nature of tree failures remains largely unknown, our ability as scientists and arborists to predict which trees will fail and in what fashion remains limited. As currently practiced, the science of hazard tree evaluation involves examining a tree for structural defects, including genetic problems, those caused by the local environmental that the tree grows in and those attributed to man (pruning etc.).

The assessment process involves evaluating three components: 1) a tree with the potential to fail, 2) an environment that may contribute to that failure, and 3) a person or object that would be injured or damaged (the target). A defective tree cannot be considered hazardous without the presence of a target.

All trees have a finite life-span though it is not pre-programmed internally in the same manner as annual plantings. As trees age, they are less able to compartmentalize structural damage following injury from insects, disease or pruning. Trees in urban settings have a shorter life span than trees grown in an undisturbed habitat.

Different species of trees grow differently. Evergreen trees have a "reputation" of growing slowly and defensively. These trees allocate a high proportion of their resources to defending themselves from pathogens, parasites and wounds. As a rule, trees with this type of growth tend to be long lived. Though like all other living things, they have a predictable life span. Examples of this type of tree include the northwest Pseudotsuga menziesii - Douglas fir, and Thuja plicata - Western red cedar.

Deciduous trees are trees that annually shed leaves or needles. These trees tend to grow quickly and try to "outgrow" problems associated with insects, disease and wounds. They allocate a relatively small portion of their internal resources to defense and rely instead upon an ability to grow more quickly than the pathogens which infect them. However, as these trees age, their growth rate declines and the normal problems associated with decay begins to catch up and compromise the tree's structural integrity. Examples of this type of tree include Salix, Populus and Alnus.

Knowledge of the growth and failure patterns of individual tree species is critical to effective hazard analysis. Species vary widely in their rates of failure. The current tree risk evaluation rating system accepted as the standard by the ISA was developed by the ISA in conjunction with Julian Dunster[3] and recognizes this variation in species failure and includes a species component as part of the overall risk evaluation.

Site Observations:
Site is located on the corner of Willows road and NE 124th Street in Redmond, WA. The fifteen-acre site appears to have been previously used as a farm, with much of the land cleared of vegetation. It has a varied terrain and slopes west to east and north to south. The land has been previously cleared and appears to have once included pasture areas. The south side of the lot is comprised of a steep ravine with a small creek at the bottom.

Currently the vegetation on the property includes fruit trees and pioneer species of timber, primarily cottonwood and red alder, bitter cherry, Hawthorne, Cascara on the north, west and east sides of the site. The southern perimeter has larger diameter species and more climax species (Bigleaf maples, Douglas firs, Western red cedar's and Hemlock.)

Offsite trees Potentially Impacted by Development:
None

Method's used to determine tree location and tree health:

Trees were identified previously by numbered aluminum tags attached to the western side of the tree. All the trees on site were examined using the Matheny and Clark[1] criteria for determining the potential hazard of trees in an urban environment as well as the Tree Risk Assessment in Urban Areas and The Urban/Rural Interface by Julian Dunster[2]. Tree diameters were measured using a logger's tape, and tree driplines were measured by a Nikon Forestry PRO Laser Rangefinder™.

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BBREVIATED LEGEND- SEE REPORT FOR GREATER DETAIL

1. Numerical ordering
2. Tree tag #: numbered aluminum tags attached to the trees in the field
3. Tree species ID: common and botanical names
   - Apple: *Malus sp.*
   - American sycamore: *Plantanus occidentalis*
   - Austrian pine: *Pinus nigra*
   - Bigleaf maple: *Acer macrophyllum*
   - Birch: *Betula nigra*
   - Bitter Cherry: *Prunus emarginata*
   - Blue atlas cedar: *Cedrus atlantica 'Glauca'*
   - Cedar: *Thuja plicata*
   - Cherry: *Prunus sp.*
   - Dawn redwood: *Chamaecyparis nootkatensis*
   - Deodora cedar: *Cedrus deodara*
   - Colorado blue spruce: *Picea pungens*
   - Cottonwood*: Populus deltoides*
   - Dogwood*: Cornus nuttallii*
   - Douglas fir: *Pseudotsuga menziesii*
   - English laurel: *Prunus laurocerasus*
   - Filbert: *Corylus avellana var.*
   - Grand fir: *Abies grandis*
   - Hemlock: *Tsuga hetrophylla*
   - Holly: *Ilex aquifolium*
   - Japanese maple: *Acer palmatum*
   - Leylandii cypress: *Cupressocyparis leylandii*
   - Lodgepole pine*: Pinus contorta*
   - Mountain ash: *Sorbus americana*
   - Mountain hemlock: *Tsuga mertensiana*
   - Pear: *Pyrus sp.*
   - Plum: *Prunus*
   - Red Alder: *Alnus rubra*
   - Red maple: *Acer rubrum*
   - Walnut: *Juglans sp.*
   - Western red cedar: *Thuja plicata*
   - Weeping Alaska cedar*: Metasequoia glyptostrobides*
   - White pine*: Pinus strobus*

4. DBH: diameter of the tree measured in inches at 4' above grade
5. Adj. DBH: multiple trunk tree DBH in inches calculated per municipality directives
6. Dripline Radius: measurement in feet of the tree canopy from tree trunk to outermost branch tip via laser rangefinder
7. Health: a measurement of overall tree vigor and vitality rated as excellent, good, OK, fair or poor based on an assessment of crown density, leaf color and size, active callusing, shoot growth rate, extent of crown dieback, cambium layer health, and tree age

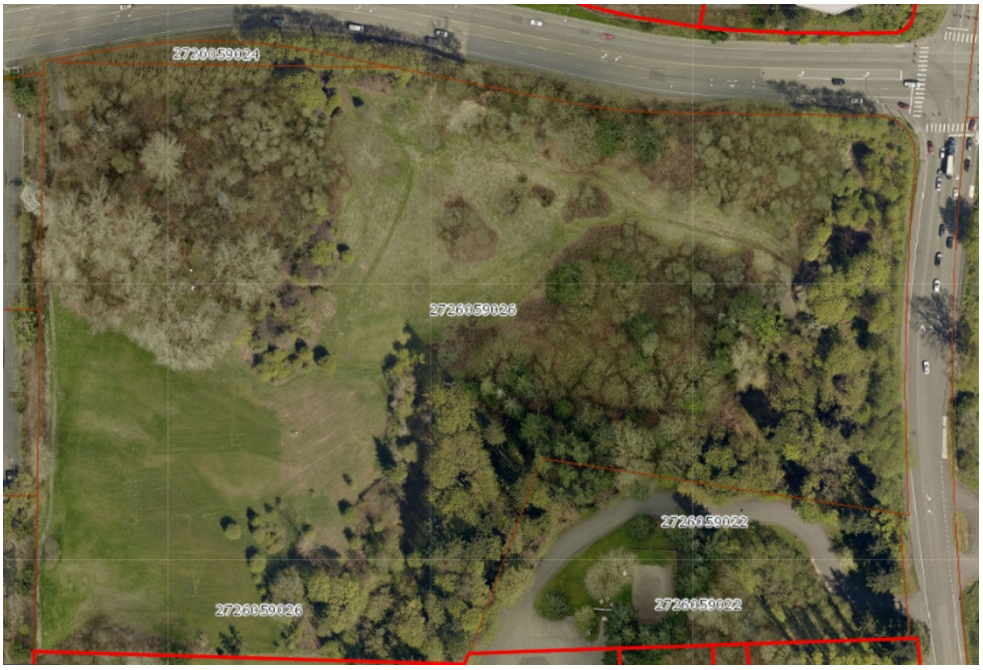
    - Excellent: Tree is an ideal specimen for the species with no obvious flaws
    - Good: Tree may have some minimal structural or situational defects
    - OK: The tree may have an average amount of structural issues, and/or some insect or disease issues, and/or some environmental issues, however, considering the species, the trees will withstand the stress of construction and/or the change in environmental conditions without an increased risk of failure
    - Fair: Tree has structural or health issues that predispose it to failure if further stressed, this tree may be unsuitable for retention as a single tree, however depending on the species, it may be suitable for retention if it is retained within a grove
    - Poor: Tree has significant structural and/or health issues. It is dead or dying and is generally exempt from total tree count

8. Defects/Concerns: a measure of the tree's structural stability and failure potential based on assessment of specific structural features, e.g., decay, conks, co-dominant trunks, included bark, abnormal lean, one-sided canopy, history of failure, prior construction impact, pruning history, etc.
9. Proposed action:
    - Retain
    - Impacted
    - Remove due to viability
    - Remove due to planned development (tree is otherwise healthy)
10. Limits of disturbance/Tree protection zone: the area surrounding the tree that defines the area that surrounds the trunk that cannot be encroached upon during construction. This may be a multiple of the trunk diameter (1 -1.5 times the trunk diameter converted to feet) or it may be related to the width of the canopy. It is always determined by tree species and environment and is up to the discretion of the ISA Certified Arborist to determine
11. Measure of tree "value" may be determined by municipality formula or a direct measure of the trunk diameter to determine significance, for City of Redmond the value is determined by size; **LM=Landmark** is any healthy tree with a DBH greater than 30", S=Significant: any healthy tree whose DBH is 6"-29.9", N=Non-significant: any tree that is unhealthy regardless of size
12. Photos: If photos are provided they are identified by number here

[1] Matheny, N., and Clark, J. 1994. *Evaluation of Hazard Trees in Urban Areas*. 2nd Edition. Champaign, Illinois: International Society of Arboriculture.
[2] Dunster, J.A. 2009. *Tree Risk Assessment in Urban Areas and the Urban/Rural Interface*: Course Manual. Silverton, Oregon: Pacific Northwest Chapter, International Society of Arboriculture.
[3] Dunster, Julian A., E. Thomas Smiley, Nelda Matheny and Sharon Lilly. Tree Risk Assessment Manual. Champaign, Illinois: International Society of Arboriculture, 2013.

Site:

NE 124th ST



Willows Road

North

Percentage of species present:

Species		Number	%
Bigleaf maple	*Acer macrophyllum*	175	25%
Red alder	*Alnus rubra*	176	25%
Cottonwood	*Populus deltoides*	113	16%
Hawthorne	*Crataegus*	52	7%
Bitter cherry	*Prunus emarginata*	43	6%
Douglas fir	*Pseudotsuga menziesii*	39	5%
Western red cedar	*Thuja plicata*	27	4%
Cascara	*Rhamnus purshiana*	18	3%
Hemlock	*Tsuga hetrophylla*	18	3%
Grand Fir	*Abies grandis*	16	2%
Black locust	*Robinia pseudoacacia*	12	2%
Ash	*Sorbus americana*	6	1%
Apple	*Prunus*	5	1%
Lodge pole pine	*Pinus contorta*	4	1%
Fruiting pear	*Prunus*	3	0%
White pine	*Pinus strobus*	2	0%
Holly	*Ilex aquifolium*	1	0%
		710	

Onsite Tree Observations:

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
1	1	Douglas fir	9	9	16	Poor	Multiple wounds @ 3' to 6' on north, heaved soil, self-corrected lean				1		16	16	16	16	N
2	2	Douglas fir	13	13	10	OK	Typical of species, small crack with sap @ 4' west, thin canopy, stress coning, exposed roots					1	10	10	10	10	S
3	3	Douglas fir	12	12	12	Fair	Exposed roots, dead wood, broken branches, typical of species, dead twigs				1		12	12	12	12	N
4	4	Douglas fir	20	20	16	OK	Exposed roots, free flowing sap					1	16	16	16	16	S
5	**5**	**Cascara**	**7, 8, 8, 9, 8, 13, 14, 12, 11, 11**	**33**	**24**	**Fair**	Co-dominant leaders with included bark x10 @ root crown, typical of species, multiple wounds @ root crown up to 3', woodpecker activity, dead wood				**1**		**24**	**24**	**24**	**24**	N
6	15	Cotton-wood	16, 17	23.5	16	Fair	Co-dominant leaders with included bark x2 @ root crown, moss and lichen, vertical crack, typical of species				1		16	16	16	16	N
7	17	Cotton-wood	11	11	14	OK	Typical of species, asymmetric canopy to south					1	14	14	14	14	S
8	18	Cotton-wood	14	14	16	Fair	Typical of species, moss and lichen, exposed roots, sway to south, asymmetric canopy to south				1		16	16	16	16	N
9	19	Cotton-wood	11	11	10	Fair	Sway to south, asymmetric canopy to south, typical of species				1		10	10	10	10	N
10	20	Cotton-wood	12	12	20	Fair	Sway to south, asymmetric canopy to south				1		20	20	20	20	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
11	21	Cotton-wood	19	19	16	OK	Exposed roots, typical of species					1	16	16	16	16	S
12	22	Cotton-wood	9	9	19	Fair	Sway to south, moss and lichen				1		19	19	19	19	N
13	23	Cotton-wood	11	11	17	Fair	Typical of species, asymmetric canopy to south, wound @ 6' on south, OK in grove				1		17	17	17	17	N
14	24	Cotton-wood	10	10	13	Fair	Moss and lichen, typical of species, asymmetric canopy to south				1		13	13	13	13	N
15	25	Cotton-wood	13	13	10	Fair	Dead wood, broken branches, moss and lichen, lean to south				1		10	10	10	10	N
16	26	Cotton-wood	12	12	6	Fair	Dead wood, broken branches, moss and lichen, exposed roots, lean to south				1		6	6	6	6	N
17	27	Cotton-wood	13	13	6	Fair	Moss and lichen, exposed roots, lean to south				1		6	6	6	6	N
18	28	Cotton-wood	14	14	7	OK	Low live crown ratio less than 15%, moss and lichen					1	7	7	7	7	S
19	29	Cotton-wood	18	18	0	Poor	Dead				1		0	0	0	0	N
20	30	Cotton-wood	12	12	0	Poor	Dead				1		0	0	0	0	N
21	31	Cotton-wood	8	8	4	Poor	Mostly dead				1		4	4	4	4	N
22	32	Cotton-wood	18	18	6	Poor	Co-dominant leaders with included bark x2 @ 6', previous top loss				1		6	6	6	6	N
23	33	Cotton-wood	17	17	6	Poor	Mostly dead				1		6	6	6	6	N
24	34	Cotton-wood	12	12	8	Poor	Mostly dead				1		8	8	8	8	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
25	35	Cotton-wood	12	12	0	Poor	Dead				1		0	0	0	0	N
26	36	Cotton-wood	9	9	10	Fair	Co-dominant leaders with included bark x2 @ root crown @ 1', asymmetric canopy to east, OK in grove				1		10	10	10	10	N
27	37	Cotton-wood	11	11	6	Fair	Calloused wound @ 1' on east, suppressed canopy, moss and lichen, OK in grove				1		6	6	6	6	N
28	38	Cotton-wood	8	8	9	OK	Suppressed canopy, asymmetric canopy to east, typical of species, OK in grove					1	9	9	9	9	S
29	39	Cotton-wood	13	13	11	Fair	Dead spur @ 3' on north, asymmetric canopy to east, OK in grove				1		11	11	11	11	N
30	40	Ash	14	14	12	OK	Moss and lichen, asymmetric canopy to east, typical of species, OK in grove					1	12	12	12	12	S
31	41	Cotton-wood	10	10	9	Poor	Wound with decay @ 3' to 5' on west				1		9	9	9	9	N
32	42	Cotton-wood	10	10	9	Poor	Crack @ 6' on south, sap, moss and lichen, wounds @ 3' to 5' on west				1		9	9	9	9	N
33	43	Cotton-wood	12	12	6	Fair	Wound with decay @ 3' on east, typical of species, OK in grove				1		6	6	6	6	N
34	44	Cotton-wood	12	12	6	Fair	Moss and lichen, exposed roots, previous top loss, OK in grove				1		6	6	6	6	N
35	45	Cotton-wood	10	10	6	Fair	Exposed roots, crack @ 6' on south, typical of species, OK in grove				1		6	6	6	6	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
36	46	Ash	9, 4, 6, 4, 6, 9	16.5	15	Fair	Co-dominant leaders with included bark x6 @ root crown, dead wood, broken branches, twisted trunks, previous top loss, OK in grove				1		15	15	15	15	N
37	47	Ash	9, 10, 4, 6	15.5	17	Fair	Co-dominant leaders with included bark x4 @ root crown, twisted trunks, dead wood, broken branches, OK in grove				1		17	17	17	17	N
38	48	Ash	10, 10, 8, 9	18.5	14	OK	Co-dominant leaders with included bark x4 @ root crown, moss and lichen, typical of species, dead wood, broken branches					1	14	14	14	14	S
39	49	Ash	10, 6, 10, 9, 12, 7	22.5	14	OK	Co-dominant leaders with included bark x6 @ root crown, typical of species					1	14	14	14	14	S
40	50	Ash	10, 9, 12, 4, 4, 5	19.5	15	Fair	Co-dominant leaders with included bark x6 @ root crown, decay @ root crown, dead wood, broken branches, hanger				1		15	15	15	15	N
41	**51**	**Cotton-wood**	**38**	**38**	**20**	**Poor**	Moss and lichen, dead wood, broken branches, dead scaffold, poor pruning with decay				**1**		**20**	**20**	**20**	**20**	N
42	52	Cotton-wood	14	14	9	Fair	Moss and lichen, typical of species, exposed roots, OK in grove				1		9	9	9	9	N
43	53	Cotton-wood	9	9	6	Fair	Moss and lichen, previous top loss, typical of species				1		6	6	6	6	N
44	54	Cotton-wood	8	8	6	Poor	Failing to west				1		6	6	6	6	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
45	55	Cotton-wood	20	20	10	Fair	Dead wood, broken branches, low live crown ratio less than 15%, moss and lichen				1		10	10	10	10	N
46	56	Cotton-wood	13	13	16	Fair	Vertical crack on south, exposed roots, self-corrected lean, dead wood				1		16	16	16	16	N
47	**57**	**Cotton-wood**	**53**	**53**	**24**	**Poor**	Co-dominant leaders with included bark x2 @ 6', previous top loss, decay throughout				**1**		**24**	**24**	**24**	**24**	N
48	58	Cotton-wood	8	8	8	Poor	Failing to west				1		8	8	8	8	N
49	59	Cotton-wood	18	18	16	Fair	Previous top loss, lean to west, moss and lichen				1		16	16	16	16	N
50	60	Cotton-wood	17	17	21	OK	Typical of species					1	21	21	21	21	S
51	61	Cotton-wood	18	18	18	OK	Moss and lichen, lean to north					1	18	18	18	18	S
52	62	Cotton-wood	8	8	16	Fair	Moss and lichen, previous top loss, suppressed canopy				1		16	16	16	16	N
53	63	Cotton-wood	12	12	14	Fair	Moss and lichen, previous top loss, suppressed canopy				1		14	14	14	14	N
54	64	Red alder	9, 3, 2, 2	10	10	Fair	Co-dominant leaders with included bark x4 @ root crown, previously topped, damage @ root crown				1		10	10	10	10	N
55	65	Bigleaf maple	9	9	10	OK	Typical of species					1	10	10	10	10	S
56	66	Cotton-wood	21	21	10	Poor	moss and lichen, exposed roots, asymmetric canopy west				1		10	10	10	10	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
57	67	Cotton-wood	20	20	16	Fair	growing at top of slope, asymmetric canopy west, slight lean west, dead wood, dead scaffold, OK in grove				1		16	16	16	16	N
58	68	Bigleaf maple	20	20	24	Fair	Bacterial flux @ root crown north, decay @ root crown, exposed roots				1		24	24	24	24	N
59	69	Red alder	9	9	11	OK	Typical of species					1	11	11	11	11	S
60	70	Red alder	11	11	15	OK	Typical of species, moss and lichen					1	15	15	15	15	S
61	71	Haw-thorne	15	15	12	Good	Typical of species, moss and lichen					1	12	12	12	12	S
62	72	Haw-thorne	11	11	16	OK	Asymmetric canopy to north, moss and lichen, typical of species					1	16	16	16	16	S
63	73	Haw-thorne	6, 9, 7	13	12	Poor	Co-dominant leaders with included bark x3 @ root crown, failing to north, moss and lichen				1		12	12	12	12	N
64	74	Haw-thorne	8	8	14	Fair	Typical of species, self-corrected lean-to west, moss and lichen, column of decay @ root crown up to 6'				1		14	14	14	14	N
65	**75**	**Apple**	**31**	**31**	**18**	**Poor**	Typical of species, cavity on north, carpenter ants, woodpecker activity, ivy @ root crown up to 30', blackberries at root crown up to 30', moss and lichen				**1**		**18**	**18**	**18**	**18**	N
66	76	Apple	16, 14	21	28	Poor	Co-dominant leaders with included bark x2 @ 3', mostly dead				1		28	28	28	28	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
67	**77**	**Bigleaf maple**	**9, 11, 16, 15, 12, 15, 16, 17, 15**	**42.5**	**38**	**Fair**	Co-dominant leaders with included bark x9 @ root crown, dead trunks, dead scaffolds, cavity				**1**		**38**	**38**	**38**	**38**	N
68	86	Haw-thorne	20	20	18	Poor	Mostly dead				1		18	18	18	18	N
69	**87**	**Bigleaf maple**	**60**	**60**	**28**	**Good**	Multi-stem, typical of species					**1**	**28**	**28**	**28**	**28**	**LM**
70	88	Alder	8	8	12	OK	Typical of species					1	12	12	12	12	S
71	89	Alder	8	8	14	OK	Typical of species					1	14	14	14	14	S
72	90	Cotton-wood	9	9	6	OK	Typical of species, moss and lichen					1	6	6	6	6	S
73	91	Cotton-wood	11	11	7	OK	Moss and lichen, typical of species					1	7	7	7	7	S
74	92	Cotton-wood	12, 9	15	9	Fair	Co-dominant leaders with included bark x2 @ root crown, undermined roots, dead wood				1		9	9	9	9	N
75	93	Cotton-wood	8	8	6	OK	Self-corrected lean to east, typical of species					1	6	6	6	6	S
76	94	Cotton-wood	9	9	7	OK	Typical of species, moss and lichen					1	7	7	7	7	S
77	95	Haw-thorne	7, 11, 7, 14, 9	22.5	19	OK	Co-dominant leaders with included bark x5 @ root crown, typical of species, moss and lichen					1	19	19	19	19	S
78	96	Cotton-wood	11	11	10	Poor	Co-dominant leaders with included bark x2 @ 8', split crotch to 7'				1		10	10	10	10	N
79	97	Cotton-wood	11	11	9	OK	Typical of species, moss and lichen					1	9	9	9	9	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
80	98	Cotton-wood	8	8	6	OK	Typical of species, moss and lichen					1	6	6	6	6	S
81	99	Cotton-wood	6	6	5	OK	Moss and lichen, self-corrected lean to south, typical of species					1	5	5	5	5	S
82	100	Cotton-wood	6	6	8	OK	Asymmetric canopy to north, moss and lichen, exposed roots, typical of species					1	8	8	8	8	S
83	101	Haw-thorne	3, 4, 9, 7, 8, 6	16	13	OK	Co-dominant leaders with included bark x6 @ root crown, typical of species, dead wood, moss and lichen					1	13	13	13	13	S
84	102	Cotton-wood	6	6	5	OK	Self-corrected lean to south, typical of species					1	5	5	5	5	S
85	103	Cotton-wood	6.5	6.5	7	Fair	Moss and lichen, root joined with #92, moss and lichen				1		7	7	7	7	N
86	104	Alder	7	7	10	OK	Typical of species					1	10	10	10	10	S
87	105	Alder	9	9	14	OK	Typical of species					1	14	14	14	14	S
88	106	Cascara	8	8	12	Poor	Vertical crack on north, low live crown ratio less than 10%				1		12	12	12	12	N
89	107	Cotton-wood	9	9	8	OK	Low live crown ratio less than 10%, OK in grove					1	8	8	8	8	S
90	108	Cascara	12	12	15	OK	Typical of species					1	15	15	15	15	S
91	109	Cascara	9	9	15	OK	Typical of species, asymmetric canopy to east					1	15	15	15	15	S
92	110	Cotton-wood	10	10	14	OK	Co-dominant leaders with included bark x2 @ root crown, typical of species					1	14	14	14	14	S
93	112	Alder	9	9	10	OK	Dead wood, typical of species					1	10	10	10	10	S
94	113	Alder	9	9	0	Poor	Dead				1		0	0	0	0	N
95	114	Alder	8	8	0	Poor	Dead				1		0	0	0	0	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
96	115	Cotton-wood	12	12	17	OK	Typical of species					1	17	17	17	17	S
97	116	Alder	8	8	0	Poor	Dead				1		0	0	0	0	N
98	117	Alder	9	9	15	OK	Self-corrected lean to east, typical of species					1	15	15	15	15	S
99	118	Alder	7	7	8	OK	Typical of species					1	8	8	8	8	S
100	119	Alder	9	9	12	OK	Typical of species					1	12	12	12	12	S
101	120	Alder	7	7	10	Fair	Previous top loss, suppressed canopy				1		10	10	10	10	N
102	121	Alder	9	9	14	OK	Asymmetric canopy to east, typical of species					1	14	14	14	14	S
103	122	Alder	7	7	10	Fair	Lean to south, not self-corrected lean				1		10	10	10	10	N
104	123	Alder	8	8	12	OK	Typical of species					1	12	12	12	12	S
105	124	Alder	9	9	16	OK	Lean to south, self-corrected lean to south					1	16	16	16	16	S
106	125	Alder	6	6	11	OK	Self-corrected lean to south, typical of species					1	11	11	11	11	S
107	126	Alder	7	7	11	OK	Lean to east, suppressed canopy, typical of species	1					11	11	11	11	S
108	127	Alder	8	8	10	OK	Typical of species, self-corrected lean to south	1					10	10	10	10	S
109	128	Red alder	8	8	22	OK	Serpentine trunk, typical of species, asymmetric canopy to east					1	22	22	22	22	S
110	129	Red alder	6	6	12	OK	Typical of species					1	12	12	12	12	S
111	130	Red alder	8.5	8.5	18	Fair	Ivy @ root crown to 25', asymmetric canopy to north, lean to north				1		18	18	18	18	N
112	131	Red alder	6	6	16	OK	Asymmetric canopy to east, typical of species					1	16	16	16	16	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
113	132	Red alder	6	6	16	OK	Asymmetric canopy to east, typical of species					1	16	16	16	16	S
114	133	Red alder	9	9	16	OK	Asymmetric canopy to east, typical of species					1	16	16	16	16	S
115	134	Red alder	7	7	16	OK	Lean to east, asymmetric canopy to east, typical of species					1	16	16	16	16	S
116	135	Red alder	11, 10, 9	17.5	14	OK	Typical of species, co-dominant leaders with included bark x3 @ root crown, lean not self-corrected lean to east					1	14	14	14	14	S
117	138	Red alder	8	8	18	Fair	Sway to east, asymmetric canopy to east				1		18	18	18	18	N
118	139	Red alder	11	11	10	Poor	Top dead				1		10	10	10	10	N
119	140	Red alder	7	7	10	Fair	Low live crown ratio less than 10%, dead spur, OK in grove				1		10	10	10	10	N
120	141	Red alder	10	10	16	Fair	Lean to southwest, asymmetric canopy to west, ivy @ root crown up to 6'				1		16	16	16	16	N
121	142	Red alder	12	12	14	OK	Typical of species, asymmetric canopy to southeast					1	14	14	14	14	S
122	143	Red alder	9	9	18	Fair	Lean to east, asymmetric canopy to east				1		18	18	18	18	N
123	144	Red alder	8	8	23	Fair	Asymmetric canopy to east, lean to east				1		23	23	23	23	N
124	145	Red alder	13	13	24	OK	Typical of species, asymmetric canopy to south, moss and lichen					1	24	24	24	24	S
125	146	Red alder	9	9	28	Fair	Serpentine trunk, asymmetric canopy to east, lean to east				1		28	28	28	28	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
126	148	Red alder	7	7	12	OK	Self-corrected lean to west, ivy @ root crown to 10', typical of species					1	12	12	12	12	S
127	149	Grand Fir	16, 17	23.5	16	OK	Co-dominant leaders with included bark x2 @ root crown, ivy @ root crown to 50', dead wood, broken branches, maybe OK with ivy removed	1					16	16	16	16	S
128	150	Bigleaf maple	8	8	11	OK	Ivy to top of tree, low live crown ratio <15% remove ivy to save	1					11	11	11	11	S
129	151	Bigleaf maple	12	12	24	OK	Ivy @ root crown to top of tree, asymmetric canopy to east, previous top loss, low live crown ratio less than 10% remove ivy to save	1					24	24	24	24	S
130	152	Bigleaf maple	9	9	21	Poor	Serpentine trunk, asymmetric canopy to east, lean to east, ivy @ root crown up to 35'				1		21	21	21	21	N
131	153	Cherry	11	11	6	Poor	Ivy @ root crown to top of tree				1		6	6	6	6	N
132	154	Haw-thorne	5, 4, 3, 6, 4, 5	11	18	OK	Co-dominant leaders with included bark x6 @ root crown, moss and lichen, typical of species, ivy @ root crown up to 15', OK with ivy removed	1					18	18	18	18	S
133	155	Bigleaf maple	21	21	18	OK	Ivy @ root crown up to 40', typical of species, OK if cleaned up					1	18	18	18	18	S
134	156	Bigleaf maple	8	1	1	Poor	Dead				1		1	1	1	1	N
135	157	Bigleaf maple	15	15	18	OK	Moss and lichen, asymmetric canopy to east					1	18	18	18	18	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
136	158	Bigleaf maple	10	10	10	Poor	Mostly dead				1		10	10	10	10	N
137	159	Bigleaf maple	25	25	22	OK	Typical of species, dead wood, dead scaffolds					1	22	22	22	22	S
138	160	Bigleaf maple	16	16	17	OK	Exposed roots, ivy up to 25', moss and lichen, typical of species					1	17	17	17	17	S
139	161	Bigleaf maple	7	7	15	OK	Self-corrected lean to west, moss and lichen, typical of species, asymmetric canopy to south					1	15	15	15	15	S
140	162	Bigleaf maple	9	9	10	Fair	Ivy @ root crown to top of tree				1		10	10	10	10	N
141	163	Bigleaf maple	5, 8	9.5	14	OK	Co-dominant leaders with included bark x2 @ root crown, ivy @ root crown up to 30'					1	14	14	14	14	S
142	164	Bigleaf maple	10	10	16	Fair	Serpentine trunk, low live crown ratio less than 10%, lean to west, suppressed canopy, OK in grove				1		16	16	16	16	N
143	165	Bigleaf maple	8	8	6	Fair	Ivy @ root crown to top of tree, low live crown ratio less than 10%, suppressed canopy, OK in grove if ivy removed				1		6	6	6	6	N
144	166	Bigleaf maple	7, 5	8.5	16	OK	Typical of species, suppressed canopy, moss and lichen, asymmetric canopy to west					1	16	16	16	16	S
145	167	Bigleaf maple	11	11	16	Fair	Dead wood, low live crown ratio less than 5%, asymmetric canopy to southwest, OK in grove				1		16	16	16	16	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
146	168	Apple	10, 14	17	18	Poor	Co-dominant leaders with included bark x2 @ 4', typical of species, cavity on east				1		18	18	18	18	N
147	169	Haw-thorne	9, 4, 5, 6	12.5	18	Poor	Co-dominant leaders with included bark x4 @ 3', failing to east				1		18	18	18	18	N
148	170	Haw-thorne	6	6	15	Poor	Mostly dead				1		15	15	15	15	N
149	171	Bigleaf maple	7	7	6	Poor	Hypoxylon canker, column of decay to north				1		6	6	6	6	N
150	172	Bigleaf maple	11, 9, 9, 11	20	16	Poor	Decay @ center, co-dominant leaders with included bark x4 @ root crown, cavity north, dead trunks, dead scaffolds				1		16	16	16	16	N
151	173	Bigleaf maple	13	13	14	Fair	Co-dominant leaders with included bark x2 @ 20', dead trunk				1		14	14	14	14	N
152	**174**	**Bigleaf maple**	**29, 18, 11, 21**	**41.5**	**18**	**OK**	Co-dominant leaders with included bark x4 @ root crown, exposed roots, undermined roots, decay @ crotch, calloused wound on east @ root crown up to 5', moss and lichen, typical of species	**1**					**18**	**18**	**18**	**18**	**LM**
153	175	Bigleaf maple	8, 17	19	18	OK	Co-dominant leaders with included bark x2 @ root crown, self-corrected lean to east, asymmetric canopy to west, typical of species, dead wood					1	18	18	18	18	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
154	**177**	**Bigleaf maple**	**16, 27**	**31.5**	**30**	**OK**	Co-dominant leaders with included bark x2 @ root crown, poor pruning with decay, hanger, barbed wire, moss and lichen, dead scaffolds	**1***					**23**	**30**	**30**	**30**	**LM**
155	178	Bigleaf maple	9	9	19	Fair	Cavity on north, dead wood, broken branches, asymmetric canopy to west, OK in grove				1		19	19	19	19	N
156	**179**	**Bigleaf maple**	**12, 13, 10, 6, 16, 15**	**30.5**	**36**	**Poor**	Co-dominant leaders with included bark x6 @ root crown, dead wood, broken branches, low live crown ratio less than 15%, Hypoxylon canker, girdling wire				**1**		**36**	**36**	**36**	**36**	N
157	181	Douglas fir	29	29	24	Fair	No taper, dead wood, broken branches, abnormal bark, shedding bark, carpenter ants, OK possible in grove				1		24	24	24	24	N
158	182	Douglas fir	29	29	20	Fair	Calloused wound @ 3' on west, abnormal bark, popping bark, vertical crack 5' to 12' on west, horizontal crack @ 12' on west, shedding bark, carpenter ants bark only, asymmetric canopy to west, previous top loss				1		20	20	20	20	N
159	**183**	**Douglas fir**	**34**	**34**	**26**	**OK**	Exposed roots, dead wood, dead twigs, broken branches, previous top loss					**1**	**26**	**26**	**26**	**26**	**LM**
160	184	Bigleaf maple	10, 12, 12	19.5	30	OK	Co-dominant leaders with included bark x3 @ root crown, typical of species, dead scaffolds, poor pruning with decay, OK possible in					1	30	30	30	30	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
							grove?										
161	187	Black locust	13	13	18	Fair	Co-dominant leaders with included bark x2 @ 6', asymmetric canopy to north, dead wood, typical of species, moss and lichen				1		18	18	18	18	N
162	188	Black locust	9	9	17	Poor	Failing to north @ root crown				1		17	17	17	17	N
163	189	Black locust	10	10	22	Poor	Failing to north @ root crown				1		22	22	22	22	N
164	190	Black locust	7	7	19	Poor	Failing to north				1		19	19	19	19	N
165	191	Douglas fir	26	26	14	Fair	Moss and lichen, previous top loss, torque crack 15' on west to 25' on east, dead wood, broken branches				1		14	14	14	14	N
166	192	Douglas fir	13	13	14	Fair	Serpentine trunk, dead wood, broken branches, no taper, suppressed canopy, OK in grove				1		14	14	14	14	N
167	193	Black locust	13	13	10	Poor	Failing to east				1		10	10	10	10	N
168	194	Black locust	8	8	18	Poor	Leaning on #204				1		18	18	18	18	N
169	195	Black locust	9	9	14	Poor	Mostly dead				1		14	14	14	14	N
170	196	Black locust	10, 12	15.5	18	Poor	Co-dominant leaders with included bark x2 @ root crown, decay @ root crown, failing to north				1		18	18	18	18	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
171	198	Black locust	13	13	22	OK	Lean to east, typical of species					1	22	22	22	22	S
172	199	Bigleaf maple	13	13	18	Fair	Self-corrected lean to north, asymmetric canopy to north, moss and lichen, typical of species				1		18	18	18	18	N
173	200	Bigleaf maple	7, 9, 10, 7, 6, 4, 14	23	14	Poor	Co-dominant leaders with included bark x7 @ root crown, decay @ root crown				1		14	14	14	14	N
174	202	Bigleaf maple	10, 11, 10, 7	19	14	OK	Co-dominant leaders with included bark x4 @ root crown, asymmetric canopy to south, dead wood, broken branches, typical of species, moss and lichen					1	14	14	14	14	S
175	203	Black locust	9	9	28	Poor	Failing to south @ root crown				1		28	28	28	28	N
176	204	Cotton-wood	11	11	6	Poor	Mostly dead				1		6	6	6	6	N
177	205	Cotton-wood	9	9	6	Poor	Mostly dead				1		6	6	6	6	N
178	206	Black locust	12, 11	16	21	OK	Co-dominant leaders with included bark x2 @ root crown, typical of species					1	21	21	21	21	S
179	208	Bigleaf maple	14	14	20	OK	Typical of species, dead wood					1	20	20	20	20	S
180	**209**	**Western red cedar**	**33**	**33**	**16**	**Good**	Nurse tree, self-corrected lean, typical of species	**1**					**16**	**16**	**16**	**16**	**LM**
181	**210**	**Bigleaf maple**	**18, 14, 16, 18**	**33**	**34**	**OK**	Nurse tree, co-dominant leaders with included bark x4 @ 1'	**1***					**26**	**34**	**34**	**34**	**LM**

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
182	211	Lodge pole pine	16	16	20	Poor	Previous top loss, serpentine trunk, dead wood, broken branches, suppressed canopy, low live crown ratio less than 10%, woodpecker activity, horizontal crack on south @ 11', OK in grove				1		20	20	20	20	N
183	212	Lodge pole pine	12	12	12	OK	Serpentine trunk, dead wood, low live crown ratio less than 10%, OK in grove					1	12	12	12	12	S
184	213	Grand fir	11	11	12	Fair	Thin canopy, low live crown ratio less than 25%, OK in grove				1		12	12	12	12	N
185	214	Grand fir	24	24	20	OK	Typical of species, asymmetric canopy to west, torque crack, OK in grove					1	20	20	20	20	S
186	215	Grand fir	18	18	17	OK	Lightening strike, asymmetric canopy to northeast, typical of species					1	17	17	17	17	S
187	216	Bigleaf maple	21, 17	27	28	OK	Co-dominant leaders with included bark x2 @ 2', cavity on north, previous large trunk failure, typical of species, could be pruned	1					28	28	28	28	S
188	217	Bigleaf maple	16	16	24	OK	Typical of species					1	24	24	24	24	S
189	218	Bigleaf maple	16	16	18	OK	Typical of species					1	18	18	18	18	S
190	219	Apple	13	13	16	OK	Dead wood, dead scaffolds, typical of species	1					16	16	16	16	S
191	220	Apple	7, 2, 12, 7	15.5	12	Poor	Co-dominant leaders with included bark x4 @ root crown, mostly dead				1		12	12	12	12	N
19	221	Pear tree	12	12	10	OK	Typical of species, dead wood					1	10	10	10	10	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
2																	
193	222	Bigleaf maple	20	20	17	Fair	Ivy @ root crown up to 40', dead wood, typical of species, cavity @ root crown up to 2' on north, exposed roots				1		17	17	17	17	N
194	223	Bigleaf maple	9	9	20	Fair	Self-corrected lean to north, failing to north, moss and lichen				1		20	20	20	20	N
195	**224**	**White pine**	**27, 15**	**31**	**20**	**OK**	Co-dominant leaders with included bark x2 @ root crown, typical of species, dead wood, broken branches, bush top, ivy @ root crown up to 25', self-corrected lean to west, free flowing sap on south					**1**	**20**	**20**	**20**	**20**	**LM**
196	226	Grand fir	12, 11	16.5	14	Poor	Co-dominant leaders with included bark x2 @ root crown, ivy @ root crown up to 20', dead wood, low live crown ratio, mostly dead				1		14	14	14	14	N
197	228	Bigleaf maple	10	10	12	OK	Typical of species, asymmetric canopy to west, ivy @ root crown to 13', dead spur @ root crown, suppressed canopy					1	12	12	12	12	S
198	229	Grand fir	14	14	17	OK	Ivy @ root crown up to 40', dead wood, broken branches, typical of species, moss and lichen, OK if cleaned and pruned					1	17	17	17	17	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
199	230	White pine	17, 12	21	7	Poor	Co-dominant leaders with included bark x2 @ root crown, ivy @ root crown up to top of tree, mostly dead				1		7	7	7	7	N
200	231	Grand fir	12	12	6	Poor	Mostly dead				1		6	6	6	6	N
201	232	Lodge pole pine	11	11	6	Poor	Failing to south				1		6	6	6	6	N
202	233	Lodge pole pine	9	9	6	Fair	Ivy @ root crown to top of tree				1		6	6	6	6	N
203	234	Grand fir	14	14	9	Poor	Ivy @ root crown to top of tree, dead wood, broken branches, mostly dead				1		9	9	9	9	N
204	235	Grand fir	14	14	10	Poor	Ivy @ root crown to top of tree, suppressed canopy, mostly dead				1		10	10	10	10	N
205	236	Bigleaf maple	9	9	14	OK	Previous top loss, asymmetric canopy to east, suppressed canopy					1	14	14	14	14	S
206	237	Grand fir	18	18	12	OK	Ivy @ root crown to 50', dead wood, dead twigs, typical of species, OK if pruned and in grove					1	12	12	12	12	S
207	238	Bigleaf maple	17	17	20	OK	Serpentine trunk, ivy @ root crown to top of tree, dead wood, broken branches, undermined roots, asymmetric canopy to south	1					20	20	20	20	S
208	239	Bigleaf maple	20	20	26	Poor	Self-corrected lean to south, asymmetric canopy to south, undermined roots		1				26	26	26	26	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
209	240	Bigleaf maple	14, 16, 20	29	18	Poor	Co-dominant leaders with included bark x3 @ root crown reduced to 2, ivy @ root crown up to 40', dead wood, broken branches, undermined roots		1				18	18	18	18	N
210	**242**	**Bigleaf maple**	**40**	**40**	**26**	**OK**	Ivy @ root crown to top of tree, dead wood, dead scaffold, moss and lichen, OK in grove	**1**					**26**	**26**	**26**	**26**	LM
211	243	Bigleaf maple	18	18	24	OK	Serpentine trunk, self-corrected lean to east, dead wood, dead scaffolds, OK if pruned	1					24	24	24	24	S
212	244	Bigleaf maple	12	12	12	OK	Low live crown ratio less than 5%, typical of species, OK in grove	1					12	12	12	12	S
213	245	Bigleaf maple	12	12	20	OK	Co-dominant leaders with included bark x3 @ 7', dead spur, moss and lichen				1		20	20	20	20	N
214	246	Cotton-wood	19	19	16	OK	Asymmetric canopy to east, ivy @ root crown to top of tree, dead wood					1	16	16	16	16	S
215	247	Cotton-wood	13	13	7	OK	Lean to east, not self-corrected lean, ivy @ root crown to top of tree, low live crown ratio less than 5%, OK in grove					1	7	7	7	7	S
216	248	Cotton-wood	8	8	6	OK	Ivy @ root crown to top of tree, low live crown ratio less than 5%, maybe OK in grove					1	6	6	6	6	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
217	249	Cotton-wood	19	19	12	OK	Typical of species, ivy @ root crown up to 40', dead wood, broken branches, maybe OK in grove					1	12	12	12	12	S
218	250	Cotton-wood	9	9	9	Fair	Ivy @ root crown to top of tree, low live crown ratio less than 5%				1		9	9	9	9	N
219	251	Red alder	6	6		Poor	Mostly dead				1						N
220	252	Cotton-wood	8	8	5	Poor	Ivy @ root crown to top of tree, mostly dead				1		5	5	5	5	N
221	253	Cotton-wood	16	16	16	Fair	Ivy @ root crown up to 40', decay @ root crown, low live crown ratio less than 15%				1		16	16	16	16	N
222	254	Grand fir	19	19	12	OK	Typical of species, asymmetric canopy to west, ivy @ root crown to top tree					1	12	12	12	12	S
223	255	Bigleaf maple	10	10	13	OK	ivy root crown to top of tree, self-corrected lean east, typical of species, OK in grove					1	13	13	13	13	S
224	256	Bigleaf maple	8	8	12	Fair	Self-corrected lean to east, lean to east, ivy @ root crown to top of tree, low live crown ratio less than 15%, OK in grove				1		12	12	12	12	N
225	257	Bigleaf maple	9, 6, 8	13.5	12	Fair	Self-corrected lean to east, lean to east, ivy @ root crown to top of tree, low live crown ratio less than 15%				1		12	12	12	12	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
226	258	Cotton-wood	13	13	16	OK	Decay @ root crown, spur @ 1', ivy @ root crown up to 35', carpenter ants, moss and lichen, typical of species, maybe OK in grove					1	16	16	16	16	S
227	259	Cascara	7	7	3	Poor	Mostly dead				1		3	3	3	3	N
228	260	Bigleaf maple	15	15	16	Fair	Lean to north, dead wood, dead scaffolds, co-dominant leaders with included bark x2 @ 5', OK in grove				1		16	16	16	16	N
229	261	Bigleaf maple	8.5	8.5	16	Fair	Asymmetric canopy to north, dead wood, ivy @ root crown up to 20', moss and lichen, OK in grove				1		16	16	16	16	N
230	262	Bigleaf maple	8, 9	12	12	Fair	Co-dominant leaders with included bark x2 @ root crown, dead wood, dead scaffolds, ivy up to 35', asymmetric canopy to north, low live crown ratio less than 10%, OK in grove				1		12	12	12	12	N
231	263	Red alder	8	8	9	OK	Typical of species					1	9	9	9	9	S
232	264	Red alder	8	8	9	OK	Typical of species					1	9	9	9	9	S
233	265	Red alder	8	8	9	OK	Typical of species, asymmetric canopy to north					1	9	9	9	9	S
234	266	Red alder	7	7	11	OK	Moss and lichen, typical of species					1	11	11	11	11	S
235	267	Red alder	7, 3	7.5	10	OK	Typical of species, co-dominant leaders with included bark x2 @ root crown					1	10	10	10	10	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
236	268	Red alder	9	9	12	Fair	Asymmetric canopy to north, lean				1		12	12	12	12	N
237	269	Red alder	7	7	8	Fair	Asymmetric canopy to north, typical of species				1		8	8	8	8	N
238	270	Red alder	6	6	8	OK	Typical of species, moss and lichen					1	8	8	8	8	S
239	271	Red alder	15	15	16	Poor	Large unhealed wound @ 4' on west, failing to west				1		16	16	16	16	N
240	272	Red alder	6	6	9	Fair	Typical of species, lean to north				1		9	9	9	9	N
241	273	Red alder	6	6	10	OK	Typical of species					1	10	10	10	10	S
242	274	Red alder	8	8	9	Fair	Asymmetric canopy to north, lean to north				1		9	9	9	9	N
243	275	Red alder	7	7	9	OK	Asymmetric canopy to north, typical of species					1	9	9	9	9	S
244	276	Red alder	7	7	10	Fair	Asymmetric canopy to north, lean to north				1		10	10	10	10	N
245	277	Red alder	6	6	9	OK	Typical of species					1	9	9	9	9	S
246	278	Red alder	7	7	14	Fair	Dead wood, broken branches, previous top loss, co-dominant leaders with included bark x2 @ 18'				1		14	14	14	14	N
247	279	Red alder	8	8	12	OK	Asymmetric canopy to north, typical of species					1	12	12	12	12	S
248	280	Red alder	7	7	11	Fair	Asymmetric canopy to north, typical of species, low live crown ratio less than 20%				1		11	11	11	11	N
249	281	Red alder	6	6	10	OK	Asymmetric canopy to north, low live crown ratio less than 20%, typical of species, moss and lichen					1	10	10	10	10	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
250	282	Red alder	6	6	12	Poor	Asymmetric canopy to north, failing to north				1		12	12	12	12	N
251	283	Red alder	7	7	10	OK	Typical of species					1	10	10	10	10	S
252	284	Red alder	6	6	12	OK	Asymmetric canopy to north					1	12	12	12	12	S
253	285	Red alder	8	8	11	Fair	Asymmetric canopy to north, lean to north, typical of species				1		11	11	11	11	N
254	286	Red alder	6	6	12	Poor	Asymmetric canopy to north, failing to north				1		12	12	12	12	N
255	287	Red alder	7	7	12	Fair	Asymmetric canopy to north, ivy @ root crown up to 12'				1		12	12	12	12	N
256	288	Red alder	6	6	11	Fair	Asymmetric canopy to north, lean to north, typical of species				1		11	11	11	11	N
257	289	Red alder	6	6	9	OK	Typical of species, dead wood, broken branches					1	9	9	9	9	S
258	290	Red alder	6	6	8	OK	Typical of species					1	8	8	8	8	S
259	291	Red alder	6	6	10	OK	Kink in trunk @ 11', typical of species					1	10	10	10	10	S
260	292	Red alder	6	6	7	Fair	Suppressed canopy, asymmetric canopy to north				1		7	7	7	7	N
261	293	Red alder	7	7	10	OK	Ivy @ root crown up to 12', typical of species					1	10	10	10	10	S
262	294	Red alder	7	7	9	Fair	Asymmetric canopy to north, low live crown ratio less than 30%, lean to north				1		9	9	9	9	N
263	295	Red alder	7	7	10	Fair	Asymmetric canopy to north, ivy @ root crown up to 12', lean to north				1		10	10	10	10	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
264	296	Red alder	6	6	9	Fair	Ivy @ root crown up to 20', asymmetric canopy to north, typical of species				1		9	9	9	9	N
265	297	Red alder	7	7	12	Poor	Previous ivy @ root crown up to 16', asymmetric canopy to north, failing to north				1		12	12	12	12	N
266	298	Red alder	7	7	9	OK	Broken branches, low live crown ratio less than 25%, typical of species					1	9	9	9	9	S
267	299	Red alder	7	7	12	Poor	Previous top loss, failing to north, asymmetric canopy to north				1		12	12	12	12	N
268	300	Red alder	7	7	10	Fair	Previous top loss, asymmetric canopy to north, typical of species				1		10	10	10	10	N
269	301	Red alder	6	6	9	Fair	Serpentine trunk, low live crown ratio less than 15%, ivy @ root crown up to 10'				1		9	9	9	9	N
270	302	Red alder	7	7	8	Fair	Wound @ 15' on east, typical of species				1		8	8	8	8	N
271	303	Red alder	6	6	6	OK	Typical of species					1	6	6	6	6	S
272	304	Red alder	6	6	9	OK	Asymmetric canopy to north, moss and lichen, typical of species					1	9	9	9	9	S
273	305	Red alder	6	6	5	OK	Typical of species					1	5	5	5	5	S
274	306	Red alder	6	6	5	OK	Typical of species					1	5	5	5	5	S
275	307	Red alder	6	6	5	OK	Typical of species					1	5	5	5	5	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
276	308	Bigleaf maple	15,14	21	19	Fair	Co-dominant leaders with included bark X 2 @ root crown, moss and lichen, dead wood				1		19	19	19	19	N
277	310	Cotton-wood	17	17	16	Poor	Moss and lichen, co-dominant leaders with included bark X 2 @ 30', weak attachment				1		16	16	16	16	N
278	311	Bigleaf maple	14,16,17	24	20	OK	Co-dominant leaders with included bark X 3 @s, moss and lichen, typical of species, dead wood					1	20	20	20	20	S
279	312	Bigleaf maple	16	16	14	Fair	Asymmetric canopy NW, previous top loss, moss and lichen, serp trunk, OK in grove				1		14	14	14	14	N
280	313	Bigleaf maple	16	16	15	OK	co-dominant leaders with included bark x 2 @ root crown, asymmetric canopy north, moss and lichen , typical of species					1	15	15	15	15	S
281	314	Bigleaf maple	12,14	18	18	Poor	Co-dominant leaders with included bark X 2 @ root crown, moss and lichen, previous top loss				1		18	18	18	18	N
282	315	Bigleaf maple	14,14,7, 6	22	18	OK	co-dominant leaders with included bark X 4 @ root crown, moss and lichen, exposed roots, growing on the top of the slope					1	18	18	18	18	S
283	316	Bigleaf maple	16,14	21	17	Fair	co-dominant leaders with included bark x 2 @ root crown, wited trunks, previous top loss, asymmetric canopy north, moss and lichen				1		17	17	17	17	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
284	317	Bigleaf maple	20,15	25	16	Fair	co-dominant leaders with included bark X3 now 2 @ root crown, previous top loss, dead wood, dead scaffold				1		16	16	16	16	N
285	318	Bigleaf maple	15	15	18	Fair	Asymmetric canopy to east, lean 5° east, dead wood, moss and lichen				1		18	18	18	18	N
286	319	Bigleaf maple	8	8	13	OK	Moss and lichen, typical of species, co-dominant leaders with included bark x2 @ 7'					1	13	13	13	13	S
287	320	Red alder	9	9	12	Poor	Unhealed wound @ 4' on west, decay				1		12	12	12	12	N
288	321	Red alder	8, 5	9.5	11	OK	Co-dominant leaders with included bark x2 @ root crown, moss and lichen, lean to north, typical of species					1	11	11	11	11	S
289	322	Red alder	6.5	6.5	10	OK	Asymmetric canopy to north, moss and lichen, typical of species					1	10	10	10	10	S
290	323	Red alder	7	7	12	OK	Typical of species, asymmetric canopy to north, dead wood					1	12	12	12	12	S
291	324	Red alder	7	7	9	OK	Typical of species, asymmetric canopy to north					1	9	9	9	9	S
292	325	Red alder	9, 2	9	7	Fair	Co-dominant leaders with included bark x2 @ root crown, asymmetric canopy to north, undermined roots, typical of species				1		7	7	7	7	N
293	326	Red alder	6.5, 6, 7	11.5	12	Fair	Co-dominant leaders with included bark x3 @ root crown, typical of species, dead wood, moss and lichen, self-corrected lean to north				1		12	12	12	12	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
294	328	Red alder	7	7	7	OK	Typical of species, co-dominant leaders with included bark x2 @ 9'					1	7	7	7	7	S
295	329	Red alder	6	6	8	Fair	Serpentine trunk, asymmetric canopy to north, moss and lichen				1		8	8	8	8	N
296	330	Red alder	7	7	8	OK	Typical of species					1	8	8	8	8	S
297	331	Red alder	7	7	7	OK	Typical of species					1	7	7	7	7	S
298	332	Haw-thorne	10, 6	11.5	15	Fair	Co-dominant leaders with included bark x2 @ root crown, typical of species, dead wood, moss and lichen, decay @ root crown				1		15	15	15	15	N
299	333	Bigleaf maple	8, 10, 10, 9, 4	19	16	Poor	Co-dominant leaders with included bark x5 @ root crown, decay @ root crown, dead trunk, multiple previous top loss, carpenter ants				1		16	16	16	16	N
300	334	Bigleaf maple	8, 7, 6	12	12	Poor	Co-dominant leaders with included bark x4 reduced to 3 @ root crown, moss and lichen, two dead trunks				1		12	12	12	12	N
301	335	Red alder	7	7	10	Poor	Mostly dead, failing to south				1		10	10	10	10	N
302	**336**	**Douglas fir**	**34**	**34**	**14**	**OK**	Exposed roots, horizontal crack in bark @ 4', typical of species					**1**	**14**	**14**	**14**	**14**	**LM**

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
303	337	Bigleaf maple	15, 21, 12	28.5	20	Poor	Co-dominant leaders with included bark x3 @ root crown, undermined roots, cavity @ root crown on south, cavity @ root crown on east, exposed roots, dead wood, dead scaffold, nurse tree, asymmetric canopy to south, vertical crack @ root crown 6' on west				1		20	20	20	20	N
304	**340**	**Douglas fir**	**39**	**39**	**20**	**OK**	Moss and lichen, dead wood, broken branches, hangers, OK with pruning					**1**	**20**	**20**	**20**	**20**	**LM**
305	**341**	**Bigleaf maple**	**20, 42**	**46.5**	**24**	**Fair**	Co-dominant leaders with included bark x2 @ 4', dead scaffold, hangers, calloused wound @ root crown to 6', moss and lichen				**1**		**24**	**24**	**24**	**24**	N
306	342	Bigleaf maple	11	11	14	Poor	Serpentine trunk, asymmetric canopy to west, co-dominant leaders with included bark x2 reduced to 1 @ 3'				1		14	14	14	14	N
307	343	Haw-thorne	6, 9, 7	13	18	Fair	Co-dominant leaders with included bark x3 @ root crown, moss and lichen, asymmetric canopy to west, dead wood, broken branches				1		18	18	18	18	N
308	344	Bigleaf maple	16, 12, 16	25.5	18	Fair	Co-dominant leaders with included bark x3 @ 4', dead wood, top dead				1		18	18	18	18	N
309	345	Fruiting pear	9	9	4	Poor	Mostly dead				1		4	4	4	4	N
310	346	Bigleaf maple	14	14	13	OK	Typical of species, moss and lichen, dead wood					1	13	13	13	13	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
311	347	Bigleaf maple	12,11,10	19	14	Poor	co-dominant leaders with included bark X3@ root crown , self-corrected lean north, decay @ root crown, undermined roots				1		14	14	14	14	N
312	348	Bigleaf maple	13	13	17	OK	Moss and lichen, co-dominant leaders with included bark 2 @14', typical of species					1	17	17	17	17	S
313	349	Bitter cherry	8	8	14	Poor	Gummosis, mostly dead				1		14	14	14	14	N
314	**350**	**Bigleaf maple**	**22, 25, 25, 15, 15, 10**	**48**	**26**	**OK**	Co-dominant leaders with included bark x6 @ 1', typical of species, dead wood, dead scaffold, OK with pruning					**1**	**26**	**26**	**26**	**26**	**LM**
315	351	Cascara	11	11	15	OK	Typical of species, dead wood					1	15	15	15	15	S
316	352	Red alder	6	6	9	OK	Typical of species					1	9	9	9	9	S
317	353	Red alder	6	6	7	OK	Asymmetric canopy to northeast, typical of species					1	7	7	7	7	S
318	354	Bigleaf maple	11	11	14	Fair	Asymmetric canopy to north, dead wood, broken branches, suppressed canopy, asymmetric canopy to north, OK in grove				1		14	14	14	14	N
319	355	Red alder	8, 6	10	12	Fair	Co-dominant leaders with included bark x2 @ root crown, moss and lichen, typical of species				1		12	12	12	12	N
320	357	Red alder	7	7	8	Fair	Typical of species, moss and lichen, low live crown ratio less than 10%				1		8	8	8	8	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
321	358	Red alder	7	7	10	Fair	Asymmetric canopy to south, lean to south, typical of species				1		10	10	10	10	N
322	359	Red alder	6	6	10	Fair	Self-corrected lean to east, asymmetric canopy to east, typical of species				1		10	10	10	10	N
323	360	Red alder	7	7	11	Fair	Self-corrected lean to east, asymmetric canopy to east				1		11	11	11	11	N
324	361	Red alder	8	8	10	Poor	Self-corrected lean, typical of species, wounds @ root crown up to 3'				1		10	10	10	10	N
325	362	Red alder	6	6	12	Fair	Lean to south, not self-corrected lean				1		12	12	12	12	N
326	363	Red alder	9	9	13	Poor	Asymmetric canopy to south, unhealed wounds @ root crown up to 3'				1		13	13	13	13	N
327	364	Bitter cherry	8	8	10	Poor	Typical of species, decay @ root crown				1		10	10	10	10	N
328	365	Bigleaf maple	7	7	11	OK	Typical of species, low live crown ratio less than 20%, moss and lichen, exposed roots					1	11	11	11	11	S
329	366	Bigleaf maple	14	14	13	Fair	Co-dominant leaders with included bark x2 @ 5', asymmetric canopy to east, dead wood, moss and lichen, lean to south				1		13	13	13	13	N
330	367	Bitter cherry	8	8	10	Fair	Probable crack @ root crown up to 10' on west, "seam in bark"				1		10	10	10	10	N
331	368	Bitter cherry	7	7	12	Fair	Dead wood, broken branches, low live crown ratio less than 10%, asymmetric canopy to east				1		12	12	12	12	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
332	369	Bitter cherry	6	6	10	Fair	Dead wood, broken branches, gummosis, asymmetric canopy to east				1		10	10	10	10	N
333	370	Bitter cherry	10	10	9	Fair	Serpentine trunk, asymmetric canopy to north, typical of species, OK in grove				1		9	9	9	9	N
334	371	Bitter cherry	12	12	9	Fair	Previous top loss, serpentine trunk, typical of species, OK in grove				1		9	9	9	9	N
335	372	Bitter cherry	13	13	12	OK	Co-dominant leaders with included bark x2 @ 11', typical of species					1	12	12	12	12	S
336	373	Haw-thorne	11	11	12	Fair	Co-dominant leaders with included bark x3 @ 6', poor attachments, OK in grove				1		12	12	12	12	N
337	374	Bitter cherry	9	9	10	Poor	Vertical crack @ root crown up to 20'				1		10	10	10	10	N
338	375	Bitter cherry	7	7	9	Fair	Lean to north, asymmetric canopy to north, gummosis, moss and lichen, OK in grove				1		9	9	9	9	N
339	376	Bitter cherry	7	7	9	Fair	Self-corrected lean to west, low live crown ratio less than 10%, gummosis, OK in grove				1		9	9	9	9	N
340	377	Bitter cherry	7	7	8	Fair	Asymmetric canopy to north, low live crown ratio less than 15%, moss and lichen, gummosis, OK in grove				1		8	8	8	8	N
341	378	Bitter cherry	8, 6	10	10	Poor	Co-dominant leaders with included bark x2 @ root crown, narrow trunk, attachments				1		10	10	10	10	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
342	379	Bitter cherry	8, 6	10	9	Fair	Co-dominant leaders with included bark x2 @ root crown, asymmetric canopy to south, low live crown ratio less than 15%, moss and lichen, typical of species, OK in grove				1		9	9	9	9	N
343	380	Bitter cherry	6	6	6	Poor	Asymmetric canopy to east, dead wood, broken branches				1		6	6	6	6	N
344	381	Bitter cherry	7, 3	7.5	8	Fair	Co-dominant leaders with included bark x2 @ root crown, typical of species, low live crown ratio less than 10%, gummosis				1		8	8	8	8	N
345	382	Haw-thorne	11, 11	15.5	15	Fair	Co-dominant leaders with included bark x2 @ root crown, typical of species, dead wood, broken branches, OK in grove				1		15	15	15	15	N
346	383	Bitter cherry	7	7	10	Poor	Self-corrected lean to south, gummosis				1		10	10	10	10	N
347	384	Haw-thorne	6, 6	8	9	Fair	Co-dominant leaders with included bark x2 @ 2', twisted trunks, moss and lichen, dead wood, broken branches				1		9	9	9	9	N
348	385	Haw-thorne	9, 7, 4	12	10	Poor	Co-dominant leaders with included bark x3 @ root crown, failing to east				1		10	10	10	10	N
349	386	Haw-thorne	4, 4, 7, 8, 8	14.5	16	Fair	Co-dominant leaders with included bark x5 @ root crown, twisted trunks, moss and lichen, dead wood, broken branches, OK in grove				1		16	16	16	16	N
35	387	Red alder	7	7	9	OK	Typical of species					1	9	9	9	9	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
0																	
351	388	Haw-thorne	4, 3, 6	8	12	Fair	Co-dominant leaders with included bark x3 @ root crown, moss and lichen, dead wood, broken branches				1		12	12	12	12	N
352	389	Bitter cherry	9	9	16	Fair	Serpentine trunk, typical of species, wound @ 1', gummosis, OK in grove				1		16	16	16	16	N
353	390	Bitter cherry	8	8	8	Fair	Typical of species, low live crown ratio less than 10%, lean to east, self-corrected lean to east, gummosis				1		8	8	8	8	N
354	391	Bitter cherry	7	7	9	Fair	Serpentine trunk, moss and lichen, low live crown ratio less than 10%, gummosis, OK in grove				1		9	9	9	9	N
355	392	Bitter cherry	9	9	8	Fair	Exposed roots, asymmetric canopy to west, lean to west, gummosis, OK in grove				1		8	8	8	8	N
356	393	Bitter cherry	8, 3	8.5	10	Fair	Co-dominant leaders with included bark x2 @ root crown, low live crown ratio less than 10%, moss and lichen, OK in grove				1		10	10	10	10	N
357	394	Bitter cherry	6, 7	9	7	Fair	Co-dominant leaders with included bark x2 @ root crown, gummosis, decay @ root crown, OK with #395				1		7	7	7	7	N
358	395	Bitter cherry	8	8	10	Fair	Typical of species, asymmetric canopy to south, low live crown ratio less than 15%, OK in grove				1		10	10	10	10	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
359	396	Bitter cherry	9	9	11	Fair	Moss and lichen, dead wood, broken branches, exposed roots, typical of species, OK in grove				1		11	11	11	11	N
360	397	Haw-thorne	18	18	16	Fair	Co-dominant leaders with included bark x7 @ 5', decay @ crotch, dead wood, broken branches, moss and lichen				1		16	16	16	16	N
361	398	Haw-thorne	6, 5, 4, 10, 13, 8, 5, 4	21	14	Poor	Co-dominant leaders with included bark x8 @ root crown, failing to east				1		14	14	14	14	N
362	399	Haw-thorne	10, 7, 4, 4, 3	14	17	Poor	Co-dominant leaders with included bark x5 @ root crown, failing to south				1		17	17	17	17	N
363	400	Haw-thorne	18	18	12	Fair	Typical of species, moss and lichen, failing to east				1		12	12	12	12	N
364	401	Bitter cherry	9	9	11	Fair	Dead wood, broken branches, low live crown ratio less than 15%, self-corrected lean to north				1		11	11	11	11	N
365	402	Bitter cherry	12	12	12	Fair	Asymmetric canopy to west, dead wood, moss and lichen, gummosis				1		12	12	12	12	N
366	403	Bitter cherry	8	8	8	Poor	Failing to east				1		8	8	8	8	N
367	404	Bitter cherry	9	9	9	Fair	Co-dominant leaders with included bark x2 @ 4', twisted trunks, dead wood, broken branches				1		9	9	9	9	N
368	405	Cotton-wood	18	18	12	Poor	Previous top loss, asymmetric canopy to south, moss and lichen				1		12	12	12	12	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
369	406	Cotton-wood	21	21	14	Poor	Self-corrected lean, lean to south, asymmetric canopy to south				1		14	14	14	14	N
370	407	Bitter cherry	12	12	16	Poor	Failing to north @ root crown				1		16	16	16	16	N
371	408	Bitter cherry	9	9	10	Poor	Failing to west @ root crown				1		10	10	10	10	N
372	409	Red alder	12	12	14	Fair	Self-corrected lean to west, typical of species, asymmetric canopy to west, dead wood, broken branches, moss and lichen				1		14	14	14	14	N
373	410	Haw-thorne	8, 8, 6, 6, 5, 4, 4	16	14	Fair	Co-dominant leaders with included bark x7 @ root crown, typical of species, moss and lichen, twisted trunks, OK in grove				1		14	14	14	14	N
374	411	Red alder	7	7	8	Fair	Previous top loss, moss and lichen, serpentine trunk, lean to east				1		8	8	8	8	N
375	**412**	**Cotton-wood**	**31**	**31**	**14**	**OK**	Asymmetric canopy to north, typical of species, exposed roots					**1**	**14**	**14**	**14**	**14**	**LM**
376	413	Cotton-wood	25	25	13	Poor	Nurse tree, wound with decay @ root crown, carpenter ants, asymmetric canopy to north				1		13	13	13	13	N
377	414	Cotton-wood	27	27	12	OK	Typical of species, exposed roots, moss and lichen, dead wood, broken branches					1	12	12	12	12	S
378	415	Cotton-wood	21	21	17	Poor	Lean to east, previous top loss				1		17	17	17	17	N
379	**416**	**Cotton-wood**	**48**	**48**	**22**	**Poor**	Nurse tree, previous top loss, dead wood, dead scaffold, exposed roots				**1**		**22**	**22**	**22**	**22**	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
380	**417**	**Cotton-wood**	**36**	**36**	**18**	**Poor**	Previous top loss, lean to east, dead wood, broken branches				**1**		**18**	**18**	**18**	**18**	N
381	418	Cotton-wood	26	26	27	OK	Typical of species, moss and lichen					1	27	27	27	27	S
382	419	Haw-thorne	7	7	14	Fair	Decay @ root crown, lean to west, dead wood, broken branches				1		14	14	14	14	N
383	420	Cotton-wood	18	18	19	Fair	Sway to east, asymmetric canopy to east, moss and lichen				1		19	19	19	19	N
384	421	Cotton-wood	9	9	7	Poor	Suppressed canopy, previous top loss, exposed roots, failing to east				1		7	7	7	7	N
385	422	Cotton-wood	12	12	30	Poor	Failing to north				1		30	30	30	30	N
386	**423**	**Cotton-wood**	**35**	**35**	**18**	**Fair**	Typical of species, moss and lichen, exposed roots, decay @ root crown				**1**		**18**	**18**	**18**	**18**	N
387	424	Cotton-wood	9	9	7	Poor	Failing to west				1		7	7	7	7	N
388	425	Cotton-wood	17	17	17	Fair	Sway to south, asymmetric canopy to south, moss and lichen, exposed roots				1		17	17	17	17	N
389	426	Cotton-wood	21	21	22	Fair	Slight lean to south, asymmetric canopy to south, previous top loss, exposed roots				1		22	22	22	22	N
390	427	Cascara	9	9	4	Poor	Mostly dead, woodpecker activity				1		4	4	4	4	N
391	428	Cascara	9	9	4	Poor	Mostly dead, woodpecker activity				1		4	4	4	4	N
392	429	Cascara	9	9	4	Poor	Mostly dead				1		4	4	4	4	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
393	430	Cascara	9	9	4	Poor	Mostly dead				1		4	4	4	4	N
394	431	Cotton-wood	16	16	12	OK	Exposed roots, typical of species, suppressed canopy					1	12	12	12	12	S
395	432	Cotton-wood	14	14	16	Fair	Serpentine trunk, suppressed canopy, moss and lichen, exposed roots, typical of species				1		16	16	16	16	N
396	**433**	**Cotton-wood**	**36, 40, 20**	**57.5**	**26**	**Fair**	Co-dominant leaders with included bark x3 @ root crown, cavity @ root crown up to 3' on west, canker, moss and lichen, exposed roots, previous top loss, dead wood, wound @ 3' on south, typical of species				**1**		**26**	**26**	**26**	**26**	N
397	436	Cotton-wood	7	7	3	Poor	Typical of species, moss and lichen, previous top loss, top dead				1		3	3	3	3	N
398	437	Cotton-wood	11	11	9	Fair	Dead top, moss and lichen, exposed roots				1		9	9	9	9	N
399	438	Black locust	9	9	11	Poor	Typical of species, moss and lichen, cavity @ 3' on north, lean to east				1		11	11	11	11	N
400	439	Cotton-wood	20	20	12	Poor	Dead wood, broken branches, previous top loss				1		12	12	12	12	N
401	**440**	**Cotton-wood**	**37**	**37**	**13**	**Fair**	Typical of species, moss and lichen, exposed roots				**1**		**13**	**13**	**13**	**13**	N
402	**441**	**Cotton-wood**	**31**	**31**	**16**	**Fair**	Typical of species, moss and lichen, root fused with #440				**1**		**16**	**16**	**16**	**16**	N
403	442	Cotton-wood	15	15		Poor	Top half broken off				1						N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
404	443	Red alder	14	14	13	Fair	Typical of species, moss and lichen, low live crown ratio less than 15%				1		13	13	13	13	N
405	444	Cotton-wood	26	26	18	Fair	Moss and lichen, typical of species, previous top loss				1		18	18	18	18	N
406	445	Cotton-wood	23	23	26	Fair	Previous top loss, elongated branch				1		26	26	26	26	N
407	446	Cotton-wood	14	14	6	Fair	Moss and lichen, previous top loss, dead wood, broken branches				1		6	6	6	6	N
408	447	Cotton-wood	17	17	7	Poor	Previous top loss, root fused with #448				1		7	7	7	7	N
409	448	Cotton-wood	24	24	15	Poor	Moss and lichen, previous top loss, dead wood, broken branches				1		15	15	15	15	N
410	449	Red alder	7	7	9	Poor	Asymmetric canopy to west, lean to west				1		9	9	9	9	N
411	450	Cascara	13	13	14	Poor	Decay throughout, failing to north				1		14	14	14	14	N
412	451	Cotton-wood	7	7	11	Poor	Wound on north 3' to 5', dead wood				1		11	11	11	11	N
413	452	Haw-thorne	7	7	17	OK	Moss and lichen, typical of species	1					17	17	17	17	S
414	453	Haw-thorne	16, 19	25	22	Poor	Co-dominant leaders with included bark x2 @ root crown, dead wood, broken branches, cavity @ root crown up to 5' on north				1		22	22	22	22	N
415	455	Cascara	11	11	16	Fair	Previous top loss, moss and lichen, dead wood, rooted with #453 & #454				1		16	16	16	16	N
416	456	Haw-thorne	9	9	16	OK	Typical of species, moss and lichen, lean to north	1					16	16	16	16	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
417	457	Cotton-wood	9	9	12	Poor	Previous top loss, asymmetric canopy to west, moss and lichen				1		12	12	12	12	N
418	458	Cotton-wood	17	17	16	Fair	Asymmetric canopy to west, typical of species, exposed roots, moss and lichen				1		16	16	16	16	N
419	459	Cotton-wood	9	9	11	Poor	Sway to south, calloused wound @ 4' on west, woodpecker activity				1		11	11	11	11	N
420	460	Cotton-wood	25, 14	28.5	15	Poor	Co-dominant leaders with included bark x2 @ root crown, moss and lichen, exposed roots, decay @ root crown				1		15	15	15	15	N
421	462	Cotton-wood	9, 10, 18	22.5	20	Fair	Co-dominant leaders with included bark x3 @ root crown, moss and lichen, exposed roots, woodpecker activity, decay @ root crown, previous top loss				1		20	20	20	20	N
422	465	Cotton-wood	9	9	9	Poor	Failing to west				1		9	9	9	9	N
423	466	Cotton-wood	9	9	9	Poor	Asymmetric canopy to west, exposed roots, moss and lichen, failing to west				1		9	9	9	9	N
424	467	Cotton-wood	9	9	8	Fair	Suppressed canopy, moss and lichen, typical of species				1		8	8	8	8	N
425	468	Cotton-wood	24	24	16	OK	Typical of species	1					16	16	16	16	S
426	469	Red alder	10	10	11	Fair	Multiple wounds @ root crown up to 3' on west, moss and lichen				1		11	11	11	11	N
427	470	Bitter cherry	7	7	16	Poor	Failing to west				1		16	16	16	16	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
428	471	Red alder	7	7	11	Poor	Non-self-corrected lean to west				1		11	11	11	11	N
429	472	Bitter cherry	16	16	18	Poor	Failing to west				1		18	18	18	18	N
430	473	Red alder	7	7	10	Poor	Failing to west				1		10	10	10	10	N
431	474	Red alder	6	6	14	Poor	Previous top loss, failing to west				1		14	14	14	14	N
432	475	Red alder	10	10	8	Fair	Previous top loss, lean to west, moss and lichen				1		8	8	8	8	N
433	476	Red alder	7	7	15	Poor	Failing to west				1		15	15	15	15	N
434	477	Red alder	7	7	15	Poor	Failing to west				1		15	15	15	15	N
435	478	Red alder	7	7	10	Fair	Self-corrected lean, lean to west				1		10	10	10	10	N
436	479	Red alder	10	10	14	Fair	Previous top loss, lean to west				1		14	14	14	14	N
437	480	Red alder	9	9	15	Poor	Failing to west				1		15	15	15	15	N
438	481	Red alder	9	9	10	Fair	Lean to west, supporting fallen red alder				1		10	10	10	10	N
439	482	Red alder	9	9	11	Fair	Previous top loss, lean to west				1		11	11	11	11	N
440	483	Haw-thorne	9	9	15	Fair	Self-corrected lean, lean to south, typical of species, OK in grove				1		15	15	15	15	N
441	484	Red alder	11	11	13	OK	Supporting fallen cherry, self-corrected lean, typical of species					1	13	13	13	13	S
442	485	Red alder	14	14	12	Poor	Failing to east				1		12	12	12	12	N
443	486	Red alder	7	7	14	Fair	Previous top loss, lean to east, suppressed canopy				1		14	14	14	14	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
444	487	Red alder	13	13	15	Fair	Self-corrected lean, moss and lichen, dead spur				1		15	15	15	15	N
445	488	Red alder	9	9	9	Fair	Suppressed canopy, dead wood, moss and lichen, exposed roots				1		9	9	9	9	N
446	489	Red alder	8, 9	12	12	Poor	Co-dominant leaders with included bark x2 @ root crown, 9" trunk mostly dead, self-corrected lean, moss and lichen				1		12	12	12	12	N
447	490	Red alder	8	8	12	OK	Asymmetric canopy to north, typical of species					1	12	12	12	12	S
448	491	Red alder	6	6	9	OK	Asymmetric canopy to north, typical of species					1	9	9	9	9	S
449	492	Red alder	7	7	12	Fair	Vertical crack @ root crown up to 3' on north, asymmetric canopy to north				1		12	12	12	12	N
450	493	Red alder	11	11	15	OK	Self-corrected lean, typical of species					1	15	15	15	15	S
451	494	Red alder	7	7	11	OK	Undermined roots, typical of species					1	11	11	11	11	S
452	495	Red alder	6	6	12	Fair	Typical of species, undermined roots				1		12	12	12	12	N
453	496	Red alder	6	6	9	Fair	King in trunk @ 7' on west, typical of species				1		9	9	9	9	N
454	497	Red alder	7	7	8	Fair	Ivy @ root crown to 20', self-corrected lean to north, typical of species				1		8	8	8	8	N
455	498	Red alder	6	6	8	Poor	Wound @ 3' to 5' on south				1		8	8	8	8	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
456	499	Red alder	12	12	12	Fair	Co-dominant leaders with included bark x2 @ 18', typical of species, lean to east, not self-corrected lean, leaning on container				1		12	12	12	12	N
457	500	Red alder	8	8	9	Poor	Multiple unhealed wounds @ 3' to 6' on north				1		9	9	9	9	N
458	501	Red alder	9	9	9	OK	Serpentine trunk, typical of species, asymmetric canopy to north					1	9	9	9	9	S
459	502	Red alder	7	7	9	Fair	King @ 6', typical of species				1		9	9	9	9	N
460	503	Red alder	10	10	10	OK	Typical of species					1	10	10	10	10	S
461	504	Red alder	8	8	8	OK	Typical of species					1	8	8	8	8	S
462	505	Red alder	6	6	7	OK	Asymmetric canopy to north, typical of species					1	7	7	7	7	S
463	506	Red alder	7	7	7	OK	Typical of species, moss and lichen, dead wood, broken branches					1	7	7	7	7	S
464	507	Red alder	10	10	13	OK	Typical of species, moss and lichen					1	13	13	13	13	S
465	508	Bitter cherry	6, 5, 4	9	7	Poor	Co-dominant leaders with included bark x3 @ root crown, mostly dead				1		7	7	7	7	N
466	509	Bitter cherry	14	14	11	Poor	Mostly dead				1		11	11	11	11	N
467	510	Pear	20	20	12	Poor	Mostly dead				1		12	12	12	12	N
468	511	Cascara	7, 6	9	8	Poor	Co-dominant leaders with included bark x2 @ root crown, mostly dead				1		8	8	8	8	N
46	512	Cascara	9	9	6	Poor	Fallen tree, branch rooted				1		6	6	6	6	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
9																	
470	513	Red alder	10	10	10	Fair	Moss and lichen, wound @ 3' on west, self-corrected lean to east				1		10	10	10	10	N
471	514	Red alder	14	14	13	Poor	Previous top loss, moss and lichen, cavity @ 2' on west				1		13	13	13	13	N
472	515	Red alder	11	11	13	Poor	Failing to east				1		13	13	13	13	N
473	516	Red alder	13	13	12	Poor	Moss and lichen, cavity @ 1' on north, decay, lean to east				1		12	12	12	12	N
474	517	Red alder	15	15	14	Poor	Failing to south				1		14	14	14	14	N
475	518	Haw-thorne	8, 9, 9, 9, 8, 9	21.5	12	Fair	Co-dominant leaders with included bark x6 @ root crown, typical of species, dead wood, broken branches, cavity @ 3' on west, OK in grove				1		12	12	12	12	N
476	520	Red alder	7	7	9	Fair	Serpentine trunk, dead wood				1		9	9	9	9	N
477	521	Red alder	8	8	8	OK	Moss and lichen, typical of species					1	8	8	8	8	S
478	522	Red alder	8	8	9	OK	Typical of species					1	9	9	9	9	S
479	523	Red alder	7, 5	9	11	Fair	Co-dominant leaders with included bark x2 @ root crown, self-corrected lean, twisted trunks, asymmetric canopy to south				1		11	11	11	11	N
480	524	Red alder	7	7	10	OK	Typical of species, asymmetric canopy to north					1	10	10	10	10	S
481	525	Red alder	6	6	8	OK	Typical of species					1	8	8	8	8	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
482	526	Red alder	7	7	9	Fair	Serpentine trunk, low live crown ratio less than 10%, lean to north, self-corrected lean to north				1		9	9	9	9	N
483	527	Red alder	9	9	13	Fair	Asymmetric canopy to south, typical of species, self-corrected lean, lean to south				1		13	13	13	13	N
484	528	Red alder	6	6	6	Fair	Low live crown ratio less than 10%, lean to north, self-corrected lean				1		6	6	6	6	N
485	529	Red alder	6	6	8	Fair	Low live crown ratio less than 15%, OK in grove				1		8	8	8	8	N
486	530	Red alder	7	7	8	OK	Typical of species, dead wood					1	8	8	8	8	S
487	531	Red alder	7	7	9	OK	Self-corrected lean, moss and lichen, typical of species					1	9	9	9	9	S
488	532	Red alder	7	7	9	OK	Moss and lichen, asymmetric canopy to north, self-corrected lean, typical of species					1	9	9	9	9	S
489	533	Haw-thorne	11	11	14	Poor	Mostly dead				1		14	14	14	14	N
490	534	Haw-thorne	9, 5	10.5	17	Poor	Co-dominant leaders with included bark x2 @ 3', typical of species, decay throughout				1		17	17	17	17	N
491	535	Holly	8	8	11	Fair	Co-dominant leaders with included bark x2 @ 8', woodpecker activity, nurse tree				1		11	11	11	11	N
492	536	Red alder	9	9	12	Poor	Multi topping, decay @ 9'		1				12	12	12	12	N
493	537	Red alder	8	8	17	Fair	Topped @ 9', typical of species		1				17	17	17	17	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
494	538	Red alder	8, 2	8.5	18	Fair	Co-dominant leaders with included bark x2 @ root crown, topped @ 9'		1				18	18	18	18	N
495	540	Grand fir	21	21	14	Good	Dead wood, broken branches, dead twigs, typical of species	1					14	14	14	14	S
496	541	Red alder	9	9		Poor	Failed @ root crown		1								N
497	542	Bigleaf maple	23	23	15	Fair	Co-dominant leaders with included bark x2 @ 9', dead scaffold, OK in grove		1				15	15	15	15	N
498	544	Bigleaf maple	9, 10, 15, 13	24	22	Poor	Co-dominant leaders with included bark x4 @ root crown, failing @ root crown, OK in grove		1				22	22	22	22	N
499	548	Bigleaf maple	16, 14, 16	26.5	26	Poor	Co-dominant leaders with included bark x3 @ root crown, column of decay @ root crown up to 20', carpenter ants, woodpecker activity, asymmetric canopy to east, OK in grove		1				26	26	26	26	N
500	549	Western red cedar	18	18	10	OK	Exposed roots, typical of species, horizontal crack @ 4' on north	1					10	10	10	10	S
501	550	Western red cedar	10	10	10	Poor	Cavity 10' to 16', cavity @ root crown up to 6' on south, carpenter ants		1				10	10	10	10	N
502	551	Bigleaf maple	8, 8.5	11.5	16	OK	Co-dominant leaders with included bark x2 @ root crown, dead spur @ root crown, asymmetric canopy to north, typical of species	1					16	16	16	16	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
503	553	Bigleaf maple	9	9	16	Poor	Exposed roots, failing to north @ root crown, asymmetric canopy to north		1				16	16	16	16	N
504	554	Bigleaf maple	8.5, 7	11	16	OK	Co-dominant leaders with included bark x2 @ root crown, asymmetric canopy to north, undermined roots, asymmetric canopy to north, supporting tree #553, OK in grove	1					16	16	16	16	S
505	556	Bigleaf maple	13	13	16	Poor	Hypoxylon canker, carpenter ants, woodpecker activity, mostly dead		1				16	16	16	16	N
506	557	Western red cedar	20, 18	27	14	OK	Nurse tree, co-dominant leaders with included bark x2 @ 4', carpenter ants, woodpecker activity, OK in grove	1					14	14	14	14	S
507	559	Bigleaf maple	8.5	8.5	11	OK	Exposed roots, root gall, suppressed canopy, typical of species	1					11	11	11	11	S
508	560	Bigleaf maple	9, 16, 12	22	18	Fair	Exposed roots, co-dominant leaders with included bark x3 @ root crown, typical of species, dead wood, broken branches, decay @ root crown, carpenter ants, woodpecker activity, OK in grove		1				18	18	18	18	N
509	563	Bigleaf maple	19	19	16	Poor	Self-corrected lean to east, asymmetric canopy to east, ivy @ root crown to top of tree		1				16	16	16	16	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
510	564	Bigleaf maple	12	12	18	Fair	Co-dominant leaders with included bark reduced to 1 @ 5', serpentine trunk, dead wood, scaffold, exposed roots		1				18	18	18	18	N
511	565	Cotton-wood	28	28	24	Poor	Ivy heavy to top		1				24	24	24	24	N
512	566	Bigleaf maple	9	9	16	Poor	Mostly dead		1				16	16	16	16	N
513	567	Cotton-wood	14	14	5	Poor	Ivy @ root crown to top of tree, mostly dead, low live crown ratio less than 5%		1				5	5	5	5	N
514	568	Bigleaf maple	18	18	12	Poor	Mostly dead, ivy to top of tree		1				12	12	12	12	N
515	569	Cotton-wood	16	16	16	Fair	Ivy @ root crown up to 50', low live crown ratio less than 5%		1				16	16	16	16	N
516	**570**	**Bigleaf maple**	**30**	**30**	**10**	**Poor**	Hypoxylon canker, mostly dead		**1**				**10**	**10**	**10**	**10**	N
517	571	Grand fir	22	22	14	OK	Asymmetric canopy to east, dead wood, broken branches, ivy @ root crown to top of tree, OK in grove	1					14	14	14	14	S
518	572	Grand fir	19	19	17	OK	Asymmetric canopy to south, dead wood, broken branches, moss and lichen, OK in grove	1					17	17	17	17	S
519	573	Grand fir	13	13	16	OK	Asymmetric canopy to south, dead wood, broken branches, OK in grove	1					16	16	16	16	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
520	574	Grand fir	19, 14	23.5	16	OK	Dead wood, broken branches, ivy @ root crown up to 35', asymmetric canopy to southwest, low live crown ratio less than 10%, wisteria @ root crown up to 30', OK in grove if cleaned	1					16	16	16	16	S
521	576	Bigleaf maple	12	12	0	Poor	Dead		1				0	0	0	0	N
522	577	Bigleaf maple	14	14	17	Fair	Dead scaffolds, moss and lichen, asymmetric canopy to south		1				17	17	17	17	N
523	578	Bigleaf maple	9	9	8	Poor	Ivy @ root crown up to top, mostly dead		1				8	8	8	8	N
524	579	Bitter cherry	8	8	12	OK	Serpentine trunk, non self-corrected lean to north, moss and lichen, suppressed canopy, previous top loss	1					12	12	12	12	S
525	580	Bigleaf maple	8	8	11	OK	Suppressed canopy, moss and lichen, typical of species	1					11	11	11	11	S
526	581	Western red cedar	10	10	8	OK	Exposed roots, decay in exposed roots, thin canopy, typical of species	1					8	8	8	8	S
527	582	Bigleaf maple	19	19	16	OK	Column of decay @ root crown up to 12' on west, typical of species, moss and lichen, exposed roots, decay @ root crown	1					16	16	16	16	S
528	583	Bigleaf maple	26	26	16	OK	Co-dominant leaders with included bark x2 @ 8', typical of species, dead scaffold, hanger	1					16	16	16	16	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
529	584	Bigleaf maple	14	14	14	OK	Serpentine trunk, previous top loss, dead wood, typical of species, moss and lichen	1					14	14	14	14	S
530	**585**	**Bigleaf maple**	**29, 10**	**30.5**	**18**	**OK**	Co-dominant leaders with included bark x2 @ root crown, dead scaffold, hanger, OK in grove	**1**					**18**	**18**	**18**	**18**	**LM**
531	588	Bigleaf maple	13	13	15	OK	Co-dominant leaders with included bark x2 @ root crown up to 1', dead spur, serpentine trunk, typical of species, OK in grove	1					15	15	15	15	S
532	589	Bigleaf maple	14, 12, 14	23	15	Poor	Co-dominant leaders with included bark x3 @ 4', multi large galls, ivy @ root crown up to 50', dead scaffold, Hypoxylon canker		1				15	15	15	15	N
533	590	Bigleaf maple	11, 12	16.5	16	Fair	Co-dominant leaders with included bark x2 @ 3', Hypoxylon canker, moss and lichen, ivy @ root crown up to 25', OK in grove		1				16	16	16	16	N
534	591	Western red cedar	29	29	16	OK	Typical of species, exposed roots, column of decay @ root crown @ 3' on south, woodpecker activity, carpenter ants, typical of species	1					16	16	16	16	S
535	592	Bigleaf maple	4, 9, 5, 16	19.5	22	Poor	Co-dominant leaders with included bark x4 @ root crown, healed conk, failing to north		1				22	22	22	22	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
536	593	Bigleaf maple	17	17	17	OK	Exposed roots, undermined roots, moss and lichen, low live crown ratio less than 20%, typical of species	1					17	17	17	17	S
537	**594**	**Western red cedar**	**33**	**33**	**15**	**OK**	Self-corrected lean to south, undermined roots, woodpecker activity, dead wood, broken branches, typical of species	**1**					**15**	**15**	**15**	**15**	**LM**
538	595	Bigleaf maple	9	9	10	OK	Low live crown ratio less than 10%, dead wood, dead scaffold	1					10	10	10	10	S
539	596	Bigleaf maple	20	20	26	OK	Exposed roots, undermined roots, dead scaffolds, typical of species	1					26	26	26	26	S
540	597	Bigleaf maple	26	26	24	OK	Moss and lichen, dead wood, dead scaffolds, typical of species	1					24	24	24	24	S
541	598	Bigleaf maple	15, 16, 14	26	22	OK	Co-dominant leaders with included bark x3 @ root crown, Hypoxylon canker, typical of species	1					22	22	22	22	S
542	600	Bigleaf maple	17	17	20	Poor	Cavity @ root crown up to 6' on south, moss and lichen		1				20	20	20	20	N
543	601	Bigleaf maple	16	16	21	Poor	Cavity @ root crown up to 6', carpenter ants		1				21	21	21	21	N
544	602	Bigleaf maple	14	14	16	OK	Typical of species, dead scaffolds, hanger	1					16	16	16	16	S
545	603	Bigleaf maple	9	9	10	Poor	Cavity 3' to 6' on north		1				10	10	10	10	N
546	604	Bigleaf maple	17	17	16	OK	Co-dominant leaders with included bark x2 @ 6', exposed roots, dead wood, typical of species	1					16	16	16	16	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
547	605	Bigleaf maple	18, 16	24	18	Poor	Co-dominant leaders with included bark x2 @ root crown, nurse tree, filled with decay		1				18	18	18	18	N
548	**606**	**Bigleaf maple**	**17, 26, 17, 15, 14**	**41**	**28**	**OK**	Co-dominant leaders with included bark x5 @ 4', moss and lichen, exposed roots, Hypoxylon canker, dead wood, dead scaffold, dead wood	**1**					**28**	**28**	**28**	**28**	**LM**
549	607	Bigleaf maple	17	17	16	OK	Moss and lichen, dead scaffold, dead wood, typical of species, prune dead wood	1					16	16	16	16	S
550	608	Douglas fir	24	24	16	OK	Serpentine trunk, previous top loss, dead wood, broken branches, suppressed canopy, low live crown ratio less than 20%, OK in grove	1					16	16	16	16	S
551	609	Hemlock	9	9		Poor	Dead		1								N
552	610	Western red cedar	25.5	25.5	10	Good	Exposed roots, carpenter ants, typical of species	1					10	10	10	10	S
553	**611**	**Bigleaf maple**	**32**	**32**	**20**	**OK**	Dead scaffold, co-dominant leaders with included bark x2 @ 30' reduced to 1', typical of species, asymmetric canopy to north	**1**					**20**	**20**	**20**	**20**	**LM**
554	612	Western red cedar	16	16	10	Good	Typical of species	1					10	10	10	10	S
555	613	Western red cedar	10	10	13	OK	Asymmetric canopy to east, suppressed canopy, dead wood, typical of species	1					13	13	13	13	S
556	614	Bigleaf maple	16.5	16.5	20	OK	Typical of species	1					20	20	20	20	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
557	**615**	**Douglas fir**	**42**	**42**	**20**	**OK**	Abnormal bark, popping bark, dead wood, broken branches, calloused wound @ 4' on northwest	**1**					**20**	**20**	**20**	**20**	**LM**
558	616	Hemlock	10	10	10	OK	Typical of species, dead wood, suppressed canopy	1					10	10	10	10	S
559	**617**	**Douglas fir**	**44**	**44**	**18**	**Fair**	Typical of species, dead wood, broken branches, cannot see tree top, popping bark, low live crown ratio less than 20%, previous top loss		**1**				**18**	**18**	**18**	**18**	N
560	618	Hemlock	29	29	19	OK	Low live crown ratio less than 30%, dead wood, broken branches, dead twigs, typical of species, undermined roots, exposed roots	1					19	19	19	19	S
561	619	Western red cedar	11	11	11	OK	Typical of species, self-corrected lean to north	1					11	11	11	11	S
562	620	Western red cedar	12	12	12	OK	Self-corrected lean to north, asymmetric canopy to north, typical of species	1					12	12	12	12	S
563	621	Bigleaf maple	17	17	14	OK	Self-corrected lean to west, 25' from trunk to self-corrected lean	1					14	14	14	14	S
564	622	Hemlock	9, 11, 7	16	13	OK	Co-dominant leaders with included bark x3 @ root crown, self-corrected lean, OK in grove	1					13	13	13	13	S
565	**623**	**Bigleaf maple**	**63, 29**	**69.5**	**24**	**OK**	Co-dominant leaders with included bark x2 @ root crown, typical of species, exposed roots, den under roots 2'x2'	**1**					**24**	**24**	**24**	**24**	**LM**

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
566	624	Western red cedar	14	14		Poor	Dead		1								N
567	625	Douglas fir	16	16	10	Fair	Serpentine trunk, dead wood, broken branches, low live crown ratio less than 5%, OK in grove		1				10	10	10	10	N
568	626	Douglas fir	22	22	10	Poor	Abnormal bark, shedding bark, popping bark, free flowing sap, bore beetle, dead wood, laminated root rot?		1				10	10	10	10	N
569	627	Bigleaf maple	13	13	16	Fair	Exposed roots, undermined roots, dead wood, dead scaffold, asymmetric canopy to south		1				16	16	16	16	N
570	**628**	**Western red cedar**	**38, 17**	**41.5**	**12**	**Poor**	Co-dominant leaders with included bark x2 @ root crown, large cavity @ root crown up to 12', carpenter ants, woodpecker activity, dead top		**1**				**12**	**12**	**12**	**12**	N
571	**629**	**Bigleaf maple**	**21, 31, 16**	**40.5**	**28**	**OK**	Co-dominant leaders with included bark x3 @ root crown, moss and lichen, typical of species, dead scaffold, OK with pruning	**1***					**22**	**28**	**28**	**28**	**LM**
572	**630**	**Western red cedar**	**43**	**43**	**14**	**Fair**	Failing to north, soil failure, maybe above toe of slope		**1**				**14**	**14**	**14**	**14**	N
573	**631**	**Western red cedar**	**36**	**36**	**12**	**OK**	Typical of species	**1**					**12**	**12**	**12**	**12**	**LM**
574	632	Bigleaf maple	10	10	13	OK	Cavity @ 1' to 4' on north, typical of species	1					13	13	13	13	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
575	633	Red alder	18	18	18	Fair	Lean to north, typical of species, dead scaffold, dead wood, moss and lichen, lean to north				1		18	18	18	18	N
576	**634**	**Douglas fir**	**38**	**38**	**20**	**Fair**	Abnormal bark, shedding bark, carpenter ants, self-corrected lean to east, woodpecker activity, bore beetle, OK in grove				**1**		**20**	**20**	**20**	**20**	N
577	**635**	**Bigleaf maple**	**25, 22**	**33.5**	**29**	**Good**	Co-dominant leaders with included bark x2 @ root crown, typical of species, dead scaffold, dead wood	**1**					**29**	**29**	**29**	**29**	**LM**
578	**637**	**Bigleaf maple**	**38**	**38**	**28**	**OK**	Dead scaffold, typical of species, OK with pruning	**1**					**28**	**28**	**28**	**28**	**LM**
579	**638**	**Bigleaf maple**	**33**	**33**	**22**	**Fair**	Previous top loss @ 12', dead scaffold, dead wood, galls, exposed roots, undermined roots		**1**				**22**	**22**	**22**	**22**	N
580	639	Bigleaf maple	26	26	30	Fair	Decay in scaffolds, cavity 20' to 26, OK in grove		1				30	30	30	30	N
581	**640**	**Bigleaf maple**	**36**	**36**	**30**	**OK**	Lean to west, moss and lichen, exposed roots, dead scaffold, dead wood, typical of species	**1**					**30**	**30**	**30**	**30**	**LM**
582	641	Hemlock	14	14	14	Poor	Lost top half				1		14	14	14	14	N
583	642	Bigleaf maple	26	26	18	Fair	Column of decay @ root crown up to 15' on west, numerous failures				1		18	18	18	18	N
584	643	Bigleaf maple	12	12	16	Poor	Cavity @ root crown up to 9', carpenter ants, woodpecker activity				1		16	16	16	16	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
585	644	Bigleaf maple	15, 18	23.5	16	OK	Co-dominant leaders with included bark x2 @ root crown, typical of species, moss and lichen, dead wood	1					16	16	16	16	S
586	**646**	**Hemlock**	**42**	**42**	**21**	**Poor**	Abnormal bark, suppressed canopy, popping bark, carpenter ants, woodpecker activity, exposed roots, leaning to east		**1**				**21**	**21**	**21**	**21**	N
587	647	Western red cedar	18	18	8	Poor	Failing to east, on top of #646		1				8	8	8	8	N
588	648	Hemlock	10	10	4	Poor	Mostly dead, Phaeolus schweinitzii @ root crown		1				4	4	4	4	N
589	649	Hemlock	19	19	14	Fair	Free flowing sap from crack up to 7' on south, abnormal bark, popping bark, Hypoxylon canker, root crown = 18" from cubical butt rot		1				14	14	14	14	N
590	650	Douglas fir	16	16	8	Poor	Large scraping wound root crown to 6' on west, no taper, suppressed canopy		1				8	8	8	8	N
591	651	Bigleaf maple	18	18	22	OK	Co-dominant leaders with included bark x2 @ 11', asymmetric canopy to west, typical of species	1					22	22	22	22	S
592	**652**	**Douglas fir**	**39**	**39**	**15**	**OK**	Tissue dieback, low live crown ratio less than 20%, undermined roots, shedding bark, carpenter ants, typical of species	**1**					**15**	**15**	**15**	**15**	**LM**
593	653	Western red cedar	9.5	9.5	9	OK	Typical of species, suppressed canopy, nurse tree, exposed roots	1					9	9	9	9	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
594	654	Hemlock	11	11	10	OK	Dead wood, broken branches, self-corrected lean to east, co-dominant leaders with included bark x2 @ 15'	1					10	10	10	10	S
595	655	Western red cedar	28	28	10	OK	Previous top loss, dead wood, exposed roots, undermined roots	1					10	10	10	10	S
596	656	Hemlock	9	9	8	OK	Self-corrected lean to east, previous top loss, exposed roots, typical of species	1					8	8	8	8	S
597	**657**	**Bigleaf maple**	**30**	**30**	**30**	**OK**	Cavity 5' to 14' on south, typical of species	**1**					**30**	**30**	**30**	**30**	**LM**
598	658	Douglas fir	14	14	16	OK	Abnormal bark, popping bark, calloused wound 5' on west, dead wood, broken branches, vertical crack 5' to 9' on east, chlorotic tissue	1					16	16	16	16	S
599	**659**	**Douglas fir**	**41**	**41**	**16**	**Poor**	Large calloused wound @ root crown @ 3' on south, popping bark, abnormal bark, conks		**1**				**16**	**16**	**16**	**16**	N
600	660	Hemlock	20	20	12	OK	1' away from failed Hemlock, typical of species, asymmetric canopy to north	1					12	12	12	12	S
601	661	Hemlock	16	16	16	Fair	Horizontal crack 4' on south, OK in grove		1				16	16	16	16	N
602	662	Western red cedar	11	11	8	OK	Typical of species	1					8	8	8	8	S
603	663	Western red cedar	9	9	12	OK	Typical of species	1					12	12	12	12	S
604	664	Bigleaf maple	21	21	24	Poor	Decay @ root crown, failing to north, mostly dead		1				24	24	24	24	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
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605	**665**	**Bigleaf maple**	**26, 22**	**34**	**26**	**OK**	Co-dominant leaders with included bark x2 @ root crown, exposed roots, undermined roots, previous top loss, dead scaffold, conk @ root crown, OK in grove	**1**					**26**	**26**	**26**	**26**	**LM**
606	667	Western red cedar	19	19	10	Poor	Failing to north				1		10	10	10	10	N
607	**668**	**Bigleaf maple**	**34**	**34**	**27**	**OK**	Exposed roots, undermined roots, cavity @ root crown up to 15' on east, typical of species, OK in grove	**1**					**27**	**27**	**27**	**27**	**LM**
608	669	Hemlock	8	8	9	OK	Hypoxylon canker, co-dominant leaders with included bark x2 @ 6', typical of species	1					9	9	9	9	S
609	670	Western red cedar	8	8	11	OK	Typical of species, suppressed canopy	1					11	11	11	11	S
610	671	Douglas fir	26	26	16	OK	Calloused wound 4' on west, carpenter ants bark only, abnormal bark, popping bark, previous top loss, low live crown ratio less than 25%	1					16	16	16	16	S
611	**672**	**Bigleaf maple**	**30**	**30**	**28**	**OK**	Moss and lichen, typical of species, dead wood, dead scaffold, OK if pruned	**1**					**28**	**28**	**28**	**28**	**LM**
612	673	Hemlock	10	10	10	Fair	Previous top loss, suppressed canopy, dead wood, OK in grove				1		10	10	10	10	N
613	674	Bigleaf maple	13, 15	20	15	OK	Co-dominant leaders with included bark x2 @ 3', previous top loss, strong laterals, typical of species	1					15	15	15	15	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
614	675	Hemlock	11	11	9	OK	Hanger, dead wood, typical of species	1					9	9	9	9	S
615	**676**	**Douglas fir**	**36**	**36**	**16**	**OK**	Free flowing sap, abnormal bark, shedding bark, carpenter ants bark only, calloused wound @ 3' on west, dead wood, broken branches, previous top loss, elongated branches, raccoon poop, typical of species	**1**					**16**	**16**	**16**	**16**	**LM**
616	677	Bigleaf maple	7	7	12	OK	Suppressed canopy, typical of species	1					12	12	12	12	S
617	678	Bigleaf maple	20	20	15	Poor	Cavity @ root crown up to 7', carpenter ants, woodpecker activity				1		15	15	15	15	N
618	679	Bigleaf maple	13	13	18	OK	Suppressed canopy, dead wood, low live crown ratio less than 20%, previous top loss, OK in grove	1					18	18	18	18	S
619	680	Bigleaf maple	16	16	19	OK	Previous top loss, asymmetric canopy to west, moss and lichen, typical of species	1					19	19	19	19	S
620	681	Hemlock	12	12	12	Fair	Self-corrected lean to north, exposed roots, decay @ root crown, dead wood, broken branches				1		12	12	12	12	N
621	682	Bigleaf maple	18, 20	27	21	OK	Co-dominant leaders with included bark x2 @ root crown, nurse tree, cavity 40' on south, dead wood, broken branches, OK in grove	1					21	21	21	21	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
622	**684**	**Douglas fir**	**32**	**32**	**10**	**Poor**	Abnormal bark, shedding bark, popping bark, carpenter ants, cav @ root crown to 9' south, low live crown ratio < 10%		**1**				**10**	**10**	**10**	**10**	N
623	685	Bigleaf maple	21	21	17	OK	Typical of species, asymmetric canopy to south, exposed roots, undermined roots	1					17	17	17	17	S
624	686	Douglas fir	10	10	16	Poor	Previous top loss, nurse tree, abnormal bark, shedding bark, carpenter ants, mostly dead		1				16	16	16	16	N
625	687	Bigleaf maple	14	14	15	OK	Asymmetric canopy to south, moss and lichen, typical of species	1					15	15	15	15	S
626	688	Bigleaf maple	15	15	16	Fair	Lean to south, dead wood, dead scaffold, moss and lichen, typical of species OK in grove		1				16	16	16	16	N
627	689	Douglas fir	12	12	12	Poor	Abnormal bark, shedding bark, carpenter ants, wound @ 4' on south, dead wood, broken branches, laminated root rot?		1				12	12	12	12	N
628	690	Haw-thorne	12, 11, 7	17.5	16	Fair	Co-dominant leaders with included bark x3 @ root crown, typical of species, moss and lichen, dead wood		1				16	16	16	16	N
629	691	Douglas fir	18	18	17	OK	Ivy @ root crown up to 25', dead wood, broken branches, dead twigs, typical of species	1					17	17	17	17	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
630	692	Douglas fir	14	14	15	OK	Asymmetric canopy to south, previous ivy @ root crown up to 20', dead wood, broken branches, dead twigs	1					15	15	15	15	S
631	693	Douglas fir	13	13	15	OK	Previous ivy at @ root crown up to 30', asymmetric canopy to south, typical of species, dead wood, broken branches	1					15	15	15	15	S
632	694	Douglas fir	18	18	15	OK	Ivy @ root crown up to 20', dead wood, broken branches, typical of species	1					15	15	15	15	S
633	695	Red alder	7, 7	10	15	OK	Co-dominant leaders with included bark x2 @ root crown, failing to south, moss and lichen, OK in grove	1					15	15	15	15	S
634	697	Haw-thorne	7	7	14	OK	Dead wood, broken branches, moss and lichen, suppressed canopy	1					14	14	14	14	S
635	698	Bigleaf maple	12	12	17	OK	Asymmetric canopy to south, suppressed canopy, exposed roots, undermined roots, lean to south, OK in grove	1					17	17	17	17	S
636	699	Bigleaf maple	27	27	18	Fair	Decay @ root crown, moss and lichen, dead scaffold, dead wood, typical of species		1				18	18	18	18	N
637	700	Bigleaf maple	14	14	6	Poor	Mostly dead		1				6	6	6	6	N
638	701	Western red cedar	8	8	7	OK	Typical of species	1					7	7	7	7	S
639	702	Western red cedar	18	18	10	OK	Self-corrected lean to east, typical of species, undermined roots	1					10	10	10	10	S
640	703	Bigleaf maple	20	20		Poor	Mostly dead, pileated woodpecker		1								N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
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641	704	Bigleaf maple	14	14	0	Poor	Dead		1				0	0	0	0	N
642	705	Bigleaf maple	7, 10	12		Poor	Co-dominant leaders with included bark x2 @ 1', mostly dead		1								N
643	**706**	**Bigleaf maple**	**20, 17, 15**	**30**	**24**	**OK**	Co-dominant leaders with included bark x3 @ root crown, dead scaffold, dead wood, lean to south, OK in grove	**1**					**24**	**24**	**24**	**24**	**LM**
644	707	Bigleaf maple	43	20	27	OK	Failing from root crown to south, self-corrected lean	1					27	27	27	27	S
645	708	Hemlock	16	16	14	OK	Exposed roots, dead wood, broken branches, suppressed canopy, exposed roots, undermined roots, typical of species	1					14	14	14	14	S
646	709	Bigleaf maple	13	13	19	OK	Typical of species, dead wood, broken branches, undermined roots	1					19	19	19	19	S
647	710	Douglas fir	13	13	12	OK	Previous top loss, failing to west, OK in grove	1					12	12	12	12	S
648	**711**	**Bigleaf maple**	**17, 14, 11, 14, 9, 13**	**32.5**	**19**	**OK**	Co-dominant leaders with included bark x6 @ root crown, typical of species, decay @ center, cavity on north, horizontal crack on north, moss and lichen, OK in grove	**1**					**19**	**19**	**19**	**19**	**LM**
649	712	Haw-thorne	7	7	10	Poor	Large cavity @ root crown				1		10	10	10	10	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
650	713	Bigleaf maple	19	19	20	OK	Moss and lichen, dead wood, asymmetric canopy to west, cavity @ root crown up to 3' on east, undermined roots, typical of species	1					20	20	20	20	S
651	714	Bigleaf maple	14	14	19	OK	Moss and lichen, asymmetric canopy to east, dead wood, typical of species	1					19	19	19	19	S
652	715	Bigleaf maple	25	25	17	OK	Moss and lichen, exposed roots, dead scaffold, dead wood, typical of species	1					17	17	17	17	S
653	716	Bigleaf maple	12, 11	16	17	OK	Co-dominant leaders with included bark x2 @ root crown, typical of species, moss and lichen, dead wood	1					17	17	17	17	S
654	717	Haw-thorne	9	9	18	Poor	Failing to south				1		18	18	18	18	N
655	**718**	**Haw-thorne**	**14, 15, 16, 14, 9**	**31**	**10**	**Poor**	Co-dominant leaders with included bark x5 @ root crown, conks, broken trunks, carpenter ants, woodpecker activity				**1**		**10**	**10**	**10**	**10**	N
656	723	Red alder	10	10	11	OK	Typical of species					1	11	11	11	11	S
657	724	Cascara	7	7	9	Fair	Undermined roots, moss and lichen, suppressed canopy				1		9	9	9	9	N
658	725	Bigleaf maple	21	21	27	OK	Moss and lichen, dead wood, broken branches, typical of species	1					27	27	27	27	S
659	726	Bigleaf maple	10, 10, 12, 12, 7, 6	24	19	OK	Co-dominant leaders with included bark x6 @ root crown, trunk 7 & 6 are dead, dead wood, broken branches, dead scaffold, OK in grove	1					19	19	19	19	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
660	**728**	**Haw-thorne**	**17, 17, 19, 13, 10, 13**	**37**	**28**	**Poor**	Large cavity on west		**1**				**28**	**28**	**28**	**28**	N
661	729	Cascara	16	16	12	Poor	Co-dominant leaders with included bark x6 @ root crown, failing from root crown in every direction, carpenter ants, woodpecker activity		1				12	12	12	12	N
662	**735**	**Cascara**	**9, 10, 10, 12, 14, 17, 18**	**35**	**18**	**Poor**	Co-dominant leaders with included bark x7 @ root crown, all failed @ root crown, carpenter ants, woodpecker activity, broken trunks		**1**				**18**	**18**	**18**	**18**	N
663	737	Red alder	15	15	0	Poor	Dead		1				0	0	0	0	N
664	738	Western red cedar	18, 11	21	13	OK	Co-dominant leaders with included bark x2 @ 3', typical of species, exposed roots	1					13	13	13	13	S
665	739	Western red cedar	29	29	16	OK	Typical of species, asymmetric canopy to south, exposed roots, typical of species	1					16	16	16	16	S
666	740	Red alder	9	9	9	Poor	Failing to south		1				9	9	9	9	N
667	741	Haw-thorne	10	10	14	Fair	Self-corrected lean to west, asymmetric canopy to south, dead wood, broken branches, suppressed canopy		1				14	14	14	14	N
668	742	Haw-thorne	9	9	10	OK	Moss and lichen, dead wood, broken branches, OK in grove	1					10	10	10	10	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
669	743	Haw-thorne	7, 6, 3, 3	10	14	Poor	Co-dominant leaders with included bark x4 @ root crown, moss and lichen, asymmetric canopy to south		1				14	14	14	14	N
670	744	Haw-thorne	5, 5, 5, 5, 5, 5, 5, 5	14	17	OK	Co-dominant leaders with included bark x8 @ root crown, typical of species, moss and lichen, dead wood, broken branches	1					17	17	17	17	S
671	745	Bitter cherry	7	7	9	OK	Typical of species, moss and lichen, dead wood	1					9	9	9	9	S
672	746	Cascara	8	8	4	Poor	Mostly dead		1				4	4	4	4	N
673	747	Bigleaf maple	23, 9, 6	25.5	21	Poor	Co-dominant leaders with included bark x3 @ root crown, moss and lichen, dead scaffold, dead wood, carpenter ants, woodpecker activity, Hypoxylon canker				1		21	21	21	21	N
674	750	Bigleaf maple	14, 15, 17	27	14	Poor	Co-dominant leaders with included bark x3 @ root crown, large cavity of decay 6' north, mostly dead				1		14	14	14	14	N
675	753	Bigleaf maple	10, 8	13	6	Poor	Co-dominant leaders with included bark x2 @ root crown, mostly dead				1		6	6	6	6	N
676	754	Douglas fir	15	15	14	OK	Self-corrected lean, dead wood, broken branches, dead twigs, typical of species, OK in grove	1					14	14	14	14	S
677	755	Douglas fir	12	12	15	OK	Dead wood, broken branches, bush top, asymmetric canopy to south, typical of species	1					15	15	15	15	S

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								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
678	756	Douglas fir	12	12	15	OK	Dead wood, broken branches, dead twigs, asymmetric canopy to south, typical of species	1					15	15	15	15	S
679	757	Douglas fir	11	11	12	OK	Asymmetric canopy to south, dead wood, dead twigs, typical of species	1					12	12	12	12	S
680	758	Douglas fir	16	16	16	OK	Exposed roots, moss and lichen, asymmetric canopy to south, dead wood, dead twigs, horizontal crack @ 5', OK in grove	1					16	16	16	16	S
681	759	Haw-thorne	8	8	14	OK	Typical of species, dead wood, broken branches, asymmetric canopy to west	1					14	14	14	14	S
682	760	Haw-thorne	10, 7	12	9	OK	Co-dominant leaders with included bark x2 @ 3', typical of species, moss and lichen	1					9	9	9	9	S
683	761	Haw-thorne	6, 4	7	9	OK	Co-dominant leaders with included bark x2 @ 3', moss and lichen, typical of species, dead wood, OK with pruning	1					9	9	9	9	S
684	762	Haw-thorne	7	7	13	Fair	Typical of species, moss and lichen, dead wood,suppressed canopy				1		13	13	13	13	N
685	763	Haw-thorne	8,3	9	15	Fair	Typical of species, co-dominant leaders with included bark x2 @ root crown, lean to east				1		15	15	15	15	N
686	764	Bigleaf maple	9, 9, 6, 5	15	14	OK	Co-dominant leaders with included bark x4 @ 2', asymmetric canopy to northeast, suppressed canopy					1	14	14	14	14	S

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
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687	765	Haw-thorne	8, 7	10.5	13	Poor	Co-dominant leaders with included bark x2 @ 3', failing to east				1		13	13	13	13	N
688	766	Bitter cherry	8	8	9	Fair	Decay @ root crown, dead wood, broken branches				1		9	9	9	9	N
689	767	Bitter cherry	9	9	11	Fair	Co-dominant leaders with included bark x2 @ 5', dead wood, broken branches, asymmetric canopy to north				1		11	11	11	11	N
690	768	Bitter cherry	9	9	6	Poor	Mostly dead				1		6	6	6	6	N
691	769	Bitter cherry	7	7	6	Poor	Mostly dead				1		6	6	6	6	N
692	770	Haw-thorne	7, 5, 4, 4, 6, 4	12.5	16	Fair	Co-dominant leaders with included bark x6 @ root crown, typical of species, decay @ root crown				1		16	16	16	16	N
693	771	Bitter cherry	9	9	4	Poor	Dead scaffold, dead wood, dead top				1		4	4	4	4	N
694	772	Hemlock	15	15	10	Fair	Previous topping @ 15', exposed roots, lean to west				1		10	10	10	10	N
695	773	Bigleaf maple	6	6	9	OK	Typical of species					1	9	9	9	9	S
696	774	Haw-thorne	13, 10, 6, 8, 9	21	18	Fair	Co-dominant leaders with included bark x5 @ root crown, typical of species, moss and lichen, decay @ root crown				1		18	18	18	18	N
697	775	Bigleaf maple	6	6	8	Fair	Moss and lichen, previous top loss, dead top				1		8	8	8	8	N
698	776	Haw-thorne	8, 3, 6	10.5	10	Poor	Co-dominant leaders with included bark x3 @ root crown				1		10	10	10	10	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
699	777	Bigleaf maple	12	12	18	OK	Asymmetric canopy to northwest, moss and lichen, typical of species					1	18	18	18	18	S
700	778	Bigleaf maple	12	12	18	OK	Asymmetric canopy to west, typical of species					1	18	18	18	18	S
701	779	Bigleaf maple	6	6	15	OK	Suppressed canopy, lean to west					1	15	15	15	15	S
702	780	Bigleaf maple	7	7	18	OK	Asymmetric canopy to west, typical of species					1	18	18	18	18	S
703	781	Bigleaf maple	13	13	18	OK	Lean to west, asymmetric canopy to west, moss and lichen, typical of species					1	18	18	18	18	S
704	**782**	**Douglas fir**	**32**	**32**	**14**	**OK**	Free flowing sap, wound @ 3' on north, girdled with barbed wire, abnormal bark, shedding bark, carpenter ants bark only, slight bulge @ 4', broken branches, dead wood, popping bark	**1**					**14**	**14**	**14**	**14**	**LM**
705	**783**	**Douglas fir**	**30**	**30**	**16**	**OK**	Serpentine trunk, hanger, abnormal bark, shedding bark, carpenter ants bark only, previous top loss, elongated branch, low live crown ratio - 25%	**1**					**16**	**16**	**16**	**16**	**LM**
706	784	Bigleaf maple	7	7	10	Fair	Suppressed canopy, previous top loss, low live crown ratio - 10%, asymmetric canopy to west, OK in grove		1				10	10	10	10	N
707	785	Bigleaf maple	22	22	24	Poor	Failing to north, cavity @ root crown up to 15' on west				1		24	24	24	24	N

1	2	3	4	5	6	7	8	9					10				11
								Proposed Action					TPR/LOD/CRZ				
								Retain			Remove		Radius in ft.				
#	Tree Tag #	Species ID	DBH (in)	Adj. DBH (in)	Drip-line radius (ft)	Health	Defects/Comments	Retained	Buffer	Impacted	Non- viable	Remove for improvements	N	E	S	W	**LM=Landmark** S=Significant N=Non-significant
708	**786**	**Douglas fir**	**38**	**38**	**17**	**OK**	Large calloused wound @ root crown up to 8' on south, free flowing sap, red ring rot, column of decay @ root crown up to 12' on south, previous top loss, elongated branches, OK in grove	**1**					**17**	**17**	**17**	**17**	**LM**
709	787	Red alder	10, 4	11	14	Poor	Co-dominant leaders with included bark x2 @ 4', failing to west				1		14	14	14	14	N
710	788	Haw-thorne	8, 6, 6	11.5	16	Fair	Co-dominant leaders with included bark x3 @ 4', typical of species, lean to west, moss and lichen, OK in grove				1		16	16	16	16	N
* Trees impcated by roadways are not counted as Impacted								132	68	0	348	162					

RZC 21.72.060 C.3
* Trees impacted by utilities
**Reduced dripline in direction of utilities

Tree Matrix Calculations:

Proposed Action and Brief Definition				
Tree Type	**Removal**	**Impacted**	**Retained**	**Total**
Landmark (>30" DBH)	Number of removed landmark trees	Number of impacted landmark trees	Number of retained landmark	Total Landmark Trees
	7	1	26*	34
	% of Removed Landmark Trees of All Landmark Trees	% of impacted Landmark Trees of all Landmark Trees	% of Retained Landmark Trees of All Landmark Trees	% Landmark Trees of All Trees
	7/34=20%	1/34= 3%	26/34= 77%	34/294=12 %
Significant (6" - 30")	Number of removed significant trees	% Impacted of all significant trees	Number of Retained Significant Trees	Total Significant Trees
	155	0	105	260
	% Significant removed of all significant trees	% impacted of all significant trees	% retained of all significant trees	% significant trees of all trees
	155/260=60%	0/260 = 0%	105/260 = 40%	260/294=88%
Totals	Number of Landmark + Significant removed trees	Number of Landmark + significant impacted	Number of Landmark + significant retained	Total Number of ALL Trees
	162	1	131	294
	% removed of all trees	% impacted of all Trees	% Retained of all Trees	
	162/294 = 55%	1/294=.3%	131/294 = 45%	100%

*RZC 21.72 Trees impacted by utilities are counted as retained

Potentially Impacted Offsite Trees:
None

Mitigation:

Per the RZC 21.72 all Landmark Trees (DBH > 30") are to be replaced at a 3:1 ratio; all Significant trees removed are to be replaced at a 1:1 ratio. Landmark trees impacted by site improvements excluding utility and roadway access are counted as removed and mitigated for.

Mitigation			
Replacement Quota	Number of Removed Trees	Number of Replacement Trees	Total Number of Replacement Trees
Removed Landmark (3:1)	7	21	21
Impacted Landmark (#629)	1	3	3
Removed Significant (1:1)	155	155	155
Total # of Replacement Trees			179

RZC 21.72 code specifies that the replacement trees meet or exceed the American Nursery and Landscape Standard and that the minimum sizes for replacement be:

- 2.5" caliper at breast height for a deciduous tree
- 6-8' tall for an evergreen replacement

Discussion:

Updated Tree Density Calculation	
Total number of trees onsite	710
Total number of significant trees	294
Required 35% Tree retention	103
Total number of retained trees proposed	132
Number of trees over requirement	29

The information gathered and reported above is provided to satisfy the city of Redmond's requirements for a tree preservation plan (RMC 20D.80.20) of the Redmond Community Development Guide. The trees were surveyed and tagged by kpff prior to my evaluation. Each tree was measured at approximately four and a half feet above grade. Each trunk of trees whose normal growth habit is characterized by multiple trunks as well as those trees whose structure arose out of co-dominant leaders were also measured at 4.5' above grade and the average of the leaders were taken to be the adjusted DBH sited on the matrix.

Trees whose adjusted DBH were less than 6" (the diameter necessary to be considered significant) were recorded but not counted toward the total number of significant trees. Likewise, dead trees were eliminated from the overall tree count. Any trees that were dying, but still had living tissue were assessed as being in "poor" condition.

The dripline of each tree was measured using a laser recording device. One measurement was taken on each tree with a "normal" balanced canopy that was approximately equal in radius in all directions. Trees with asymmetric canopies are generally located on the outside edges of groves. The radius of their canopies can vary a great deal. When describing the radius of those canopies, measurements were taken of the canopy in the four directions (NESW) are recorded.

Driplines were also revised to more adequately reflect the location of buttress roots located on the opposite side of an asymmetric canopy – so where there may not be a dripline present, one was prescribed.

Landmark trees are identified in this report by a bolder typeface and described under the "value" column as **LM**.

As much as possible retained trees were left in groves and retained in areas where they would not experience changes in wind impact.

Currently, the proposed site development includes 30 residential buildings and several mixed-use structures accessed by a roadway running east-west with frontage onto Willows Road and NE 124th Street. There is a "protected native growth area" of mixed species trees located on the south side of the property which includes critical steep slope and a small creek. There is a storm detention tract located on the northeast corner of the site.

Comments Regarding Non-Viable Landmark Trees:

On this 15.4-acre site, there are forty -four (44) "Landmark" (having a DBH >30") trees; three (3) of the Landmark trees are impacted by site improvements, two (#210 and #177) of those impacted trees are impacted by roadways and are therefore counted as retained. One Landmark tree (#629) is impacted by site grading and is therefore not considered retained. tree is impacted nine (9) are assessed as being in poor condition with a recommendation that they be removed. These trees are located outside the critical slope and wetland area. In addition to these trees, there are Landmark-sized trees within the buffer with significant health issues that preclude their being counted as a retained tree, however, they will be retained because there is no proposed target that could be damaged in the event of their failure.

Three of the trees do not strictly meet the criteria as they are multi-stemmed "clumps" of trees with collected DBH measurements >17", however, the ISA recommends that the DBH of each individual trunk be squared and added together, the square root of that total equals the "adjusted" DBH. Some of the trunks of the trees may be separated from another by several feet as in the case of the Beech tree #5. The three (3) trees with adjusted DBH >30" are tree numbers, 5, 77, and 179.

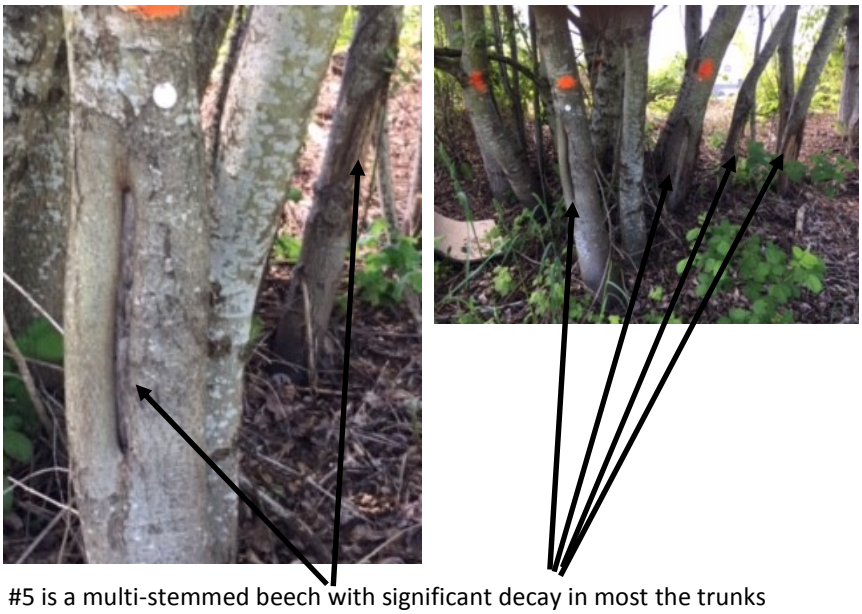
The remainder of the trees designated as "Landmark trees" strictly meet the criteria having a DBH at standard height >30". Those trees are: #38, #53, #75, #416, #417 and # 423.

The following table describes their individual defects that may them unsuitable for retention:

1	2	3	4	5	6	7	8	
#	Tree Tag #	Species ID	DBH inches	Adj. DBH inches	Drip-line radius feet	Health	Defects/Comments	Non- viable
1	**5**	**Beech**	**7, 8, 8, 9, 8, 13, 14, 12, 11, 11**	**33**	**24**	**Fair**	**Co-dominant leaders with included bark x10 @ root crown, typical of species, multiple wounds @ root crown up to 3', woodpecker activity, dead wood**	**1**
2	**51**	**Cotton-wood**	**38**	**38**	**20**	**Poor**	**Moss and lichen, dead wood, broken branches, dead scaffold, poor pruning with decay**	**1**

1	2	3	4	5	6	7	8	
#	Tree Tag #	Species ID	DBH inches	Adj. DBH inches	Drip-line radius feet	Health	Defects/Comments	Non- viable
3	**57**	**Cotton-wood**	**53**	**53**	**24**	**Poor**	**Co-dominant leaders with included bark x2 @ 6', previous top loss, decay throughout**	**1**
4	**75**	**Apple**	**31**	**31**	**18**	**Poor**	**Typical of species, cavity on north, carpenter ants, woodpecker activity, ivy @ root crown up to 30', blackberries at root crown up to 30', moss and lichen**	**1**
5	**77**	**Bigleaf maple**	**9, 11, 16, 15, 12, 15, 16, 17, 15**	**42.5**	**38**	**Fair**	**Co-dominant leaders with included bark x9 @ root crown, dead trunks, dead scaffolds, cavity**	**1**
6	**179**	**Bigleaf maple**	**12, 13, 10, 6, 16, 15**	**30.5**	**36**	**Poor**	**Co-dominant leaders with included bark x6 @ root crown, dead wood, broken branches, low live crown ratio less than 15%, Hypoxylon canker, girdling wire**	**1**
7	**416**	**Cotton-wood**	**48**	**48**	**22**	**Poor**	**Nurse tree, previous top loss, dead wood, dead scaffold, exposed roots**	**1**
8	**417**	**Cotton-wood**	**36**	**36**	**18**	**Poor**	**Previous top loss, lean to east, dead wood, broken branches**	**1**
9	**423**	**Cotton-wood**	**35**	**35**	**18**	**Fair**	**Typical of species, moss and lichen, exposed roots, decay @ root crown**	**1**

Photo documentation of the non-viable Landmark trees:



#5 is a multi-stemmed beech with significant decay in most the trunks

Beech as a species nationwide is in serious decline from both insect and disease. The tree species has a low ability to compartmentalize disease and once the tree is injured, decay follows quickly.

Trees # 416 and #417 are cottonwoods with previous top loss, dead wood throughout the canopy, exposed and decaying roots, Tree #416 has a lean to the NE

Tree #423 Cottonwood, significant failure of 1/2 of the tree, dead wood, exposed roots

Tree #75 is an overly-mature apple with little live wood

Tree #77 is a Bigleaf maple, with significant die back in the entire canopy.

The tree to the left of the dying maple is healthy. Note the difference in leaf size, color and quantity

Tree 57 is a cottonwood with little living tissue and a lot of dead wood. There is a horizontal crack visible above the tag.

Tree #51 Cottonwood, vertical crack with decay, previous top loss, low live crown ratio and dead wood

Multi-trunk bigleaf maple, 2 sides failing

Tree Protection Fencing:

First, protect the roots that lie in the path of construction. Approximately 90-95% of a trees root systems lie in the top three feet of soil and more than ½ of them are in the top 1'. Construction activities should be avoided in this area. Protect as much of the area beyond the tree's dripline as possible. Some healthy trees survive after losing ½ of their roots. However, other species are extremely sensitive to root damage even outside the dripline.

Do not disturb the critical root zone (CRZ). The CRZ is defined by its critical root radius. It is more accurate than the dripline for determining the CRZ of trees growing in forests or that have narrow growth habits. To calculate the critical root radius, measure the trees diameter (DBH) 4.5' above the ground. For each inch, allow for 1- 1.5' of critical root radius. If a tree's DBH is 10", its critical root radius is 10-15'.

In addition to the CRZ, it is important to determine the limits of disturbance (LOD) for preserved trees. Generally, this approximates the CRZ; however, in previously excavated areas around the dripline the LOD may be smaller or in the case of a tree situated on a slope the LOD may be larger. The determination of the LOD is also subject to the tree species. Some tree species do better than others after root disturbance.

Tree protection is advised throughout the duration of any construction activities whenever the critical root zone or leaf canopy may be encroached upon by such activities.

The CRZ or LOD should be protected with fencing adequate to hinder access to people, vehicles and equipment. Fencing detail should be provided. It should consist of continuous 4' high temporary chain-link fencing with post sections @ 10' on center, polyethylene laminar safety fencing or similar materials. The fencing must contain fencing signage detailing that the tree protection area cannot be trespassed on.

Soil compaction is one of the most common killers of urban trees. Stockpiled materials, heavy machinery and excessive foot traffic damage soil structure by reducing pore space. The effected tree roots suffocate. When construction takes place close to the protected CRZ, cover the site with 4" of bark to reduce soil compaction.

Tree protection fencing must be erected prior to soil excavation, boring, grading or fill operations. It is erected at the LOD. If it is necessary to run utilities within the LOD, the utilities should be combined into one cut as practical. Trenching should not be done in the LOD. If roots greater than 1" diameter near the LOD are damaged or torn, it is necessary to hand trim them to a clean cut. Any roots that are exposed during construction should be covered with soil as soon as possible.

During drought conditions, trees must be adequately watered. Site should be visited regularly by a qualified ISA Certified Arborist to ensure the health of the trees. Tree protection fencing is the last item to be removed from the site after construction is completed.

After construction, has been completed, please contact an ISA Certified arborist to evaluate the remaining trees looking for signs and symptoms of damage or stress. It may take several years for severe problems to appear. If fencing around portions of the CRZ of a tree to be retained are not practical to erect due to construction or obstacles, tree protection fencing should be placed 3' laterally from the obstruction (ex. 3' back of a curb, building, or other existing or planned permanent infrastructure.)

Glossary:

ANSI A300: American National Standards Institute (ANSI) standards for treecare

Chlorotic: discoloration caused by lack of chlorophyll in the foliage

Conifer: A tree that bears cones and has evergreen needles orscales

Crown: the above ground portion of the tree comprised of branches and their foliage

Crown raise pruning: a pruning technique where the lower branches are removed,thus raising the overall height of the crown from the ground

DBH or DSH: diameter at breast or standard height; the diameter of the trunk measured54 inches (4.5 feet) above grade

Deciduous: tree or other plant that loses its leaves annually and remains leafless generally during the cold season

Epicormic: arising from latent or adventitious buds

Evergreen: tree or plant that keeps its needles or leaves year-round; this means for more than one growing season

Increment: the amount of new wood fiber added to a tree in each period, normally one year.

ISA: International Society of Arboriculture

Landscape function: the environmental, aesthetic, or architectural functions that a plantcan have

Lateral: secondary or subordinate branch

Limits of disturbance: The boundary of minimum protection around a tree, the area that cannot be encroached upon without possible permanent damage to the tree. It is a distance determined by a qualified professional and is based on the age of the tree, its health, the tree species tolerance to disruption and the type of disturbance. It also considers soil and environmental condition and previous impacts. It is uniqueto each tree in its location.

Limited visual assessment: a visual assessment from a specified perspective such as foot, vehicle, or aerial (airborne) patrol of an individual tree or a population of trees near specified targets to identify specified conditions or obvious defects (ISA2013)

Live crown ratio: the percentage of living tissue in the canopy versus the tree's height. It is a good indicator of overall tree health and the trees growing conditions. Trees with less than a 30% Crown ratio often lack the necessary quantity of photosynthetic material necessary to sustain the roots; consequently, the tree may exhibit low vigor and poor health.

Monitoring: keeping a close watch; performing regular checks or inspections

Owner/manager: the person or entity responsible for tree management or thecontrolling authority that regulates tree management

Pathogen: causal agent of disease

Phototropic growth: growth toward light source or stimulant

ROW: Right-of-way; generally referring to a tree that is located offsite on a city easement

Reaction wood: Specialized secondary xylem which develops in response to a lean or similar mechanical stress, it serves to help restore the stem to a vertical position

Self-corrected lean: a tree whose trunk is at an angle to the grade but whose trunk and canopy changes to become upright/vertical

Senescence: The condition or process of deterioration with age; loss of a cell's power of division and growth

Significant tree: a tree measuring a specific diameter determined by the municipality the tree grows in. Some municipalities deem that only healthy trees can be significant, other municipalities consider both healthy and unhealthy trees of a determined diameter to be significant

Snag: a tree left partially standing for the primary purpose of providing habitat for wildlife

Soil structure: the size of particles and their arrangement; considers the soil, water, and air space

Sounding: process of striking a tree with a mallet or other appropriate tool and listening for tones that indicate dead bark, a thin layer of wood outside a cavity, or cracks in wood

Structural defects: flaws, decay, or other faults in the trunk, branches, or root collar of a tree, which may lead to failure; may be genetic, or environmental

Tree credit: A number assigned to a tree by a municipality that may be equal to the diameter of the tree or a numerical count of the tree, or related to diameter by a factor conveyed in a table of the municipal code

Trunk area: the cross-sectional area of the trunk based upon measurement at 54inches (4.5 ft.) above grade

Visual Tree Assessment (VTA): method of evaluating structural defects and stability in trees by noting the pattern of growth. Developed by Claus Mattheck (Harris, et al 1999) detailed visual inspection of a tree and surrounding site that may include the use of simple tools. It requires that a tree risk assessor walk completely around the tree trunk looking at the site, aboveground roots, trunk, and branches (ISA2013)

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1. 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. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as thou free and clear, under responsible ownership and competent management.

2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes or other governmental regulations.

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